

THE EFFECT OF STRUCTURED MATERNAL ENGAGEMENT ON ARI PREVENTION

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ABSTRACT

Acute respiratory infection (ARI) remains a major cause of morbidity and mortality among under-five children in India. Despite being preventable through simple home-based measures, repeated hospital visits indicate gaps in maternal knowledge and practices. Objective to evaluate the effectiveness of structured maternal engagement strategies on knowledge and home-based practices regarding prevention of acute respiratory infection among mothers of under-five children. A true experimental pre-test post-test control group design was adopted in paediatric units of selected hospitals in Dehradun, Uttarakhand. A total of 290 mothers were selected using purposive sampling. Structured knowledge questionnaire and practice checklist were used. The experimental group received structured maternal engagement strategies, while the control group received routine care. Data were analysed using descriptive and inferential statistics. Post-test knowledge and practice scores significantly improved in the experimental group ($p < 0.05$). Significant differences were observed between experimental and control groups. Structured maternal engagement strategies are effective in improving maternal knowledge and preventive practices regarding ARI.

Keywords: acute respiratory infection; maternal engagement; under-five child; home care practice; child morbidity; paediatric nursing

INTRODUCTION

Acute respiratory infection is one of the leading causes of morbidity and mortality among under-five children globally. In India, respiratory infections including pneumonia account for a significant proportion of child deaths. According to NFHS-5 (2019–21), 2.8% of children under five experienced symptoms of ARI within two weeks preceding the survey. Respiratory infections contribute to nearly 13–16% of under-five mortality in India. In hilly regions such as Uttarakhand, climatic variations, cold temperatures, overcrowding, poor ventilation, and indoor air pollution increase vulnerability. Mothers are the primary caregivers and play a crucial role in prevention and early recognition of danger signs. However, studies indicate gaps in maternal knowledge regarding warning signs, hygiene practices, and appropriate health-seeking behaviour. Structured maternal engagement strategies delivered by nurses may systematically improve maternal awareness and caregiving behaviour. Hence, this experimental study was undertaken.

METHOD

True experimental pre-test post-test control group design. Paediatric units of selected hospitals, Dehradun, Uttarakhand. 290 mothers of under-five children. Sampling Technique non-probability purposive sampling. Structured maternal engagement strategies included planned teaching sessions, demonstrations on hygiene and ventilation, education on danger signs, interactive discussions, and printed materials. Data were analysed using descriptive statistics (mean, SD, frequency, percentage) and inferential statistics (paired t-test, independent t-test, chi-square). Significance level was set at $p < 0.05$.

RESULT AND DISCUSSION

The experimental group showed significant improvement in post-test knowledge and practice scores compared to pre-test scores ($p < 0.05$). The control group did not show significant improvement. Between-group comparison revealed statistically significant differences favouring the experimental group.

Table 1.
Characteristics Respondent

Characteristics	f	%
Age 20–25 years	110	37.9
Age 26–30 years	120	41.4
Age >30 years	60	20.7
Primary education	85	29.3
Secondary education	140	48.3

The findings revealed that structured maternal engagement strategies significantly improved maternal knowledge and preventive practices. The results are consistent with previous interventional studies demonstrating improvement in maternal awareness following structured education programmes. Systematic nurse-led engagement appears more effective than routine advice.

CONCLUSION

Structured maternal engagement strategies significantly improved maternal knowledge and home-based preventive practices regarding ARI. The intervention is feasible, cost-effective, and suitable for integration into paediatric hospital settings.

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