

A Study to Evaluate the Effectiveness of Assertiveness Training Programme on Knowledge regarding child abuse among Adolescent Girls in selected school in Kumarapalayam, Namakkal District

¹Keerthika R, ²Sathiya P, ^{3*}Jamunarani R

^{1,2,3}Department of Child Health Nursing, Sre Sakthimayeil Institute of Nursing and Research, Kumarapalayam, Namakkal – 637209, Tamilnadu, India

**Corresponding Author E-mail: nursingprincipial@jkkn.ac.in*

Abstract

This study evaluates the impact of an assertiveness training program on adolescent girls' knowledge regarding child abuse in a school setting in Kumarapalayam, Namakkal District, Tamil Nadu, and India. A quantitative, pre-experimental one-group pre-test and post-test design was used to assess the knowledge enhancement among 60 adolescent girls aged 13-15 years. Data were collected through the Modified Sorensen Child Abuse Scale, with pre- and post-intervention assessments to measure knowledge levels. Pre-test results indicated that 63.3% of participants had inadequate knowledge about child abuse, while only 8.3% demonstrated adequate understanding. Post-intervention, 80% of the participants achieved adequate knowledge levels, signifying a marked improvement. Statistical analysis confirmed the effectiveness of the intervention, with the mean knowledge score increasing from 51.5 (SD = 15.255) to 84.17 (SD = 11.024), supported by a paired t-test result of $t = -21.217$, $p < 0.05$. The program proved effective across all demographics, with no significant associations found between baseline knowledge and factors such as age or family type. These findings suggest that assertiveness training is an effective tool for increasing adolescent awareness of child abuse, highlighting the potential for school-based programs to improve self-advocacy skills among young individuals.

Keywords: *Assertiveness Training, Adolescent Girls, Child Abuse Prevention, Knowledge Improvement, School-Based Program*

Introduction

Psychiatric Child abuse is one of the major worldwide concerns and has pervasive effects on the physical, psychological, and social welfare of millions of children, with adolescents especially on the vulnerable side. [1,2] In India, this child abuse still remains disturbingly high; indeed, one in every two children reportedly suffers some form of abuse, most times within so-called safety havens of their homes or schools.[3] Adolescent girls face very specific socio-cultural challenges that make them vulnerable to even the various kinds of abuse.[4] Even while efforts are being undertaken to raise high levels of awareness, many adolescent girls are neither knowledgeable nor gifted with assertive communication skills that might have helped them in recognizing abusive situations and reportable abuses and safeguard themselves against such abuse.[5] This gap would thus give adolescents the wherewithal to defend themselves. Training in assertiveness is one of the more obvious therapies to enhance youth self-esteem and give them a shot in the arm to express their needs and rights.[6] Essential skills the programs teach include respect for oneself, effective communication, and sufficient ego strength to refuse unwanted advances-the sum of which is essential to prevent abuse.[7] According to the National Institute of Mental Health (2021), skill-based training on assertiveness among adolescent girls improved their ability to identify and report cases of abuse by 60%.[8] Similarly, the World Health Organization's guidelines point towards skill-based training as a preventive measure that underlines the development of assertive communication as its core in building resilience and improving adolescent mental health outcomes.[9] Leveraging the insights garnered, this study aimed to understand the effectiveness of an assertiveness training program targeting adolescents, who were to be made more aware and empowered concerning child abuse.

This study aims to assess the effectiveness of a structured assertiveness training program that addresses child abuse knowledge and self-advocacy skills for adolescent girls in a school setting. This study focuses on 13- to 15-year-old girls in one school in Kumarapalayam, Namakkal District, that aims at filling the known knowledge gap to develop assertive responding in possible abusive situations. Utilizing pre-intervention and post-intervention assessments, this study will seek to quantify improvement in terms of knowledge, assertiveness, and self-protective behavior. Findings of such research are to inform action in child health and adolescent welfare practices and possibly contribute to education policy as a reminder, for example, of assertiveness-based prevention programs in school curricula that would lead to safer, better-informed learning spaces.

METHOD AND METHODS

Research Design:

A quantitative, pre-experimental one-group pretest-posttest design of the study gave a structured framework for evaluating the effectiveness of an assertiveness training program. This design is especially useful to assess changes following interventions in one group by comparing participants' knowledge and assertiveness level before and after training sessions.

