



A Study to Explore the Impact of a Structured Teaching Programme on Anemia Management Knowledge among Adolescent Girls in a Selected Rural Area of Narmadapuram, M.P.

Rahul Deshmukh

Associate. Prof. (Nursing Officer), PSSCIVE, (NCERT) Bhopal, M.P., India

Abstract

The Anemia remains a prevalent health concern among adolescent girls in rural areas, contributing to a range of health issues. This study aimed to assess the impact of a structured teaching programme on anemia management knowledge among adolescent girls in a selected rural area of Narmadapuram, M.P. The study utilized a quasi-experimental design with pre-test and post-test assessments to evaluate the effectiveness of the intervention.

Keywords: Anemia, Adolescent Girls, Structured Teaching Programme, Knowledge, Rural Health, Public Health Intervention.

Introduction

The management of anemia among adolescent girls is a critical aspect of public health, given its widespread prevalence and potential long-term health implications. The selected rural area in Narmadapuram, M.P., exhibits a concerning prevalence of anemia among adolescent girls. According to recent health surveys and local health records, a substantial proportion of girls in this region are diagnosed with anemia, indicating a prevalent public health challenge. Anemia, characterized by insufficient red blood cells or hemoglobin levels, poses severe health risks, affecting overall well-being and potentially hindering socio-economic development.

The rationale for conducting a study on anemia management among adolescent girls in Narmadapuram is multifaceted. Firstly, anemia adversely impacts the physical and cognitive development of young individuals, leading to fatigue, decreased concentration, and increased vulnerability to infections. Secondly, the socio-economic implications of widespread anemia can be profound, hindering educational attainment and limiting future opportunities for affected individuals.

Moreover, the lack of awareness and knowledge about preventive measures and treatment options contributes to the persistence of anemia in the community. Educational interventions have proven to be effective in other

settings, making it imperative to explore their impact in the context of the selected rural area. By enhancing knowledge and promoting healthier practices, this study aims to contribute to the reduction of anemia prevalence and its associated consequences among adolescent girls.

Anemia management is crucial for adolescent health due to its direct correlation with physical and cognitive development. Iron-deficiency anemia, a common form of anemia, can lead to long-term consequences such as impaired academic performance, reduced work capacity, and increased susceptibility to infections. Adolescent girls, in particular, face additional challenges due to the iron loss during menstruation, emphasizing the need for targeted interventions to address their unique health needs. The significance of anemia management extends beyond individual health to broader societal well-being. Healthy and empowered adolescents contribute to the overall development of communities, breaking the cycle of intergenerational anemia and fostering a more resilient and prosperous society.

The prevalence of anemia in the selected rural area necessitates urgent attention and targeted interventions. This study aims to bridge the gap in knowledge, empower adolescent girls with essential information, and contribute to the overall improvement of health outcomes in the community.

Objectives of the Study

To explore the impact of a structured teaching programme on anemia management knowledge among adolescent girls.

Significance of the Study

1. It contributes to the existing knowledge on anemia management among adolescent girls.
2. The study Implications is for public health interventions and educational programs.

Literature Review

The Literature review provides valuable insights into the prevalence of anemia among adolescent girls and the impact of educational interventions. However, there is a need for further research to address gaps in knowledge and develop targeted programs that consider cultural nuances for effective anemia management.

Rupal Patel (2022) highlighted the role of dietary practices in preventing and managing anemia. Nutritional education interventions that promote the consumption of iron-rich foods, such as leafy greens and fortified cereals, have proven effective in enhancing knowledge and encouraging healthier dietary habits among adolescent girls.

Deepti (2022) indicated that awareness levels about anemia among adolescent girls were generally low. The study found that a lack of knowledge about dietary sources of iron and the importance of regular health check-ups contributed to the high prevalence of anemia in the target population.

[Payal T. Vaghela](#) (2021) Community involvement emerged as a key factor in successful anemia management programs. The study emphasized the need for community engagement to create awareness, dispel myths, and promote sustained behavioral change. Involving local leaders and influencers was found to be effective in

disseminating information and fostering a supportive environment.

