EP051

BUILDING MOTIVATIONAL INTERVIEWING COMPETENCY THROUGH ONLINE TRAINING: A PILOT STUDY AMONG TUBERCULOSIS (TB) CARE PROVIDERS



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INTRODUCTION

- Patient-centred counselling is essential to improve treatment adherence in tuberculosis (TB) care.
- Motivational interviewing (MI) has been shown to enhance adherence and patient self-efficacy, but many healthcare providers (HCPs) lack formal training which restricts their ability to provide optimal adherence counselling.
- This study evaluates an online MI training program developed as part of the CARE-TB adherence intervention trial.

AIM:

To evaluate self-reported competency and acceptability of an online MI training module for HCPs.

METHODOLOGY

An online motivational interviewing (MI) training module was implemented among HCPs in tuberculosis care, with pre–post evaluation of competency and acceptability. The methods are summarized below.

Target Sites

Hospital Sungai Buloh & International Medical University

Study Design

Pre-post pilot study

Participants (n=33)

HCPs involved in TB care (27 pharmacists, 1 allied health practitioner, 1 doctor and 4 others)

Outcomes Assessed

1. **MI competency scores (**pre- & post-test;22 points)
2. **Perceived confidence, MI skills, and importance** *(Likert scale 1-10)*
3. **Acceptability:**
   - ease of use *(Likert scale 1-10)*,
   - recommend to others *(Yes/Maybe/No)*, and
   - perceived usefulness *(qualitative feedback grouped into thematic categories)*

Intervention

Online MI training module (hosted on RedCap)

- 4 modules: MI principles, processes, skills and clinical application
- Pre/post tests (5-6 items each) assessing MI knowledge and competency

Analysis

- Pre-post paired tests (t-test/ Wilcoxon), effect sizes, descriptive statistics

RESULTS

Thirty-three participants (mean age 34.5±6.2 years); 81.8% were female, 81.8% pharmacists, 66.7% had no prior MI experience.

Key Findings

Among participants with complete pre-post data (n=25):

- MI competency scores **increased significantly**: mean 14.0 (SD 4.1) pre-training to 19.7 (SD 2.5) post-training (95% CI 4.30–7.22; $p<0.001$), with a large effect size (Cohen's d = 1.58)
- Mean percentage improvement in MI scores :**53.1%**
- Improvements were also observed in perceived confidence, MI skills and importance. (Figure 1, all $p \leq 0.05$)
- Acceptability of the MI training module was high, with **96%** (95% CI 79.6%–99.9%) recommending the module to others, supported by positive ratings for ease of use and usefulness. (Figures 2 & 3)
- Qualitative feedback showed **communication and counselling skills** were most reported, followed by application of MI and patient-centred engagement being least reported. (Figure 4)

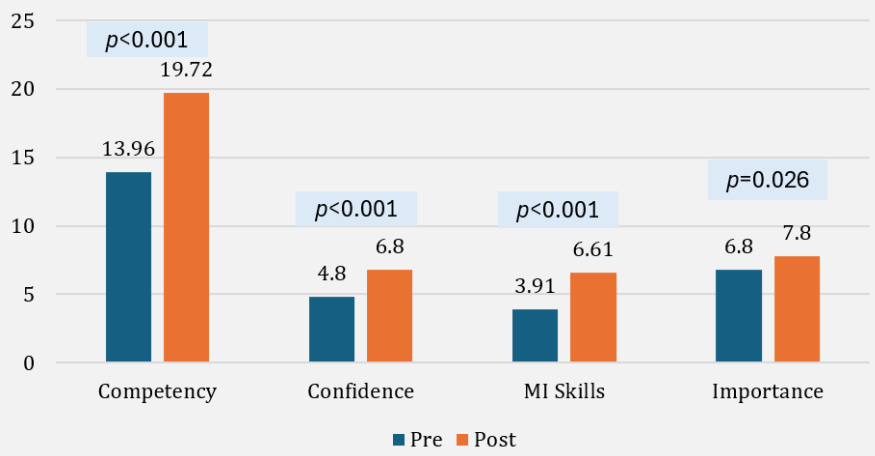


Figure 1: Pre-Post Changes in MI Related Outcomes (n=25)

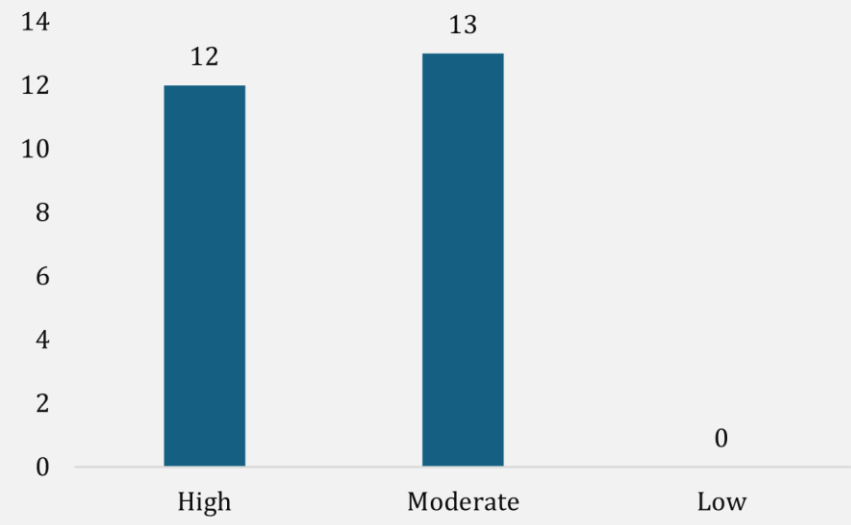


Figure 2: Ease of Use of MI Training Module (n=25)

