

Effectiveness of Structured Teaching Program on Knowledge regarding Psycho Education on Depression among ITI Students in Selected ITI Colleges: A Quasi-Experimental Study

Lamuwel Ashok Kamble¹, Roshini Dhale²

¹Maharashtra University of Health Sciences, Nashik
Email: lamukamble[at]gmail.com

²Department of Mental Health Nursing, Suretech College of Nursing Nagpur, Maharashtra, India
HOD and Research Guide Mental Health Nursing, Suretech College of Nursing Nagpur Maharashtra, India

Abstract: ***Aim of the study:** The study aims to find the Effectiveness of structured teaching program on knowledge regarding psycho-education on depression among ITI students in selected ITI colleges. **Objectives of study:** The primary objective of the study was to evaluate the effectiveness of a Structured Teaching Program on knowledge regarding psychoeducation on depression among ITI students. Secondary objectives included assessing baseline knowledge and determining the association between post-test knowledge scores and selected demographic variables. **Methods:** A quantitative quasi-experimental one-group pre-test post-test design was employed. The study was conducted in selected ITI colleges, with 60 students selected using purposive sampling. Data were collected using a structured knowledge questionnaire consisting of 30 multiple-choice questions. A pilot study was conducted from 3rd March to 10th March 2025 to test the feasibility and reliability of the tool. The main study was conducted from 26th March to 1st May 2025. The intervention consisted of lectures, handouts, demonstrations, and Q&A sessions. Pre-test and post-test scores were analyzed using descriptive statistics and paired t-tests. **Results:** The pre-test revealed that 26.7% of students had inadequate knowledge, 58.3% had moderately adequate knowledge, and 15% had adequate knowledge, with a mean score of 16.90 ± 4.08 (56.3%). Post-intervention, only 3.3% of students remained in the inadequate category, 35% had moderately adequate knowledge, and 61.7% achieved adequate knowledge, with a mean score of 22.58 ± 3.97 (75.3%). The mean knowledge score increased by 5.68 points, which was statistically significant ($t = 10.73$, $p < 0.001$). Age and monthly family income were significantly associated with post-test knowledge, while gender, religion, course year, family history of mood disorders, and source of information were not. **Conclusion:** The Structured Teaching Program was highly effective in improving ITI students' knowledge regarding psychoeducation on depression. The study highlights the importance of targeted educational interventions to enhance mental health literacy among adolescents.*

Keywords: Psychoeducation, Depression, Structured Teaching Program, ITI Students, Knowledge Assessment

1. Introduction

“One of the best aspects of health care reform Is it starts to emphasize prevention”

Depression is a mood disorder that involves a persistent feeling of sadness and loss of interest. It is different from the mood fluctuations that people regularly experience as a part of life. Major life events, such as bereavement or the loss of a job, can lead to depression. However, doctors only consider feelings of grief to be part of depression if they persist. Depression is an ongoing problem, not a passing one. It consists of episodes during which the symptoms last for at least 2 weeks. Depression can last for several weeks, months, or years.¹

In India, the prevalence of depression among adolescents and young adults has been reported to range from 15% to 25%, with limited access to mental health education in vocational institutions. Early intervention through structured educational programs can play a vital role in promoting mental health and preventing the progression of depressive symptoms into severe disorders.²

Depression is one of the most common mental health disorders, significantly affecting emotional well-being, academic performance, and social functioning among

adolescents and young adults. The transition from school to vocational education, such as Industrial Training Institutes (ITI), often involves exposure to new academic, social, and career-related pressures that can predispose students to psychological distress and depression. Despite its increasing prevalence, awareness, and knowledge regarding depression remain limited, leading to under recognition and inadequate management of the condition.³

Need for the Study

The prevalence of depression in children is low (<1% in most studies) with no sex differences, and then rises substantially throughout adulthood. Many factors could explain the recorded postpubertal rise in prevalence because ITI students is a developmental period characterised by pronounced biological and social changes. The most commonly postulated contributors are puberty and brain and cognitive maturation. They include enhanced social understanding and self-awareness, changes in brain circuits involved in responses to reward and danger, and increased reported stress levels, especially in girls. Median 12-month prevalence estimates in mid to late adolescence are roughly similar to those seen in adulthood (4–5%), with the cumulative probability of depression rising from around 5% in early adolescence to as high as 20% by the end of that time. However, population prevalence estimates vary widely across studies and in different countries, possibly because of methodological

Volume 15 Issue 10, October 2026

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

www.ijsr.net

differences.

