

Motivational Interviewing: Incorporation of a patient-centered model approach in Community Health Centers (CHCs) to facilitate better patient adherence and outcomes

By Jennifer M. Echols

Mississippi College Physician Assistant Program

GE-National Medical Fellowship Primary Care Leadership Program Scholar

Abstract

Motivational Interviewing (MI) is an empirically based, patient-centered approach to healthcare that, when applied to everyday provider-patient exchanges, elicits better communication, resulting in improved patient satisfaction, adherence, and outcomes. This study examines the feasibility of incorporating MI training into community health centers (CHCs) with a multifaceted approach which includes: (a) before and after survey to assess clinicians' competence in MI and willingness to apply it in clinical practice, and (b) comparative study of an experimental intervention consisting of a control group (patients being treated by a clinician without MI training) and an interventional group (patients being treated by a clinician with MI training) to assess overall patient satisfaction with received care. Results support the benefits of integrating MI into CHCs, making training of staff in MI a worthwhile endeavor that should be further explored.

Keywords

Interviewing, motivation, health promotion, motivational interviewing, comorbidity, socioeconomic status, treatment, compliance, adherence, outcome

Introduction

Motivational Interviewing (MI) is a patient-centered approach to patient care developed by William Miller, Ph.D. and Stephen Rollnick, Ph.D. in 1983 to help people make significant changes in their lives, namely in respect to addictions, eating disorders, mental health, and chronic health problems. Since its creation in 1983, MI has been empirically tested extensively with repeated demonstration of efficacy in improving patient adherence and overall health outcomes (Miller & Rose, 2009). Despite its clinical success, there is little research of MI being utilized in community health centers (CHCs), where the patient population has higher incidence of chronic health conditions and comorbidities. Although communication skills have become a major focus in medical training globally, MI is not included in traditional medical training, leaving many practicing clinicians with no knowledge of this evidence-based, patient-centered approach, especially in older generations of clinicians (ACOG, 2009). The proposed intervention introduces CHC providers to MI with basic training and assesses willingness to apply this tool. CHC staff leaders were provided with professional training contact information and additional literature on implementing strategies for long-term, consistent incorporation of Motivational Interviewing in order to improve patient adherence and outcomes, as well as overall clinic productivity in the future.

Background

Personal Interests in Motivational Interviewing (MI)

I was first introduced to the concept of motivational interviewing as an undergraduate nearly a decade ago in a psychology class taught by Dr. Pamela Manners, as my minor was psychology. I have always been a proponent for alternative approaches to achieve better outcomes, with behavioral-cognitive therapy being one of the most widely used and successful approaches. MI is applied in an educational setting, whether it is a healthcare provider with his

or her patient or a teacher leading a class. Prior to physician assistant school, I taught high school science and tutored college students, using MI principles as a tool to help my students and to strengthen the relationship I had with them. Now, as a third year, clinical PA student, I continue to use MI with my patients because it works so very well to improve adherence and promote better outcomes.

What is MI?

Motivational Interviewing (MI) is a relatively new therapeutic approach that is a merging of science with practice, which combines relationship building concepts of humanistic therapy and behavioral-cognitive therapy (Burke et al, 2003). It is a patient-centered yet directive method for improving intrinsic motivation to change by investigating and resolving client ambivalence with reflective listening and eliciting “change talk” as major parts in the process. There are four basic principles of motivational interviewing: (1) expressing empathy, (2) developing discrepancy, (3) rolling with resistance, and (4) supporting self-efficacy (Rollnick & Miller, 2012).

Brief History of MI

In 1983, MI was developed by William Miller, Ph.D. and Stephen Rollnick, Ph.D to help alcoholics become more involved in their treatment by eliciting behavior change through self-efficacy and internalized control. The application of MI has since been extended to virtually every clinical setting to prompt change in health-threatening behavior, including, but not restricted to obesity, diabetes, eating disorders, hypertension, smoking, high-risk sexual behavior, drug addiction, etc. (Rollnick & Miller, 2012)

How can MI fit into Community Health Centers (CHCs)?

