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# The Effectiveness of Motivational Interviewing Techniques Used by Nurses to Improve ADL Performance in Rehabilitation Settings: A Qualitative Study

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**Abstract**
**Objective:** This qualitative study aimed to explore the perspectives of nurses and patients on the effectiveness of motivational interviewing (MI) techniques in improving activities of daily living (ADL) performance in rehabilitation settings.
**Methods:** Semi-structured interviews were conducted with 12 nurses and 15 patients from two rehabilitation centers. Purposive sampling was used to recruit participants with experience in using or receiving MI interventions. The interviews were audio-recorded, transcribed verbatim, and analyzed using thematic analysis.
**Results:** Three main themes emerged from the data: (1) building a therapeutic alliance, (2) fostering patient autonomy, and (3) overcoming barriers to change. Nurses highlighted the importance of establishing trust, empathy, and collaboration with patients to facilitate behavior change. Patients reported that MI techniques such as reflective listening, affirmations, and goal-setting helped them to develop intrinsic motivation, set realistic goals, and take ownership of their rehabilitation process. However, both nurses and patients identified barriers to implementing MI, including time constraints, lack of training, and resistance to change.
**Conclusion:** This study provides insights into the experiences and perceptions of nurses and patients regarding the use of MI techniques in rehabilitation settings. The findings suggest that MI can be an effective approach to enhance patient motivation, engagement, and ADL performance. However, addressing the challenges in implementing MI requires organizational support, training, and resources. Future research using mixed methods designs is needed to further evaluate the impact of MI on rehabilitation outcomes and explore strategies to optimize its implementation.
**Keywords:** motivational interviewing, nurses, activities of daily living, rehabilitation, qualitative research

## Introduction

Rehabilitation is a multidisciplinary approach that aims to optimize functional independence and quality of life among individuals with physical, cognitive, or sensory impairments (Stucki et al., 2018). Nurses play a pivotal role in the rehabilitation process by providing holistic care, education, and support to promote recovery and adaptation (Vaughn et al., 2016). One of the key challenges faced by rehabilitation nurses is motivating patients to actively engage in their rehabilitation program and perform activities of daily living (ADL) independently (Vloothuis et al., 2019).

Motivational interviewing (MI) is a client-centered, directive counseling approach that aims to elicit behavior change by exploring and resolving ambivalence (Miller & Rollnick, 2012). MI has been widely used in various healthcare settings to promote health behaviors, such as smoking cessation, weight management, and medication adherence (Rollnick et al., 2008). In recent years, there has been growing interest in applying MI techniques in rehabilitation settings to enhance patient motivation and engagement (Henkemans et al., 2018).

Despite the potential benefits of MI in rehabilitation, there is limited qualitative research exploring the perspectives of nurses and patients on the effectiveness of MI techniques in improving ADL performance. Therefore, this study aimed to address this gap by conducting semi-structured interviews with nurses and patients from rehabilitation centers. The findings of this study can inform the development and implementation of MI-based interventions in rehabilitation settings.

Literature Review

Several studies have investigated the effectiveness of MI in promoting health behaviors and improving patient outcomes in various healthcare settings. A systematic review by Rubak et al. (2005) found that MI outperformed

traditional advice-giving in 80% of the studies reviewed, with a significant positive effect on a range of health behaviors, including alcohol and drug use, smoking cessation, and physical activity.

In the context of rehabilitation, a qualitative study by Willey et al. (2020) explored the experiences of occupational therapists in using MI to promote behavior change among patients with spinal cord injury. The study found that MI helped therapists to build a collaborative relationship with patients, identify and resolve barriers to change, and support patients in setting and achieving their rehabilitation goals.

Another study by McGrane et al. (2015) examined the effectiveness of an MI-based intervention delivered by physiotherapists to improve physical activity levels among patients with chronic low back pain. The results showed that the MI group had significantly higher levels of physical activity and self-efficacy compared to the control group at 3-month follow-up.

A qualitative study by Norris et al. (2019) explored the perspectives of nurses and patients on the use of MI in stroke rehabilitation. The study found that nurses perceived MI as a valuable tool to enhance patient motivation, engagement, and goal-setting. Patients reported that MI helped them to feel heard, supported, and empowered in their rehabilitation journey.

Despite the promising evidence supporting the use of MI in rehabilitation, there are also challenges in implementing MI in practice. A qualitative study by Hohman et al. (2018) identified several barriers to implementing MI among occupational therapists, including time constraints, lack of training, and resistance from patients and families.

