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The Use of Motivational Interviewing to Manage Behavioral Changes in Hand Injured Clients

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Abstract

Individuals vary in the degree in which they are willing to make significant changes in areas of their daily life, especially after an illness or injury. Motivational interviewing (MI) has been used to predict a persons' readiness to change and to build the necessary intrinsic motivation that is needed to make difficult changes. The article describes the stages of change model and strategies that can be applied to patients in different stages of change. Vignettes are provided to apply the various principles of MI and to assist hand therapists with an approach that supports the recovery efforts of their patients.

Patients come to the therapist seeking positive change. Examples of positive change include improved self-reliance after a brachial plexus injury, return to a clerical job after a carpal tunnel release, or return to sports while struggling with lateral epicondylitis. Biomechanical and functional changes cannot occur without motivation to embrace and accept the requirements of change. Patients hinder progress and positive change when they engage in nonproductive behaviors such as missed appointments, limited participation in the clinic, exaggerated pain responses, refusal to return to work, or noncompliance with splinting and exercise programs. Patients with such behaviors may be labeled "noncompliant," "unmotivated," or "malingering."

The patient–therapist interaction affects motivation and self-efficacy in treatment. Although no approach will work with every patient, motivational interviewing (MI) is a communication style that enables therapists to facilitate behavior change.¹ MI enhances motivation and self-efficacy by helping the patient become mindful of discrepancies between current and desired behaviors and by resolving ambivalence about making difficult changes.² The role of the hand therapist is to guide, rather than dictate change.

Motivational interviewing is most successful when the patient's readiness for change is matched to stage-specific MI techniques. This article will introduce MI principles, apply these principles to well-established stages of change, and recommend simple techniques for enacting behavioral change through MI.

MOTIVATIONAL INTERVIEWING IN HAND THERAPY

Motivational interviewing was developed in the early 1980s in the treatment of individuals with addictive behaviors such as alcohol abuse, smoking, obesity, and opiate use.³ MI

principles are now applied to the management of chronic conditions such as diabetes,⁴ traumatic brain injuries,⁵ multiple sclerosis,⁶ cardiac rehabilitation,⁷ and HIV.⁸

Motivational interviewing has been recommended for persons with musculoskeletal and chronic pain syndromes to improve personal responsibility for their rehabilitation and to apply self-management skills in their everyday life.^{9–12} In addition, MI was found to promote health in the work place by improving readiness for return to work and safe work style behaviors.^{13–17} When used correctly by empathetic therapists, MI can be an invaluable tool for assisting persons through the difficult initial stages of change. Although the benefits of MI have not been evaluated for persons with upper extremity pathology, it seems applicable.

Hand therapists expect patients to be motivated to follow recommendations. When patients resist, therapists conclude that they lack the necessary motivation for change and may discharge them from treatment. According to Rollnick and Miller,² specific change behaviors occur when a clear priority for change is established (ready), when a desire and perceived importance for change is present (willing), and when confidence for change is high (able). Because these behaviors can be influenced by other factors, motivation for change can be considered an interpersonal process, influenced by the interaction between people. The hand therapist is one person who may successfully fulfill the role of being the change agent for the patient.

STAGES OF CHANGE

Change is an important aspect of human existence. According to the paradigm for change described by Prochaska et al.,³ a person's readiness to change can be predicted and specific processes for each stage of change can be used to assist individuals as they move from resistance to positive behavioral change. Communication strategies that are inconsistent with a patient's readiness for change may result in conflict or noncompliance.

Initially, four "stages of change" were proposed, reflecting change over time and describing the characteristics of person in each stage of change. The first stage, labeled *precontemplation*, includes individuals who do not recognize a need for change. Precontemplators do not engage in activities that could alter their view of the problem behavior and they frequently display defensive behaviors such as resistance, rebellion, resignation, or rationalization.² In this stage, patients may not appreciate the value of hand therapy.

As individuals become more aware of problem behaviors, they move into the second stage; *contemplation*. The hallmark of contemplators is their acknowledgment that a problem exists followed by serious reflection and consideration of possible solutions; however, ambivalence about change remains. Contemplators work to understand the problem, its causes, and possible solutions. They may spend a lot of time gathering information about problem-solving strategies but are not ready to make a commitment to change. To be successful in moving to the next stage of change, the targeted behavior must be of value to the patient, and they must consider the behavior attainable. Finally, establishing a documented plan of change with specific outcomes for success will hold the patient accountable for future actions.

