



A Study To Assess The Effectiveness Of Structured Teaching Programme On Selected Health Problems In Terms Of Knowledge And Practice Among Orphan Children In Selected Orphanage Homes At Nagpur Maharashtra.

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Abstract: This study evaluates the effectiveness of a structured teaching programme on selected health problems namely head lice infestation, scabies, typhoid fever, worm infestation, hepatitis A, and iron deficiency anemia among orphan children in Nagpur Maharashtra. Using a pre-experimental one-group pre-test and post-test design, the knowledge and practices of 100 orphan children aged 12–15 years were assessed before and after the intervention. Data were collected through self-administered questionnaires and dichotomous practice questionnaires. The findings revealed that the majority of children had inadequate knowledge and practices before the intervention, but showed significant improvement after exposure to the structured teaching programme. Statistical analysis using paired 't' test confirmed a highly significant difference ($p < 0.05$) between pre-test and post-test scores. The study concludes that structured teaching programmes can effectively improve knowledge and practices among orphan children, thereby contributing to better health outcomes and well-being.

Index Terms - Structured Teaching Programme, Health Problems, Knowledge and Practice, Orphan Children, Health Education, Nagpur, Maharashtra.

I. Introduction

Orphan children are among the most vulnerable populations, often deprived of parental guidance and adequate healthcare. Observational visits revealed that many children in orphanages suffer from fever, lice infestation, skin diseases, diarrhea, malnourishment, and poor hygienic practices. These conditions highlight the urgent need for health education as a means of promoting preventive care and safe practices.

To address this gap, the present study assessed the effectiveness of a structured teaching programme in improving knowledge and practice regarding selected health problems among orphan children in Nagpur Maharashtra.

Title of the study

A Study to Assess the Effectiveness of Structured Teaching Programme on Selected Health Problems in Terms of Knowledge and Practice Among Orphan Children in Selected Orphanage Homes at Nagpur Maharashtra.

Objectives

1. To assess the pre-test knowledge and practice scores regarding selected health problems among orphan children.
2. To assess the post-test knowledge and practice scores regarding selected health problems among orphan children.
3. To compare pre-test and post-test knowledge and practice levels.
4. To correlate post-test knowledge and practice scores.
5. To find the association between post-test knowledge scores and selected demographic variables.

II. Literature Review

Studies worldwide indicate high prevalence of communicable diseases like scabies, worm infestations, hepatitis A, and anemia among institutionalized children. Research shows that health education interventions significantly improve knowledge and hygiene practices. However, limited data exist on the effectiveness of structured health education programmes specifically among orphan children in India.

III. Methodology

Research Approach: Evaluative approach

Design: One-group pre-test post-test (pre-experimental)

Setting: Three orphanages in Nagpur Maharashtra.—Shri anath seva ashram, Bal Sadan, Shri shradhanand anathalaya.

Sample: 100 orphan children aged 12–15 years

Sampling Technique: Purposive sampling

Tools:

Part I: Demographic data

Part II: Self-administered questionnaire (30 multiple choice questions)

Part III: Dichotomous practice questionnaire (15 yes/no items)

Data Collection: Pre-test on day 1, structured teaching programme delivered on day 2, post-test on day 7

Analysis: Descriptive statistics, paired 't' test, Chi-square test, Pearson's correlation.

V. Results and Discussion

Demographics: 37% of children were aged 14 years, 55% were male, and 44% were in 9th standard.

Pre-Test Findings: 81% had inadequate knowledge, 28% had inadequate practice.

Post-Test Findings: 71% achieved adequate knowledge, 100% showed adequate practice.

Statistical Significance: Paired 't' test values (knowledge: 40.77; practice: 38.92) confirmed a highly significant improvement.

Correlation: No significant correlation was found between knowledge and practice scores, prior health problem, and duration of stay were significantly associated with post-test knowledge.

Table 1: Demographic Characteristics of Orphan Children (N = 100)

Variable	Category	Frequency	Percentage
Age	12 years	28	28%
	13 years	17	17%
	14 years	37	37%
	15 years	18	18%
Sex	Male	55	55%
	Female	45	45%
Education	6th Std	9	9%
	7th Std	31	31%
	8th Std	16	16%
	9th Std	44	44%
Previous Health Problems	None	36	36%
	Head Lice	24	24%
	Scabies	19	19%

Variable	Category	Frequency	Percentage
	Typhoid Fever	3	3%
	Worm Infestation	4	4%
	Hepatitis A	2	2%
	Iron Deficiency Anemia	12	12%
Duration of Stay	< 1 year	37	37%
	> 1 year	63	63%

Table 2: Comparison of Pre-Test and Post-Test Knowledge Scores (N = 100)

Knowledge Level	Pre-Test (%)	Post-Test (%)
Inadequate	81%	0%
Moderately Adequate	19%	29%
Adequate	0%	71%

Table 3: Comparison of Pre-Test and Post-Test Practice Scores (N = 100)

Practice Level	Pre-Test (%)	Post-Test (%)
Inadequate	28%	0%
Moderately Adequate	72%	0%
Adequate	0%	100%

Table 4: Statistical Analysis of Knowledge and Practice Scores

Variable	Mean (Pre-Test)	Mean (Post-Test)	Paired 't' Value	Significance
Knowledge	12.45	23.78	40.77	p < 0.05 (Significant)
Practice	6.32	13.45	38.92	p < 0.05 (Significant)

Table 5: Association Between Post-Test Knowledge and Demographic Variables.

Demographic Variable	Significance
Age	Significant (p < 0.05)
Sex	Not Significant
Education	Significant (p < 0.05)
Previous Health Problem	Significant (p < 0.05)
Duration of Stay	Significant (p < 0.05)

The results demonstrate that the structured teaching programme produced a substantial improvement in knowledge and practices. Pre-test scores showed the majority of children had inadequate awareness, whereas post-test results reflected a sharp increase in adequate knowledge (71%) and practice (100%). The paired 't' test values confirmed statistically significant improvements. While knowledge and practice both improved, their correlation was not significant, indicating that improved knowledge does not always directly translate into practice. Demographic analysis further showed that age, education, prior health problems, and duration of stay significantly influenced knowledge gains.

VI. Conclusion and Recommendations

The study concluded that the structured teaching programme significantly improved knowledge and practices of orphan children regarding selected health problems.

Recommendations:

Health education programmes should be regularly conducted in orphanages.

Nurses and healthcare workers should integrate structured teaching in preventive care.

Larger-scale studies are recommended to generalize findings.

Comparative studies with other methods (e.g., video-based teaching) may be conducted.

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Highlights / Key Points

- ❖ A structured teaching programme was developed and implemented on common health problems (head lice, scabies, typhoid fever, worm infestation, hepatitis A, and iron deficiency anemia) among orphan children.
- ❖ The study involved 100 orphan children (12–15 years) from selected orphanages in Nagpur Maharashtra., using a pre-test/post-test design.
- ❖ Pre-test results showed 81% of children had inadequate knowledge and 28% had inadequate practice regarding health problems.
- ❖ Post-test findings revealed significant improvements, with 71% demonstrating adequate knowledge and 100% achieving adequate practice levels.
- ❖ Statistical analysis (paired t test, $p < 0.05$) confirmed the effectiveness of the programme, highlighting its potential for adoption in orphanages and community health settings.