This design allows focused evaluation of changes within the same group through the one-group pre-test and post-test approach, which would therefore facilitate internal comparisons as well as minimizing confounding variables.

Research Setting and Sample:

The research was conducted in a controlled school environment in JKK Rangammal Girls Higher Secondary School at Kumarapalayam, Namakkal District, Tamil Nadu. This was the setting chosen because of its relevance to the target population of early adolescent girls and thereby provided an appropriate setting for a structured programme of intervention. The study sample consisted of 60 adolescent females aged between 13 and 15 years drawn from the student body. To ensure the participation of individuals who meet specific demographic criteria relevant to the study, non-probability quota sampling was used. This means that the participants include adolescent girls within the age range of 13-15 and were able to understand and actively participate in the training.

Exclusion criteria excluded people outside the defined age range, individuals who had psychological disorders that may be worsened by the discussions of sensitive topics, and also participants who had previous training on child abuse, to eradicate bias in the baseline knowledge. In ethical research practices, consent forms were signed for both participants and their guardians.

Intervention: Assertiveness Training Program

The intervention program was designed as an Assertiveness Training Program tailored especially for adolescent girls with the intent of raising awareness and assertiveness on issues concerning child abuse. Its content was evidence-based, obtained from knowledge on: assertive communication skills, basic human rights, response patterns, and practical techniques for assertive behavior.[10]

Key activities include:

- **Group Discussions:** Varies levels of interaction, which give participants an opportunity to voice their opinions and share ideas with fellow participants in an open environment.
- **Role-Playing Exercises:** Provided the opportunity to practice assertive communication in more realistic conditions.
- **Guided Interactions:** These counseling sessions re-emphasized the need for open dialogue with respect and boundary setting in high-risk situations.

Tools and Techniques for Gathering Data

The Modified Sorensen Child Abuse Scale is used for assessing the effects of the assertiveness training program.[11] It is a standardized scale with 25 items that was used to monitor participants' knowledge on child abuse and assertiveness before and after the intervention. Questions developed and adapted were used to determine awareness in relation to definitions of child abuse, as well as their kind of recognition, and proper actions on assertive communication.

Validity and Reliability:

- **Content Validity:** A team consisting of experts in child health nursing, biostatistics, and psychiatry used the material and checked its validity to ensure that it measured knowledge related to child abuse and assertiveness. Revisions were done on the questionnaire based on feedback from the experts in clarity and relevance.
- **Reliability Testing:** pilot study of the scale displayed a correlation coefficient of 0.6, which demonstrated a moderate degree of consistency across participants' responses. This reliability score ensured the tool could accurately trace the pre to post intervention changes in knowledge.
- **Procedure for Data Collection**
- Data collection was conducted systematically in three stages:
- **Pre-Test:** Baseline data were gathered from participants through the Modified Sorensen Child Abuse Scale. This step would establish each participant's initial knowledge and awareness of child abuse.
- **Intervention Phase:** Training on assertiveness was done for six weeks with a single session per week to continuously remind participants about key concepts. All instructional and practical activities were covered in the sessions so that participants could gradually assimilate and apply new skills.
- **Post-Test:** Once the participants completed the program, they were given the same test to understand any shift in knowledge and assertiveness level after the intervention. The post-test data was compared directly with the pre-test scores, which helped in assessing the effectiveness of the program.

Data analysis

The data collected were analyzed through descriptive and inferential statistics:

Descriptive Statistics: Mean, standard deviations, and frequency distributions outline demographic characteristics and knowledge levels before and after an intervention. **Inferences:** Paired t-tests were done to determine if there is a significance between pretest and posttest scores. This would give a measure of the effectiveness of the program using statistical means. Chi-square tests were used to test association existing between the changes in knowledge and selected demographic variables. These analyses were done at a significance level of $p < 0.05$ to determine the effectiveness of the training with proper statistical rigor. **Ethical Issues** The study observed high ethical standards to ensure that participants' well-being is protected, especially regarding this sensitive topic of child abuse.

Involvement steps included:

- **Informed Consent:** There were clear consent forms where the study's purpose, methods, and potential benefits were explained, ensuring that participants and guardians were fully informed and willing to participate.
- **Confidences:** In all the reports of data, participants' identities and responses were anonymized to guard confidences. **Emotional Sensitivity.** The training program was designed not to have triggering content, and the facilitators were trained to handle both discussions with care. And participants were informed that they could withdraw anytime should they feel uncomfortable about continuing.