Although communication skills have become a major focus in medical training globally, MI is not included in traditional medical training, leaving many practicing clinicians with no knowledge of this evidence-based, patient-centered approach, especially in older generations of clinicians. Following an exhaustive literature analysis, I found that there were a few studies on MI use in underserved populations, but there were virtually no studies that specifically addressed the use of MI in CHCs and the impact MI could have on CHC patient adherence and outcomes.

Methodology

Research Design

Multifaceted approach which includes: (a) exhaustive literature search was performed using Mississippi College Leland Speed Library article database (the combinations of the following key words “motivational interviewing”, “patient resistance”, “motivational interviewing training” were primarily used in the search), (b) before and after study to assess clinicians’ competence in MI and willingness to apply it in clinical practice, and (c) comparative study of an experimental intervention consisting of a control group (patients being treated by a clinician without MI training) and an interventional group (patients being treated by a clinician with MI training) to assess overall patient satisfaction with received care.

Hypothesis 1. A majority of clinicians introduced to Motivational Interviewing will develop positive outlooks on the method and would be interested in obtaining additional training in the future.

Hypothesis 2. Patients counseled and treated by clinicians trained in MI will have greater rates of satisfaction as compared to those that were treated by clinicians not trained in MI.

Hypothesis 3. H_0 = There will be no significant differences appreciated in the responses of male versus female respondents. (H_A = There is a significant difference between male and female respondents.)

Research Setting

Jackson-Hinds Comprehensive Health Center (JHCHC) in Jackson, Mississippi, which includes internal medicine, family medicine, pediatrics, and dentistry.

Research Subjects

Eight clinicians were selected based on attendance to MI workshop and 80 patients of any age in the JHCHC main clinic who are seeing the clinician for any reason (40 patients of MI trained providers and 40 patients of non-MI trained providers). Clinicians not trained in MI were selected randomly based on providers who were willing to attend the workshop (i.e. if one adult medicine provider came to the workshop, the next available adult medicine provider who did not attend the workshop would be selected for the control group within that department.) No incentives were offered to participants.

Data Collection

(a) During week three of the PCLP externship, clinicians received a pre and post-test with an introduction course in MI to assess their knowledge and confidence in using MI. The training workshop presentation was developed from multiple sources, all of which were based on the text “Motivational Interviewing in Healthcare: Helping Patients Change Behavior” by Stephen Rollnick and William Miller, the fathers of MI (Rollnick & Miller, 2012). The competency test was adapted from a test created by Thad R. Leffingwell at Oklahoma State University (Leffingwell, 2006). They also answered a brief 9 question survey (5 point Likert Scale) to

assess their willingness to apply MI in the clinic and to receive additional training in the future. (See appendix 2 for MI competency test and provider training survey)

(b) Patients of both clinician groups were given a 7 question satisfaction survey (5 point Likert Scale) of their experience after being seen, with questions specifically directed at MI concepts. These surveys were distributed and collected over the next three weeks of the externship. Any surveys that were incomplete were not included in the study. (See appendix 3 for patient satisfaction survey)

Data Analysis

A descriptive analysis, including participant sample size, percentages of individual responses, mean (of survey responses), and calculation statistical significance for the 7 question patient satisfaction survey (5 point Likert scale format) was completed to compare patient satisfaction of those treated by providers with MI training versus providers without MI training. Statistical significance was determined by calculating X^2 and the value for the two sets of data. This data was further correlated with the Mann-Whitney U test to see if there was a difference between the Likert median score between male and female respondents. Graphical analysis of all data was also performed. (See appendix 1 for tables and graphical analyses)

Results

Hypothesis 1. A majority of clinicians introduced to Motivational Interviewing will develop positive outlooks on the method and would be interested in obtaining additional training in the future.