V. Indra (2020) has explored the barriers hindering anemia management knowledge. Factors such as socio-economic status, cultural beliefs, and inadequate access to healthcare services were identified as significant obstacles. Understanding these barriers is crucial for developing targeted interventions that address specific challenges faced by different communities.

Methodology

Study Design - Quasi-experimental with pre-test and post-test assessments.

Sample- Randomly selected adolescent girls from the identified rural area.

Intervention- Structured teaching programme designed with culturally sensitive and locally relevant content.

Data Collection - Pre-test and post-test questionnaires, qualitative feedback sessions. Hygiene habits, physical activeness, menstrual hygiene and dietary pattern taken to evaluate level of practice and habits of school students. Health and hygiene practices among school student were assessed by standardised questionnaire inspecting underlying factors such as level of hygiene and physical activeness of the students in their daily practice.

S.No.	Heads	Parameters assessed
1	Demographic Information	Name: Age: Gender, house, living area, dietary pattern, nutritional habits
2	Teaching program area	Frequency of:- overall health, structured teaching program on anemia management
3	Anemia Knowledge Assessment	importance of a balanced diet in preventing anemia, symptoms of anemia, sources iron-rich foods, preventing anemia
4	Dietary Habits	number of meals/day, breakfast/meal skipping, fast food intake , street food, milk consumption, Green Leafy Vegetables, pulses, Aerated beverages, chocolate/sweet , Eating disorders, Effect of media advertisement on food choices
5	Behavioral Changes	Knowledge on:- participating in the teaching program, motivated to undergo regular health check-ups

FIGURES of data analysis

Data Analysis – Quantitative analysis using statistical tools, qualitative analysis of feedback.

