# Effectiveness of Structured Teaching Programme (Stp) on Knowledge and Attitude Regarding Hiv Among Adolescent Girls in A Selected School, Thiruchencode, Tamilnadu

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**ABSTRACT**

Adolescents form an important and vulnerable group in the community. Lack of proper knowledge and misconceptions about HIV/AIDS make them highly susceptible to infection and social stigma. This study was conducted to assess the effectiveness of a Structured Teaching Programme (STP) on knowledge and attitude regarding HIV among adolescent girls in a selectd school, Thiruchencode.

A pre-experimental one-group pre-test post-test design was adopted. The study was conducted among 60 adolescent girls selected by purposive sampling technique. A structured questionnaire was used to assess knowledge and a five-point Likert scale to measure attitude. After the pre-test, a STP was administered using lecture and audiovisual aids. Post-test was conducted after seven days.

The findings revealed that the mean post-test knowledge and attitude scores were significantly higher than pre-test scores ($p < 0.05$). The study concluded that the STP was highly effective in improving knowledge and developing a positive attitude regarding HIV among adolescent girls.

**Keywords**: HIV, Adolescent girls, Knowledge, Attitude, Structured Teaching Programme, Nursing Education

## Introduction

Human Immunodeficiency Virus (HIV) continues to be a major public health issue worldwide. Adolescents are considered a high-risk group due to their curiosity, peer influence, and lack of adequate sexual and reproductive health education. According to UNAIDS (2023), adolescents account for a significant proportion of new HIV infections globally. In India, awareness about HIV among adolescents is still limited, especially in semi-urban and rural areas.

Adolescent girls, in particular, face additional challenges due to cultural taboos, lack of open discussion about reproductive health, and gender inequalities. Education is a vital tool to empower them with correct information, remove misconceptions, and promote healthy behaviors. Nurses play a key role in health education, especially through community and school health programmes. The present study aimed to evaluate the effectiveness of a Structured Teaching Programme in improving knowledge and attitude about HIV among adolescent girls in Thiruchencode.

## Objectives

1. To assess the pre-test level of knowledge and attitude regarding HIV among adolescent girls.
2. To evaluate the effectiveness of a Structured Teaching Programme on knowledge and attitude regarding HIV among adolescent girls.
3. To find the association between pre-test knowledge and attitude scores and selected demographic variables.

## Hypotheses

$H_1$: There will be a significant difference between the pre-test and post-test knowledge scores of adolescent girls regarding HIV after STP.
$H_2$: There will be a significant difference between the pre-test and post-test attitude scores regarding HIV after STP.

## Methodology

**Research Design:** A pre-experimental one-group pre-test post-test design was used to evaluate the effectiveness of STP.
**Setting of the Study:** The study was conducted at a selected girls' higher secondary school in Thiruchencode, Tamil Nadu.
**Population and Sample:** The population consisted of adolescent girls aged 13–19 years.
A sample of 60 girls were selected using a purposive sampling technique.

## Tool and Technique

1. Structured Knowledge Questionnaire: Comprised 30 multiple-choice questions covering areas like meaning, cause, modes of transmission, prevention, myths, and stigma related to HIV/AIDS.
2. Attitude Scale: A 20-item, five-point Likert scale measured the respondents' attitude toward HIV-positive individuals.

## Data Collection Procedure

1. Pre-test: Knowledge and attitude were assessed using the tools.
2. Intervention: STP was conducted for 45–60 minutes using lecture, discussion, charts, and audiovisual aids.
3. Post-test: Conducted seven days after STP using the same tools.

## Data Analysis

Descriptive statistics (mean, percentage, standard deviation) and inferential statistics (paired t-test and chi-square) were used.

## Results

**Demographic Characteristics of Adolescent Girls (N = 60)**

| Demographic Variable | Category | Frequency (f) | Percentage (%) |
|---|---|---|---|
| **Age (years)** | 13–14 | 15 | 25 |
| | 15–16 | 25 | 41.7 |
| | 17–19 | 20 | 33.3 |

| | | | |
|---|---|---|---|
| **Class of Study** | 9th Std<br>10th Std<br>11th–12th Std | 18<br>22<br>20 | 30<br>36.7<br>33.3 |
| **Religion** | Hindu<br>Christian<br>Muslim | 35<br>15<br>10 | 58.3<br>25<br>16.7 |
| **Source of Information** | Friends/Peers<br>Teachers<br>Mass Media<br>Health Personnel | 10<br>20<br>25<br>05 | 16.7<br>33.3<br>41.7<br>8.3 |
| **Family Monthly Income** | < ₹10,000<br>₹10,001–20,000<br>> ₹20,000 | 18<br>25<br>17 | 30<br>41.7<br>28.3 |