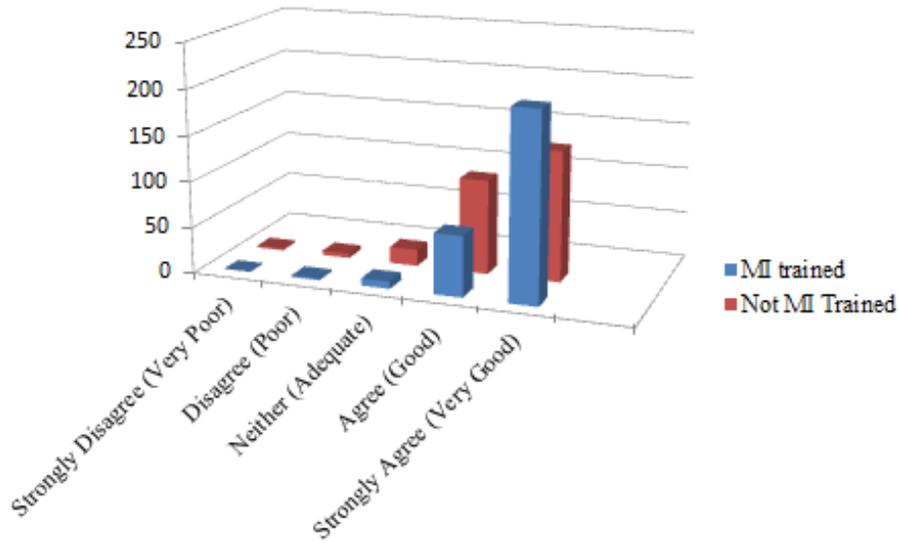
When a comparison was done of providers' performances on the MI training competency pre and post-test, 100% of participants had improved scores after training was completed, with an overall average of 70% improvement in post-test scores as compared to pre-test scores. Also,

in the MI Provider Training Survey, 100% of respondents expressed desire to have additional training in MI and that they would use the concepts of MI in their practice (See Appendix 2 for MI competency exam and MI Provider Training Survey). Overall, providers who attended the introductory MI workshop indicated positive regard for the approach (See Fig. 1 for quantified response data and Fig. 2 for response distribution in appendix 1). Note: Hypothesis 1 is accepted.

Hypothesis 2. Patients counseled and treated by clinicians trained in MI will have greater rates of satisfaction as compared to those that were treated by clinicians not trained in MI.

Out of a patient sample of 80 patients, 36 were male and 44 were female and ages were quite variable, with the largest group (27.5%) being in the age range of 18-29 (See Fig. 3 in appendix 1). Patient satisfaction responses did indicate higher rates of satisfaction when treated by providers who had undergone MI training. Percentages and mean were calculated for individual responses, with overall higher outcomes (increased satisfaction) in the MI trained group (See Fig. 4 and 5 in appendix 1 for comparison of quantified response data). In the chart featured below, MI trained versus Non-MI trained provider patient satisfaction groups of these individual responses are compared. The MI trained providers received higher rates of satisfaction in all categories.

Patient Satisfaction: MI trained vs. Non-MI Trained Provider Care



Statistical significance of the survey responses between the group that was treated by MI-trained providers and the group not treated by MI-trained providers was determined by calculating X^2 and the p-value. There was a comparative significance with a chi-square statistic of 7.0525 and a P-Value of 0.029415 (when $p < 0.05$). Note: Hypothesis 2 is accepted.

Statistical Analysis of Patient Satisfaction Survey Responses: X^2 , P-Value

The contingency table below provides the following information: the observed cell totals, (the expected cell totals) and [the chi-square statistic for each cell].

Groups	Agree	Disagree	Neither	Row Totals
MI Trained Providers	270 (262.50) [0.21]	2 (4.50)[1.39]	8 (13.00)[1.92]	280
Non-MI Trained Providers	255 (262.50)[0.21]	7 (4.50)[1.39]	18 (13.00)[1.92]	280
Column Totals	525	9	26	560 (Grand Total)

The chi-square statistic is 7.0525. The P-Value is 0.029415. **The result is significant at $p < 0.05$.**

Hypothesis 3. H_0 = There will be no significant differences appreciated in the responses of male versus female respondents. (H_A = There is a significant difference between male and female respondents.)

This data was further correlated with the Mann-Whitney U test to see if there is a difference between the Likert median score between male and female respondents. According to these calculations, the null (of hypothesis 3) would be rejected and it should be assumed there are some levels of variation between male and female responses.

Statistical Analysis of Patient Satisfaction Survey Responses: Mann-Whitney U Test to determine significance between male and female survey responses	
Significance level: 0.05	
Hypothesis Type: 2 tail	
Result 1: Z ratio	Result 2: U value
Z score is -0.8783	U value is 118.5
p-value is 0.37886	Critical value of U at $p \leq 0.05$ is 87.
The result is NOT significant at $p \leq 0.05$	The result is NOT significant at $p \leq 0.05$
There are no significant values, hence N_0 is rejected.	