Methods

**Study Design**

This study employed a qualitative descriptive design using semi-structured interviews to explore the perspectives of nurses and patients on the effectiveness of MI techniques in improving ADL performance in rehabilitation settings.

**Participants and Setting**

Purposive sampling was used to recruit 12 nurses and 15 patients from two rehabilitation centers. The inclusion criteria for nurses were: (1) registered nurses working in rehabilitation settings for at least one year, and (2) experience in using MI techniques with patients. The inclusion criteria for patients were: (1) adults aged 18 years or older, (2) currently receiving rehabilitation services for at least one month, and (3) experience in receiving MI interventions from nurses.

**Data Collection**

Semi-structured interviews were conducted face-to-face by two trained researchers using an interview guide developed based on the literature review and research objectives. The interviews were conducted in a private room at the rehabilitation centers and lasted approximately 30-60 minutes. The interviews were audio-recorded with the participants' permission and transcribed verbatim for analysis.

**Data Analysis**

The interview transcripts were analyzed using thematic analysis, following the six-phase approach proposed by Braun and Clarke (2006). The analysis was conducted independently by two researchers to ensure rigor and trustworthiness. The researchers first familiarized themselves with the data by reading and re-reading the transcripts. Initial codes were generated based on the meaningful segments of the data. The codes were then collated into potential themes and sub-themes. The themes were reviewed and refined through discussions between the researchers until consensus was reached. Finally, the themes were named and defined, and representative quotes were selected to illustrate each theme.

Results

Three main themes emerged from the data analysis: (1) building a therapeutic alliance, (2) fostering patient autonomy, and (3) overcoming barriers to change.

**Theme 1: Building a Therapeutic Alliance**

Nurses emphasized the importance of establishing a trusting, empathetic, and collaborative relationship with patients as a foundation for effective MI interventions. They described using active listening, reflective statements, and open-ended questions to understand patients' perspectives, concerns, and goals (Table 1).

Table 1. Strategies for Building a Therapeutic Alliance

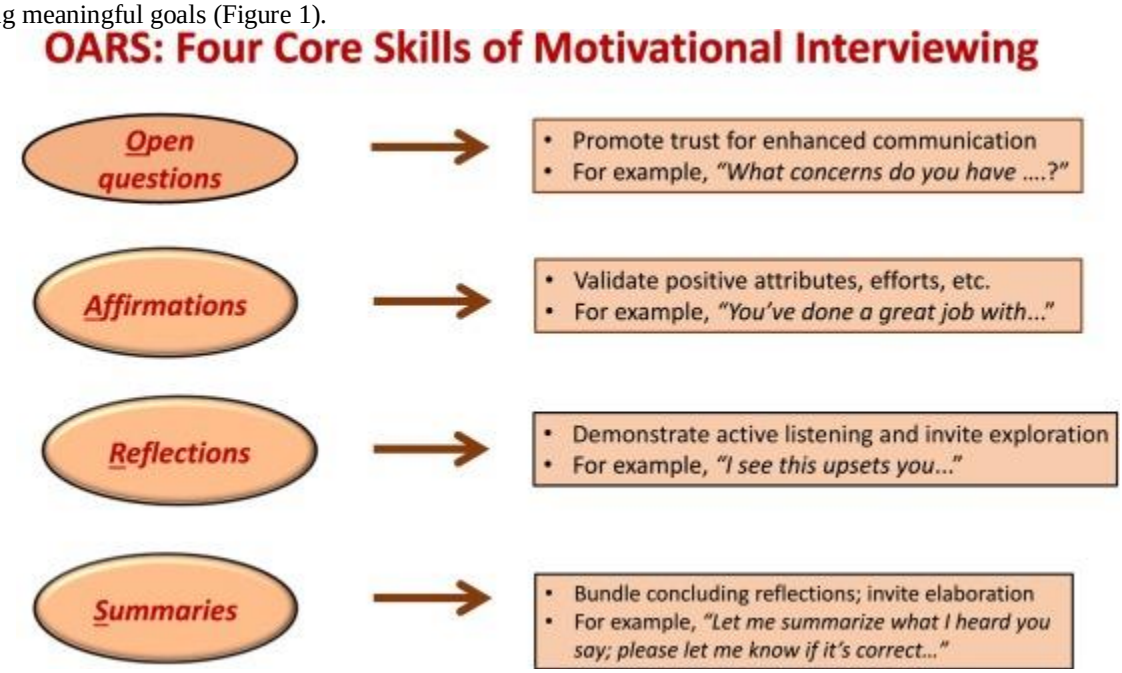
| Strategy | Description | Example Quote |
|---|---|---|
| Active listening | Giving undivided attention to patients and acknowledging their feelings and concerns | "I try to really listen to what the patient is saying, not just the words but also the emotions behind them." (Nurse 3) |
| Reflective statements | Paraphrasing or reflecting back what the patient has said to demonstrate understanding and empathy | "When a patient expresses frustration with their progress, I might say something like 'It sounds like you're feeling discouraged right now.' It helps them feel heard and validated." (Nurse 8) |
| Open-ended questions | Asking questions that encourage patients to elaborate on their thoughts, feelings, and experiences | "Instead of asking yes/no questions, I try to ask things like 'What concerns you most about your recovery?' or 'What would you like to be able to do again?' It gets them thinking and talking more openly." (Nurse 11) |