2. Review of Literature

Review of the literature is a key step in the research process. It is an extensive, exhaustive and systematic examination of earlier or contemporary publications relevant to research. It is essential for the research study and the researcher to analyze the existing knowledge before going into a new area of study. This will help make a stepping stone in the progress of the study.

Assumption

The present study is based on the following assumption

- 1) ITI students may have inadequate knowledge regarding psycho- education on depression.
- 2) Depression is a common mental health problem among adolescents and young adults.
- 3) Lack of awareness regarding depression may lead to delayed help-seeking behavior.
- 4) Structured teaching programs, (STP) can enhance knowledge about depression effectively.
- 5) Improved knowledge may lead to a positive attitude toward mental health and its management.
- 6) Psycho- education plays a vital role in reducing stigma and misconception about depression

Limitation

- The study is limited to ITI students enrolled in selected ITI colleges.
- The study focuses only on assessing knowledge regarding psycho-education and does not measure changes in attitude or practices.
- The study is restricted to students who are available and willing to participate during period of data collection
- The effectiveness of the structured teaching program will be evaluated only through structured knowledge questionnaire.

Hypothesis

H₀: There is no significant difference between effectiveness of structured teaching program on knowledge regarding psycho education on depression among ITI students after pre-test and post-test.

H₁: There is significant difference between effectiveness of structured teaching program on knowledge regarding psycho education on depression among ITI students after pre-test and post-test.

3. Methodology

Research approach: A research approach is the overall plan and direction adopted to conduct a study systematically. It determines how data will be collected, analyzed, and interpreted to answer the research questions. It can be broadly classified as qualitative, quantitative, or mixed-method depending on the nature of the study and the type of data collected. A quantitative approach emphasizes measurement of variables, statistical analysis, and objective evaluation, while a qualitative approach focuses on exploring experiences, perceptions, and meanings.

Research design: A research design is the blueprint or plan that guides the researcher in collecting, measuring, and analyzing data. It ensures that the evidence obtained enables the researcher to answer the research questions effectively. Common designs include experimental, quasi-experimental, descriptive, and correlational designs. A one-group pre-test post-test research design is a type of quasi experimental design where the same group of participants is tested before and after an intervention to measure its effect.

Variables under study: (1) Independent variable: Structured Teaching Program (STP)- a planned, standardized educational intervention about psychoeducation for depression delivered to ITI students. The STP includes lecture(s), handout(s), demonstrations and Q&A sessions and is delivered by the investigator according to a predefined lesson plan. (2) Dependent variable: Knowledge regarding psychoeducation on depression- the participants' factual understanding measured with a structured knowledge questionnaire (pre-test and post-test scores)

Setting: The study was conducted in selected ITI colleges.

Population: Population refers to the entire group of individuals or elements that share common characteristics and to whom the results of a research study can be generalized (Polit & Beck, 2017).

Target Population: ITI students from all eligible years/streams in the selected ITI colleges. for whom the structured teaching program on psycho-education regarding depression is intended.

Accessible Population: ITI students who was available in the selected ITI colleges during the period of data collection and who meet the inclusion criteria of the study.

Sample and sampling technique

Sample: Sample is a subset of the population selected for a research study, representing the larger group from which it is drawn. It consists of elements or participants chosen using specific sampling techniques to provide information about the population (Polit & Beck, 2017).

Sample size: By using paired t-t est sample size formula (also known as the dependent means sample size formula) for pre-test and post-test designs.

$$n = \frac{(Z\alpha/2 + Z\beta)^2 \times s^2 \times \Delta^2}{\Delta^2}$$

Sampling technique: Sampling technique refers to the process or method used to select a subset of participants (sample) from the larger population, ensuring that the sample adequately represents the target population (Polit & Beck, 2017).