Discussion

After an exhaustive literature search, it was found that there were virtually no studies that specifically addressed the impact of MI in community health centers, essentially making this a pilot study, which tends to be superficial in data and design. Although this study offers useful information, a single study cannot provide definitive empirical explanations. The main objective of this study was to determine how a brief, 1.5 hour introductory training in MI given to Jackson Hinds providers affected their ability to perform MI with evidence produced by (a) MI

competency test (b) post-MI training provider survey responses reflecting opinions of MI and associated training and (c) comparison of patient satisfaction survey responses of overall care of providers trained in MI versus those who were not trained in MI. Like with any study, there were limitations that need to be addressed in the future to determine if the documented findings are in fact accurate and valid. Identified limitations and possible solutions are addressed in the following sections: “Participation and Provider Resistance” and “Time and Internal Validity”.

Study Limitations and Considerations: Participation and Provider Resistance

The study was limited by lack of provider participation in training, and the sample size goal of a minimum of 100 patient surveys was not met. There were 8 providers that attended the MI workshop and administrative assistants were unable to schedule any additional training sessions due to scheduling conflicts. Of the 300 surveys that were distributed at the Jackson-Hinds main clinic, only 80 were completed, which is a 26.7% completion rate. The women’s health department had the lowest return, with only 2 surveys out of the 75 given, which is a completion rate of only 2.7%. This could be addressed by conducting all the surveys personally versus depending on staff to complete them, but this may also limit the rate of completion as well. Also, the surveys were collected twice per week, which may have also contributed to the low return rate. Doing a daily collection of surveys may have yielded better results.

Despite having positive outlooks overall, there were signs of provider resistance indicated in the MI provider training survey responses. To the statement “Some patients need to be coerced or pressured to change” 37.5% of providers agreed/strongly agreed and 25% were indifferent, despite the clear guidelines of MI training stating persuasion and/or coercion is not an appropriate way to communicate with patients. Also, in response to the statement, “Some patients will never change regardless of how I interact with them” a shocking 50%

agreed/strongly agreed and 12.5% were indifferent. This is very worrisome for resistance to change in how providers approach their patients because of feelings that they have no effect on the outcomes of some patients, which definitely needs to be addressed if Jackson Hinds plans to incorporate MI training in the future. Although these concepts were included in the workshop, I may not have emphasized them enough during training.

Provider resistance was also demonstrated outside of the study's measured parameters during a staff meeting I attended about increasing patient flow and productivity by closing electronic medical records in a timely fashion. A provider, who had previously participated in the introductory MI training, stated that MI would be too time consuming due to the open-ended questions of the MI interviewing process. This was stated in response to the CEO suggesting the possibility of MI training for all staff members to increase productivity. This comment was very disappointing to hear, especially since this provider did not indicate these feelings in the post-training survey, which made me question the integrity of the project's design. However, in the studies "*The Effectiveness and Applicability of Motivational Interviewing: A Practice-Friendly Review of Four Meta-Analyses*" and "*The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials*", it was found in a review of 34 valid studies that MI was actually *less* time-consuming and elicited equal or better outcomes as compared to traditional, authoritarian approaches, making it more cost-effective (Lundahl & Burke, 2009; Burke & Menchola, 2003). Perhaps this discrepancy could have been addressed with an additional provider survey and competency test at the end of the study to assess how well concepts and initial opinions were retained or even visibly monitoring trained providers to subjectively assess whether or not MI concepts are being employed.

Study Limitations and Considerations: Time and Internal Validity

This was a preliminary study that was significantly limited by a 6-week time constraint, which restricts the options available to collect data. Surveys are a relatively easy way to collect a large amount of data in a short amount of time, making their use in this setting ideal. A five point Likert scale was used for both the provider and patient surveys, which provided the majority of the data analyzed. Likert scales, although easy to use and ideal in scenarios of time limitation, have inherent weaknesses in design, such as difficulty in reproduction, as well as various biases, such as acquiescence bias, central tendency bias, and social desirability bias (Jamieson, 2004). Additionally, the training, surveys, and exams that were created in this study have not been externally tested, making their accuracy and validity debatable. Lastly, one must always consider human error in terms of statistical analysis of collected data.

