International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622
Indexing: Embase
Impact Factor (RJIF): 6.71

www.gynaecologyjournal.com
2025;9(5): 184-185
Received: 17-08-2025
Accepted: 19-09-2025

Tanya Sharma
B.Sc. Nursing, 4th Year, SGT University, Gurugram, Haryana, India

Arushi Sharma
B.Sc. Nursing, 4th Year, SGT University, Gurugram, Haryana, India

Yanshika
B.Sc. Nursing, 4th Year, SGT University, Gurugram, Haryana, India

Shashank
B.Sc. Nursing, 4th Year, SGT University, Gurugram, Haryana, India

Archit
B.Sc. Nursing, 4th Year, SGT University, Gurugram, Haryana, India

Mannu Vashist
PG Tutor, SGT University, Gurugram, Haryana, India

Corresponding Author:
Tanya Sharma
B.Sc. Nursing, 4th Year, SGT University, Gurugram, Haryana, India

Effectiveness of a planned teaching program on mothers' knowledge regarding diarrheal management in under-five children in rural Gurugram, Haryana

Tanya Sharma, Arushi Sharma, Yanshika, Shashank, Archit and Mannu Vashist

DOI: https://www.doi.org/10.33545/gynae.2025.v9.i5c.1708

Abstract
Background: Diarrhea remains one of the leading causes of morbidity and mortality in children under five, especially in rural India. Despite the availability of effective interventions like Oral Rehydration Solution (ORS) and zinc supplementation, many caregivers lack knowledge of proper management.
Objective: To assess the effectiveness of a structured teaching programme (PTP) on mothers' knowledge regarding diarrheal management among under-five children in rural Gurugram, Haryana.
Methods: A quantitative research approach with a quasi-experimental one-group pre-test post-test design was adopted. A total of 100 mothers of under-five children from Kaliyawas village were selected using stratified proportionate random sampling. Data was collected using a self-structured knowledge questionnaire. The intervention comprised a 45-60-minute structured teaching programme in Hindi, supported by visual aids and handouts.
Results: Pre-test findings revealed that the majority of mothers (92%) had moderate knowledge, 8% had poor knowledge, and none had good knowledge regarding diarrheal management. The mean pre-test score was 10.65 (53.25%). Post-intervention, the mean score significantly improved to 14.29 (71.45%), with 18% achieving good knowledge and 82% remaining at a moderate level. No mothers scored in the poor category. The mean knowledge gain was 3.64, with a paired t-value of 30.073 ($p<0.001$). No significant association was found between mothers' knowledge and demographic variables such as age, education, family type, occupation, income, water source, or dietary habits.
Conclusion: The structured teaching programme was effective in enhancing maternal knowledge of diarrheal management. Health education interventions targeting mothers can play a pivotal role in reducing diarrheal morbidity and mortality among under-five children in rural India.

Keywords: Diarrhea, mothers, under-five children, health education, planned teaching programme, rural health

Introduction

Diarrhea, defined as the passage of three or more loose or watery stools within 24 hours, is a leading cause of childhood morbidity and mortality worldwide. Globally, it accounts for nearly 1.6 million deaths annually among children under five years of age, making it the second most common cause of pediatric death. In India, diarrhea contributes significantly to under-five mortality, with higher prevalence in rural communities due to poor sanitation, unsafe water, and limited awareness of preventive measures.

Mothers, being primary caregivers, play a crucial role in the prevention and management of diarrhea through practices such as breastfeeding, safe feeding, hygiene, and timely administration of ORS and zinc. However, lack of awareness and misconceptions remain widespread. Structured teaching programmes can empower mothers by bridging this knowledge gap and reducing preventable child deaths.

This study was conducted to evaluate the effectiveness of a planned teaching programme on maternal knowledge regarding diarrheal management in rural Gurugram, Haryana.

Methodology

- **Research Approach & Design:** Quantitative research with a quasi-experimental one-group pre-test post-test design.

- **Setting:** Village Kaliyawas, Gurugram, Haryana.
- **Population:** Mothers of under-five children residing in the study area.
- **Sample & Sampling Technique:** 100 mothers selected using stratified proportionate random sampling, ensuring representation based on education and family type.
- **Data Collection Tools:** Section I: Demographic variables (age, family type, education, occupation, income, water source, number of children, dietary habits). Section II: Self-structured knowledge questionnaire (20 items) on diarrheal management. Scoring: Poor (0-7), Moderate (8-14), Good (15-20).
- **Intervention:** A 45-60 minute planned teaching programme in Hindi, including lectures, charts, handouts, and demonstrations on causes, signs/symptoms, prevention, ORS preparation, and when to seek medical help.
- **Data Analysis:** Descriptive (mean, % distribution, SD) and inferential statistics (paired t-test, chi-square test) using SPSS.

Results

- **Knowledge Scores:** Pre-test mean = 10.65 (53.25%), Post-test mean = 14.29 (71.45%).
- **Knowledge Levels:** Pre-test: 8% poor, 92% moderate, 0% good. Post-test: 0% poor, 82% moderate, 18% good.
- **Effectiveness:** Mean gain = 3.64, t = 30.073, $p<0.001$ (statistically significant).
- **Association with Demographics:** No significant relationship found between pre-test knowledge and demographic variables ($p>0.05$).

Conclusion

The study demonstrated that a structured teaching programme significantly improved mothers' knowledge of diarrheal management in under-five children. Since no demographic variables influenced baseline knowledge, such interventions can be universally applied in similar rural contexts. Strengthening community-based maternal health education through regular awareness sessions can contribute to reducing diarrhea-related morbidity and mortality in India.

References

1. World Health Organization. Diarrhoeal disease. Geneva: WHO; 2017. Available from: https://www.who.int/news/diarrhoeal-disease
2. UNICEF. Diarrhoea. UNICEF Data; 2024. Available from: https://data.unicef.org/topic/child-health/diarrhoeal-disease
3. Lakshminarayanan R, Jayalakshmy R. Prevalence of diarrhoea among under-five children in India and its contextual determinants. Clin Epidemiol Glob Health. 2021;11:100737.
4. Kapil U, Verma D, Narula S, *et al.* Diarrhoea amongst under-three children in rural Haryana. Indian Pediatr. 1995;31(10):1227-1232.
5. Curtis V, Cairncross S. Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. Lancet Infect Dis. 2003;3(5):275-281.
6. Ibrahim MK, Zambruni M, Melby CL, Melby PC. Impact of childhood malnutrition on host defense and infection. Clin Microbiol Rev. 2017;30(4):919-971.
7. Bahl R, Frost C, Kirkwood BR, *et al.* Breastfeeding and the risk for diarrhea morbidity and mortality. Pediatrics. 2005;115(5):e514-22.
8. Das P, Chowdhury R, Parashar UD, *et al.* Impact of rotavirus vaccination on diarrheal disease in India: NFHS-5 analysis. Clin Epidemiol Glob Health. 2023;27:101215.

How to Cite This Article
Sharma T, Sharma A, Yanshika, Shashank, Archit, Vashist M. Effectiveness of a planned teaching program on mothers' knowledge regarding diarrheal management in under-five children in rural Gurugram, Haryana. International Journal of Clinical Obstetrics and Gynaecology 2025;9(5):184-185.