



A COMPARATIVE STUDY TO EVALUATE THE EFFECTIVENESS OF HANDS-ON TRAINING VERSUS SELF-INSTRUCTIONAL MODULE ON THE KNOWLEDGE REGARDING MENTAL HEALTH FIRST AID (MHFA) AMONG NURSES IN SELECTED HOSPITALS

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ABSTRACT

Introduction- Mental health crises are increasingly encountered in hospital settings, and nurses play a vital role in providing immediate support through Mental Health First Aid (MHFA). Adequate knowledge and structured training are essential to ensure early identification, appropriate response, and timely referral of individuals experiencing mental health emergencies. **Objectives-** The study aimed to evaluate and compare the effectiveness of Hands-On Training (HOT) and Self-Instructional Module (SIM) on knowledge regarding MHFA among nurses working in selected hospitals. **Methodology-** A quantitative research approach with Two parallel arm interventional study design was adopted. The sample consisted of 56 Nurses selected through simple random sampling and equally divided into two groups: Hands-On Training group (n=28) and Self-Instructional Module group (n=28). A self-structured, validated questionnaire comprising 30 multiple-choice questions was used to assess knowledge regarding MHFA. The tool demonstrated high reliability ($r = 0.9539$ for HOT group and $r = 0.9588$ for SIM group). Pre-test assessment was conducted before the intervention, and post-test assessment was carried out after 7 days. **Results-** The findings revealed that the majority of nurses in both groups had average and inadequate baseline knowledge regarding MHFA during the pretest. Both Hands-On Training and Self-Instructional Module significantly improved knowledge scores ($p < 0.05$). However, comparison between groups using an unpaired 't' test showed that Hands-On Training was significantly more effective than the Self-Instructional Module ($t = 3.90, p < 0.05$). Age and educational qualification were significantly associated with pretest knowledge scores, while gender, clinical experience, and area of work showed no significant association. **Conclusion-** The study concludes that although both training methods were effective in improving knowledge regarding MHFA, Hands-On Training was significantly superior to the Self-Instructional Module. Interactive and experiential learning enhanced nurse's understanding and preparedness to manage mental health crises effectively.

KEYWORDS : Mental Health First Aid (MHFA), Hands-On Training, Self-Instructional Module

1. INTRODUCTION

Mental health is an essential component of overall health and well-being. Nurses frequently encounter individuals experiencing psychological distress and mental health crises, making early recognition and initial support important components of nursing care (World Health Organization [WHO], 2022).

Mental Health First Aid (MHFA) is designed to provide initial help to a person developing a mental health problem or experiencing a mental health crisis until appropriate professional treatment is obtained or the crisis is resolved (Kitchener & Jorm, 2008; Kitchener et al., 2017). MHFA training has been associated with improvements in knowledge, attitudes, confidence, and helping behaviours (Kitchener & Jorm, 2004, 2006).

Educational approaches are important for strengthening professional knowledge. Hands-On Training promotes active participation, discussion, demonstration, and experiential learning, whereas self-directed approaches can provide flexible and structured learning opportunities. Evidence from MHFA educational research indicates that both interactive and self-directed or e-learning approaches can improve mental health-related knowledge and outcomes (Bond et al., 2017; Jorm et al., 2010).

However, comparative evidence regarding Hands-On Training and Self-Instructional Modules for improving MHFA knowledge among nurses in Indian hospital settings remains limited. Therefore, the present study compared the effectiveness of these two educational strategies.

2. Objectives

1. To assess the baseline knowledge of nurses regarding Mental Health First Aid (MHFA) at selected hospitals.
2. To evaluate the effectiveness of Hands-On Training (HOT) on knowledge regarding Mental Health First Aid (MHFA) in selected hospitals.
3. To evaluate the effectiveness of Self-Instructional Module (SIM) on knowledge regarding Mental Health First Aid (MHFA).
4. To compare the effectiveness of Hands-On Training versus Self-Instructional Module on knowledge regarding Mental Health First Aid (MHFA) among nurses in selected hospitals.
5. To associate study findings with selected demographic variables.

3. MATERIALS AND METHODS

A quantitative research approach with a two-parallel-arm interventional study design was adopted. The study included 56 nurses selected through simple random sampling and divided into a Hands-On Training group (n = 28) and a Self-Instructional Module group (n = 28).

The research tool consisted of demographic variables and a 30-item self-structured knowledge questionnaire covering the concept of MHFA, signs and symptoms, identification of crisis, communication and initial support, and suicide prevention and crisis management.

Content validity was established through expert validation. Reliability was determined using the parallel-form method and Pearson correlation coefficient. The reliability coefficient was 0.9539 for HOT and 0.9588 for SIM, indicating excellent reliability.

After ethical approval, administrative permission, and written informed consent, pre-test knowledge was assessed. The HOT group received interactive Hands-On Training, whereas the SIM group received a structured Self-Instructional Module. Data were analysed using descriptive and inferential statistics, with statistical significance set at $p < 0.05$.

4. RESULTS

A total of 56 nurses participated in the study, with 28 in each intervention group. At baseline, the majority of participants in both groups demonstrated average knowledge regarding MHFA.

