Motivational Interviewing Complements Work Rehabilitation Practice with Injured Workers

CIRPD Webinar July 20, 2017

Joanne Park, PhD, BScOT
Douglas P. Gross, PhD, BScPT
We do not have affiliations (financial or otherwise) with a pharmaceutical, medical device, communications organization, or other commercial body.

Research grants to complete this project received from:
Workers’ Compensation Board of Alberta
Canadian Occupational Therapy Foundation

Data were received from:
Workers’ Compensation Board of Alberta/Millard Health

Other: Doug Gross is an employee of the University of Alberta
Joanne Park is an employee of the WCB-Alberta
Clinical Trial Registration Number is ISRCTN45748422
Research Collaborators

University of Alberta
Shaniff Esmail
Colleen Norris

WCB-Alberta
Fahreen Rayani
What factors determine whether this worker will be disabled?
Psychosocial Barriers to RTW
<table>
<thead>
<tr>
<th>What Influences RTW?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual</strong></td>
</tr>
<tr>
<td>Physical problem</td>
</tr>
<tr>
<td>Job satisfaction</td>
</tr>
<tr>
<td>Stress/distress</td>
</tr>
<tr>
<td><strong>Workplace</strong></td>
</tr>
<tr>
<td>Physical Demands</td>
</tr>
<tr>
<td>Income</td>
</tr>
<tr>
<td>Level of support</td>
</tr>
<tr>
<td><strong>Social</strong></td>
</tr>
<tr>
<td>Co-worker support</td>
</tr>
<tr>
<td>Supervisor ratings/relationship</td>
</tr>
<tr>
<td>Cultural factors</td>
</tr>
<tr>
<td>‘Legislation/Policy’</td>
</tr>
<tr>
<td>WCB</td>
</tr>
<tr>
<td>Union</td>
</tr>
<tr>
<td>Health care system</td>
</tr>
</tbody>
</table>
Motivational Interviewing

- Client motivation is essential for success
- Ambivalence – arises from doubt and/or contradictory ideas regarding work ability
- MI is a client-centered counselling approach that assists in resolving ambivalence
Does integrating MI into occupational rehab lead to more sustainable RTW outcomes?

_Hypotheses_: MI in addition to a standard functional restoration program would lead to:
1) More successful RTW, especially among non-job attached workers
2) Lower recurrence rates
3) No change in clinical outcomes of pain/disability
Methods

*Design*: Cluster Randomized Controlled Trial

*Sample*: All workers treated at Millard Health (predominantly employed males with sub-acute/chronic MSK)

*Comparison*: MI vs no-MI during rehabilitation

*Context*: Workers’ compensation rehab facility
Motivational Interviewing for Workers with Disabling Musculoskeletal Disorders: Results of a Cluster Randomized Control Trial

Joanne Park1,2, Shantiff Esmail3, Fahreen Rayani4, Colleen M. Norris5, Douglas P. Gross6

© The Author(s) 2017. This article is an open access publication

https://link.springer.com/article/10.1007/s10926-017-9712-3
Motivational Interviewing Improves Sustainable Return to Work in Injured Workers After Rehabilitation: A Cluster Randomized Controlled Trial

Douglas P. Gross Ph.D., BSc.PT

Department of Physical Therapy, University of Alberta, Edmonton, Canada

Joanne Park Ph.D. (Cand), MA, BScOT

Dept. of Occupational Therapy, University of Alberta, Edmonton, Canada; Workers’ Compensation Board of Alberta Millard Health, Edmonton

Fahreen Rayani MA, BSc (Spec.) Psychology

Health Care Services Department, Workers’ Compensation Board of Alberta, Edmonton, Canada

Colleen M. Norris Ph.D., MScN, BScN

Faculty of Nursing/Public Health, School of Medicine & Dentistry Medicine/Surgery, University of Alberta, Edmonton, Canada

Shaniff Esmail Ph.D, MScOT, BScOT

Dept. of Occupational Therapy, University of Alberta, Edmonton, Canada

Received 22 December 2016, Revised 29 May 2017, Accepted 3 June 2017, Available online 21 June 2017.
Inclusion/Exclusion

Included if:
• Active WCB claim for musculoskeletal disorder/injury
• Participating in rehab between 11/17/14 and 06/30/15

Excluded if:
• Under age 18
• Referred for surgery
• Co-morbid/non-compensable medical conditions interfering with rehab
• Traumatic brain injury or traumatic psychological injury
• Non-English speaker
• Non-compliant with rehab/attended less than 5 days
Outcomes

Work status at program discharge:
- Work Status? (Working or not)

Rehabilitation Outcomes (change between admission/discharge):
- Pain intensity – Visual Analogue Scale
- Disability – Pain Disability Index

Workers’ Compensation Benefit Outcomes:
- Total temporary disability (TTD)
- Partial temporary disability (PTD)
- Vocational rehabilitation benefits (VR)
- Recurrence of these outcomes
Study Flow Chart

12 RTW Assessment Clinicians

MI (6)  No MI (6)