Recommendations

This study would be more ideal as a longitudinal study that specially addressed patient outcomes instead of satisfaction, which was not possible in this study due to time constraints. Also, professionally guided MI training would be much better, ideally as a 2-day workshop, versus the 1.5 hour introductory, student conducted training of this study. The design of this study needs to be adjusted to ensure better internal validity and results. Future studies must have more specific, careful assessments of the study's integrity, as well as more standardized training to facilitate ease of comparison. Future research could also specifically address how much training and/or supervision is required in order to be competent and consistent when using MI. Additionally, If executive staff members did want to incorporate MI training, I feel attendance would have to be made mandatory and the workshop would have to be done more than once, perhaps annually at minimum, due to provider resistance to change. MI is a very successful

approach to patient communication and care, but only if providers are willing to attend training sessions and then implement the tools given in those sessions (Miller & Mount, 2001). MI is an integral part to the change process of health-impairing patient behavior, and research has shown that a patient's willingness to change is greatly influenced by the provider's approach (Norcross, 2002).

Conclusion

Many providers spend a significant amount of time trying to convince patients to change unhealthy behaviors, yet studies have repeatedly shown that change will not happen until patients have an internal desire for change. MI respects the autonomy of the patient while engaging them in their own care and eliciting change, all the while establishing a stronger, more respectful provider-patient relationship. MI would be an excellent communication method to incorporate into CHCs to elucidate better adherence and overall patient outcomes based on the preliminary findings of this pilot study. Further investigation is warranted in the future to further assess the long-term benefits to CHC patients with more extensive provider training, versus the rather superficial nature of this study that was unavoidable due to lack of provider participation and limited time constraints.

References

- ACOG Committee on Health Care for Underserved Women. (2009). *Motivational interviewing: A tool for behavior change*. *Obstetrics and Gynecology*, 113, 243-246.
- Burke, B., Arkowitz, H., & Menchola, M. (2003). *The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials*. *Journal of Consulting and Clinical Psychology*. Vol. 71, No. 5, 843–861
- Jamieson, Susan. (2004). *Likert Scales: How to Use Them*. *Medical Education* 38: 1217-1218.
- Leffingwell, T. (2006). *Motivational Interviewing Knowledge and Attitudes Test for Evaluation of Training Outcomes*. <http://psychology.okstate.edu/faculty/leffingwell/bcl/>
- Lundahl, B. & Burke, B. (2009). *The Effectiveness and Applicability of Motivational Interviewing: A Practice-Friendly Review of Four Meta-Analyses*. *Journal of Clinical Psychology: in session*, Vol. 65(11), 1232-1245
- Miller, W. R. & Mount, K. A. (2001). *A small study of training in motivational interviewing: Does one workshop change clinician and client behavior?* *Behavioural and Cognitive Psychotherapy*, 29, 457-471.
- Miller, W. & Rose, G. (2009). *Toward a Theory of Motivational Interviewing*. *American Psychologist*. 64(6), 527-537.
- Norcross, J.C. (2002). *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients*. New York: Oxford University Press.
- Rollnick, Stephen, and William R. Miller. (2012). *Motivational Interviewing in Health Care Helping Patients Change Behavior*. New York: Guilford Publications. Print.