Table 1. Significance of Difference Between Pre-test and Post-test Knowledge Scores

Group	Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD	Mean Gain $\pm$ SD	t-value	p-value
Hands-On Training (n = 28)	11.03 $\pm$ 3.63	26.53 $\pm$ 1.50	15.50 $\pm$ 4.48	18.28	0.0001
Self-Instructional Module (n = 28)	10.57 $\pm$ 4.31	21.42 $\pm$ 1.25	10.85 $\pm$ 4.41	13.02	0.0001

The mean knowledge score increased from 11.03 $\pm$ 3.63 to 26.53 $\pm$ 1.50 following Hands-On Training. The calculated paired t-value of 18.28 with $p = 0.0001$ was statistically significant, indicating that Hands-On Training was effective in improving knowledge regarding MHFA.

Similarly, the mean knowledge score increased from 10.57 $\pm$ 4.31 to 21.42 $\pm$ 1.25 following the Self-Instructional Module. The calculated paired t-value was 13.02 with $p = 0.0001$, indicating a statistically significant improvement.

Table 2. Comparison of Difference Between Knowledge Scores in Pre-test and Post-test

Group	Mean	SD	Between-group Mean Difference	t value	p value
Hands-On Training	15.50	4.48	4.64 $\pm$ 1.18	3.90	0.0001
Self-Instructional Module	10.85	4.41			

The mean score was 15.50 $\pm$ 4.48 in the Hands-On Training group and 10.85 $\pm$ 4.41 in the Self-Instructional Module group. The calculated unpaired t-value was 3.90 with $p = 0.0001$, showing a statistically significant difference between the groups.

Association analysis showed that age and educational qualification were significantly associated with pre-test knowledge in both groups. Gender, clinical experience, and area of work did not show statistically significant association with pre-test knowledge. In the Self-Instructional Module group, age ($\chi^2 = 18.46$, $p = .030$) and educational qualification ($\chi^2 = 21.68$, $p = 0.010$) were significantly associated with pre-test knowledge.

5. DISCUSSION

The present study demonstrated statistically significant improvement in MHFA knowledge following both Hands-On Training and Self-Instructional Module. The larger mean gain observed in the Hands-On Training group indicates that the interactive educational approach produced a greater change in knowledge in this study.

The findings are consistent with previous evidence that structured MHFA education can improve mental health literacy and confidence (Kitchener & Jorm, 2006, 2008). Kitchener and Jorm (2006) reviewed evaluation studies of MHFA training, while Kitchener and Jorm (2008) described MHFA as an early-intervention programme intended to improve knowledge and helping responses. Previous

research has also reported beneficial effects of MHFA education on knowledge and helping-related outcomes (Bond et al., 2017).

The significant improvement in the Self-Instructional Module group indicates that self-directed written learning can also improve knowledge. However, the between-group analysis showed a statistically significant difference in mean gain scores. The finding may be related to the opportunity for active participation, practice, communication, and immediate feedback provided during Hands-On Training.

Age and educational qualification were associated with baseline knowledge, whereas gender and clinical experience were not. These findings indicate that formal educational exposure may contribute to baseline MHFA knowledge, while routine clinical experience alone may not ensure adequate preparation in MHFA principles.

6. CONCLUSION

Both Hands-On Training and Self-Instructional Module were effective in improving knowledge regarding Mental Health First Aid among nurses. The observed mean gain was greater in the Hands-On Training group, and the between-group difference was statistically significant. The findings support the use of interactive and experiential educational strategies to strengthen nurses' MHFA knowledge and preparedness.

7. Recommendations

The study recommends conducting similar studies with larger samples across multiple hospitals, along with follow-up studies to assess long-term retention of MHFA knowledge. Regular MHFA training should be incorporated into hospital in-service education programmes, using simulation, role-play, and case-based learning to strengthen practical competencies. Further research should assess the impact of MHFA training on nurses' skills, confidence, referral practices, and patient-related outcomes.

REFERENCES

- Bond, K. S., Jorm, A. F., Kitchener, B. A., & Reavley, N. J. (2017). Mental health first aid training for nursing students: A randomized controlled trial. *BMC Medical Education*, 17, Article 115. <https://doi.org/10.1186/s12909-017-0955-2>
- Jorm, A. F., Kitchener, B. A., Fischer, J. A., & Cvetkovski, S. (2010). Mental health first aid training by e-learning: A randomized controlled trial. *Australian & New Zealand Journal of Psychiatry*, 44(12), 1072–1081. <https://doi.org/10.3109/00048674.2010.516426>
- Kitchener, B. A., & Jorm, A. F. (2004). Mental health first aid training in a workplace setting: A randomized controlled trial. *BMC Psychiatry*, 4, Article 23. <https://doi.org/10.1186/1471-244X-4-23>
- Kitchener, B. A., & Jorm, A. F. (2006). Mental health first aid training: Review of evaluation studies. *Australian & New Zealand Journal of Psychiatry*, 40(1), 6–8. <https://doi.org/10.1080/j.1440-1614.2006.01735.x>
- Kitchener, B. A., & Jorm, A. F. (2008). Mental health first aid: An international programme for early intervention. *Early Intervention in Psychiatry*, 2(1), 55–61. <https://doi.org/10.1111/j.1751-7893.2007.00056.x>
- Kitchener, B. A., Jorm, A. F., & Kelly, C. M. (2017). *Mental health first aid manual* (4th ed.). Mental Health First Aid Australia. <https://mhfa.com.au/>
- World Health Organization. (2022). Mental health: Strengthening our response. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>