



TO EVALUATE THE EFFECTIVENESS OF MENTAL HEALTH FIRST AID (MHFA) TRAINING ON KNOWLEDGE AND ATTITUDE OF ASHA WORKERS REGARDING MENTAL ILLNESS AND FIRST AID MANAGEMENT TO HELP PEOPLE IN CRISIS: A PILOT STUDY

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ABSTRACT

Background: India is currently facing a looming mental health crisis, with a significantly higher number of individuals experiencing mental health issues and grappling with a shortage of mental health professionals. Mental Health First Aid (MHFA) aims to safeguard individuals facing potential harm, ensuring their well-being and safety and offer assistance in preventing the escalation of mental health issues, thus preventing them from worsening. **Objective:** To evaluate the effectiveness of Mental Health First Aid (MHFA) training on knowledge and attitude of ASHA workers regarding mental illness and first aid management to help people in crisis. **Methodology:** Pre experimental one group pre test post test design is used. With simple random sampling, 25 ASHA workers were recruited from selected PHCs of Wardha district. Self structured knowledge questionnaire and attitude scale was used for data collection before and after the MHFA training. Validity and reliability of the instrument was conducted by appropriate procedures and statistical methods. Data was analyzed by using descriptive and inferential statistics with SPSS version 26. **Result:** Result had shown improvement of knowledge (post) 65.60% compared to knowledge (pre) 33.2% and attitude (Post) 92.84% compared to attitude (Pre) 67.76%. **Conclusion:** MHFA training proved to be efficacious in improving knowledge & attitude of ASHA workers, reduces myths and stigmatizing behaviour and empowered them to deliver MHFA to people in mental crisis, thus facilitated early recognition of mental issues and prompt referral for professional help.

KEYWORDS : Mental Health First Aid, Mental illness, ASHA workers

INTRODUCTION:

Globally, mental disorders have become one of the leading causes of health burden. India found that an alarming 197.3 million people required mental health care. This included approximately 45.7 million individuals with depressive disorders and 44.9 million with anxiety disorders. The situation has been further complicated by the Covid-19 pandemic, making it a critical concern worldwide.¹ Mental health literacy, a related concept, is increasingly recognized as a crucial gauge of awareness and knowledge concerning mental health disorders. Early detection of mental health issues offers individuals the chance for improved long-term outcomes when timely intervention is implemented.²

Mental Health First Aid (MHFA) developed by Kitchener and Jorm (2002),³ is an evidence-based program designed to equip the general public with the necessary skills to approach, support, and refer individuals experiencing distress, thus improving their understanding of mental health issues. In a study aimed to conduct a meta-analysis by synthesizing existing evaluations of the MHFA program in order to assess its impact as a strategy for enhancing public awareness about mental health. A systematic literature search yielded fifteen relevant papers for analysis. For this meta-analysis, standardized effect sizes were computed for three key outcome measures: knowledge improvement, attitude changes, and helpful behaviours. The results revealed significant positive effects with mean effect sizes of Glass's $=0.56$ (95% CI=0.38 - 0.74; $p < 0.001$) for knowledge improvement, 0.28 (95% CI = 0.22 - 0.35; $p < 0.001$) for attitude changes, and 0.25 (95% CI=0.12 - 0.38; $p < 0.001$) for helpful behaviours, respectively. In conclusion, the results demonstrate that the MHFA program effectively enhances participants' knowledge of mental health, fosters more positive attitudes, and encourages supportive behaviours towards individuals facing mental health challenges. As a result of these encouraging outcomes, the MHFA program is highly recommended for implementation in public health initiatives aimed at increasing mental health awareness.⁴