Total sample collection – 100

Expected Outcomes Results

1. How would you describe your overall.

S1	
Excellent	40
Good	25
Fair	25
Poor	10

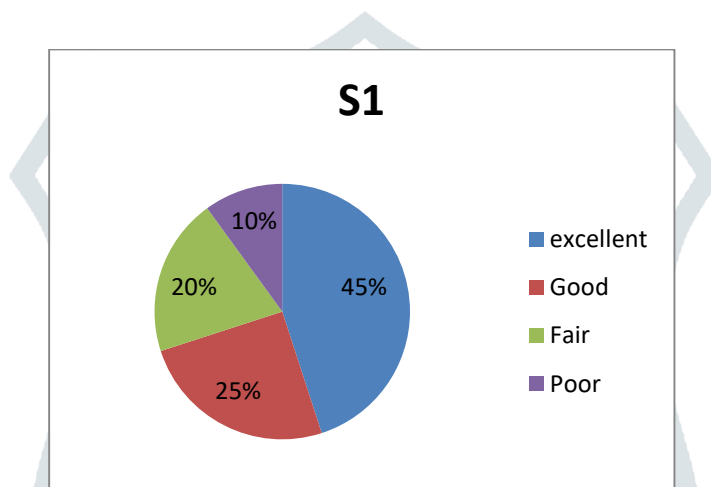


FIGURE-1

2. Were you a participant in the structured teaching program on anemia management?

S1	
Yes	70
No	30

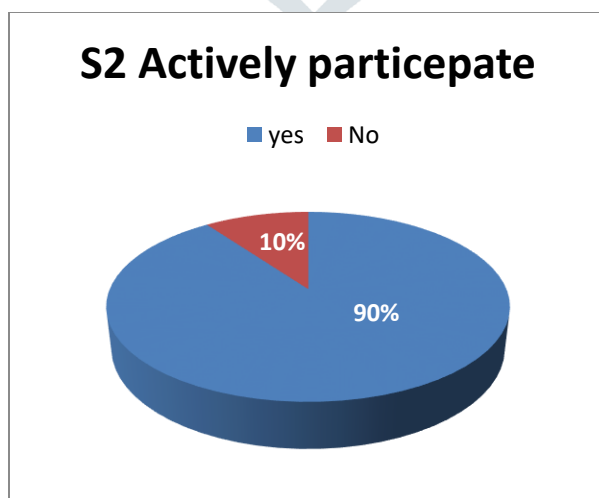


FIGURE-2

Anemia Knowledge Assessment

3. The structured teaching program helped me understand the importance of a balanced diet in preventing anemia.

S1	S2	S3	S4	S5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
80	15	5	0	0

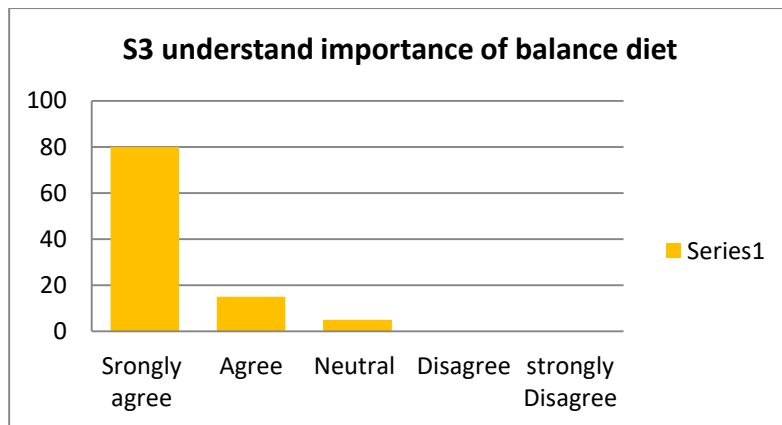


FIGURE-3

4. I feel confident in recognizing symptoms of anemia after participating in the teaching program.

S1	S2	S3	S4	S5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
90	10	0	0	0

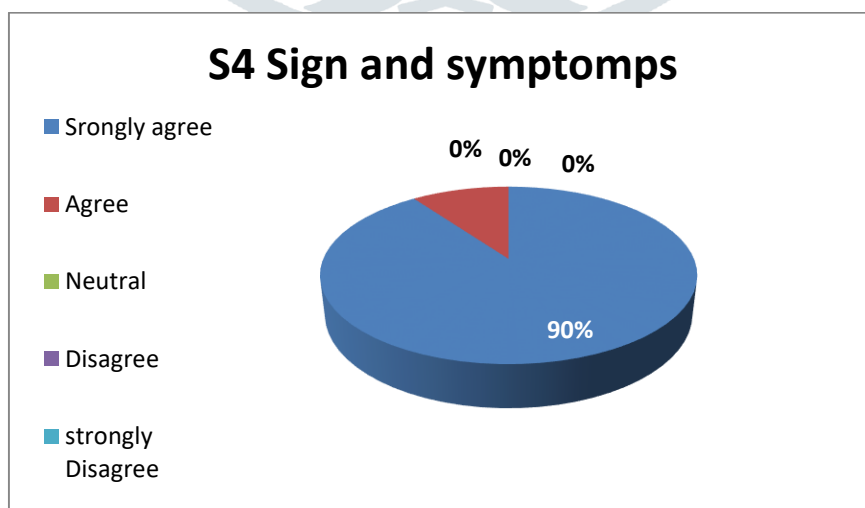


FIGURE-4

5. The program provided me with practical information on incorporating iron-rich foods into my diet.

S1	S2	S3	S4	S5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
95	5	0	0	0

