

Effectiveness of Structured Teaching Programme on Rotavirus Vaccination Knowledge among Mothers of Toddler Children in an Urban Slum, Bengaluru

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Abstract: *Rotavirus infection is a leading cause of severe diarrhoeal disease among children under five years of age worldwide. Lack of awareness regarding rotavirus vaccination among mothers contributes significantly to morbidity and mortality in children. The present study aimed to assess the effectiveness of a structured teaching programme (STP) on knowledge regarding rotavirus vaccination among mothers of toddler children in a selected urban slum of Bengaluru. A quasi-experimental one-group pre-test post-test design was adopted. Sixty mothers were selected using simple random sampling. Data were collected using a structured interview schedule consisting of demographic variables and 30 knowledge questions related to rotavirus infection and vaccination. The pre-test mean knowledge score was 6.57 (21.9%), whereas the post-test mean score increased to 17.08 (56.93%). The paired t-test value ($t = 35.948$, $p < 0.001$) indicated a statistically significant improvement in knowledge after the teaching programme. The study concluded that structured teaching programmes are effective in improving maternal knowledge regarding rotavirus vaccination.*

Keywords: Rotavirus vaccination, structured teaching programme, mothers of toddlers, health education, diarrhoeal disease

1. Introduction

Rotavirus infection is one of the most common causes of severe diarrhoea among infants and young children worldwide. It contributes significantly to childhood morbidity and mortality, particularly in developing countries. In India, diarrhoeal diseases continue to be a major public health problem among children under five years of age. Vaccination is considered the most effective preventive strategy against severe rotavirus infection. However, awareness regarding rotavirus vaccination among mothers remains inadequate, especially in urban slum communities. Health education programmes such as structured teaching programmes can play an important role in improving knowledge regarding childhood vaccination and disease prevention. Therefore, the present study was conducted to evaluate the effectiveness of a structured teaching programme on rotavirus vaccination knowledge among mothers of toddler children.

2. Objectives

- 1) To assess the knowledge of mothers regarding rotavirus vaccination before the structured teaching programme.
- 2) To assess the knowledge of mothers regarding rotavirus vaccination after the structured teaching programme.
- 3) To compare pre-test and post-test knowledge scores.
- 4) To determine the association between post-test knowledge scores and selected demographic variables.

3. Materials and Methods

A quantitative research approach with a quasi-experimental one-group pre-test post-test design was adopted. The study was conducted in a selected urban slum area of Bengaluru. The sample consisted of 60 mothers of toddler children aged between 1 and 3 years selected using simple random sampling. Data were collected using a structured interview schedule consisting of demographic variables and 30 multiple-choice knowledge questions related to rotavirus infection and vaccination. Each correct response was awarded one mark. A structured teaching programme lasting 45 minutes was conducted using charts and teaching materials. Post-test assessment was conducted after the intervention. Data were analysed using descriptive statistics and inferential statistics including paired t-test and chi-square test.

4. Results

The majority of mothers were aged between 20–25 years. Most participants were housewives and had middle school education. The pre-test mean knowledge score was 6.57 whereas the post-test mean score increased to 17.08. The mean difference in knowledge scores was 10.52. The paired t-test value ($t = 35.948$) indicated a statistically significant improvement in knowledge after the structured teaching programme ($p < 0.001$).