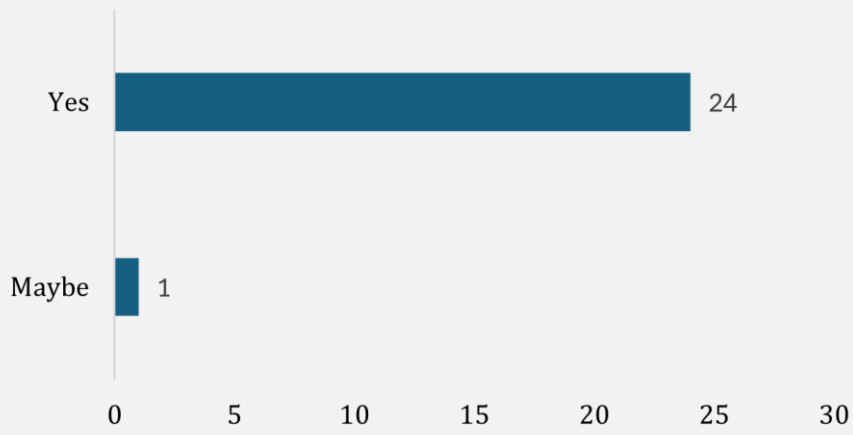


Figure 3: Recommendation of MI Training Module (n=25)

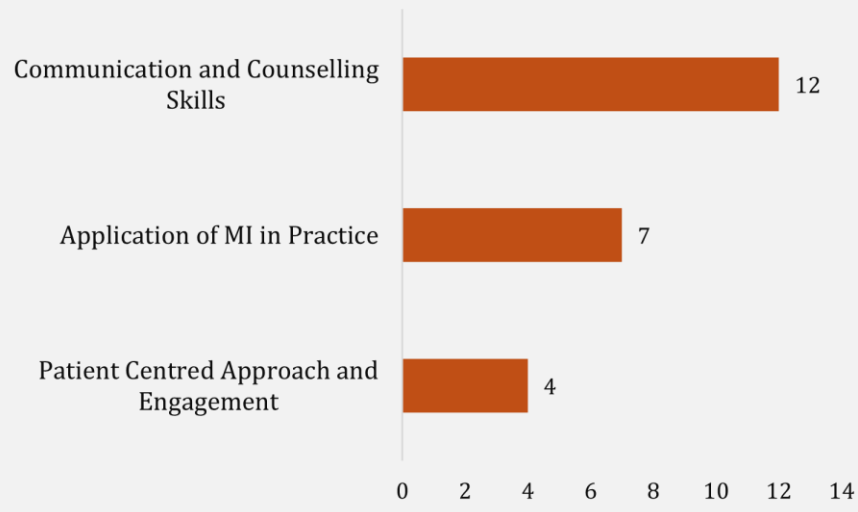


Figure 4: Perceived Usefulness of MI Training Module (n=23)

DISCUSSION

- The online MI training module demonstrated high acceptability among healthcare providers.
- Significant improvements were observed in competency scores, confidence and MI skills.
- Smaller improvements in confidence and lower reporting of patient-centred approach and engagement suggest a need for additional reinforcement such as practical or hands on training.

CONCLUSION

- Online MI training improves counselling competency and skills among HCPs.
- Scalable digital training may enhance MI capacity in TB care settings.
- Further research is required to evaluate its impact on clinical practice and patient outcomes.

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References

1. Bischof, G., Bischof, A., & Rumpf, H.-J. (2021). Motivational Interviewing: An Evidence-Based Approach for Use in Medical Practice. *Deutsches Ärzteblatt International*, *118*(7), 109–115. https://doi.org/10.3238/arztebl.m2021.0014
2. Law, S., Seepamore, B., Oxlade, O., Sikhakhane, N., Dawood, H., Chetty, S., Padayatchi, N., Menzies, D., & Daftary, A. (2021). Acceptability, feasibility, and impact of a pilot tuberculosis literacy and treatment counselling intervention: A mixed methods study. *BMC Infectious Diseases*, *21*, 449. https://doi.org/10.1186/s12879-021-06136-1
3. Mohd, Z. W., Ahmad, S. R., Yaacob, N. A., Mohd Shariff, N., Jaeb, M. Z., & Hussin, Z. (2023). Innovative Integrated Motivational Interviewing for Dual Management in Tuberculosis Patients with Diabetes (MID-DOT) in Malaysia. *Healthcare*, *11*(13), 1929. https://doi.org/10.3390/healthcare11131929