



Effectiveness of a structured teaching programme on knowledge regarding adverse effects of cosmetic usage among teenage girls in a GHSC, Erode District, Tamil Nadu

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Abstract

Background: Cosmetic products are widely used among teenage girls. Inadequate knowledge regarding their adverse effects may lead to health problems such as allergies, dermatitis, acne, and skin irritation

Objectives: 1. To assess the knowledge regarding adverse effects of cosmetic usage among teenage girls. 2. To evaluate the effectiveness of a Structured Teaching Programme (STP). 3. To determine the association between knowledge and selected demographic variables.

Methods: A quantitative pre-experimental one-group pretest-posttest design was adopted among 60 teenage girls aged 14–17 years selected through simple random sampling. A structured questionnaire consisting of 30 items was used to assess knowledge.

Results: The mean pretest knowledge score was 14.62, whereas the mean posttest score increased to 20.2. The paired t-test value was 14, indicating significant improvement in knowledge following the Structured Teaching Programme.

Conclusion: The Structured Teaching Programme was effective in improving knowledge regarding adverse effects of cosmetic usage among teenage girls.

Keywords: Cosmetic usage, adverse effects, teenage girls, structured teaching programme, knowledge

Introduction

Cosmetics are commonly used by adolescents to improve appearance and self-confidence. Increasing cosmetic use among teenage girls has raised concerns regarding potential adverse effects, including allergic reactions, acne, dermatitis, skin irritation, and long-term health risks. Teenage girls often obtain information regarding cosmetic products through media, friends, and social influences. However, awareness regarding the adverse effects of cosmetic products remains inadequate. Therefore, educational interventions such as Structured Teaching Programmes may help improve knowledge and promote safe cosmetic practices.

Materials and Methods

Research Design

Pre-experimental one-group pretest-posttest design.

Setting

Government Higher Secondary School, Vellankovil, Erode District.

Sample

60 teenage girls aged 14–17 years.

Sampling Technique

Simple random sampling technique.

Tool

Structured Knowledge Questionnaire consisting of 30 multiple-choice questions.

Research Tool

Structured Knowledge Questionnaire

Section A: Demographic Variables

- Age
- Standard studying
- Residence
- Religion
- Interest in cosmetics
- Previous knowledge regarding cosmetics

Section B: Knowledge Questionnaire

- 30 Multiple Choice Questions (MCQs)
- ஒவ்வொரு சரியான பதிலுக்கும் 1 மதிப்பெண்
- தவறான பதிலுக்கு 0 மதிப்பெண்
- மொத்த மதிப்பெண்: 30

Scoring Interpretation

Score: Knowledge Level

22–30: Adequate Knowledge

15–21: Average Knowledge

<14: Below Average Knowledge

Intervention

Structured Teaching Programme on:

- Introduction to cosmetics
- Types of cosmetics
- Adverse effects
- Prevention of adverse effects

Intervention: Structured Teaching Programme (STP)

A Structured Teaching Programme (STP) on the Adverse Effects of Cosmetic Usage was administered to teenage girls aged 14–17 years after the pretest. The programme included information regarding:

1. Introduction to cosmetics
2. Types of cosmetic products
3. Safe use of cosmetics
4. Adverse effects of cosmetic usage
5. Allergic reactions and skin problems
6. Prevention of cosmetic-related adverse effects
7. Importance of reading product labels
8. Healthy skin care practices

Statistical Analysis

Frequency, percentage, mean, standard deviation, paired t-test, and chi-square test were used.

Demographic Characteristics

Among 60 participants:

- 53% were aged 14–15 years.
- 47% were aged 16–17 years.
- 97% belonged to rural areas.
- 88% reported liking cosmetic products.
- 57% obtained previous knowledge from media.

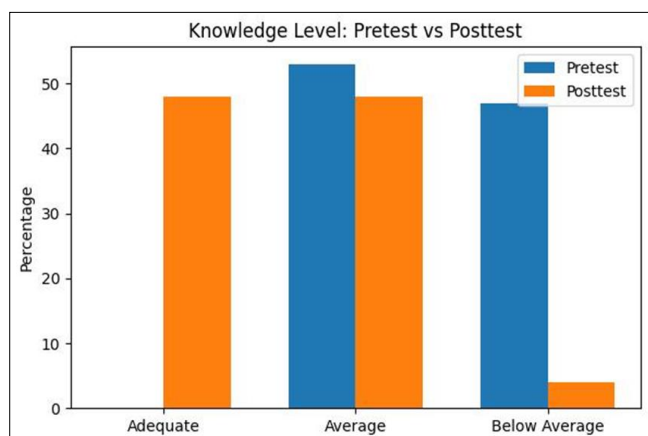
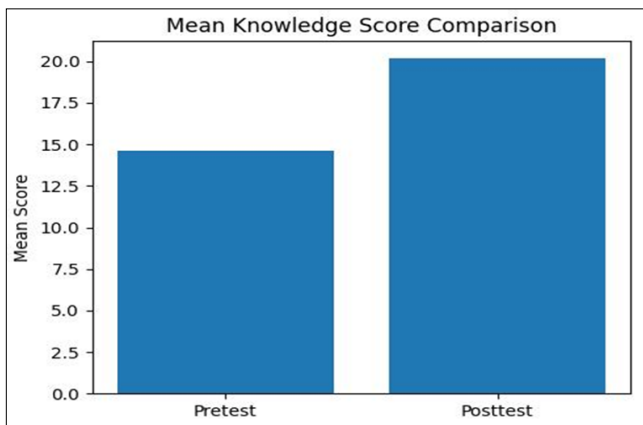
Knowledge Level Before and After Intervention

Knowledge Level	Pretest (%)	Posttest (%)
Adequate	0	48
Average	53	48
Below Average	47	4

Effectiveness of STP

Test	Mean Score
Pretest	14.62
Posttest	20.2

Paired t-value = 14, indicating significant improvement in knowledge after the Structured Teaching Programme.



Discussion

The findings demonstrated that the Structured Teaching Programme significantly improved knowledge regarding adverse effects of cosmetic usage among teenage girls. Similar findings have been reported in previous studies, which highlighted the need for educational interventions to enhance awareness of cosmetic safety.

Conclusion

The study concluded that the Structured Teaching Programme was effective in improving knowledge regarding adverse effects of cosmetic usage among teenage girls. Educational programmes in schools can play a significant role in promoting safe cosmetic practices and preventing cosmetic-related health problems.

Recommendations

- Conduct similar studies with larger sample sizes.
- Include control groups.
- Conduct studies in urban settings.
- Extend research to older adolescents.

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