Patients also valued the therapeutic alliance with nurses and felt that it contributed to their motivation and adherence to rehabilitation.

"The nurses here are really supportive and understanding. They take the time to listen to me and help me set realistic goals for my recovery. It makes me feel more motivated to work on my ADLs." (Patient 7)

**Theme 2: Fostering Patient Autonomy**

Nurses reported using MI techniques such as evocation, affirmations, and choice to foster patient autonomy and intrinsic motivation. They encouraged patients to identify their own reasons for change and supported them in setting meaningful goals (Figure 1).




[Figure 1. MI Techniques for Fostering Patient Autonomy]

Patients appreciated the autonomy-supportive approach of nurses and felt that it enhanced their confidence and self-efficacy in performing ADLs.

"The nurses here don't just tell me what to do, they ask me what I want to work on and how I want to go about it. It makes me feel more in control of my rehabilitation and more motivated to practice my ADLs." (Patient 12)

**Theme 3: Overcoming Barriers to Change**

Both nurses and patients identified several barriers to implementing MI and achieving behavior change in rehabilitation settings. These included time constraints, lack of training, resistance to change, and environmental factors (Table 2).

Table 2. Barriers to Implementing MI in Rehabilitation Settings

| Barrier | Description | Example Quote |
|---|---|---|
| Time constraints | Heavy workload and limited time with each patient can make it challenging to use MI effectively | "Sometimes it's challenging to use MI when you have a heavy workload and limited time with each patient. It requires a lot of active listening and reflection, which can be time-consuming." (Nurse 11) |
| Lack of training | Insufficient training in MI techniques can hinder nurses' confidence and competence in using them | "I think many nurses haven't had formal training in MI, so they may not feel comfortable or skilled in using it with patients." (Nurse 5) |
| Resistance to change | Some patients may be resistant to changing long-standing habits or trying new approaches | "I think some patients are just not ready to change, no matter how much you try to motivate them. They may have been doing things a certain way for a long time and are resistant to trying something new." (Nurse 6) |
| Environmental factors | Lack of organizational support, resources, or a conducive environment can impede the implementation of MI | "It can be hard to use MI when you don't have a private space to talk with patients or when there are constant interruptions and distractions." (Nurse 9) |

Despite these barriers, nurses and patients also identified strategies to overcome them, such as seeking organizational support, attending MI training workshops, involving family members in the rehabilitation process, and creating a supportive environment.

"I think it's important to have the support of your organization and colleagues when trying to implement MI. It helps to have regular team meetings and supervision to discuss challenges and share best practices." (Nurse 2)

"Having my family involved in my rehabilitation has been really helpful. They encourage me to practice my ADLs at home and celebrate my progress. It keeps me motivated to keep working towards my goals." (Patient 15)

Discussion

This study explored the perspectives of nurses and patients on the effectiveness of MI techniques in improving ADL performance in rehabilitation settings. The findings suggest that MI can be a valuable approach to enhance patient motivation, engagement, and outcomes in rehabilitation.

The importance of building a therapeutic alliance between nurses and patients emerged as a key theme in this study. This finding is consistent with previous research highlighting the role of the therapeutic relationship in facilitating behavior change and improving patient outcomes (Norris et al., 2019; Willey et al., 2020). Nurses in this study described using MI techniques such as active listening, reflective statements, and open-ended questions to establish trust, empathy, and collaboration with patients. These techniques have been shown to enhance patient-provider communication, patient satisfaction, and treatment adherence (Miller & Rollnick, 2012).

