



Effectiveness of Mental Health First Aid Kit for Depression and Psychological Well-being in Adolescents

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Authors' contributions

This work was carried out in collaboration among all authors. Author SM designed the study and wrote the protocol. Authors TS and JG managed the literature searches and proof reading. All authors read and approved the final manuscript.

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ABSTRACT

Background: Psychological state for youth not just impacts physical wellness at the moment, but also in potential lives. One of the major setbacks with adolescents developing depression in India is that most of them are unaware of the situation and majorly receive therapeutic help after the situation turns chronic in nature. Mental Health First Aid explains how symptoms of mental disease should be recognized and managed.

Objectives: To develop, evaluate and validate the Mental Health First Aid Kit for depression among adolescents and their psychological well-being.

Materials and Methods: For this community approach study, the teachers from the selected schools at Wardha city will be trained as potential volunteers to conduct this experimental trial with the scholar. The efficacy of Mental Health First Aid Kit will be assessed by using various scale. The pre and post values obtained will be subjected to statistical analysis.

Expected Results: The development of the proposed indigenous Mental Health First Aid Kit would facilitate positive outcomes in primary assistance to adolescents with mental health concerns.

Conclusion: The results of the proposed study will be helpful to encourage the adolescent individual to identify and seek primary care until a more definitive medical diagnosis and treatment is availed.

Keywords: Adolescent; adolescent psychiatry; adolescent health; mental health.

1. INTRODUCTION

Globally, mental well-being is a big problem, and India is not far behind in expressing this. The speed tends to be sluggish if we analyze advances in the area of psychological well-being. The first Director-General of the World Health Organization (WHO), Dr Brock Chisholm, in 1954, had presciently announced that "there can be no real physical wellness without mental well-being [1]. More than 65 years later, this situation has not significantly improved. Neuropsychiatric conditions are responsible for about 14 percent of the worldwide burden of illness. Owing to poor recognition of the relationship among mental disorder as well as other medical conditions, the burden of mental illnesses is known to be underrated [2]. Primary concern, focused on the responsibility of health issues and resolving inequality in regard to determinants and responses to health issues, remains a major challenge.

The teens are the main economic and demographic strength in a country. Psychological state for youth not just impacts physical wellness at the moment, but also in potential lives. In this cross-sectional analysis, a prevalidated, pre-tested Marathi anxiety stress and depression scale-21 instrument was implemented to 461 rural teenage adolescents studying in Pune city and rural region from a block in Nanded district, Maharashtra, including associated variables to determine the severity of anxiety stress, and depression and its external factors. The incidence of these students of anxiety, tension and depression was 60 percent, 44 percent and 54 percent. Urban students in the city of Pune have faced a considerably higher tension rate than rural students. Higher concentrations were strongly correlated with distressed households, strict upbringing, previous perceptions with traumatic outcomes, poor thoughts towards student success and tobacco usage. Studies suggest that such students' mental health condition is troubling, prompting timely action [3].

For teenagers, the period of adolescence plays a crucial and essential role in their developmental growth into adults. This is majorly marked by the transitional phase in terms of social, educational, and biological aspects of life. Their psychological strength is so delicate that peer pressure, academics, societal norms may act as a deciding force for their addictions, initiation of substance abuse, higher risk of sexual behaviours, suicidal thoughts and others [4]. The family, upbringing and the association have a tremendous influence on their psychological well-being. Significantly, the educational institutions help shape their personality and overall development. The family members and teachers are the primary role models for the teenagers, while the friends have a secondary influence. In India, these are the healthy contributors that largely influence adolescents' mental well-being of all strata. Therefore, the need arises to have an awareness campaign at the school and college level. These programs would help adolescents identify and improve their understanding of mental health being and awareness altogether [5].