Inclusion Criteria:

- The ITI students who are studying in ITI colleges.
- The students who are willing to participate in the study.
- The students who are able to read and write English, Hindi and Marathi.

Exclusion Criteria:

- The students who are not available at the time of data collection.
- The students who are already attended a workshop or seminar on depression.

Tool preparation**Section – A**

Structured questionnaire was used to assess the level of knowledge regarding psycho education on reducing the depression. It consists of 30 multiple choice questions with four options for each question and patients are expected to choose one correct option. Correct answer is given a score as one. Total score is 30.

Section – B

Structured teaching programme on regarding psycho education on reducing the depression.

Testing of tool reliability: plan of data collection.

Source of data collection: sources of date are used to assess the level of knowledge of ITI students.

Validation of the tool: To ensure the content validity the instrument was given 11 experts from the field of mental health nursing, psycho;ogist and psychotherapist and from biostatistician. The experts were requested to give their opinions and suggestions regarding the relevance, adequacy and appropriateness of the tool. Their suggestions were taken into consideration in the preparation of the tool and self-instructional module.

Reliability: In statistics, the Pearson product-moment correlation coefficient (sometimes referred to as the PPMCC or PCC or Pearson's r) is a measure of the linear correlation (dependence) between two variables X and Y , giving a value between +1 and -1 inclusive, where 1 is total positive correlation, 0 is no correlation, and -1 is total negative correlation. It is widely used in the sciences as a measure of the degree of linear dependence between two variables. It was developed by Karl Pearson from a related idea introduced by Francis Galton in the 1880s.

Feasibility of the study: The investigator conducted a Pilot study.

Pilot study: The pilot study was conducted from 3rd March 2025 to 10th March 2025 in one of the selected ITI colleges. The purpose of the pilot was to test the feasibility, reliability, and clarity of the structured teaching program and the data collection tool among ITI students. A small group of students, meeting the inclusion criteria, was selected for the pilot. The process helped in identifying practical difficulties, time management issues, and the applicability of the tool in the real setting. The findings confirmed that the tool was reliable and the intervention feasible, with only minor modifications required. The students who participated in the pilot study were excluded from the main study sample.

Data collection procedure: This is a detailed procedure for data collection in a quasi- experimental study among ITI students. The process begins with obtaining permissions from the Institutional Ethics Committee (IEC), finalizing tools like a demographic proforma and structured knowledge questionnaire on psycho-education regarding depression. The tools are validated through expert review and incorporated into the final sample. Materials are prepared, and the study is conducted using non-probability convinient sampling. Recruitment and consent are obtained, and students are briefed about the study's purpose, procedures, risks, benefits, confidentiality, and voluntary participation. The baseline assessment is administered, followed by a structured teaching program (STP) lasting 35-45 minutes.

Plan for data analysis: - Descriptive statistics (mean, standard deviation) will summarize baseline data.

- Paired t-tests will compare pre- and post-intervention scores within the intervention group.
- Independent t-tests will compare intervention pretest level of score and post test level Expected Outcomes.

4. Results

Organization of the data: The collected data is tabulated, analyzed, organized and presented under the following sections:

Section A: Demographic variable of the subject

Table 1: Percentage wise distribution of ITI students according to their demographic characteristics

S. No.	Variable	Groups	Frequency	Percentage
1	Age	12-14	25	41.7
		15- 16	20	33.3
		17-18	15	25.00
2	Gender	Male	36	60.00
		Female	24	40.00
3	Religion	Hindu	40	66.7
		Muslim	10	16.7
		Christian	10	16.7
		Others	0	0
4	Year of Course	I PUC	28	46.7
		II PUC	32	53.3
5	Monthly Family (Rs)	<5000 Rs	9	15.00
		5000- 10000 Rs	28	46.7
		10001- 15000 Rs	17	28.3
		> 15001Rs	6	10.00
6	Family History of mood disorders	Yes	11	18.3
		No	49	81.7
7	Source of Information	Family	9	15.00
		Friends	9	15.00
		Mass Media	23	38.3
		Academics	19	31.7

Section B: Assessment of the level of knowledge regarding psycho education on depression among ITI students in selected ITI colleges.