Another important theme was fostering patient autonomy and intrinsic motivation through MI. Nurses reported using techniques such as evocation, affirmations, and choice to elicit patients' own reasons for change and support them in setting meaningful goals. This approach is consistent with the self-determination theory, which posits that autonomy, competence, and relatedness are essential for intrinsic motivation and sustained behavior change (Ryan & Deci, 2000). Previous studies have also found that autonomy-supportive interventions can enhance patient engagement, self-efficacy, and functional outcomes in rehabilitation (McGrane et al., 2015; Vloothuis et al., 2019).

However, this study also identified several barriers to implementing MI in rehabilitation settings, including time constraints, lack of training, resistance to change, and environmental factors. These findings are consistent with previous research highlighting the challenges of integrating MI into routine clinical practice (Hohman et al., 2018; Willey et al., 2020). To overcome these barriers, nurses and patients in this study suggested strategies such as seeking organizational support, attending MI training workshops, involving family members in the rehabilitation process, and creating a supportive environment. These strategies have been shown to facilitate the implementation and sustainability of MI in healthcare settings (Forsberg et al., 2010; Miller & Moyers, 2017).

This study has several limitations that should be acknowledged. First, the small sample size and qualitative design limit the generalizability of the findings to other rehabilitation settings and populations. Second, the study relied on self-reported data from nurses and patients, which may be subject to social desirability bias. Third, the study did not include objective measures of ADL performance or long-term follow-up to assess the sustainability of the effects of MI.

Despite these limitations, this study provides valuable insights into the experiences and perceptions of nurses and patients regarding the use of MI techniques in rehabilitation settings. The findings suggest that MI can be an

effective approach to enhance patient motivation, engagement, and ADL performance. However, further research using mixed methods designs and larger samples is needed to evaluate the effectiveness and implementation of MI in rehabilitation settings.

Conclusion

This qualitative study explored the perspectives of nurses and patients on the effectiveness of MI techniques in improving ADL performance in rehabilitation settings. The findings suggest that MI can be a valuable approach to enhance patient motivation, engagement, and outcomes in rehabilitation. Nurses and patients identified building a therapeutic alliance, fostering patient autonomy, and overcoming barriers to change as key factors influencing the effectiveness of MI. However, further research is needed to evaluate the effectiveness and implementation of MI in rehabilitation settings using mixed methods designs and larger samples.

**References**

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Forsberg, L., Ernst, D., &Farbring, C. Å. (2010). Learning motivational interviewing in a real-life setting: A randomised controlled trial in the Swedish Prison Service. Criminal Behaviour and Mental Health, 20(3), 177-188. https://doi.org/10.1002/cbm.792

Henkemans, O. A. B., Molema, J. J. W., Franck, E. J. H., Otten, W., & Buurman, B. M. (2018). Interventions using motivational interviewing for rehabilitation in older adults: A systematic review and meta-analysis. Archives of Physical Medicine and Rehabilitation, 99(11), 2308-2320. https://doi.org/10.1016/j.apmr.2018.06.010

Hohman, M., Pierce, P., & Barnett, E. (2018). Motivational interviewing: An evidence-based practice for improving student practice skills. Journal of Social Work Education, 54(1), 122-136. https://doi.org/10.1080/10437797.2017.1308974

McGrane, N., Galvin, R., Cusack, T., & Stokes, E. (2015). Addition of motivational interventions to exercise and traditional physiotherapy: A review and meta-analysis. Physiotherapy, 101(1), 1-12. https://doi.org/10.1016/j.physio.2014.04.009

Miller, W. R., & Moyers, T. B. (2017). Motivational interviewing and the clinical science of Carl Rogers. Journal of Consulting and Clinical Psychology, 85(8), 757-766. https://doi.org/10.1037/ccp0000179

Miller, W. R., & Rollnick, S. (2012). Motivational interviewing: Helping people change (3rd ed.). Guilford Press.

Norris, M., Poltawski, L., Calitri, R., Shepherd, A. I., & Dean, S. G. (2019). Hope and despair: A qualitative exploration of the experiences and impact of trial processes in a rehabilitation trial. Trials, 20(1), 525. https://doi.org/10.1186/s13063-019-3633-8

Rollnick, S., Miller, W. R., & Butler, C. C. (2008). Motivational interviewing in health care: Helping patients change behavior. Guilford Press.

Rubak, S., Sandbaek, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. British Journal of General Practice, 55(513), 305-312.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psych