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## Mini Review

## Evaluation of Motivational Interview in Nursing: A Literature Review

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### Abstract

With healthcare settings' focus on outcomes, successful strategies for promoting healthy behaviors involving shared decision-making between nurse and patient are essential. Using a methodological framework, a literature review was performed to explore current knowledge regarding strategies for evaluating the delivery of MI in the nursing field. The most commonly used tool for the evaluation of intervention was a version of the Motivational Interviewing Treatment Integrity (MITI) Code (n=7). We identified major barriers in using MI. One barrier is a valid and feasible way to evaluate MI's use. A second barrier is the considerable amount of time and effort involved to properly teach and implement MI in the clinical setting. The number of MI studies in nursing is increasing but the strategies used to evaluate the delivery of MI are still limited. With MI gaining popularity in the clinical setting, nurse educators must be aware of this effective strategy in communication.

**Keywords:** Evaluation; Health Communication; Motivational Interview

### Introduction

As the global environment of health care evolves, the role and responsibility of the nurse continues to increase in complexity. In addition to performing traditional duties, emphasis is put on the provision of cost-effective health promotion and maintenance strategies [1]. Health care organizations stress the importance of incorporating evidence-based practice into nursing practice [2] as well as recognize that nurses are in a unique role to have an impact on patient care. Nurses, as clinicians, are found at the forefront of patient care and in nearly every type of health care setting to care for patients. There is opportunity for nurses to begin, continue, and conclude a discussion during a patient encounter. This type of exposure to patients is an ideal situation to impact patient care, satisfaction, and outcomes [3]. Furthermore, nurses are challenged to engage patients to disseminate patient preferences to the health care team for patient-centered care and involvement in clinical decision-making.

For example, the role and responsibility of nurses in the outpatient setting includes discussion of patients' social histories including lifestyle behaviors that impact overall health. In today's practice, nurses perform intake of patient histories, assess for risk factors of chronic disease, while also addressing any needs for patient education. During a patient visit, nurses are expected to efficiently document patient information to share with other health care providers. Additionally, nurses offer brief advice to patients and their families to help understand risk for disease, promote health, prevent disease and complications, as well as answer questions that the patient may have. This traditional approach by nurses is comprehensive; however, has not been an effective way to promote changes in lifestyle given the rising prevalence of diabetes, obesity, and metabolic syndrome. Additionally, clinicians on the health care team, such as physicians, therapists, and pharmacists, all have a duty to engage in patient-centered care to provide high quality, engaged care for patients and families.

It is known that many diseases afflicting today's society are due in part to poor lifestyle behaviors. One example is obesity that can be prevented with the lifestyle behaviors of healthy eating,

being physically active, achieving healthy weight, and obtaining adequate sleep each night. Despite this rather straight-forward recommendation, it remains challenging for patients to adopt these behaviors. To help combat the rising prevalence of diseases like diabetes, obesity, and metabolic syndrome, healthcare organizations are actively seeking systematic, evidence-based strategies to optimize patient outcomes through the adoption of healthy lifestyles. For example, the U.S. Department of Veterans' Affairs has invested in system-wide changes to train personnel, including nurses, on patient-centered care [4].

Successful strategies for promoting healthy behaviors involve shared decision-making between clinician and patient. Research shows that clinicians are not well-prepared to influence patients in changing health behavior [5]. One example of a successful strategy is Motivational Interviewing (MI) as described by Miller & Rollnick [6]. Healthcare organizations are promoting and training clinicians in MI. Furthermore, nursing schools have begun to teach about MI across the curricula and nursing students are exercising the principles of MI in their patient encounters, labs, and assignments [7]. In the end, increasingly more members of the health care team are expected to use MI for improving patient care and outcomes.

Briefly, MI is considered an individualized communication process with patients to encourage change in health behavior such as weight loss. MI is an approach for providing guidance through listening, encouragement, and collaboration to best motivate and strategize a plan for change with the patient. When participating in MI, patients are encouraged to take responsibility for lifestyle changes and goal setting. The purpose of MI is to help engage patients to realize why and how they might change. The use of 3 core essential skills are: 1.) asking, 2.) listening, and 3.) informing. In the use of MI, the nurse and patient together aim to address the following goals: 1) determining the best way to engage in behavior change, 2) deciding how to incorporate these ways into daily lifestyle, 3) setting targets during the decision-making process, 4) encouraging adherence by brainstorming barriers to behavior change, and 5) acknowledging the prevention of disease. These principles are addressed at each patient visit to reinforce patient confidence and help guide towards behavior change.