Appendix 1

Fig. 1. MI Provider Post-Training Survey: Provider Outlook on MI training

	Strongly Disagree (Very Poor)	Disagree (Poor)	Neither Agree nor Disagree (Adequate)	Agree (Good)	Strongly Agree (Very Good)	
	1	2	3	4	5	Response Average
1. I understand the basic ideas and principles of motivational interviewing.	0%	0%	0%	62.5% (5)	37.5% (3)	4.38
2. I feel proficient and able to use motivational interviewing in my practice.	0%	0%	0%	62.5% (5)	37.5% (3)	4.38
3. If a patient is not initially motivated, I do not think that I will be able to increase his or her motivation.	25% (2)	50% (4)	12.5% (1)	0%	12.5% (1)	2.25
4. Motivational Interviewing is applicable to my work.	0%	0%	0%	62.5% (5)	37.5% (3)	4.38
5. Some patients need to be coerced or pressured to change.	12.5% (1)	25% (2)	25% (2)	25% (2)	12.5% (1)	3.00
6. Some patients will never change regardless of how I interact with them.	37.5% (3)	0%	12.5% (1)	37.5% (3)	12.5% (1)	2.89
7. I will use Motivational Interviewing in my work.	0%	0%	0%	62.5% (5)	37.5% (3)	4.38
8. I would be interested in additional, professional training in the future.	0%	0%	0%	62.5% (5)	37.5% (3)	4.38
9. Overall, how would you rate the introductory training you received today?	0%	0%	0%	50% (4)	50% (4)	4.5
Total Respondents						8