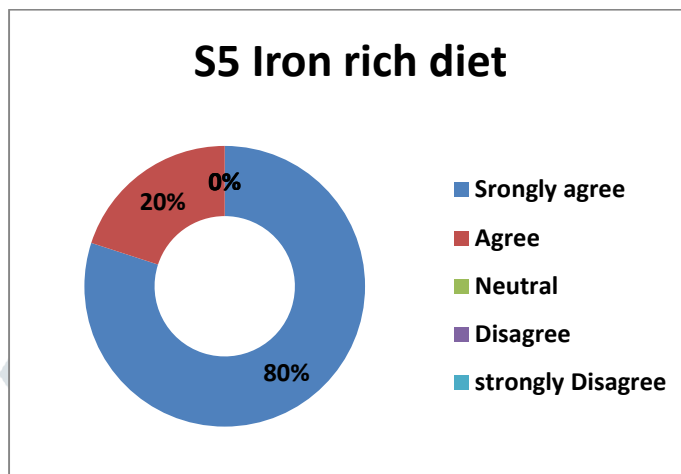


FIGURE-5

6. I believe regular health check-ups are essential for managing and preventing anemia.

S1	S2	S3	S4	S5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
75	15	5	5	0

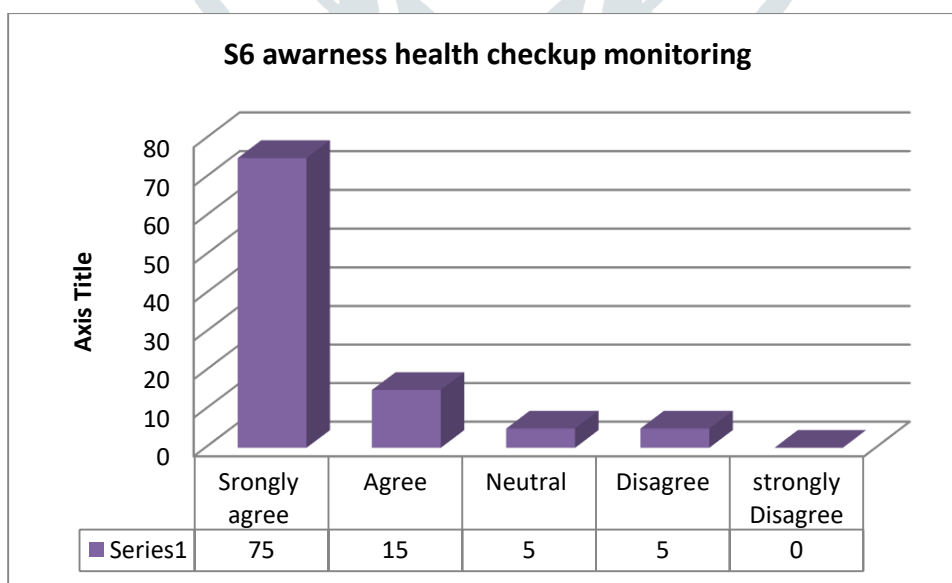


FIGURE-6

7. Since participating in the teaching program, have you made any changes in your dietary habits to include more iron-rich foods?

Yes	S1	85
No	S2	15



FIGURE-7

8. Do you feel more motivated to undergo regular health check-ups after the program?

Yes	S1	90
No	S2	10

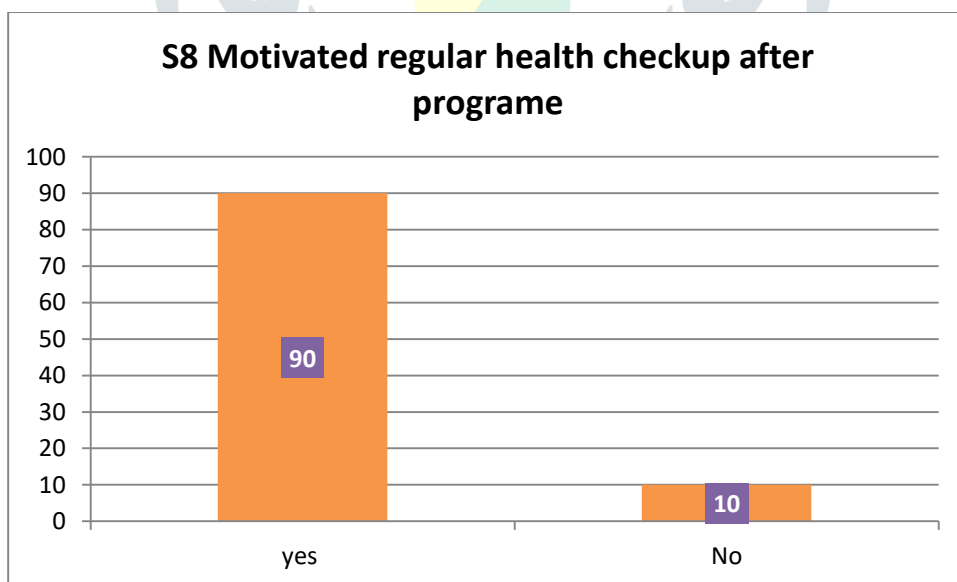


Fig.8

Questionnaire

Impact of Structured Teaching Program on Anemia Management Knowledge

Demographic Information

Name: _____

Age: _____ Gender: Male/Female/Other

Teaching Program Experience

1. How would you describe your overall health?

Excellent Good Fair Poor

2. Were you a participant in the structured teaching program on anemia management?

Yes No

If yes, please share your overall experience with the program. What aspects did you find most beneficial?