367 workers  361 workers

100% follow-up for Program D/C RTW outcomes and compensation benefits
## Confirmed RTW at Program Discharge

<table>
<thead>
<tr>
<th></th>
<th>MI</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-job attached</td>
<td>21.6%</td>
<td>9.5%</td>
</tr>
<tr>
<td>MI-Adherent</td>
<td>33.3%</td>
<td></td>
</tr>
<tr>
<td>MI with RTW goal</td>
<td>47.4%</td>
<td></td>
</tr>
<tr>
<td>Odds ratio = (2.64) ((95% \text{ CI} 1.09 – 6.41))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job attached</td>
<td>97.1%</td>
<td>94.1%</td>
</tr>
<tr>
<td>MI-Adherent</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
# Compensation Benefit

## Outcomes 1 year After Rehab

<table>
<thead>
<tr>
<th></th>
<th>MI</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non Job Attached</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days receiving Partial Benefits</td>
<td>8.2</td>
<td>0.2</td>
</tr>
<tr>
<td>(i.e. <em>return to modified duties</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Job Attached</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any benefit recurrence</td>
<td>4.5%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Recurrence of partial benefits</td>
<td>2.9%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

*Statistically significant difference (p<0.05) between groups.*
Rehab Clinical Outcomes

<table>
<thead>
<tr>
<th>Mean Improvement</th>
<th>MI</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain VAS*</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>PDI%</td>
<td>13.7</td>
<td>14.0</td>
</tr>
</tbody>
</table>

No significant differences in self-report clinical outcomes
Conclusions

• MI in addition to routine rehabilitation is more effective than rehabilitation alone in improving RTW among workers with disabling MSK disorders.

• The use of MI also leads to more sustainable RTW outcomes up to 1 year following rehabilitation, and facilitates transition to modified work duties.

• MI results in behavioural change only – no additional ‘clinical’ improvement
MOTIVATIONAL INTERVIEWING (MI)
Definition of MI

- “Directive, client-centred therapeutic style that elicits behavioural change by assisting clients identify and resolve ambivalence”
  (Miller and Rollnick, 2013)

What is Ambivalence

- Simultaneous and contradictory attitudes or feelings
- Feeling two ways about something
- Fundamental goal of MI - assist individuals explore and resolve their ambivalence about change
MI is an evidence based approach:
- Originally developed to address substance use disorders
- Reduce maladaptive behaviors
- Promote adaptive health behavior change

Effectiveness of MI In Improving Return to Work (RTW) Outcomes for Injured Workers
STAGES OF CHANGE

- Pre-contemplation
  - Low importance
  - Low/High confidence

- Contemplation
  - High importance
  - Low confidence

- Preparation
  - High anxiety

- Action
  - Decrease ambiguity - clear goal and plan

- Maintenance
  - Others who can support

Prochaska et al., 1994
Step 1: Engaging
- Build rapport

Step 2: Focusing
- Identify behaviour to address

Step 3: Evoking
- OARS
- Sustain talk vs change talk

Step 4: Planning
- Change Plan
- Address Barriers

4 FUNDAMENTAL PROCESSES OF MI
Step 1: Engaging

- Seek to Collaborate
- Be Transparent
- Directive

- Help reduce discord with clients
- Build rapport especially with angry clients

Factors Influencing Engagement:
1. Desires or goals. What does your client want?
2. Importance. Is it a priority?
3. Positivity. Is it a safe environment?
4. Expectations. Did the experience fit with the expectations?
5. Hope. Will this help?

(Miller and Rollnick, 2013)
Step 2: Focusing
- Must identify only 1 target behaviour for each MI session
- Target behaviour may change during MI session
- Tools/Scales used to identify stages of change/level of readiness with clients
  - RRTW scale
Step 3: Evoking

Skills: OARS

- **Open-ended questions**
  - Encourages client’s to reflect and elaborate
  - Closed questions- specific information answered with a few words

- **Affirmations**
  - Comments regarding client’s strengths, abilities, good intentions and effort
  - Build confidence and acknowledges personal responsibility

- **Reflections**
  - Fundamental skill of MI
  - Allows our clients to hear their thoughts and feelings in somewhat different words and ponder them

- **Summaries**
  - Provide a link between current conversation and what was previously discussed
  - Opportunity for our client’s to provide more information on what may have been missed
  - Promote understanding and show our clients we are carefully listening
SUSTAIN TALK: ONE SIDE OF AMBIVALENCE

- Sustain talk
  - Reflects one side of ambivalence
  - Normal part of ambivalence
  - Need to focus (step 2) because cannot identify sustain talk without target behaviour
  - Can be increased or decreased based on how you respond
  - Ratio of sustain talk to change talk typically decreases over the course of an MI session

(Miller & Rollnick, 2013)
Why do we do this...
- Not necessary in MI to explore and evoke reasons for sustain talk
- Decisional balance (explore pros and cons of status quo and change) used when change in a particular direction is not wanted; however this is contradictory to MI - changed in 2012.