Fig. 2: Provider MI Training Survey Responses

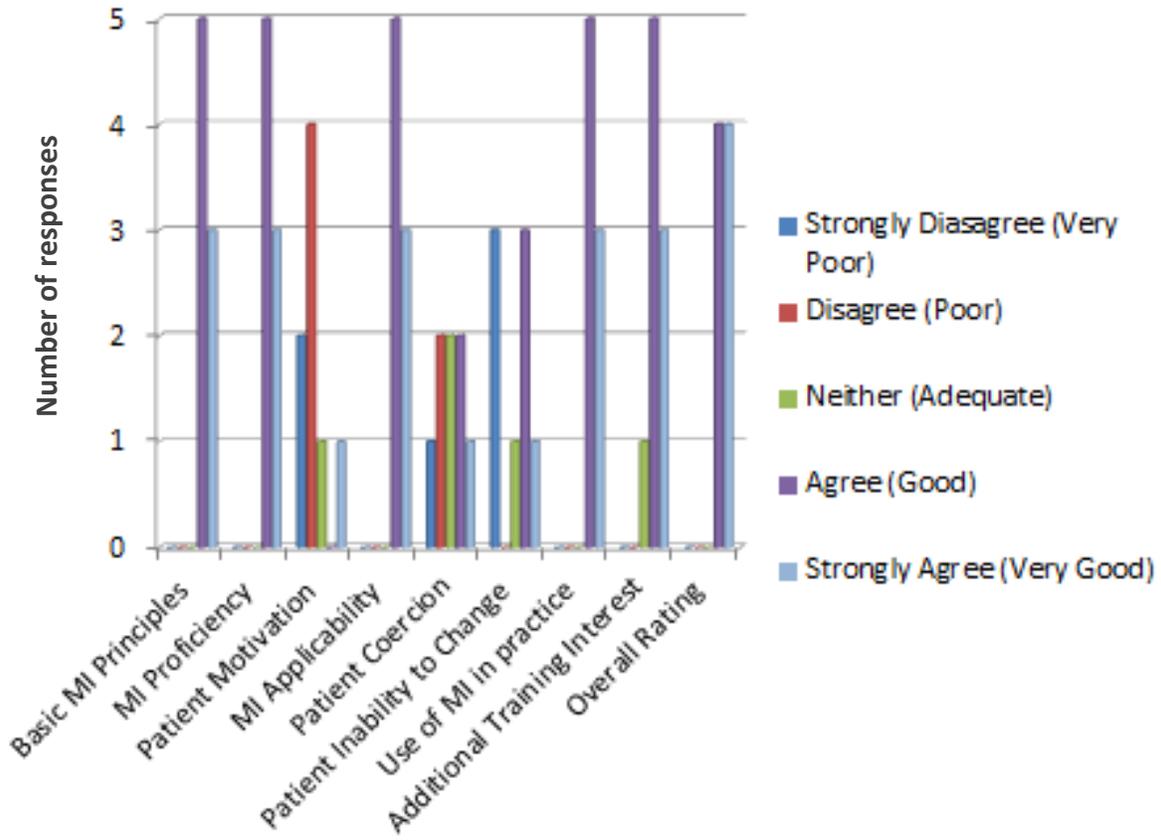


Fig. 3: Patient Survey: Age and Gender

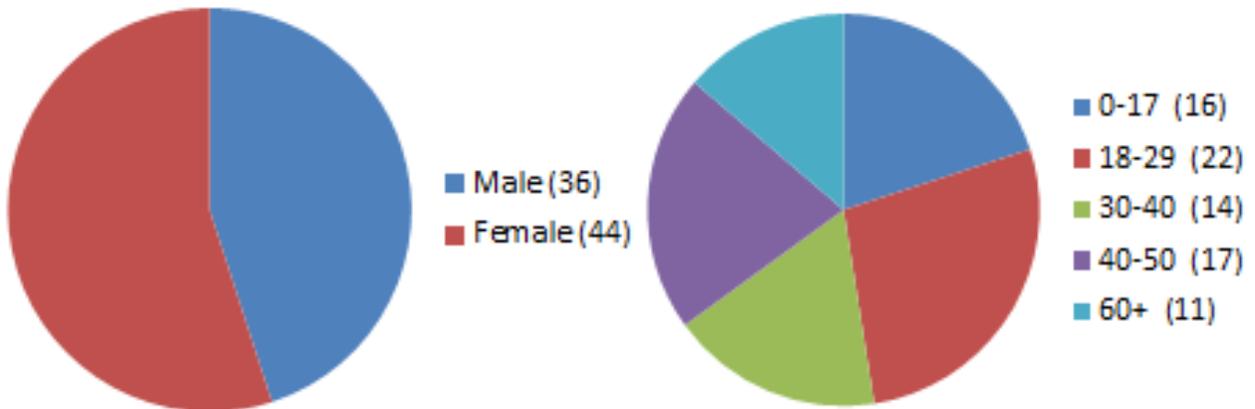


Fig. 4. Patient Satisfaction Survey: MI Trained Providers

	Strongly Disagree (Very Poor)	Disagree (Poor)	Neither Agree nor Disagree (Adequate)	Agree (Good)	Strongly Agree (Very Good)	
	1	2	3	4	5	Response Average
1. My healthcare provider answered my questions clearly.	0%	0%	2.5 % (1)	32.5% (14)	62.5% (25)	4.60
2. My healthcare provider was kind and sensitive to my situation.	0%	0%	5% (2)	22.5% (9)	72.5% (29)	4.68
3. I was involved in the decisions affecting my care.	0%	2.5% (1)	5% (2)	15% (6)	77.5% (31)	4.68
4. My treatment was clearly explained to me.	0%	0%	2.5% (1)	25% (10)	72.5% (29)	4.70
5. The care I received today was a “team effort” between my healthcare provider and me.	0%	2.5% (1)	2.5% (1)	40% (16)	55% (22)	4.48
6. My provider listened to me well.	0%	0%	0%	12.5% (5)	87.5% (35)	4.88
7. Overall, how would you rate the care you received today?	0%	0%	2.5% (1)	15% (6)	82.5% (33)	4.80
Total Respondents						40

Fig. 5. Patient Satisfaction Survey: Providers not trained in MI

	Strongly Disagree (Very Poor)	Disagree (Poor)	Neither Agree nor Disagree (Adequate)	Agree (Good)	Strongly Agree (Very Good)	
	1	2	3	4	5	Response Average
1. My healthcare provider answered my questions clearly.	0%	5% (2)	5% (2)	42.5% (17)	47.5% (19)	4.33
2. My healthcare provider was kind and sensitive to my situation.	2.5 % (1)	0%	7.5% (3)	30% (12)	60% (24)	4.45
3. I was involved in the decisions affecting my care.	0%	2.5 % (1)	10% (4)	50% (20)	37.5% (15)	4.23
4. My treatment was clearly explained to me.	0%	0%	10% (4)	52.5% (21)	37.5% (15)	4.28
5. The care I received today was a “team effort” between my healthcare provider and me.	0%	5% (2)	2.5 % (1)	45% (18)	47.5% (19)	4.35
6. My provider listened to me well.	2.5 % (1)	0%	5% (2)	35% (14)	57.5% (23)	4.45
7. Overall, how would you rate the care you received today?	0%	0%	5% (2)	27.5% (11)	67.5% (27)	4.63
Total Respondents						40