Anemia Knowledge Assessment

Please indicate your level of agreement with the following statements-

3. The structured teaching program helped me understand the importance of a balanced diet in preventing anemia.

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. I feel confident in recognizing symptoms of anemia after participating in the teaching program.

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. The program provided me with practical information on incorporating iron-rich foods into my diet.

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. I believe regular health check-ups are essential for managing and preventing anemia.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Behavioral Changes

7. Since participating in the teaching program, have you made any changes in your dietary habits to include more iron-rich foods?

Yes No

8. Do you feel more motivated to undergo regular health check-ups after the program?

Yes No

9. Please share any additional comments or thoughts you have regarding the structured teaching program and its impact on your knowledge of anemia management.

Conclusion

The findings indicate that a structured teaching programme can effectively enhance anemia management knowledge among adolescent girls in rural settings. Educational interventions tailored to the local context are crucial for addressing health disparities. This study contributes valuable insights to public health initiatives aiming to combat anemia and improve overall health outcomes in adolescent populations.

References

- 1) Chaudhary SM, Dhage VR. A study of anemia among adolescent females in the urban area of nagpur. *Indian J Community Med.* 2008 Oct;33(4):243-5. doi: 10.4103/0970-0218.43230. PMID: 19876498; PMCID: PMC2763695.
- 2) Kumar SB, Arnipalli SR, Mehta P, Carrau S, Ziouzenkova O. Iron Deficiency Anemia: Efficacy and Limitations of Nutritional and Comprehensive Mitigation Strategies. *Nutrients.* 2022 Jul 20;14(14):2976. doi: 10.3390/nu14142976. PMID: 35889932; PMCID: PMC9315959.
- 3) World Health Organization. Programming for adolescent health and development. *WHO Tech Rep Ser No.* 1996:2. [[Google Scholar](#)]
- 4) Lwanga SK, Lemeshow S, editors. World Health Organisation. *Sample size determination in health: A practical manual.* 1991. [[Google Scholar](#)]

- 5) World Health Organization. 1980. Manual of basic techniques for a health laboratory; pp. 371–4. [[Google Scholar](#)]
- 6) DeMaeyer EM. *A guide for health administrator*. WHO; 1989. Preventing and controlling iron deficiency anemia through primary health care; p. 26. [[Google Scholar](#)]
- 7) Rawat CMS, Garg SK, Singh JV, Bhatnagar M, Chopra H, Bajai SK. Sociodemographic correlates of anemia among adolescent girls in rural district of Meerut. *Indian J Community Med*. 2001;26:173–5. [[Google Scholar](#)]
- 8) Rajaratnam J, Abel R, Asokan JS, Jonathan P. Prevalence of anemia among adolescent girls of rural Tamil Nadu. *Indian Pediatr*. 2000;37:532–6. [[PubMed](#)] [[Google Scholar](#)]
- 9) Toteja GS, Singh P, Dhillon BS, Saxena BN, Ahmed FU, Singh RP, et al. Prevalence of anaemia among pregnant women and adolescent girls in 16 districts of India. *Food Nutr Bull*. 2006;27:311–5. [[PubMed](#)] [[Google Scholar](#)]
- 10) Bulliyy G, Mallick G, Sethy GS, Kar SK. Haemoglobin status of non school going adolescent girls in three districts of Orissa, India. *Int J Adolesc Med Health*. 2007;19:395–406. [[PubMed](#)] [[Google Scholar](#)]
- 11) Khanduri U, Sharma A. Megaloblastic anaemia: Prevalence and causative factors. *Natl Med J India*. 2007;20:172–5. [[PubMed](#)] [[Google Scholar](#)]