Mental Health First Aid (MHFA) explains how symptoms of mental disease and drug use problems should be recognized and managed. The program presents potential risks and warning indicators of mental health issues to attendees, develops an awareness of their effects and offers an outline of typical therapies. It illustrates how to evaluate a mental health problem by simulations and role-playing; choosing treatments; delivering initial assistance; and linking individuals to clinical, social and peer care as well as tools for self-help. MHFA is the only license approved standardized training program in India. According to NMHS (2016), about 5% of mental health issues are diagnosed in India. The crucial effects of mental wellbeing on overall health area usual overlooked condition that requires assistance. The first aid comes to rescue in these conditions. This is backed by the available evidence from international training programs having a positive influence of first aid on health [6].

In the overall public, poor Mental Health Literacy (MHL) is common within racial and ethnic minority communities. First Aid for Mental Health (MHFA) attempts to enhance MHL. This analysis aimed to evaluate the influence of MHFA in a broad national survey and through ethnic and racial subgroups on perceptions of trust regarding MHL. MHFA's self-perceived effect was evaluated on 36,263 individuals who attended the 12-hour training and a feedback method. A multiple regression study found that MHFA culminated in strong trust scores to implement different MHL-related abilities and expertise. The expected influence of MHFA practice ranged between certain ethnic and racial categories, but there were slight to trivial variations. Future MHFA research could investigate improvements in pre-post training for MHL and the degree to which expected improvements in MHL faith between learners apply into effect [7].

One of the major setbacks with adolescents developing depression in India is that most of them are unaware of the situation and majority receive therapeutic help after the situation turns chronic in nature. In one of the studies, an indigenous school-based coping-skill-program was developed and tested in 300 adolescents. The stressors in these study subjects were evaluated at baseline and after 3 months of interventions. The results of the study determined that such tools are required to aid the teenagers to cope with transitional challenges [8]. However, the need for standardized tool and a more specific protocol is still required to manage these situations. The present study aims to establish one such interventional mental health first aid kit.

2. OBJECTIVES

1. To develop and validate the MHFA kit for depression among adolescents and their psychological well-being.
2. To identify the level of depression and psychological well-being among adolescents before the intervention.
3. To identify the level of depression and psychological well-being among adolescents after the intervention.
4. To assess the effectiveness of MHFA kit in reduction of depression and improving the psychological well-being among adolescent from intervention group.
5. To identify mental health awareness and literacy among adolescents in the intervention group. (pre and post-test)

6. To associate the pre interventional findings with selected demographic variables.

2.1 Research Hypothesis

H1-There may be an effect of the Mental Health First Aid Kit on reducing depression among adolescents and improving their psychological well-being at 0.05 level of significance.

2.1.1 Null hypothesis

H₀-There may not be an effect of the Mental Health First Aid Kit on reducing depression among adolescents and improving their psychological well-being at a 0.05 level of significance.

2.2 Trial Design

For this community-oriented experimental study is designed with a quantitative approach. The study samples for this multi-staged sampling will include adolescent individual ranging between 13-15 years.

3. MATERIALS AND METHODS

3.1 Study Setting

The study will be conducted in selected schools at Wardha city, India.

3.2 Eligibility Criteria

The study will have samples confirmed to the following criteria:

