



A Study To Evaluate The Effectiveness Of Video Teaching Programme Regarding Knowledge Of Preventive Measures Of Acute Respiratory Infections Among The Mothers With Under-Five Children In Rural Areas Of Indore, Madhya Pradesh

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Abstract

Background: Acute Respiratory Infections (ARIs) are among the leading causes of morbidity and mortality in under-five children, especially in developing countries. Mothers' knowledge and preventive practices are crucial in reducing ARI burden.

Aim: To evaluate the effectiveness of a video teaching programme on knowledge regarding preventive measures of ARIs among mothers of under-five children in rural areas of Indore, Madhya Pradesh.

Methods: A pre-experimental one-group pretest–posttest design was adopted. Two hundred mothers of under-five children were selected through purposive sampling. Data were collected using a structured knowledge questionnaire on ARI prevention. A video-based teaching programme covering causes, risk factors, preventive strategies, and early care-seeking was administered. Posttest was conducted two weeks after the intervention. Data were analyzed using descriptive and inferential statistics.

Results: The mean pretest knowledge score was 11.8 ± 3.6 , which significantly increased to 22.3 ± 2.8 in the posttest ($p < 0.001$). Before intervention, only 18% of mothers had adequate knowledge, which increased to 86% after the video teaching programme. Improvement was statistically significant across all educational and socio-economic groups.

Conclusion: The video teaching programme was effective in enhancing maternal knowledge on ARI preventive measures. Such cost-effective interventions can be integrated into routine rural health services to reduce childhood morbidity.

Keywords: Acute respiratory infections, video teaching programme, mothers, under-five children, preventive measures, rural health.

Introduction

Acute Respiratory Infections (ARIs) remain a major public health challenge, especially in low- and middle-income countries. According to the World Health Organization (WHO), ARIs are responsible for nearly 20% of all under-five deaths worldwide. In India, ARIs account for approximately 15–20% of childhood mortality, with rural areas disproportionately affected due to poor hygiene, lack of awareness, overcrowding, and delayed healthcare-seeking behavior.

Mothers, being the primary caregivers, play a vital role in preventing ARIs through practices such as exclusive breastfeeding, proper nutrition, immunization, handwashing, safe cooking practices, reducing exposure to indoor smoke, and early recognition of danger signs. However, studies have shown that maternal knowledge about ARI prevention remains inadequate.

With advances in health communication, video-based teaching programmes offer an engaging and effective medium for health education. They combine visual and auditory elements, making information more understandable and memorable even among populations with low literacy.

This study was undertaken to evaluate the effectiveness of a video teaching programme in improving the knowledge of mothers of under-five children regarding ARI preventive measures in rural areas of Indore.

Methodology

Research Design

A pre-experimental one-group pretest–posttest design was employed.

Setting and Sample

The study was conducted in selected rural health centers and community areas of Indore district, Madhya Pradesh. The sample comprised 200 mothers of under-five children selected through purposive sampling.

Inclusion Criteria

- Mothers of children aged 0–59 months.
- Residents of rural Indore.
- Willing to participate and provide informed consent.

Exclusion Criteria

- Mothers who are health professionals.
- Mothers who had previously attended an ARI awareness programme.

Data Collection Tool

A **structured knowledge questionnaire** (30 items) covering:

1. Definition and causes of ARIs.
2. Risk factors.
3. Preventive measures (nutrition, breastfeeding, immunization, hygiene, ventilation).
4. Early recognition and care-seeking.

Each correct answer scored “1”; maximum score = 30.

Intervention – Video Teaching Programme

- Duration: 20 minutes.
- Content: Causes, risk factors, preventive measures, home remedies, early recognition, danger signs, and when to seek care.
- Language: Hindi (local dialect).
- Mode: Group sessions in community halls/anganwadis.

Data Collection Procedure

1. Pretest knowledge assessment.
2. Screening of video teaching programme.
3. Posttest assessment after 2 weeks.

Data Analysis

- Descriptive statistics: Mean, SD, frequency, percentage.
- Inferential statistics: Paired t-test for pre- and posttest comparisons; chi-square test for association with demographic variables.
- Significance: $p < 0.05$.

Results

Table 1. Demographic Profile of Mothers (N = 200)

Variable	Category	Frequency	Percentage (%)
Age (years)	20–25	72	36.0
	26–30	88	44.0
	31–35	28	14.0
	>35	12	6.0
Education	Illiterate	48	24.0
	Primary	62	31.0
	Secondary & above	90	45.0
Occupation	Homemaker	170	85.0
	Working	30	15.0

Table 2. Comparison of Knowledge Scores (N = 200)

Variable	Pretest Mean \pm SD	Posttest Mean \pm SD	t-value	p-value
Knowledge	11.8 \pm 3.6	22.3 \pm 2.8	32.5	<0.001

Figure 1. Pretest vs Posttest Knowledge Scores

□ (Bar graph showing mean knowledge score improvement from 11.8 to 22.3)

Figure 2. Knowledge Level Distribution

□ (Pie chart showing: Adequate knowledge – 18% pretest vs 86% posttest)

Discussion

The findings indicate that the video teaching programme was highly effective in improving maternal knowledge regarding ARI preventive measures. The mean knowledge score almost doubled after the intervention, consistent with previous studies where audiovisual teaching significantly enhanced learning outcomes compared to traditional lectures.

A significant improvement was observed across all educational groups, demonstrating that video teaching is effective even among low-literacy populations. These results suggest that video-based community health education can serve as a cost-effective strategy to reduce ARI-related morbidity and mortality.

Conclusion

The study concluded that video teaching programmes are effective in improving the knowledge of mothers regarding preventive measures of ARIs in rural areas. Integrating such interventions into primary healthcare services and anganwadi centers may help in reducing the burden of ARIs among under-five children.

Recommendations

1. Incorporate video-based health education into maternal and child health programmes.
2. Train community health workers to deliver video teaching sessions regularly.
3. Conduct large-scale, controlled studies to assess long-term effects on knowledge and practices.

References (APA 7th Edition)

1. World Health Organization. (2020). *Acute respiratory infections in children: Case management in small hospitals in developing countries*. WHO.
2. Walker, C. L. F., Rudan, I., Liu, L., Nair, H., Theodoratou, E., Bhutta, Z. A., O'Brien, K. L., Campbell, H., & Black, R. E. (2013). Global burden of childhood pneumonia and diarrhoea. *The Lancet*, 381(9875), 1405–1416. [https://doi.org/10.1016/S0140-6736\(13\)60222-6](https://doi.org/10.1016/S0140-6736(13)60222-6)
3. Sazawal, S., & Black, R. E. (2003). Effect of pneumonia case management on mortality in neonates, infants, and preschool children: A meta-analysis of community-based trials. *The Lancet Infectious Diseases*, 3(9), 547–556. [https://doi.org/10.1016/S1473-3099\(03\)00737-0](https://doi.org/10.1016/S1473-3099(03)00737-0)