

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



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Introduction

- My Background
- Motivational Interviewing: What is it and why it is important to Jackson-Hinds?
- Proposed intervention:
 - Introduce JHCHC providers to MI with basic training and assesses willingness to apply this tool
 - Provide 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 clinic overall clinic productivity in the future.



Background

- Motivational interviewing created in 1983 by William Miller, Ph.D. and Stephen Rollnick, Ph.D
- MI has been empirically tested extensively with repeated demonstration of efficacy in improving patient adherence and overall health outcomes.
 - motivational interviewing is just as effective as other behavior-modifying strategies
 - **This is clinically significant** due to the fact that similar results can be seen in a shorter amount of time, making MI more time and cost effective.
- 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.



Methodology

- Multifaceted Approach which includes:
 - (a) exhaustive literature search was performed using Mississippi College Leland Speed Library article database
 - (b) before and after study to assess clinicians competence in MI and willingness to apply it in clinical practice
 - (c) comparative study of an experimental intervention consisting of a control group and an interventional group
- Research Subjects
 - Eight clinicians
 - 80 patients of any age in the JHCHC main clinic who are seeing the clinician for any reason
- Data Collection
 - Began during week 3 of externship with data collection extending over next 3 weeks
 - MI Training with 9 question pre and post-test
 - 9 question MI Provider Training Survey (5 point Likert scale)
 - 7 question Patient Satisfaction Survey (5 point Likert scale)
 - Distributed to the following departments: Adult Medicine, Pediatrics, Women's Health



Results

- **Hypothesis 1.** A majority of clinicians introduced to Motivational Interviewing will develop positive outlooks on the approach and would be interested in additional training in the approach
 - 100% of participants indicated a desire to use MI and that they would be interested in additional training in the approach
 - overall scores of MI in their practice increased significantly after training
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CONFIRMED



Results

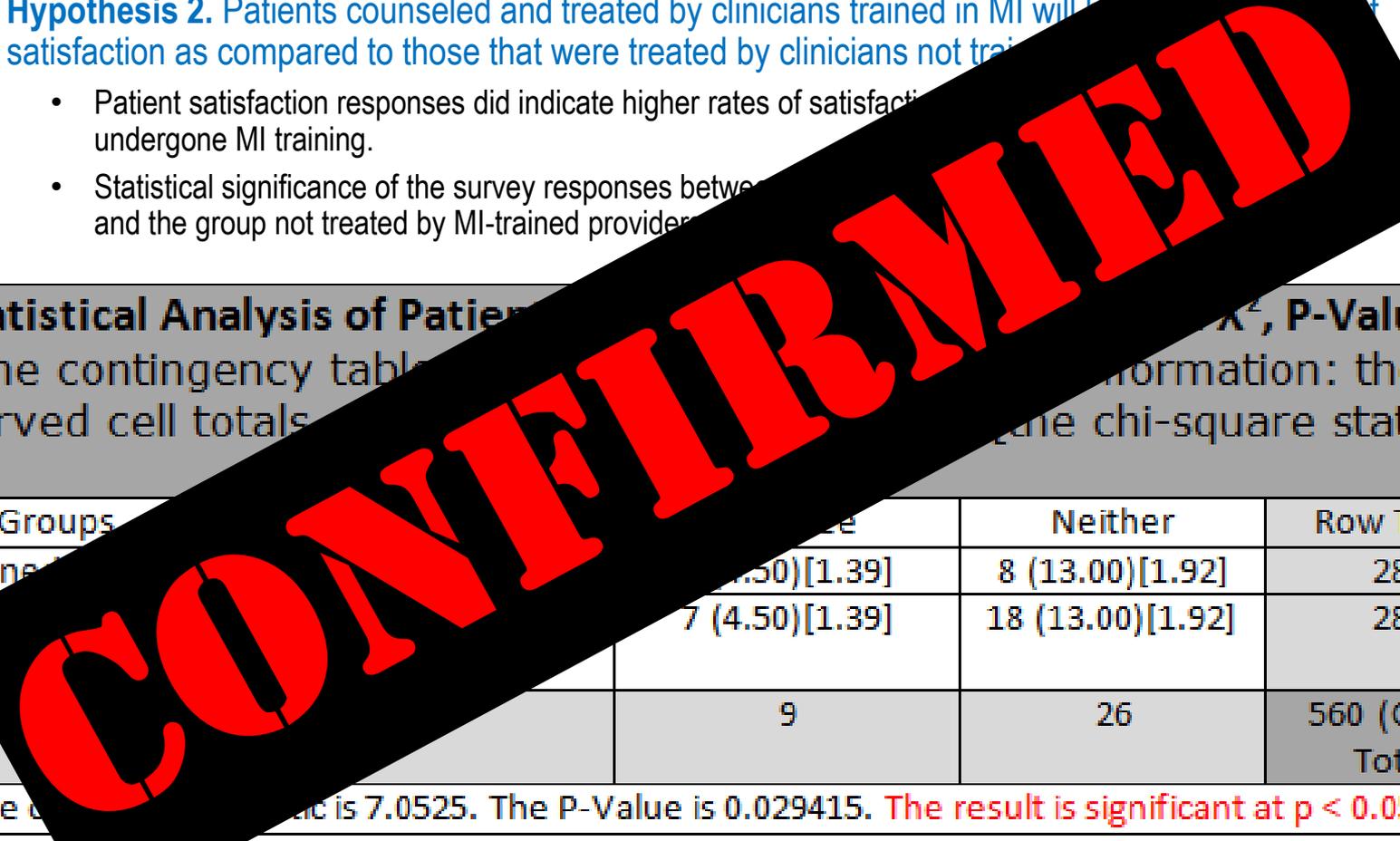
- **Hypothesis 2.** Patients counseled and treated by clinicians trained in MI will have higher patient satisfaction as compared to those that were treated by clinicians not trained in MI.
 - Patient satisfaction responses did indicate higher rates of satisfaction among patients who had undergone MI training.
 - Statistical significance of the survey responses between the group treated by MI-trained providers and the group not treated by MI-trained providers was confirmed.