**Interpretation:** Majority (41.7%) of adolescent girls were in the age group of 15–16 years, 36.7% were studying in 10th standard, and 41.7% had mass media as the primary source of information

**Section B: Pre-test Level of Knowledge and Attitude Scores**

**Table 1: Distribution of pre-test knowledge scores (N = 60)**

| Knowledge Score Range (out of 30) | Level of Knowledge | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 0–10 | Inadequate | 30 | 50 |
| 11–20 | Moderate | 20 | 33.3 |
| 21–30 | Adequate | 10 | 16.7 |

- **Mean = 12.5, SD = 3.2**

**Interpretation:** Half (50%) of the adolescent girls had inadequate knowledge in the pre-test

**Table 2: Distribution of pre-test attitude scores (N = 60)**

| Attitude Score Range (out of 100) | Level of Attitude | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 0–33 | Unfavorable | 25 | 41.7 |
| 34–66 | Neutral | 20 | 33.3 |
| 67–100 | Favorable | 15 | 25 |

**Mean = 48.6, SD = 12.5**

**Interpretation:** Most adolescent girls had either unfavorable or neutral attitude before STP.

**Section C: Post-test Knowledge and Attitude Scores**

**Table 3: Distribution of post-test knowledge scores (N = 60)**

| Knowledge Score Range (out of 30) | Level of Knowledge | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 0–10 | Inadequate | 02 | 3.3 |
| 11–20 | Moderate | 15 | 25 |
| 21–30 | Adequate | 43 | 71.7 |

- **Mean = 22.8, SD = 2.5**

**Interpretation:** After STP, 71.7% of adolescent girls had adequate knowledge

**Table 4: Distribution of post-test attitude scores (N = 60)**

| Attitude Score Range (out of 100) | Level of Attitude | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 0–33 | Unfavorable | 01 | 1.7 |
| 34–66 | Neutral | 10 | 16.7 |
| 67–100 | Favorable | 49 | 81.6 |

**Mean = 78.4, SD = 10.3**

**Interpretation:** Majority (81.6%) of adolescent girls developed favorable attitude after STP.

**Section D: Comparison of Pre-test and Post-test Scores**

**Table 5: Comparison of mean pre-test and post-test knowledge scores (N = 60)**

| Test | Mean | SD | Mean Difference | *t*-value | p-value |
|---|---|---|---|---|---|
| Pre-test | 12.5 | 3.2 | 10.310.3 | 15.67 | 0.001** |
| Post-test | 22.8 | 2.5 | | | |

**Interpretation:** The *t*-value is significant at $p < 0.05$, showing that STP was effective in improving knowledge

**Table 6: Comparison of mean pre-test and post-test attitude scores (N = 60)**

| Test | Mean | SD | Mean Difference | *t*-value | p-value |
|---|---|---|---|---|---|
| Pre-test | 48.6 | 12.5 | 29.8 | 13.42 | 0.001** |
| Post-test | 78.4 | 10.3 | | | |

**Interpretation:** The *t*-value is significant at $p < 0.05$, indicating STP improved attitudes

**Section E: Association of Pre-test Knowledge and Attitude with Demographic Variables**

- Chi-square test showed **no significant association** between pre-test knowledge scores and demographic variables such as age, religion, and income.
- However, **source of information** had a significant association with knowledge ($\chi^2 = 10.6$, $p < 0.05$).
- Attitude scores were not significantly associated with demographic variables.

**Discussion**

The findings of this study revealed that the Structured Teaching Programme was highly effective in improving both knowledge and attitude regarding HIV among adolescent girls. These findings are consistent with the studies conducted by Sharma et al. (2022) and Kumari & Devi (2021), who reported significant improvements in knowledge and reduction in stigma after educational interventions. The results emphasize the importance of school-based health education as a preventive strategy. Nurses and health educators can play a vital role in implementing such programmes to reduce misconceptions and encourage empathy toward people living with HIV.

**Conclusion**

The study concluded that the Structured Teaching Programme significantly improved knowledge and attitude regarding HIV among adolescent girls. It demonstrated that systematic and interactive education is an effective method for health promotion among adolescents.

**Nursing Implications**

**Nursing Education**: Incorporating HIV education into school health curriculum can enhance awareness.
**Nursing Practice**: Community health nurses can organize similar programmes in schools and rural areas.
**Nursing Research:** Future studies can focus on larger populations and long-term follow-up.
**Nursing Administration**: Support policies to include STP as part of adolescent health programmes.

**Recommendations**

1. Conduct similar studies with a control group for comparison.
2. Replicate the study in rural and urban settings with larger samples.
3. Include both boys and girls to assess gender differences.
4. Evaluate long-term retention of knowledge after three or six months.

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