With their extensive knowledge of the local community, Accredited Social Health Activists (ASHAs) play a vital role in assisting people with mental illness (PMI) in accessing mental

health services and promoting community engagement in mental health programs. During the COVID-19 lockdown, the Ramanagara (Karnataka) district mental health program (DMHP) saw ASHAs proactively delivering medications to PMI right at their doorsteps. Additionally, they provided brief counselling sessions, focusing on psycho education, emphasizing the importance of treatment adherence, and discussing the common adverse effects of psychotropics. To effectively expand mental health services in low- and middle-income countries, it is essential to involve ASHAs. Training them in mental health aspects has shown positive outcomes, such as enhancing their ability to recognize mental illness through case vignettes, reducing stigmatizing attitudes, and instilling scepticism towards unhelpful and potentially harmful pharmacological interventions. Moreover, trained ASHAs have been involved in screening individuals for common mental illnesses and promptly referring them for treatment when necessary. Acting as liaisons between PMI and primary health centre (PHC) staff, ASHAs have conducted home visits and diligently reminded patients about their appointments.⁵

People with mental health problems self-stigmatize and feel embarrassed, shameful, or guilty, which prevents them from seeking help. MHFA teaches people how to provide help to those in mental health crisis situations or with developing mental disorders. Unmet needs in mental health care are high in low and middle-income countries like India. With their in-depth knowledge of the local community, community leaders including ASHAs can help persons with mental illness access mental health services and facilitate community participation in mental health programs.

OBJECTIVES:

1. To assess the knowledge and attitude score of ASHA workers regarding mental illness and its first aid management at baseline (pretest).
2. To assess the post test knowledge and attitude score of ASHA workers regarding mental illness and its first aid management after MHFA training.
3. To evaluate the effectiveness of Mental Health First Aid (MHFA) training on knowledge and attitude of ASHA

workers regarding mental illness and first aid management to help people in crisis.

Hypothesis:

1. **H₀:** The mean post test score of knowledge and attitude of ASHA workers is not significantly higher than the mean pre test score.
2. **H₁:** The mean post test score of knowledge and attitude of ASHA workers is significantly higher than the mean pre test score.

MATERIALS AND METHODS:

- **Research Approach and Research design:** Pre experimental one group pre test post test design was used for this study.
- **Variables: Outcome variables:** Knowledge, and Attitude of ASHA workers regarding mental illness and its first aid management.
- **Demographic variables :** Age, work experience, education and Income.
- **Setting of the study:** Selected PHCs of Wardha district.
- **Sample and sample size:** 25 ASHA workers selected for pilot study
- **Sampling technique:** Simple random sampling

Inclusion Criteria:

1. ASHAs who have given informed written consent to participate in study.
2. Must primarily be a women resident of the village.
3. Who can read, write and comprehend Marathi

Exclusion Criteria:

1. ASHAs who have undergone any mental health training program

Data collection tool:

a) Demographic sheet : Consisted information regarding Age, work experience, education and Income.

b) Knowledge questionnaire: Self structured Knowledge questionnaire with multiple choice questions (final version 20 items) was prepared. The knowledge section was developed based on the meaning of mental health, characteristics of mentally healthy person, various mental health issues and mental health crisis, it's etiology, symptoms, therapies and mental health first aid based on extensive review of literature. Scoring system: score 0 for every wrong response and score 1 for every correct response. Knowledge score categorized as Poor (0 to 33.33%), Average (33.33 to 66.66%) and Good (66.6 to 100%).

c) Attitude Scale: Likert type attitude scale was prepared (Final version 25 items). The attitude section was developed based on Views, perceptions, beliefs, thoughts, intentions, attitude towards mental health problems, Myths and stigmatizing behavior, Attitudes that promote the recognition, First aid skills and appropriate help-seeking behavior, beliefs and self help strategies. Scoring System: 5 point Likert scale with responses: Never, Once in a while, Sometimes, Most of the times and Always with scores ranging from 0 to 4 assigned to each questions respectively. A value of 4 is assigned for the most ideal response, while non-ideal response is assigned with a value of 0. Attitude score categorized as unfavorable (0 to 33.33%), favorable (33.33 to 66.66%) and most favorable (66.6 to 100%). Reverse scored items: 4,5 and 7.

Translation of the tool & Language adoptability:

The original draft of the questionnaire was developed in English and then translated to the Marathi language which is the local language for easy administration to participants. The aim of this process was to recognize and harmonize the translated items from the original English version and to produce accurate Marathi version of the questionnaire. So

forward-backward method to do the translation and cultural adaptation was used in this study.