3.2.1 Inclusion criteria

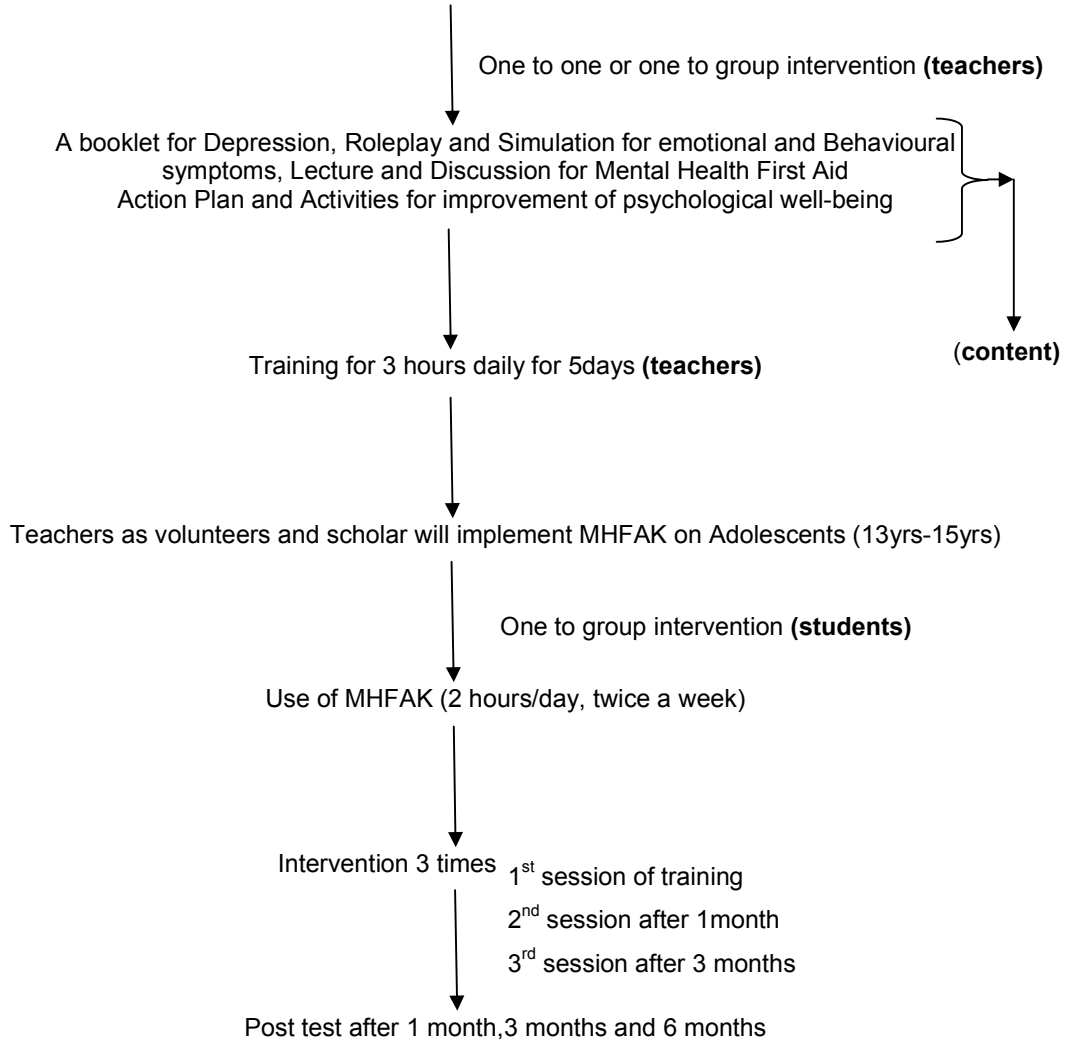
- Adolescents of 13 and 15-years of age-group.
- Those who are available at the time of the data collection.
- Who are able to read Hindi/English/Marathi.
- Subjects satisfying the beck score were included to evaluate depression.

3.2.2 Exclusion criteria

- Those who are not willing to participate in the study.
- Subject with any history of psychiatric hospitalization.
- Subject with abnormal intelligence.

3.3 Participant Timeline

Mental health first aid kit (Training programme for adolescent depression and psychological well being conducted) **by Investigator.**



3.4 Sample Size

The sample size is determined as 809. Sample size calculated by using sample of prevalence value.

$$n = [p_1(1-p) + P_2(1-p_2)] * (Z/ME)^2$$

Where,

Z is 95% confidence interval (1.96) ME is 5% margin of error (0.05)

P1 is prevalence for post-test is 54.3%

P2 is prevalence for follow up is 35.8%

(Including 10% Non-respondent)

n=809

Total sample size is 809 using the reference study [12].

Table 1. Enumerates the phases of study, approaches and details of intervention.