Appendix 2

MOTIVATIONAL INTERVIEWING PRE/POST TEST

- 1) Motivational Interviewing is a _____, practitioner-directed method for enhancing _____ motivation to change by exploring and resolving ambivalence.
 - a. consequence-driven; low
 - b. superior; non-existent
 - c. famous; outward
 - d. client-centered; intrinsic

- 2) The clinical techniques most strongly associated with empathic or active listening are:
 - a. Affirmations
 - b. Open questions
 - c. Suggestions
 - d. Reflections

- 3) Which of the following is a statement that is the best example of expressing empathy in response to a patient telling you that he is not interested in exercise because he does not have time?
 - a. "I know how you feel. I hate exercise, too."
 - b. "I can understand how it can be difficult to schedule exercise when you work and have children."
 - c. "You shouldn't allow time to prevent you from exercising."
 - d. "Just try Jenny Craig instead."
 - e. "Come see me when you are ready to change."

- 4) What are the four fundamental MI skills?
 - a) _____
 - b) _____
 - c) _____
 - d) _____

- 5) Circle all of the questions below that are **open-ended**:
 - a. "Have you eaten breakfast?"
 - b. "Are you feeling better today?"
 - d. "Can you tell me more about that?"
 - e. "How has your life changed since being diagnosed with diabetes?"
 - f. "Are you ready to lose weight?"
 - g. "What brought you here today?"

- 6) Resistance is a signal for the clinician to:
 - a. Provide additional information
 - b. Use confrontation
 - c. Fire the patient
 - d. Respond differently

True/False: Circle your answer.

- 7) TRUE/FALSE If a patient is resistant about changing a behavior, direct confrontation and persuasion are required to help the person change.

- 8) TRUE/FALSE The best way to motivate patients is to help them identify and resolve their ambivalence about change.

9) Which of the following are principles of a Motivational Interviewing approach?
(Check all that apply):

- | | | | |
|--------------------------|----------------------------|--------------------------|-------------------------|
| <input type="checkbox"/> | Develop discrepancies | <input type="checkbox"/> | Support self-efficacy |
| <input type="checkbox"/> | Confront resistance | <input type="checkbox"/> | Roll with resistance |
| <input type="checkbox"/> | Express empathy | <input type="checkbox"/> | Give direct advice |
| <input type="checkbox"/> | Maximize external pressure | <input type="checkbox"/> | Give clear consequences |
| <input type="checkbox"/> | Use subtle coercion | <input type="checkbox"/> | Avoid argumentation |

MI Provider Training Survey



<i>Please circle your response</i>	Strongly Disagree (Very Poor)	Disagree (Poor)	Neither Agree nor Disagree (Adequate)	Agree (Good)	Strongly Agree (Very Good)
I understand the basic ideas and principles of motivational interviewing.	1	2	3	4	5
I feel proficient and able to use motivational interviewing in my practice.	1	2	3	4	5
If a patient is not initially motivated, I do not think that I will be able to increase his or her motivation.	1	2	3	4	5
Motivational Interviewing is applicable to my work.	1	2	3	4	5
Some patients need to be coerced or pressured to change.	1	2	3	4	5
Some patients will never change regardless of how I interact with them.	1	2	3	4	5
I will use Motivational Interviewing in my work.	1	2	3	4	5
I would be interested in additional, professional training in the future.	1	2	3	4	5
Overall, how would you rate the introductory training you received today?	1	2	3	4	5

Thank you for completing this survey!

Appendix 3

Age _____

Male ____ Female ____

Patient Satisfaction Survey



<i>Please circle your response</i>	Strongly Disagree (Very Poor)	Disagree (Poor)	Neither Agree nor Disagree (Adequate)	Agree (Good)	Strongly Agree (Very Good)
My healthcare provider answered my questions clearly.	1	2	3	4	5
My healthcare provider was kind and sensitive to my situation.	1	2	3	4	5
I was involved in the decisions affecting my care.	1	2	3	4	5
My treatment/procedure was clearly explained to me.	1	2	3	4	5
The care I received today was a "team effort" between my healthcare provider and me.	1	2	3	4	5
My provider listened to me well.	1	2	3	4	5
Overall, how would you rate the care you received today?	1	2	3	4	5

Thank you for completing this survey!