Figures

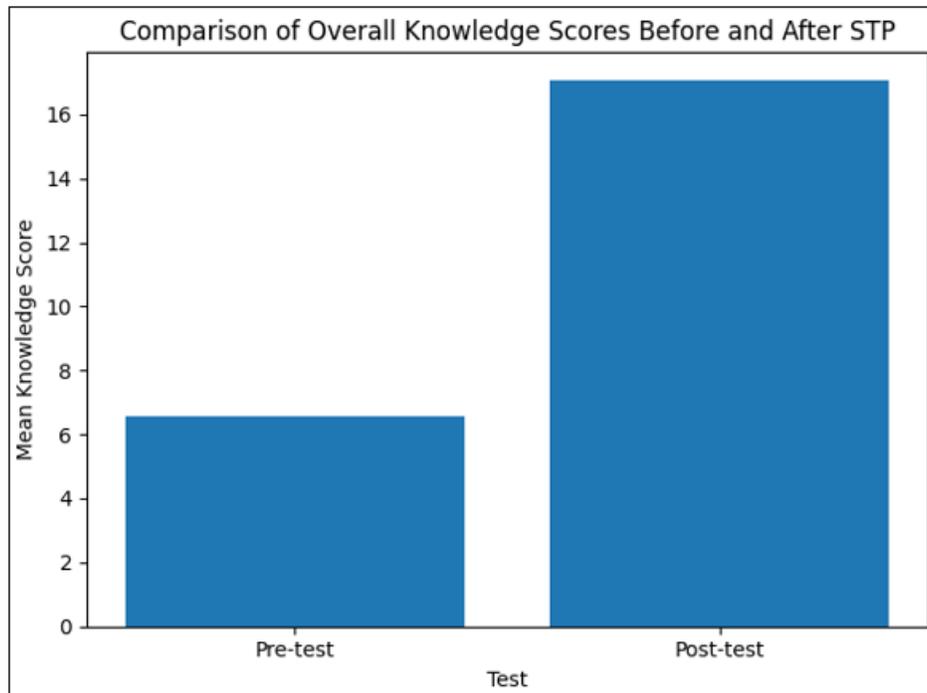


Figure 1: Comparison of Pre-test and Post-test Knowledge Scores

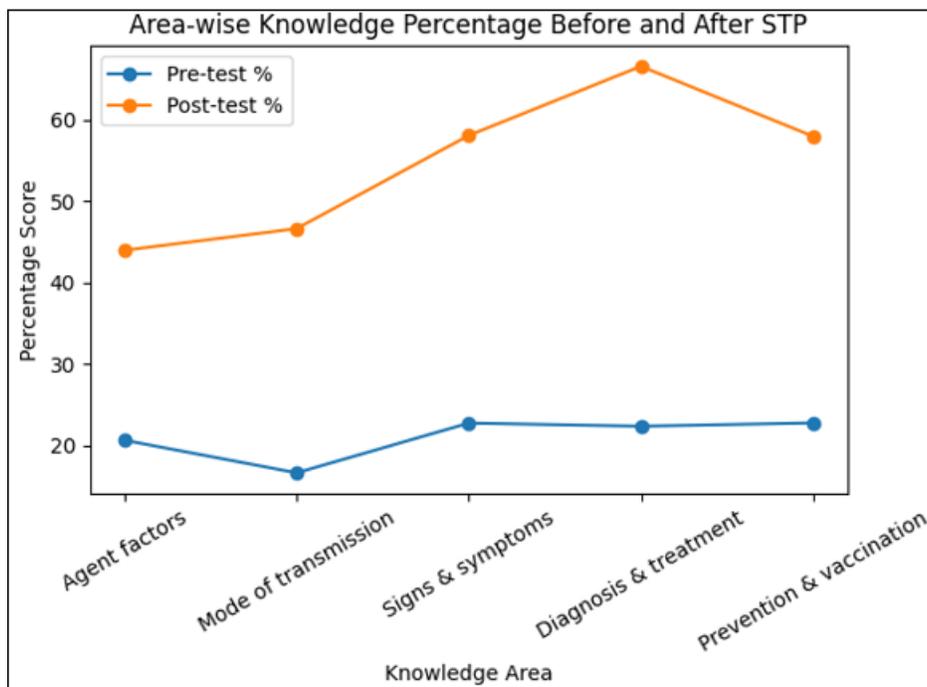


Figure 2: Area-wise Knowledge Percentage Comparison

5. Discussion

The findings of the present study showed that the structured teaching programme significantly improved the knowledge of mothers regarding rotavirus vaccination. Similar studies have reported that educational interventions are effective in improving maternal awareness regarding childhood immunization and disease prevention. Increasing awareness

among mothers can help promote timely vaccination and reduce the burden of rotavirus infection among children.

6. Conclusion

The study concluded that the structured teaching programme was effective in improving knowledge regarding rotavirus vaccination among mothers of toddler children. Community

health nurses should conduct regular health education programmes to promote vaccination awareness and improve child health outcomes.

References

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