Phases of study	Approaches	Interventional details
First phase	Documented Literature review	Develop and validate the MHFA Interventional Kit with Mental Health experts.
Second phase	<ul style="list-style-type: none"> • Community approach • Teachers will be trained as volunteers. • Informed consent from parents, • Pre-interventional assessment of selected samples under the experimental group 	Depression: Using Beck Scale[9] Psychological Well-being: Using Ryff& Keyes Scale [10] Mental health literacy and awareness: Using mental health literacy (O Connor and Casey) [11]
Third phase	Actual Intervention to Experimental group	Implementation of MHFA kit
Fourth phase	Post Interventional assessment of Selected Samples under Experimental Group	Depression: Using Beck Scale[9] Psychological Well-being: Using Ryff& Keyes Scale [10] Mental health literacy and awareness: Using mental health literacy. (O Connor and Casey) [11]

Table 2. The plan of analysis based on the objectives and tool for implementation

Objectives	Tool	Plan for analysis
To identify the level of depression and psychological well-being of adolescents. (pre-intervention)	Beck depression scale to identify depression among the general population. Psychological Well-being Scale (Ryff& Keyes) for assessing psychological well-being of adolescents	Frequency & percentage with MEAN & SD
To assess the level of Depression and Psychological well being of adolescents. (post-intervention)	-	Frequency & percentage with MEAN & SD
To assess the effectiveness of MHFAK on depression among adolescents and psychological well-being. (pre and post)		T test
To identify the increase in mental health awareness/literacy among adolescents in the interventional group. (pre and post-test)	Mental Health Literacy Scale	T test
To associate the pre interventional findings with selected demographic variables.		Chi-Square

3.4.1 Data collection, management, and analysis methods

Thesis approval from University, IEC & DRC is obtained. Permission from competent authorities to conduct the research study in selected settings will be achieved. Approach to sampling units of the selected sampling frame will aid in further assessment of the study. The sampling units will be selected as per the laid down criteria. Post which, the researcher's introduction, organization and purpose of the research study will be defined, and appropriate informed consent will be obtained in the subject's own language. Collection of the information pertaining to the research problem from the participants using standardised scale and health survey/self-reporting questionnaire will be tabulated for further assessment of statistics.

Tool outcome consists of 2 parts:

Part I consists of recording the participants' Socio demographic profile:

(Items-7 Age, Gender, education, religion, parental education, parental occupation, and socioeconomic status.)

Part II assessment would include the following criteria states as under:

- Beck depression scale to identify depression among adolescents.
- Psychological Well-being Scale (By Ryff & Keyes) for assessing psychological well-being of adolescents.
- Mental health literacy scale to assess mental health awareness and literacy of the participants. (O Connor and Casey)

4. DISCUSSION

The inference from Beck depression scale to identify depression among the general population is expected to showcase positive outcome in predicting its extent [13]. Similarly, the psychological well-being scale by Ryff & Keyes [14] is expected to access the pre intervention data accurately. The post intervention data obtained from both these evaluations would show improvement in level of depression and psychological well-being respectively. Likewise, Mental Health Literacy Scale would show improvement in comparative evaluation in pre and post interventional value collected in terms of mental health awareness and literacy [15]. The

tools used in second phase are all validated using which the entire kit will be validated for the current intervention [16-18]. The recording of demographic data will be helpful in understanding the influence of gender predilection or other factors on the final outcome of the study. However, the possible limitations are subjective to the individual adolescent's response towards the entire study that might have an influence on the final outcome of the study.

5. CONCLUSION

The proposed study results will help the adolescent individual to identify and seek primary care until a more definitive medical diagnosis and treatment is available. This kit will also be conducive to deal with the mental health requirements of adolescent individuals delicately.

CONSENT AND ETHICAL APPROVAL

The Ethical approval from the Institutional Review Board (IRB) was obtained, following which the proposed study will be conducted as per international standard or university standard, patients' written consent has been collected and preserved by the author.

EXPECTED OUTCOMES

The development of the proposed indigenous MHFAK would facilitate positive outcomes in primary assistance to adolescents with mental health concerns. Identifying and improving the level of depression and psychological well-being. Besides increasing and improving the mental health awareness is the possible expected result of this experimental trial.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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