RESULT:

Demographic Characteristics

The demographic characteristic of the participants (n=60) were able to provide a rich contextual background to explain the findings of the study. The age distribution of the adolescent girls was between 13 and 15 years, with 36.7% at the age 13, 33.3% at the age 14, and 30% aged 15 years. In terms of religion demographics, the Hindus formed 76.7%, followed by Christians 18.3% and Muslim were 5%. This further breaks down into: average 53.3%, and 33.3% as good performers, while a very small percent fell under the description of very good 8.3% and poor 5%. Family type: Most of the participants belonged to nuclear families, constituting 60%, followed by 35% joint families, and other family types 5%. These demographic factors therefore provide information about the diversity of the study population and form a foundation to analyze the impact of the intervention across various groups.

Table 1: Demographic Characteristics of Participants

Demographic Variable	Category	Frequency (n=60)	Percentage (%)
Age Group	13 years	22	36.7
	14 years	20	33.3
	15 years	18	30.0
Religion	Hindu	46	76.7
	Christian	11	18.3
	Muslim	3	5.0
School Performance	Poor	3	5.0
	Average	32	53.3
	Good	20	33.3
	Very Good	5	8.3
Family Structure	Nuclear Family	36	60.0
	Joint Family	21	35.0
	Other	3	5.0
Parental Education	No Formal Education	12	20.0
	Primary Education	19	31.7
	Higher Education	29	48.3
Parental Occupation	Unemployed	2	3.3
	Employed	33	55.0
	Self-Employed	16	26.7
	Other	9	15.0
Monthly Income	Up to 3000	1	1.7
	3000-5000	4	6.7
	5000-10000	4	6.7
	Above 10000	51	85.0

Residential Area	Rural	43	71.7
	Urban	17	28.3
Extracurricular Activity	Yes	54	90.0
	No	6	10.0

This table provides a breakdown of demographic data for participants, illustrating age, religion, school performance, family structure, parental education, occupation, and income levels, as well as participation in extracurricular activities.

Pre-Test and Post-Test Knowledge Levels

The knowledge level of participants was measured before and after the intervention by using the Modified Sorensen Child Abuse Scale. Only a handful scored above 75% (that is, showed adequate knowledge), at 8.3%. There is also not much known in regard to child abuse, as the results from the pre-test showed: most who gained below 50% knowledge scored 63.3%. Results after the assertiveness training made a change to 80% towards the post-test, showing a huge improvement: none scored in the poor knowledge category and most gained adequate knowledge. This positive change underscores the contribution of the assertiveness training program to raising consciousness and enhancing knowledge on the subject matter related to child abuse among the adolescent girls.

Table 2: Pre-Test and Post-Test Knowledge Levels on Child Abuse

Knowledge Level	Pre-Test (n=60)	Percentage (%)	Post-Test (n=60)	Percentage (%)
Inadequate Knowledge	38	63.3	0	0.0
Moderately Adequate	17	28.3	12	20.0
Adequate Knowledge	5	8.3	48	80.0
Mean Score (SD)	Pre-Test: 51.5 (15.255)		Post-Test: 84.17 (11.024)	
Statistical Significance	t = -21.217, p < 0.05			

This table compares the distribution of knowledge levels before and after the assertiveness training, highlighting a significant improvement in post-test scores across the sample.