When changes in behaviors occur, persons have entered the third stage; *action*. Unfortunately, actions do not always represent lasting change. Therefore, the fourth stage of change is *maintenance* and as its name suggests, this stage of change involves a successful long-term continuation of the acquired behavior. Individuals in maintenance regularly engage in the targeted behavior and continue to work on preventing relapse of the undesired

behavior. Inherent in this stage is the need for individuals to capitalize on the gains learned during the action stage of change.

Patients who are especially resistive to the behavioral changes that are recommended by their therapists are likely to be precontemplators or contemplators. MI is an effective counseling style to use with patients who are in these early stages of change. Knowing that these individuals do not respond well to lectures or other strong, directive communication approaches, MI allows change to occur as a series of steps that involve multiple tasks, different coping strategies, and progressively empowering alternatives instead of the traditional “all or none” approach to change.²

MOTIVATIONAL INTERVIEWING PROCESSES

When faced with the dilemma of making important but difficult changes, an approach–avoidance conflict is commonly found. The benefits of staying with the status quo can outweigh the cost of making changes. Persons with hand injuries may express a desire to do their home program on a more frequent basis, but cannot find the time in their busy day to do the prescribed activities. MI can be a useful approach to understand the reasons for change from the patient’s perspective and to “tip the decisional scale” toward the action-oriented behaviors of the targeted goal.

Two processes of MI have been described for persons in the early stages of change. Figure 1 represents the two processes and the communication approaches used in MI. Building the patient’s intrinsic motivation is the first step toward accomplishing the overall goal of resolving ambivalence and increasing the patient’s confidence to change. Precontemplators are very likely to struggle with issues of motivation and confidence. It is therefore important to establish good communication skills with this type of patient before expecting them to perform prescribed activities or exercises. Effective communication strategies include establishing rapport, setting an agenda, exploring the importance of change, and enhancing confidence.

After motivation for change has been established, the therapist *strengthens the patient’s* commitment for change (Figure 1). The overall goal is to recognize a person’s readiness to change and to develop a change plan. Contemplators are commonly found in this phase, as they recognize the need to change but remain ambivalent about enacting that change. It becomes important for the therapist to provide the pros and cons for change that support a contemplator’s readiness to act. Once a blending of agenda occurs between the patient and the therapist, a plan can be negotiated. Once intrinsic motivation is developed and commitment to change is strengthened, patients will progress to later stages of change; action-oriented and maintenance behaviors.

Building intrinsic motivation to change is a common skill used on a daily basis by hand therapy professionals. In spite of its familiarity, a detailed analysis of how to accomplish this step is useful. Establishing rapport with precontemplators, those persons most resistant to change, is the first step of building motivation (Figure 1). The opening structure of an MI conversation begins with exploring the roles of the patient and the hand therapy staff. Agendas are identified and details for change are discussed. It is, however, important to avoid communication traps that can occur at this juncture. Examples include blaming, arguing, labeling, taking sides, coming across as an overbearing expert or authority figure, or overlooking the time needed to develop rapport. Instead, rapport building can be supported through an MI communication approach called OARS; open-ended questions, affirmations, reflective listening, and summarizations. This style sets the stage for negotiation as it equalizes the power in a patient–therapy relationship and provides patients with a sense that they are heard and that their input is valued.

Vignette 1

Joe is a 38-year-old Hispanic male whose left nondominant hand was crushed. He is married and has one son; age 12 years. Joe works for a local factory as a shipping, receiving, and inventory specialist. Joe has a very supportive relationship with his family and his employer. While at work, he was placing a new propane tank on his tow motor, when it slipped and crushed his hand between the tank and the support bracket. No fractures or neurovascular problems were identified. At his first hand therapy session, Joe complained of pain, swelling, and poor use of his left hand. He held the left wrist in flexion in an attempt to limit pain. A dorsal wrist splint was fabricated to increase wrist extension, a personalized home exercise program was provided, and everyday activities were encouraged. After two treatment sessions, it was noticed that Joe was not making progress as expected. When asked if he was wearing his splint and performing the activities you recommended, he simply shrugs. You decide to use OARS to further understand Joe's dilemma. You ask (O—open-ended questions) "I'd like to understand a little bit about what you're feeling right now. Can you tell me about it?" As you listen (R—reflective listening), Joe expresses little hope about a full recovery in his hand. You summarize (S), stating "It seems as though you doubt that your hand can get better." Joe says "I don't, really." You tell Joe, "Right now I can see why you have concerns about getting better and I believe that you will be able to do quite a lot with your hand by the time you leave therapy" (A—affirmations). This conversation has now enabled you to explain how you see Joe's treatment progressing, providing both education and encouragement.