Several studies have demonstrated improved patient outcomes through the use of MI such as smoking cessation, increased exercise, improved medication adherence, increased participation in follow-up visits, and decreased hospitalizations than those patients receiving usual treatment [8,9]. Realizing the benefits of MI, health care systems and organizations have incorporated the system-wide use of MI in patient care. Adoptions of MI have expanded from the original use of MI by psychologists to include many health care providers and specialists such as physicians, physician assistants, nurse practitioners, and nurses [10,11]. Williams and Manias [12] support the use of MI in the management

of patients facing chronic disease and coexisting comorbidities, as these complex patients face additional barriers and have emotional needs that may not be addressed by traditional patient education programs. In order to maximize the outcomes of this specialized intervention, however, providers must be sufficiently trained.

As a growing number of healthcare leaders continue to realize the benefit of incorporating MI into nursing care, questions of best practice arise regarding processes for education, appropriate training, and evaluation. There should be universal standards to ensure fidelity to the approach and effectiveness of the interaction. A literature review by Hunt [13] describes various MI training methods, but information about techniques to measure MI fidelity for the purpose of education and research is limited. Without investigating the fidelity of an intervention, extraneous factors may influence results and negatively affect the reliability and validity of a study [14]. Evidence-based practice recommendations call for strong studies with consistent results. Using a methodological framework adapted from Whittemore and Knafl [15], the purpose of this literature review is to explore current knowledge regarding strategies for evaluating the delivery of MI in the field of nursing. It is proposed that utilization of an evaluation tool for MI integrity may provide meaningful feedback for nurses learning the skill of MI.

## Procedure

All databases accessible through the university were searched using a Summon search. Summon 2.0 is known as a discovery layer service that sits over all available library resources to pull the appropriate resources into a results set based on the search terms used for a given query. The online Summon library search retrieves from multiple resources including but not limited to databases (such as CINAHL and EBSCO), books, e-Books, journal articles, newspaper articles, conference proceedings, ProQuest dissertations international, digital collections photos, and multimedia streaming video collections.

The initial literature search began using the keywords motivational interviewing and nursing. Articles were included if they met inclusion criteria of being peer-reviewed, in English language, available in full-text, MI was the primary intervention, and MI delivered by a nurse. If outside of these criteria, articles were excluded. After applying limits of full-text scholarly or peer-reviewed articles in the field of nursing from 2008 to 2013, 741 results remained. The search occurred over several months in consultation with a university librarian to ensure full usage of the available search services. Data were extracted from articles independently by the authors via the use of self-developed charts to easily glean common items and differentiate differences. Major items considered included purpose, benefits, and challenges. Data were extracted by the first author and confirmed by the second author. In order to research the most appropriate sources, an additional

keyword, fidelity, was added to the search. The 74 remaining results were skimmed for content, ensuring research was applicable to the purpose of this study. From the 57 retained results, 22 were excluded because MI was not one of the primary interventions. An additional 35 articles were excluded because the intervention was not actually delivered by a nurse.

## Results

From our literature search, 25 articles were reviewed. All nurses had received some sort of training on MI, but the intensity varied from a single education session lasting a few hours to multiple sessions over a number of months. Variability in training may have led to the inconsistency found in the use of MI principles over time leading to the conclusion that the effectiveness of MI to be inconclusive for some investigators [16]. Moreover, continued training over time was suggested to contribute to consistency of use [9]. Continued training can include formal periodic training sessions, informal coaching, impromptu consultation to review case scenarios, or a combination.

Many studies employed professional MI educators, most being members of the Motivational Interviewing Network of Trainers (MINT). In addition to the didactic training sessions, most providers had the opportunity to practice learned skills through techniques such as return demonstrations, peer role-playing, use of actors as standardized patients, and video vignettes. Many of the researchers used audio recordings of patient encounters and provided feedback to the nurses in the form of coaching sessions, additional training, or communication checklists. Promotion of the use of technology, such as video to capture body language, or text coding to quantify results instead of relying on subjective data for evaluation of MI sessions was found to be promising for promoting accuracy of evaluation [17,18].

A variety of measurement tools were utilized - some that had been validated, and others solely developed for that specific investigation. The Motivational Interviewing Treatment Integrity (MITI) coding manual was the most commonly used tool for evaluation of MI delivery (n=7), the Behavior Change Counseling Index (BECCI) was used in 2 of the articles, and the remaining 16 studies employed untested or unspecified methods to promote fidelity. The majority of the researchers took advantage of trained coders for the evaluation of MI delivery, strengthening and promoting inter-coder reliability [19]. Regardless of the technique used to evaluate MI delivery, most researchers made some attempt to break down measurement into individual components and expose provider strengths and weaknesses. Whether researchers included baseline data or not, most studies included more than one set of measurements, allowing observation of trends in specific strategy development or retention over time.