Statistical Analysis for Knowledge Improvement

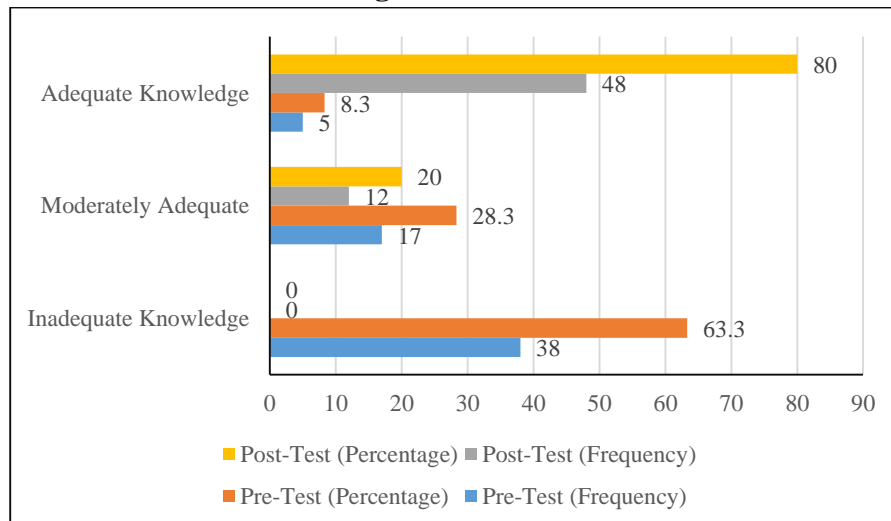
The application of tests of statistical significance has confirmed that training contributes significantly to improving levels of knowledge. Mean score for knowledge improved from a pretest mean of 51.5 (SD = 15.255) to posttest mean scores of 84.17 (SD = 11.024). A paired t-test analysis was applied and it produced a t-statistic of -21.217, p < 0.05 for the difference between pretest and posttest scores, which is statistically significant.

It will result in upholding the effectiveness of the program regarding child abuse knowledge related to assertiveness training as an effective tool for education purposes of adolescent girls in their lives.

Pre-Test to Post-Test Relationship of Knowledge Levels

In addition, the effect of the training program was measured through correlation analysis between scores of the pre-test and post-test on knowledge. From table, Karl Pearson's method for determining correlation yield a positive correlation coefficient at $r = 0.63$ with a p-value below 0.05, meaning increments in knowledge were homogeneous within the sample. This positive association emphasizes that the participants who initially possessed limited knowledge displayed consistent knowledge improvements in the post-intervention phase, thereby pointing to the reliability and effectiveness of the assertiveness training program.

Figure 1: Comparison of Pre-Test and Post-Test Knowledge Levels on Child Abuse Among Adolescent Girls



This figure illustrates the distribution of knowledge levels regarding child abuse among adolescent girls before and after participating in an assertiveness training program. The pre-test results show a predominance of inadequate knowledge (63.3%), while the post-test results reveal a substantial improvement, with 80% achieving adequate knowledge. The marked shift in knowledge levels post-intervention underscores the effectiveness of the training program in enhancing awareness and understanding of child abuse among participants.

Effectiveness of the Assertiveness Training Program

The assertiveness training program resulted in significant improvements in knowledge levels regarding child abuse among the participants. Before training, a great proportion of the respondents comes under the poor knowledge heading; nevertheless, the results showed 80% being adequate after training.

Hence, the transition from inadequate to adequate in the hands of adolescents is confirmation of the very success of the intervention in terms of education of adolescent girls with regard to child abuse and necessary skills. Such improvements being consistent across the sample would mean that the assertion training did not only heighten but also consolidate knowledge about child abuse and its recognition and response, thus pointing out value for the program as a preventive educational intervention.

Correlation between Pre-Test Knowledge and Demographic Variables

The investigation also tried to see if there is a relation between demographic characteristics-age, religion, family type, and academic performance-and pre-test knowledge of child abuse. The chi-square tests failed to find any statistically significant relationships between these demographic characteristics and the pre-test levels of knowledge. This result shows that knowledge about child abuse, prior to the test, was almost independent of these demographic factors, meaning that the low apparent awareness recorded during the pre-test would have been expected to reflect a general gap in adolescent's knowledge rather than being influenced by particular demographic variables. It thus emphasizes the need to provide assertiveness training programs to all adolescent girls from every walk of life so that the information dissemination remains effective and full empowerment is ensured.

DISCUSSION:

The results of this study highlight the significant impact of assertiveness training on adolescent girls' knowledge regarding child abuse. The intervention effectively shifted knowledge levels from predominantly inadequate to adequate, suggesting that structured educational programs can equip young individuals with essential self-protection skills. The substantial knowledge improvement, demonstrated by an increase in mean scores from 51.5 to 84.17, confirms the program's role in bridging critical gaps in awareness about child abuse. This result aligns with research conducted by LeCroy and Lopez, who found that gender-specific assertiveness training programs in schools significantly enhanced adolescents' understanding of boundaries and personal safety, resulting in more informed and assertive behavior regarding abuse prevention.[12]