Table 2: Assessment with level of pre-test knowledge

Level of pre-test knowledge	Score Range	Level of pre-test knowledge Score	
		No. of ITI students	Percentage
Inadequate Knowledge	<50%	16	26.67
Moderately Adequate Knowledge	50- 70%	35	58.33
Adequate Knowledge	>70%	9	15
Minimum Score		7	
Maximum Score		24	
Mean Knowledge Score		16.90± 4.08	
Mean % Knowledge Score		56.33± 13.62	

Section C

Table 3: Assessment with level of post-test knowledge, N=60

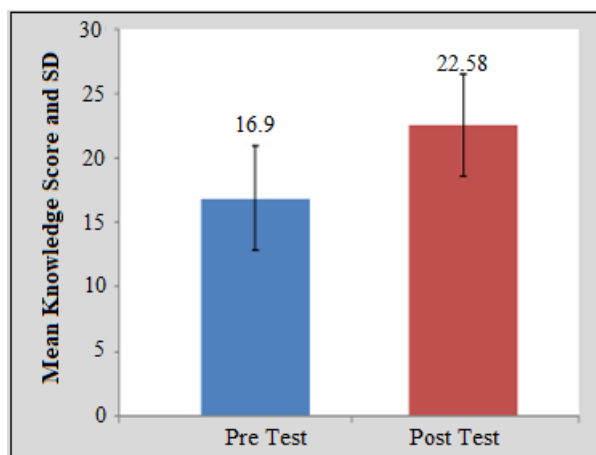
Level of post-test knowledge	Score Range	Level of post-test knowledge Score	
		No. of ITI students	Percentage
Inadequate Knowledge	<50%	2	3.33
Moderately Adequate Knowledge	50- 70%	21	35
Adequate Knowledge	>70%	37	61.67
Minimum Score		14	
Maximum Score		30	
Mean Knowledge Score		22.58± 3.97	
Mean % Knowledge Score		75.27± 13.25	

Section D

Evaluation of effectiveness of the structured teaching programme on knowledge regarding psycho education on depression among ITI students in selected ITI colleges.

Table 4: Significance of difference between knowledge score in pre and post-test of ITI Students

Overall	Mean	SD	Mean Difference	t-Value	p-Value
Pre- Test	16.90	4.08	5.68± 4.10	10.73	0.0001 S, P<0.05
Post- Test	22.58	3.97			

**Graph 9:** Significance of difference between knowledge score in pre-test and post -est of ITI students

Testing of hypothesis: Paired t value of pre- test and post -test knowledge score

Here p value is less than 0.05 hence there is significant difference between pre and post-test knowledge scores.

The null hypothesis (H01) stated there is no significant difference between pre-test and post-test knowledge. So, the null hypothesis (H01) was rejected and (H1) hypothesis was accepted.

Section V: Description on the pre test knowledge score in relation to the demographic variables.

Significant- p<0.05

In that variable like **educational status, occupation and previous knowledge** were significantly associated with pre-test knowledge.

The null hypothesis (H02) stated that there is no significant association between pre-test knowledge score with selected demographic variable. So, the null hypothesis (H02) was rejected and **(H2) hypothesis was accepted.**

In the demographic variable such as **age, gender, marital status and source of information** there is no association with pre-test level of knowledge.

So, the null hypothesis **(H02) was accepted** for above variables.