Statistical Analysis of Patient Satisfaction by MI Training Status

The contingency table below provides information: the observed cell totals, expected cell counts, the chi-square statistic, and the P-Value.

Groups	Yes	Neither	Row Totals
MI Trained	17 (4.50)[1.39]	8 (13.00)[1.92]	280
Not Trained	17 (4.50)[1.39]	18 (13.00)[1.92]	280
Column Totals	34	26	560 (Grand Total)

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



Results

- Hypothesis 3.** $H_0 =$ There will be no significant difference in the responses of male versus female respondents. A significant difference between male and female responses is
 - This data was further correlated with the null hypothesis. There is a difference between the Likert scale responses of male and female responders.
 - The null (of hypothesis) is rejected. It is assumed there are some level of significant differences in responses.

Statistical Test: Mann-Whitney U Test	
Test of Hypothesis: Responses: Mann-Whitney U Test of male and female survey responses	
Significance level: 0.05	
Test type: 2 tail	
	Result 2: U value U value is 118.5
Asymptotic Significance (2-tailed): .37886	Critical value of U at $p \leq 0.05$ is 87.
Significance 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.	

REJECTED

Discussion

- Pilot Study...and it shows
- Time Constraints
- Sample size goal not met
 - 8 providers participated in training
 - 300 surveys were distributed
 - only 80 were completed
 - 26.7% completion rate
- Likert scale weakness
 - acquiescence bias
 - central tendency bias
 - social desirability bias
 - difficult to reproduce
 - difficult to demonstrate validity



Recommendations

- Despite the shortcomings, preliminary results of this pilot study are promising...and so are the thousands of other studies that have already been done
- Dozens of companies provide quality MI workshops because it is in such high demand
 - Information Provided to Dr. Chapman if JHCHC decides to pursue training



Acknowledgements

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"It is literally true that
you can succeed best
and quickest by helping
others to succeed."

Napoleon Hill