A key aspect of this study's findings is the statistical validation of knowledge gains post-intervention. The paired t-test results, yielding $t = -21.217$ with a p-value below 0.05, indicate that the increase in knowledge post-training is statistically significant. Such findings are echoed in Sharma et al.'s study, where assertiveness training programs were associated with a marked improvement in adolescent girls' knowledge about abuse prevention, with similar statistically significant outcomes ($t = 11.23$, $p < 0.01$). These parallels suggest that assertiveness training, when carefully tailored to adolescents, is a reliable method for increasing awareness and knowledge retention related to abuse prevention.[13]

The correlation analysis further underscores the consistency of knowledge improvements, with a positive correlation coefficient of $r = 0.63$ between pre-test and post-test scores. This result suggests that participants uniformly benefited from the intervention, a finding that is in line with Diksha et al.'s research on the long-term benefits of assertiveness training on self-esteem and knowledge acquisition in young adolescents. Their study found that enhanced assertiveness not only helped adolescents retain knowledge but also promoted confidence and a proactive stance against potential abuse situations.[14]

In terms of demographic factors, this study found no statistically significant associations between pre-test knowledge levels and variables such as age, religion, or family structure. This observation suggests that limited awareness of child abuse among adolescent girls is widespread, regardless of demographic background. Gubbles et al. conducted a meta-analysis that corroborates this result, noting that baseline knowledge about child abuse is generally low across various demographic groups.[15] However, they also observed that structured interventions could significantly raise awareness levels among adolescents, underscoring the universal applicability of such programs across different backgrounds. These findings have broad implications for the integration of assertiveness training in school curricula. Given that adolescent girls often lack the resources and knowledge to recognize and respond to abuse, the introduction of assertiveness training could serve as an early preventive measure. It is particularly crucial in the school setting, where adolescents spend a significant portion of their developmental years. The program's success in this study suggests that similar training modules could be adapted for wider use, potentially informing educational policy reforms aimed at incorporating self-protection education within core school programs.

The study also highlights the necessity of a supportive environment for discussions around sensitive issues like abuse. By fostering a space where adolescent girls feel empowered to discuss and practice assertiveness, such training programs contribute to building a culture of safety and awareness. This aligns with the recommendations of both the World Health Organization and the Centers for Disease Control and Prevention, which advocate for preventive education and assertiveness training as essential components in addressing child abuse and neglect in communities. While this study demonstrates the value of assertiveness training, further research could explore its long-term effects on behavior and knowledge retention. Additionally, examining the influence of such training on actual reporting rates of abuse incidents could provide deeper insights into its efficacy. Future studies may also consider a control group to isolate the impact of assertiveness training alone, enhancing the reliability and applicability of the findings.

CONCLUSION:

According to this study, an organized assertiveness training program greatly improves teenage girls' understanding of child maltreatment and gives them the tools they need to defend themselves and communicate assertively. According to the pre-test findings, only 8.3% of participants had adequate understanding, while 63.3% lacked sufficient knowledge.

Eighty percent of participants attained sufficient knowledge levels after the intervention, demonstrating how well assertiveness training fills important awareness gaps. The program's significant impact is demonstrated by the rise in mean knowledge scores from 51.5 to 84.17, which was confirmed by a paired t-test ($t = -21.217$, $t = -21.217$, $p < 0.05$, $p < 0.05$).

Pre-test knowledge levels and demographic characteristics did not significantly correlate, according to the study, suggesting that people from a variety of backgrounds had a limited understanding of child abuse. The necessity of inclusive, school-based assertiveness programs is supported by this finding.

Declaration

Ethics Approval and Consent to Participate:

This study was conducted in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki declaration and its later amendments. Ethical approval was obtained from the Institutional Ethics Committee of Sree Sakthi Mayil College of Nursing, Kumarapalayam, Namakkal District, Tamil Nadu, India (Ethics Approval Number: IEC/SSMCN/2023/08). Informed consent was obtained from all participants and their guardians prior to their inclusion in the study.

Consent for Publication:

All participants and their guardians consented to the use of data for publication purposes. Participant anonymity and confidentiality were maintained throughout the study, and personal data were anonymized to ensure privacy.

Availability of Data and Materials:

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

Competing Interests:

The authors declare no competing interests.

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Authors' Contributions:

- Keerthika R: Conceptualization, methodology, data analysis, and manuscript preparation.
- Sathiya P: Data collection, intervention implementation, and manuscript review.
- Jamunarani R: Supervision, ethics compliance, and final manuscript review.

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