5. Summary

The study aimed to assess the effectiveness of a Structured Teaching Programme (STP) on knowledge regarding psychoeducation on depression among ITI students. The research methodology used was a quantitative evaluative approach, with a one-group pre-test post-test design. The sample size was 60 ITI students from selected colleges, and a structured knowledge questionnaire was used to assess students' knowledge. The STP consisted of lectures, handouts, demonstrations, and Q&A sessions on psychoeducation about depression. The data collection procedure involved administering a pre-test, followed by the STP, and then a post-test after the intervention. Statistical analysis was performed using descriptive and inferential statistics. The majority of the students were aged 12-14 years (41.7%), with 33.3% in 15-16 years and 25% in 17- 18 years. The majority belonged to the Hindu religion (66.7%), while 16.7% were Muslim and 16.7% Christian. Nearly half (46.7%) had a family income between ₹5,001–10,000, while 15% had <₹5,000. Only 18.3% reported a family history of mood disorders. The study found that 26.7% had inadequate knowledge, 58.3% moderately adequate knowledge, and 15%

adequate knowledge. The mean difference in knowledge scores was 5.68 points, indicating the STP was highly effective in improving knowledge. Demographic factors like age and income influenced knowledge levels, while gender, religion, year of course, family history of mood disorders, and other factors did not show significant influence.

6. Conclusion

The study evaluated the effectiveness of a structured Teaching Programme (STP) on psychoeducation about depression among ITI students from selected colleges. The results showed that the baseline knowledge of ITI students was moderately adequate, with 26.7% having inadequate knowledge and 15% showing adequate knowledge before the intervention. After the STP, 61.7% of students achieved adequate knowledge, with only 3.3% remaining in the inadequate category. The mean knowledge score improved significantly from 16.90 ± 4.08 (56.3%) in the pre-test to 22.58 ± 3.97 (75.3%) in the post-test, confirming the STP's effectiveness in enhancing knowledge. Demographic analysis revealed that age and monthly family income significantly influenced post-test knowledge levels, while gender, religion, year of study, family history of mood disorders, and source of information did not. The study concludes that targeted educational interventions can significantly improve mental health literacy among young students, equipping them with essential knowledge to understand, prevent, and manage depression more effectively.

7. Recommendations

Based on the present study, the investigator suggests the following recommendations for further study.

- 1) Similar studies can be conducted with a larger sample size and in diverse settings to increase generalizability of findings.
- 2) A true experimental design with a control group may be adopted to strengthen the evidence of effectiveness of Structured Teaching Programmes.
- 3) Long-term follow-up studies are recommended to assess the retention of knowledge and its impact on attitudes and practices regarding depression.
- 4) Psychoeducation programmes can be extended to other groups such as school children, college students, teachers, and parents to promote mental health literacy.
- 5) Nurses should be encouraged to conduct community-based teaching sessions to create awareness about depression and reduce stigma.
- 6) Structured teaching modules on adolescent mental health should be integrated into nursing curricula to prepare students for preventive and promotive roles.

References

- [1] American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: APA; 2013.
- [2] Thapar A, Collishaw S, Pine DS, Thapar AK. Depression in adolescence. *Lancet*. 2012 Mar 17;379(9820):1056–67.
- [3] Kessler RC, Avenevoli S, Ries Merikangas K. Mood

disorders in children and adolescents: An epidemiologic perspective. *Biol Psychiatry*. 2001 Jun 15;49(12):1002–14.

- [4] Donker T, Griffiths KM, Cuijpers P, Christensen H. Psychoeducation for depression, anxiety and psychological distress: A meta-analysis. *BMC Med*. 2009 Nov 25; 7:79.
- [5] Prakash J, Prakash S, Singh A, Sinha CM, Das RC. Prevalence of depression among medical, dental and engineering students in Patna. *Int J Community Med Public Health*. 2020;7(3):1086–92.
- [6] Sagar R, Dandona R, Gururaj G, Dhaliwal RS, Singh A, Ferrari A, et al. The burden of mental disorders across the states of India: The Global Burden of Disease Study 1990–2017. *Lancet Psychiatry*. 2020 Feb;7(2):148–61.
- [7] National Institute for Health and Care Excellence. Depression in children and young people: Identification and management. NICE Guideline [NG134]. 2019.
- [8] Raja S, Balasubramanian G. Prevalence of depression, anxiety and stress among undergraduate students in a private medical college in South India. *Indian J Psychol Med*. 2021;43(4):299–304.