Our findings demonstrated the most commonly used tool for evaluation was the MITI tool, and was also found to be reliable and valid as a measurement of fidelity to MI as a treatment [14,19]. The MITI tool is a coding manual to provide a behavioral coding system that addresses how well the clinician is using MI. The MITI provides structured feedback to improve use of MI and address fidelity of MI to its underlying tenets. The MITI uses 4 global scores (Likert scale using minimum of 1 to maximum of 5) to measure the active encouragement of the interviewer that address Cultivating Change Talk, Softening Sustain Talk, Partnership, and Empathy. The coder that rates the interviewer uses a random 20-minute audio recording. In addition to the global scores, the coder also gives a tally of specific interviewer behaviors also known as target behaviors or change goals. Typically, coders are experts in MI, with training for MI and use of the MITI. In the end, the clinician receives analysis of their MI session with MITI results, feedback, and suggestions on areas to focus on for improvement. Rating scales like the MITI have been successfully utilized among multiple cultures as well as in different languages [18].

## Discussion

This literature review sought out studies specifically investigating evaluation techniques for nurses using MI. We found that the use of MI is growing and there are hundreds of studies examining the effects of its use. With health care organizations and various health care providers using MI, best practices for MI make use of continued learning over time with engaging training sessions and credible trainers. Best practice includes the use of evaluation of MI sessions and fidelity of the clinician's approach to the basic tenets of MI [14]. Organizational support is essential to meet these informal recommendations and it is key to seeing success in the use of MI for changing health care outcomes. Key considerations from our review include pragmatic items in the implementation of MI as an intervention. For example, there is a lack of recommendation on the number of MI sessions for successful training, the length of each session, and the length of the overall training. There is an additional lack of standardization of training for both clinician and trainer. These gaps should be addressed prior to a system-wide adoption of MI to optimize its effects on health outcomes and patient-centered care.

Limitations from our review include use of only one university search engine, Summon, that despite its ability to combine various databases, also is limited in not including all available databases. Another limitation is the lack of available literature during our review. The body of evidence involving MI is growing and expanding as MI is used by a variety of clinicians and in a variety of health care settings. The authors anticipate this growth and recommend continued diligence in the search for evidence regarding the use of MI. Though MI is successful in changing health care outcomes, it also comes with barriers to its use. We identified 2

major barriers to the use of MI. One barrier to the use of MI is a pragmatic and standardized way to evaluate its use. Ensuring the accuracy of MI use is important to achieving successful changes in patient health behaviors. From the literature, this is not a problem exclusive to nursing. Several healthcare disciplines, for evaluation purposes, have used coaching, providing opportunity for practice, feedback, and reflection to guide further MI use. However, consensus on the best way to evaluate the effects of MI still remains to be determined. Further research is suggested to gain this knowledge from the perspectives of both clinician and patient to fully evaluate implementation of MI as an intervention.

A second barrier to the use of MI is having the necessary resources. MI requires a considerable amount of time and effort to properly teach, learn, and practice. To adapt this approach, clinicians need didactic learning, practice opportunities, and direct assessment of implementation through real-time, simultaneous observation or audio and/or videotaped sessions. Significant time is needed for transformational learning and use of self-reflection to be able to confidently embed MI into a clinician's approach to patient care. Additionally, clinicians need repeated sessions for coaching through difficult situations, providing constructive feedback, and improving effective skills. In fact, further improvements in MI skills were seen after repetitive monitoring, coaching, and feedback sessions [20]. The additional monitoring, assessment, and documentation of MI implementation as a treatment intervention is widely used to judge efficacy. Further research by field experts is recommended to best explicate the preferred evaluation method.

There are barriers to the use of MI, but with practice, overall time can be saved by avoiding serial, unproductive, and repetitive patient conversations and interactions. MI can help to quickly engage the patient to focus on meaningful ways to change health behavior that has great potential to make a difference. We found there is a variety of research available to support the use of MI in health care. The major benefits to the use of MI include the positive effects on patient outcomes, clinician-patient relationships and patient-centered care, as well as the potential for clinician transformational learning through the use of self-reflection and session analysis. MI was found to be the success in impacting patients to engage in changing lifestyle health behaviors. Incorporating MI on a consistent basis and on a large scale has the potential to impact patient outcomes, and overall health such as preventing obesity or diabetes, and treating substance abuse.

## Conclusion

MI provides a systematic, feasible, and individualized way to capture the breadth and depth of the topic of health behavior change. Though a growing number of studies investigating MI use in the field of nursing are being performed, much of the research lacks evaluation of treatment fidelity. There may be present meth-

odological limitations of MI for evaluation of technique, but incorporating the use of MI continues to gain popularity in major health systems. There is anticipated growth in the use of MI by a variety of clinicians in a variety of health care settings which will help to grow the body of literature involving MI. Despite the limitations of this review, it is a helpful reminder to evaluate the treatment fidelity in the use of MI. Or, at the very least, consider the extent of MI use and its implications for evaluation of treatment fidelity. In the end, there exists a call for nurses, and all clinicians, to be aware of MI as an effective way to approach and communicate with patients and its many implications for clinical practice.

## Highlights

- Several studies demonstrate improved patient outcomes using Motivational Interview (MI)
- From this literature review, the most frequently used scales for evaluating the use of MI and available supporting data were identified
- Major barriers to the use of MI were identified; however, the benefits of MI warrant its use

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