



EFFECTIVENESS OF AN AWARENESS PROGRAMME ON KNOWLEDGE REGARDING MANAGEMENT OF AGGRESSION AMONG ADOLESCENTS

¹Mr. Prashant Fakira Birhade, ²Dr. Meena Pagarwar*

¹Masters Science in Child Health Nursing (Pediatrics) College of Nursing, Government Medical College Nagpur, Maharashtra, India, (Nursing Officer GMCH, Maharashtra),

²Assistant Professor, Child Health Nursing, College of Nursing, Government Medical College Nagpur, Maharashtra, India

Mail Id: - Prashantbirhade11@gmail.com

Corresponding Author: Dr. Meena Pagarwar, **Email:** neerajpagrwar@gmail.com

Abstract: Adolescent aggression is a significant public health concern influencing social, academic, and emotional outcomes. This quasi-experimental study assessed the impact of an awareness programme on knowledge regarding aggression management among 110 adolescents aged 15–19, using a structured pre- and post-intervention questionnaire. The awareness program focused on the causes, forms, consequences, and management strategies for aggression, conducted through interactive teaching, discussions, and relaxation techniques. Results demonstrated a marked improvement in knowledge scores post-intervention (mean pre-test score = 14.96, post-test = 25.62). Demographic analysis showed knowledge gains were associated with age and family income but not with gender, family type, number of siblings, or parental occupation. The findings highlight the value of structured educational interventions in fostering conflict resolution skills and emotional regulation among adolescents. Integration of such programmes in curricula is recommended to promote adolescent well-being and resilience.

Keywords: Aggression, Management, Adolescents, Awareness Programme, Knowledge.

I. INTRODUCTION

Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health.¹ Adolescents aged 10-19 years represent over 16% of the world's population and play a central role in achieving the 2030 Sustainable Development Goals. Data on adolescent health are crucial to set priorities, to track trends, and to unpack inequalities for adolescents now, for when they are parents, as well as for their future children.² Adolescence is a period of life with specific health and developmental needs and rights. It is also a time to develop knowledge and skills, learn to manage emotions and relationships, and acquire attributes and abilities that will be important for enjoying the adolescent years and assuming adult roles.³ Adolescence is the crucial transition from childhood to adulthood that shapes a person's future. During this time, learning to manage emotions is vital. Uncontrolled anger can lead to aggression, which is a widespread and destructive problem that threatens society.⁴ Aggression among adolescents is a growing concern worldwide, as it significantly impacts their social development, academic performance, and overall well-being. Aggressive behavior can manifest in various forms, including physical aggression, verbal hostility, relational aggression, and impulsive outbursts. Studies suggest that aggressive tendencies during adolescence are influenced by multiple factors, including biological predispositions, environmental stressors, peer influence, and inadequate emotional regulation skills.⁵

II. PROBLEM STATEMENT

To assess the Effectiveness of an Awareness Programme on Knowledge regarding Management of Aggression among Adolescents in selected areas

III. OBJECTIVE

1. To assess the Pre-test knowledge score regarding management of aggression among adolescents in selected areas.
2. To assess the effectiveness of an awareness programme on knowledge regarding management of aggression among adolescents in selected areas.

3. To find the association of the study findings with selected demographic variables

IV. Hypothesis

H₀– There is no significant difference between the pre-test and post-test knowledge score regarding management of aggression among adolescents.

H₁– There is significant difference between the test knowledge score regarding management of aggression among adolescents

V. Assumptions

Awareness programme may be effective in improving knowledge regarding management of aggression among adolescents.

VI.

REVIEW OF LITERATURE

A study conducted by Sulekha Simalti et al. (2022) assessed the knowledge regarding aggression and coping strategies among adolescents and concluded that most adolescents had average knowledge on the topic. Out of 56 participants, 61% had average knowledge about aggression, and 51.7% had average aggression coping strategies.⁶

Another study by Tanishka Pathak (2018) evaluated the level of aggression among adolescents and the effectiveness of a planned teaching program on aggression management. The investigator concluded that the majority of adolescents (65%) had mild aggression and that the planned teaching program was an effective strategy in enhancing their knowledge scores.⁷

A meta-analysis by Jiang S. et al. (2024) examined the effectiveness of community-based programs on aggressive behavior among children and adolescents. The analysis of 16 studies revealed a significant positive effect of community-based interventions on reducing aggression. Key components of successful programs included behavioral skills training, problem-solving, and psychological treatment.⁸

VII. MATERIAL AND METHODS

7.1 Study design: - A quantitative research approach with a pre-experimental, one-group pre-test post-test design was utilized for this study. The study was conducted in selected junior colleges.