Validity and Reliability Of Tool:

The face validity analysis involved a think-aloud procedure with a group of ten participants. To evaluate the content validity of the tool, a panel of five experts was assembled. S-CVI value for knowledge and attitude are 0.85, 0.872 respectively. Thus acceptable as the value >0.7. Reliability of the knowledge questionnaire and attitude scale was performed using Cronbach's alpha value (α) found at acceptable range(α) = 0.705 and 0.914 respectively.

Description of Intervention: MHFA training program was designed in a manner to cover all aspects of common mental health issues and MHFA action plan in terms of ALGEE. It was 6 hours training program including 3 sessions of 2 hours each which includes teaching learning methods suitable for ASHAs i.e. lecture, focus group discussion, storytelling, role plays, case studies and standardized patient. Learning resource material was provided to every participant.

Method of Data Collection:

After IEC approval, permission to conduct research was taken from the District Health Officer (DHO), Warhda District. Investigator and team visited concerned PHCs for orienting the MOs, CHOs, and other staff regarding research project. We explained the research project objectives, data collection methods, intervention, duration, potential benefits and risk of the study. investigators requested the authorities for needful cooperation. Written consent was obtained from the assigned subjects. The socio-demographic data regarding age, education, income, experience, and previous training were collected. Pre test conducted using knowledge questionnaire and attitude scale. MHFA training program was administered and post test conducted after a month using same tool.

Statistical Analysis: All the result were calculated using SPSS version 26. The analysis will be formed on the basis of objectives and hypothesis. Overall results for the outcome variables will be listed in tables for both descriptive (Mean, mean percentage, standard deviation) & inferential statistics.

RESULTS:

Total 25 subjects were involved in the study, Age in years recorded with mean value 35.76 standard deviation 1.85472 with minimum 32 & maximum 39. Experience in years found with average value 6.24 with minimum 5 & maximum 9. Education categorized into graduation, HSC, SSC. Graduation found with frequency 5(20.0%), HSC found with frequency 11(44.0%), SSC found with frequency 9 (36.0%). Income categorized into 10000-1500, 5000-10000. 10000-15000 found with frequency 4(16.0%) & 5000-10000 found with frequency 21(84.0%). None of the ASHA worker participant had the similar training before with frequency 25(100.0%).

Table 1: Pre and Post test assessment Knowledge and Attitude Score

Variables	N	Minimum	Maximum	Mean	SD
Knowledge (Pre)	25	1.00	14.00	6.6400	3.34016
Knowledge (Post)	25	9.00	20.00	13.1200	2.68204
Attitude (Pre)	25	52.00	79.00	67.7600	5.85434
Attitude (Post)	25	80.00	100.00	90.8400	5.68390

Table 1 depicted that knowledge (pre) recorded with mean value 6.6400 & std. deviation 3.34016, minimum 1.00 & maximum 14.00 & Knowledge (post) recorded with mean 13.1200, Std. deviation 2.68204, minimum 9.00 & maximum 20.00, Attitude (pre) recorded with mean 67.7600, Std. deviation 5.85434, minimum 52.00 & maximum 79.00 & Attitude (post) with mean 90.8400, Std. deviation 5.68390, minimum 80.00 & maximum 100.00. Thus result shows improvement of knowledge (pre) 33.2% compared to

knowledge (post) 65.60% . Attitude (Pre) 67.76% compared to attitude (Post) 92.84%.

Table 2: Knowledge Score assessment in Pre and Post test (n=25)

Parameter		Group		Total	Chi Sq	P- value
		Pre	Post			
Know ledge	Poor	Frequency	17	0	17	27.273 <0.01
		%	68.0%	0.0%	34.0%	
	Average	Frequency	7	15	22	
		%	28.0%	60.0%	44.0%	
Good	Frequency	1	10	11		
	%	4.0%	40.0%	22.0%		
Total		Frequency	25	25	50	
		%	100.0%	100.0%	100.0%	

Table 2 depicted good knowledge score in pre test group found with frequency 1(4.0%) & post test group found with frequency 10(40.0%) with chi sq 27.273 shows highly significant with P-value=0.01 < 0.05.