Setting the agenda is the second step of building motivation (Figure 1). At this point, it is important to identify the patient's view of the agenda for change. It is essential to spend time exploring the patient's concerns and priorities about the change. It may be necessary to identify one or multiple target behaviors needed to accomplish the agenda for change.

Vignette 2

Joe began to show steady progress with finger motion, but the range of motion in his wrist remains has not improved. You wish to discuss Joe's splint compliance with him, but decide to give him the opportunity to express his concerns before you express yours. You provide him with an agenda-setting chart. The technique provides a range of issues or behaviors that the patient perceives as potential barriers to recovery.¹⁸ To begin, empty boxes are used as an opportunity to elicit concerns from the patient. Responses from the patient are entered into the boxes. Unfilled boxes are left with a question mark to add future concerns as they arise. After the patient completes the agenda-setting chart, you ask "Are you ready to talk about any concerns or comments in these areas today?" Figure 2 is an example of Joe's concerns about his future recovery. He identified five areas and with some thought, agrees to talk about the "return to work" box. He describes how he's been having nightmares about his injury. He wants you to help him type so he can get an office job instead of returning to the factory. You begin to wonder if Joe is showing some symptoms of posttraumatic stress. You refocus your conversation to Joe's adjustment to his injury and refer him to talk with his case manager in human resources. You realize that you have "let him off the hook temporarily" with his splint. However, you know this is the topic that is most important to building Joe's intrinsic motivation for making difficult changes at the present time.

Exploring the importance of change is the third step of building motivation (Figure 1). Change talk, a type of self-motivating statement proclaimed by the patient, is elicited through the MI process. Precontemplators are encouraged to assess the importance of the change, recognize the disadvantages of the status quo, list possible advantages of change, and express optimism for change. When patients begin to use change talk, hand therapist can apply other MI communication techniques such as elaborating on positive change details

and clarifying values that support change. If the patient continues to demonstrate behaviors resistive to change, the hand therapist can use other communication techniques. They include reframing the situation, agreeing with reservations, shifting the focus, staying focused and maintaining positive communication, and emphasizing personal choice and control.

Vignette 3

Joe thanks you for your suggestion to talk with his case manager, and states that he is feeling much better about his injury and his life. You still suspect he is not wearing his splint on a regular basis. During a conversation, Joe states “As soon as my hand is better, I’m finally going to play catch with my son, John.” You recognize this as a type of change talk: Joe is truly beginning to believe his hand will heal. You take the opportunity to demonstrate approximately how much wrist extension is needed to wear and use a mitt to catch a baseball. You compare it to Joe’s current extension, and emphasize the splint’s role in increasing the motion at his wrist. Joe nods, and you suggest that every time he puts on his splint, he thinks of playing catch with John.

Enhancing confidence for change is the fourth step of building motivation (Figure 1). In many cases, pre-contemplators may come to understand that change may be important, but lack the belief that they can produce the desired results. At this point, support of self-efficacy is needed and confidence talk is encouraged. Several approaches can prove useful. One technique that can be used to improve confidence is the use of a confidence ruler. Individuals rate their level of confidence for change on a scale from one to ten. Other MI methods include reviewing the patient’s past successes, identifying their personal strengths and resources, brainstorming options for change, giving information and advice, and describing a hypothetical change in detail. Any superficial attempts to improve confidence with pep talks should be avoided.

Vignette 4

Joe begins to wear his splint more often, and you notice his range of motion is returning, albeit very slowly. However, Joe appears downtrodden. He points to his splint and asks “When can I stop wearing this thing? I don’t really think it’s helping, anyway.” You tell Joe you want to perform a “test.” You take out your goniometer, and show him his wrist extension measurement. You open his file, look up his measurement from his initial appointment, and show him the difference: an improvement of 15 degrees. Joe is surprised to see this result. You realize that by identifying the success Joe has already made, he will be more likely to continue following your recommendations.