How do we do this...
- Most common method is using 1 of 3 types of reflections:
  - Simple or complex reflection – evoke change talk – the other side of ambivalence
  - Amplified reflection – add intensity or certitude – overstatements used to evoke change talk
  - Double-sided reflection – integrates sustain talk with change talk
    (Miller & Rollnick, 2013)
Change Talk
- Any expressed language favoring change

Preparatory change talk: Desire, Ability, Reason, Need (DARN)
- Reflects pro change side of ambivalence
- Phase 1 of MI – evoking motivation to generate change

Mobilizing change talk: Commitment, Activation, Taking Steps (CATs)
- Indicates movement toward resolution of ambivalence in the direction of change
- Phase 2 of MI – strengthening commitment for making change

(Miller & Rollnick, 2013)
Desire
- Wanting is a component of motivation for change but it is not essential
  - “I want, I would like, I wish, I hope”

Ability
- Component of motivation reflecting self-perceived ability to achieve goal
  - “I can, I am able to, I could, I would be able to”

Reasons
- Specific reasons for change – specify why change is important
  - “I have reason to, I would, I might, I want”

Need
- Stresses general importance or urgency of change but does not specify why change is important
  - “I need to, I have to, I must, I’ve got to, I can’t keep on like this, something has to change”

(Miller & Rollnick, 2013)
Commitment
- Used between people to make promises to each other
- Clearest example of mobilizing change talk
- “I will, I promise, I swear, I guarantee, I give you my word, I intend”

Activation
- Words indicating movement towards action but not quite a commitment to do so
- Implies a commitment without stating it
- “I’m willing to, I’m ready to, I’m prepared to”

Taking Steps
- Client has taken action in the direction of change
- “I called three places about possible jobs”

(Miller & Rollnick, 2013)
4 FUNDAMENTAL PROCESSES OF MI

Step 4: Planning
Only proceed to planning if you hear Commitment Language (CATs)
- Commitment – Used between people to make promises to each other
- Activation – Words indicating movement towards action but not quite a commitment to do so
- Taking Steps - Client has taken action in the direction of change

Develop a Change Plan
- Clear and specific
- Identify those involved in the plan
- Address barriers
## SPIRIT OF MI VS. TRADITIONAL COUNSELING METHODS

<table>
<thead>
<tr>
<th>Fundamental Approach to MI</th>
<th>Mirror-image opposite approach to counselling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collaboration</strong>. MI involves a partnership that honors the client’s expertise and perspectives. The therapist provides an atmosphere that is conducive rather than coercive to change.</td>
<td><strong>Confrontation</strong>. Counseling involves over-riding the client’s impaired perspectives by imposing awareness and acceptance of “reality” that the client cannot see or will not admit.</td>
</tr>
<tr>
<td><strong>Evocation</strong>. The resources and motivation for change are presumed to reside within the client. Intrinsic motivation for change is enhanced by drawing on the client’s own perceptions, goals, and values.</td>
<td><strong>Education</strong>. The client is presumed to lack key knowledge, insight, and/or skills that are necessary for change to occur. The therapist seeks to address these deficits by providing the requisite enlightenment.</td>
</tr>
<tr>
<td><strong>Autonomy</strong>. The therapist affirms the client’s right and capacity for self-direction and facilitates informed choice.</td>
<td><strong>Authority</strong>. The therapist tells the client what he or she must do.</td>
</tr>
</tbody>
</table>

(Miller and Rollnick, 2002)
Questions to ask yourself with each process:

1. Engaging:
   - How well do I understand my client’s perceived situation or dilemma?
   - Could I give voice to what my client is experiencing?
   - How many of my responses are reflective listening statements?
   - How engaged is my client?

2. Focusing:
   - Is there a clear target behaviour?
   - Do I know the direction in which I hope change occurs?
   - What are the goals for change and is there agreement about them?

(Miller and Rollnick, 2013)
Questions to ask yourself with each process:

3. Evoking
- What do I know about my client’s motivation for change?
- Do I hear change talk?
- What am I doing to intentionally evoke and strengthen change talk?
- What are my client’s concerns, goals and/or values that would encourage change?

4. Planning
- Am I hearing mobilizing change talk (CATS)?
- Is this person ready to discuss a plan?
- Am I evoking mobilizing change talk or providing solutions?
- Am I giving information or advice with permission?

(Miller and Rollnick, 2013)
Characteristics of MI techniques that complement its suitability for use in work rehabilitation focusing on behavioural change include:

1. MI is applicable across a variety of issues and behaviours

2. Effective with clients who are ambivalent or reluctant in changing their behaviour

3. Efficacious even in small treatment quantities

4. Applicable across age, gender, cultural and socioeconomic statuses

5. Fits well in combination with conventional interventions and programs

(Hettema et al., 2005; Rubak et al., 2005)
Motivational Interviewing is a low cost, low risk approach that has proven to be effective with injured workers in increasing return-to-work rates.

Understanding an injured worker’s level of readiness to return-to-work will assist in providing suitable psychosocial and behavioural interventions.

Further evaluation of stage-based interventions is required to determine what potential tools and/or intervention strategies are effective at different stages of behaviour change in the return-to-work process.
QUESTIONS?