7.2 Study setting: The study was conducted in selected junior colleges.

7.3 Sample: -The sample consisted of 110 adolescents aged 15 to 19 years.

7.4 Sampling Technique: - Non-Probability Convenience Sampling Technique

7.5 Data collection Tool: - Data was collected using a self-structured questionnaire divided into two sections. Section A gathered demographic data. Section B was a knowledge questionnaire comprising 30 multiple-choice questions on aggression management. A pre-test was administered, followed by an awareness program intervention on the same day. A post-test was conducted 7 days later using the same questionnaire to evaluate the program's effectiveness. Data analysis was performed using descriptive and inferential statistics, including the paired 't' test and Chi-square test, with a significance level set at $p < 0.05$.

7.6 Sample size Estimation: -

$$p = 1 - \frac{\alpha}{2} = 1 - \frac{0.05}{2} = 0.975$$

$$n = \left(\frac{Z_{0.975} * \sigma}{\text{MOE}} \right)^2$$

$$n = \left(\frac{1.96 * 0.2}{0.04} \right)^2 = 96.0365$$

Rounded up to: 97.

Rounded up to: 97 + 10% Drop out

The number of samples selected in the study is 110.

7.7 Inclusion criteria

In this study, the inclusion criteria were: - Adolescents of 15 to 19 years of age

7.8 Data collection tool

Section A It comprised 8 items seeking information on demographic data such as age, parents' occupation, number of siblings.

Section B: Questionnaire to assess the knowledge regarding management of aggression among adolescents in selected area.

It consisted of a self- structured knowledge questionnaire on knowledge regarding management of aggression, which comprised 30 items.

7.9 Description of Tool

In this study Self Structured questionnaire was used to assess the knowledge regarding management of aggression. It was divided into two sections that was A and B

Section A: Demographic data

It comprised 8 items seeking information on demographic data such as age, gender parents' occupation, number of siblings.

Section B: Questionnaire to assess the knowledge regarding management of aggression among adolescents in selected area.

It consisted of a self- structured knowledge questionnaire on knowledge regarding management of aggression, which comprised 30 items. The knowledge questionnaire consisted of 30 closed-ended – multiple choice questions. Each question has 4 options in

which 1 option was correct and other options were incorrect. Every correct response was given a score of 1 and every unanswered or incorrect response was given 0. The maximum score on the knowledge questionnaire was 30. Knowledge was graded from poor knowledge to excellent knowledge based on scores. This grading was solely for the purpose of this study. The different levels of knowledge are categorized as follows. The knowledge scores were categorized into five levels for interpretation: scores ranging from 0–6 were considered poor, 7–12 as average, 13–18 as good, 19–24 as very good, and 25–30 as excellent.

7.10 Validity and reliability

The content validity of the tool was established with the help of 13 experts, whose suggestions were incorporated to improve clarity and relevance of the items. The Scale Content Validity Index (S-CVI) was 0.90, and the Item-level Content Validity Index (I-CVI) was 0.92, indicating excellent content validity.

Reliability of Tool

The reliability was established by Test-Retest Method. The reliability coefficient of correlation for the structured knowledge questionnaire was $r = 0.84$. The higher the correlation coefficient, the more reliable the instrument.

7.11 Description of awareness programme

The Awareness Program on Aggression Management in Adolescents is a interactive session designed to educate adolescents on understanding, identifying, and managing aggression in adolescents. The program covers the causes, types, signs, and impact of aggression, along with practical strategies for self-regulation, conflict resolution, and emotional well-being. Through discussions, role-playing exercises, and guided relaxation techniques, participants will gain valuable skills to support adolescents in managing aggression effectively. The session also emphasizes the role of parents, educators, and peers in fostering a positive and supportive environment. The sessions was lasted for 45 minutes.

7.12 Statistical analysis: The software used in the analysis were SPSS 24.0 and Graph Pad Prism 7.0 version and $p < 0.05$ is considered as level of significance. Analysis of the data was done by using descriptive and inferential statistics both. Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. Inferential statistics to make judgments of the probability that an observed difference between groups is a dependable one or one that might have happened by chance in this study.

VIII. RESULTS

The study findings revealed that adolescents showed a marked improvement in knowledge scores after the awareness programme. The mean post-test score (20.6 ± 2.8) was significantly higher than the mean pre-test score (12.4 ± 3.2), indicating the effectiveness of the intervention.