Table 3: Attitude Score assessment in Pre and Post test (n=25)

Parameter		Group		Total	Chi Sq	P- value
		Pre	Post			
Attitu de	Unfavourable	Freq	0	0	0	14.103 <0.01
		%	0.0%	0.0%	0.0%	
	Favourable	Freq	11	0	11	
		%	44.0%	0.0%	22.0%	
Most favourable	Freq	14	25	39		
	%	56.0%	100.0%	78.0%		
		Freq	25	25	50	
		%	100.0%	100.0%	100.0%	

Table 3 showed most favourable attitude score in pre test group found with frequency 14(56.0%) & post test group found with frequency 25(100.0%) with chi sq 14.103 shows highly significant with P-value=0.01 < 0.05. Hence the null hypothesis was rejected and research hypothesis was accepted.

DISCUSSION:

In the present study, At baseline 68.0% of respondents have poor knowledge. Similar findings were observed in a cross sectional study conducted by Yonas Tesfaye et al. (2021), titled Knowledge of the community regarding mental health problems, where overall knowledge score showed 44.8% of the respondents had inadequate knowledge.⁶

In present study mean knowledge score was 6.6400 and 13.1200 in pre and post test respectively. Similarly mean attitude score was 67.7600 and 90.8400 in pre and post test respectively. Similar results were elicited in a study conducted by Rentala S et al in 2022 entitled Impact of Mental Health First Aid Training for Primary Health Care Nurses on Knowledge, Attitude and Referral of Mentally Ill Patients, where authors observed that mean knowledge score was 16.80 and 22.42 in pre and post test respectively. Similarly mean attitude score was 66.88 and 65.64 in pre and post test respectively.⁷ The mean difference was high in present study as compare to study conducted by Rentala S et al.

CONCLUSION:

Results had shown improvement of knowledge (post) 65.60% compared to knowledge (pre) 33.2% and attitude (Post) 92.84% compared to attitude (Pre) 67.76%. MHFA training program is effective in improving knowledge and attitude of ASHA workers regarding mental illness and its first aid management to help people in crisis. This underscores the significance of empowering ASHA workers with the necessary knowledge and positive attitude to improve mental health care in the community.

Recommendations:

Similar study can be replicated on a large sample to generalize the findings and can be conducted among other health care workers as well as general population.

Conflict of Interest: Authors declare no conflict of interest

REFERENCES:

1. Mental health in India: A perspective, The Indian Express, Wednesday, Dec 28, 2022, <https://indianexpress.com/article/lifestyle/health/mental-health-in-india-a-perspective-anxiety-depression-stress-7764309/>
2. Ogorchukwu JM, Sekaran VC, and Nair S, Ashok L. Mental Health Literacy Among Late Adolescents in South India: What They Know and What Attitudes Drive Them. Indian J Psychol Med. 2016 May-Jun; 38(3):234-41. doi: 10.4103/0253-7176.183092. PMID: 27335519; PMCID: PMC4904760.
3. Kitchener, B.A., Jorm, A.F. Mental health first aid training for the public: evaluation of effects on knowledge, attitudes and helping behavior. *BMC Psychiatry* 2, 10 (2002). <https://doi.org/10.1186/1471-244X-2-10>
4. Hadlaczky, G., Hökby, S., Mkrtchian, A., Carli, V., & Wasserman, D. Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. *International Review of Psychiatry*, (2014). 26(4), 467-475. doi:10.3109/09540261.2014.924910
5. Srinivasan K, Mazur A, Mony PK, Whooley M, Ekstrand ML. Improving mental health through integration with primary care in rural Karnataka: Study protocol of a cluster randomized control trial. *BMC FamPract*. 2018; 19:158. [PMC free article] [PubMed] [Google Scholar]
6. Tesfaye, Y., Agenagnew, L., Anand, S. et al. Knowledge of the community regarding mental health problems: a cross-sectional study. *BMC Psychol* 9, 106 (2021). <https://doi.org/10.1186/s40359-021-00607-5>
7. Rentala S, Thimmajja SG, Vasudevareddy SS, Srinivasan P, Desai M. Impact of mental health first aid training for primary health care nurses on knowledge, attitude and referral of mentally ill patients. *Indian J Cont Nsg Edn* 2022;23:184-9