Once intrinsic motivation for change has been achieved, the hand therapy professional begins to strengthen commitment to change through MI communication styles. Contemplators are considering possibilities for change, but are not ready to make a commitment for action. Therefore, MI approaches focus on recognizing readiness for change (Figure 1). At this point, the hand therapist identifies possible cues from the patient. Individuals show less resistance to change and spend less time discussing the problem. More resolutions for change are made. Patients demonstrate more change talk or ask more questions about the change. They envision themselves enacting the change and may begin experimenting with the targeted change behaviors.

There are several pitfalls for the therapist at this point including underestimation of the level of ambivalence, overprescription of a plan of action, or failure to provide sufficient direction. It is important that the agenda for change is recapped and that key questions from staff help a patient make a positive decision for change.

Vignette 5

Joe proudly tells you during a therapy session that he was able to figure out a way to do some of his favorite activities (exercising at the gym) while wearing his splint. You recognize that he either had not been doing this activity previously or had not been wearing his splint while doing so. You are happy that Joe has begun wearing his splint more consistently, but suspect that he is not wearing it throughout the whole day as you suggested. You recognize that Joe is likely in the contemplation stage, experimenting with splint usage in different contexts. Instead of prescribing extra exercises to complete, which might overwhelm Joe, you decide to spend some time brainstorming with him about other activities he can perform while wearing his splint.

The last phase of strengthening commitment to change is negotiating a change plan (Figure 1). Specific goals, strategies, and targets are discussed using a patient-centered approach. Several change options are considered and confidence ratings are obtained. Once a plan is decided, the patient is asked to put it on paper as part of their treatment plan. The reasons for change are included as well as main goals, actions to be performed, timelines, type and amount of help from others, obstacles for change, and indicators for success. Written plans are shared, approved, and made public.

Vignette 6

Joe has been reporting participating in more and more activities while he wears his splint. You decide this is the perfect time to map out a “typical day” with Joe, including documenting his splint usage. Joe writes out a schedule, and describes how and when he will wear his splint during each activity. You approve of all his decisions, and are thrilled that Joe appears to be enacting his plan to change. After the schedule has been drafted, you suggest that Joe puts the schedule on his refrigerator so he is accountable to himself to follow through with action-oriented healthy behaviors and can be supported by his family in maintaining the home program. As he continues to make progress in his hand function, his confidence and self-efficacy returns for performing his caregiver and worker roles. Joe quickly recovers full active motion of his hand and wrist, has limited swelling and pain after activity, and returns to his original job at the factory without incidence of transitional work problems.

CLINICAL CONSIDERATIONS FOR USING MI

- Expect resistance to change as a natural part of recovery.
- Understand that the likelihood of change is strongly influenced by interpersonal interactions and that hand therapy professionals significantly impact treatment dropouts, retentions, program adherences, and outcomes.
- Appreciate the need for autonomy; help the patient move toward change successfully and with confidence.
- Use OARS in therapeutic communication; open-ended questions, affirmations, reflective listening, and summaries.
- Recognize a patient’s stage of change throughout the rehabilitation process, regardless of where they are in their course of treatment.
- Be ready to use MI with any patient as soon as they begin to demonstrate resistive behavioral characteristics that interfere with recovery (e.g., not showing for appointments, limited participation in clinic, exaggerated fear or pain responses, noncompliance).

- If resistance occurs, seek to understand the patients' perspective, concerns, and priorities.
- Contrast the patient's goals with what is occurring.
- Build intrinsic motivation by establishing purpose, eliciting change talk, responding to resistance, and enhancing confidence.
- Strengthen commitment through recognizing a patients' readiness for action, negotiating a personalized plan for success, and eliciting appropriate levels of commitment.

SUMMARY

Motivational interviewing offers an approach for managing behavioral challenges that patients may present during their recovery from hand/upper extremity disorders. Readiness to change is the result of a dynamic interaction between a patient's intrinsic motivation and the therapist's appropriate selection and application of motivational techniques. When met with resistance, therapists must reevaluate their own skills to effectively address the holistic needs of their patients.

Motivational interviewing is established as a valuable, evidenced-based approach for persons with challenging behavioral problems and shows promise for use with similar hand injured patients. Initially, the application of MI principles may seem time consuming and beyond customary hand therapy procedures. However, including the MI technique may enhance treatment effectiveness for patients who at first glance appear unmotivated.

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FIGURE 1.
Components of motivational interviewing processes aimed to instill behavioral changes.

FIGURE 2.
An example of a completed agenda-setting sheet to build a patient's intrinsic motivation.