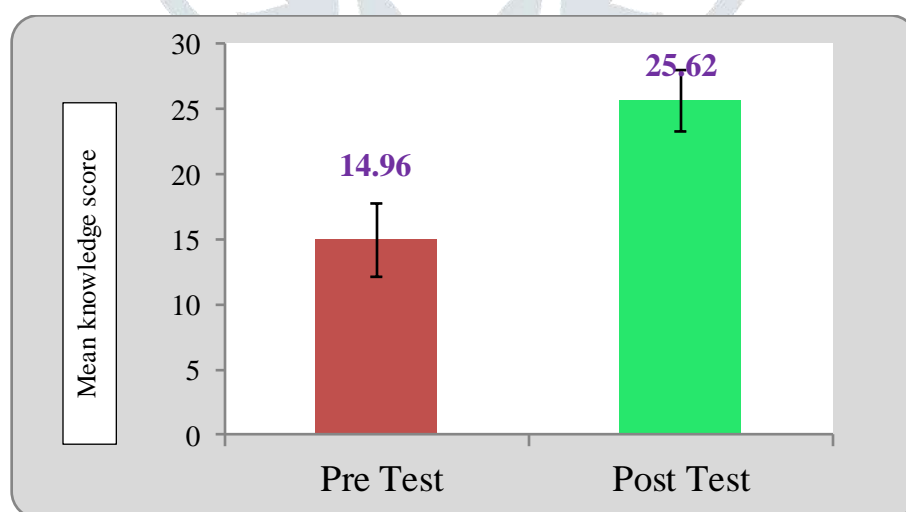
Chi-square analysis showed that certain demographic variables, such as age and monthly family income, were significantly associated with pre-test knowledge scores ($p < 0.05$), whereas other variables like gender and type of family did not show a significant association. These results suggest that the awareness programme was effective in enhancing knowledge regarding aggression management among adolescents, with age and income playing an influencing role.

Table 1: Percentage wise distribution of Adolescents according to their demographic characteristics.

n=110		
Demographic Variables	No. of Adolescents	Percentage (%)
Age(yrs)		
15-16 yrs	31	28.2
16-17 yrs	56	50.9
17-18 yrs	18	16.4
18-19 yrs	5	4.5
Gender		
Male	45	40.9
Female	65	59.1
Family Income (Rs)		
Below 10000 Rs	38	34.5
10001-20000 Rs	40	36.4
20001-30000 Rs	26	23.6
>30000 Rs	6	5.5
Type of family		
Joint	37	33.6

Nuclear	48	43.6
Single Parent	16	14.5
Extended	9	8.2
Number of siblings		
No Sibling	13	11.8
One	60	54.5
Two	24	21.8
Three	13	11.8
Occupation of father		
Laborer	33	30.0
Private Service	37	33.6
Govt Service	26	23.6
Business	14	12.7
Occupation of mother		
Housemaker	48	43.6
Private Service	21	19.1
Govt Service	23	20.9
Others	18	16.4
Birth Order		
First	51	46.4
Second	53	48.2
Third	6	5.5

Table No.1 shows that Among the 110 participants, the majority (50.9%) were in the 16–17-year age group. The sample was predominantly female (59.1%). A large portion of the adolescents (43.6%) belonged to nuclear families, and the most common monthly family income was between ₹10,001-₹20,000 (36.4%).



Graph No.1 Significance of difference between Knowledge Score in pre and post-test of Adolescents

Graph No. 1 show that the mean knowledge score in the pre-test was 14.96 ± 2.80 . Prior to the intervention, 75.5% of adolescents had a "good" level of knowledge, while 16.4% had an "average" level. Following the awareness program, the mean knowledge score significantly increased to 25.62 ± 2.36 in the post-test. In the post-test, 70.91% of adolescents demonstrated an "excellent" level of knowledge, and 28.18% had a "very good" level. The difference between pre-test and post-test scores was statistically significant, with a calculated 't' value of 29.98 ($p < 0.05$). This indicates that the awareness program was effective in enhancing knowledge regarding aggression management, and the research hypothesis H1 was accepted.

Table No.2: Association of post-test knowledge score regarding management of aggression among adolescents in relation to their age in years

Age in year	No of Adolescents	Poor	Average	Good	Very Good	Excellent	χ^2 -value	p-value
15-16 yrs	31	0	13	18	0	0	27.64	0.0001 S,p<0.05
16-17 yrs	56	0	5	47	4	0		
17-18 yrs	18	0	0	14	4	0		
18-19 yrs	5	0	0	4	1	0		

Table no 2 shows that findings showed a significant association between adolescents' age and their knowledge scores, as the calculated chi-square (27.64) exceeded the tabulated value (12.59) with $p = 0.0001$ (<0.05). Thus, age was statistically related to pre-test knowledge scores.

Table.No.3: Association of post-test knowledge score regarding management of aggression among adolescents in relation to their Monthly family income (Rs)

Family Income (Rs)	No of Adolescents	Poor	Average	Good	Very	Excellent	χ^2 -value	p-value
Below 10000 Rs	38	0	15	23	0	0	26.23	0.0001 S,p<0.05
10001-20000 Rs	40	0	2	34	4	0		
20001-30000 Rs	26	0	1	21	4	0		
>30000 Rs	6	0	0	5	1	0		

Interpretation: - The table No.3 showed that a significant association between monthly family income and adolescents' knowledge scores, as the calculated chi-square (26.23) exceeded the tabulated value (12.59) with $p = 0.0001$ (<0.05). Thus, income was statistically related to pre-test knowledge scores.

IX. DISCUSSIONS

The study aimed to assess the effectiveness of an awareness program on aggression management knowledge among adolescents. The pre-test results indicated that a majority of adolescents had limited knowledge, with a mean score of 14.96 ± 2.80 , reaffirming the need for structured educational interventions. This aligns with findings from Sharma (2016), which highlighted that insufficient knowledge can lead to an inability to regulate aggressive behavior.⁹

The significant improvement in post-test scores demonstrates that structured educational programs can effectively enhance adolescents' understanding and skills in managing aggression. These results are consistent with previous research by Kaveh et al.¹⁰ (2022) and Sharma (2016), which also showed that educational interventions reduce aggressive tendencies. The findings support Bandura's Social Learning Theory,¹¹ which suggests that behavior, while learned, can be modified through targeted programs that teach non-violent coping strategies like problem-solving and emotional regulation. The intervention also enhanced participants' awareness of how peer and family dynamics influence their emotions, encouraging them to seek support when needed.

CONCLUSION

This study shows that aggression in adolescents is influenced by biological, psychological, and social factors. Early identification and timely interventions are important to prevent negative outcomes. Awareness programs, behavioral therapies, and positive reinforcement can reduce aggression and improve coping skills. Support from educators, parents, and healthcare professionals is essential to promote emotional control and conflict resolution. A combined approach can help adolescents manage aggression better and lead to healthier social relationships.

Ethical consideration

Approval for the study was obtained from the institutional ethical committee IEC No. 2086/23-02-2024 and prior permission was taken from the concerned authorities. Informed consent was obtained from all participants before data collection, and confidentiality as well as anonymity of the subjects was strictly maintained throughout the study.

Limitations

The study was limited to a specific geographical area with a sample of 110 junior college adolescents, which may affect the generalizability of the findings. As data were collected using a self-reported questionnaire, the results could also be influenced by response bias.

Recommendations

Based on the study's findings, the following recommendations are proposed:

- A similar study should be replicated with a larger sample across various settings to enhance generalizability.
- Aggression management education should be integrated into the standard school curriculum.
- Parenting workshops should be organized to educate families on identifying and managing adolescent aggression.
- Educational institutions should collaborate with healthcare professionals to create structured aggression management programs.
- Community engagement should be increased through awareness campaigns and the establishment of counseling centers for adolescents.
- Digital resources, such as mobile apps and online modules, should be developed to educate adolescents on aggression management strategies.

REFERENCES

1. World Health Organization. (n.d.). Adolescent health. World Health Organization. <https://www.who.int/health-topics/adolescent-health>
2. World Health Organization. (n.d.). Maternal, newborn, child and adolescent health. World Health Organization. https://www.who.int/maternal_child_adolescent/en/
3. Kumar, M., Bhilwar, M., Kapoor, R., & others. (2016). Prevalence of aggression among school-going adolescents in India: A review study. *Indian Journal of Youth and Adolescent Health*, 3(4), 39–47.
4. Pandey, J. (Ed.). (2000). *Psychology in India revisited: Developments in the discipline, volume 2: Personality and health psychology*. SAGE Publications.
5. Ittel, A. (2011). Aggression in adolescence – The contribution of longitudinal studies. *International Journal of Developmental Science*, 5(1–2), 73–84. <https://doi.org/10.3233/DEV-2011-001>
6. Simalti, S. (n.d.). *Mental health nursing*. Shri Guru Ram University College of Nursing, Dehradun, India
7. Pathak, T., & Kaur, R. (n.d.). *Mental health nursing*. Nightingale Institute of Nursing, Noida. <https://doi.org/10.21474/IJAR01/7276>
8. Jiang, S., Chen, Y., & Wang, L. (2024). Effectiveness of community-based programs on aggressive behavior among children and adolescents: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*. Advance online publication. <https://doi.org/10.1177/15248380241227986>
9. Sharma, S. K. (2016). *Nursing research and statistics*. Elsevier Health Sciences.
10. Kaveh, M., et al. (2022). The effect of a theory-based educational intervention on reducing aggressive behavior among male students: A randomized controlled trial. *Journal of Education and Health Promotion*, 11(1), 238. https://doi.org/10.4103/jehp.jehp_1112_21
11. Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1–26. <https://doi.org/10.1146/annurev.psych.52.1.1>