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A STUDY TO ASSESS THE PRE-TEST AND POST-TEST KNOWLEDGE REGARDING SUBSTANCE USE AMONG ADOLESCENT BOYS IN SELECTED SCHOOLS OF BANGALORE, KARNATAKA

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ABSTRACT

Background: *Adolescence is a crucial stage of life when many individuals are first exposed to the risk of substance abuse. Early involvement can lead to serious long-term health issues and social problems. Unfortunately, many school-going adolescents still lack proper awareness about the harmful effects of drug use, making this a significant public health concern.*

Objectives: *This study was conducted to understand how much adolescent boys already know about substance abuse and to evaluate whether a structured teaching program could improve their knowledge.*

Methodology: *A quantitative, pre-experimental design was used for the study. A total of 100 adolescent boys from selected schools were chosen through simple random sampling. Their knowledge was assessed using a structured questionnaire before and after the teaching program.*

Results: *Before the intervention, nearly half of the participants (49%) had an average level of knowledge, while 30% had poor understanding (Mean = 1.91). After the teaching program, there was a clear improvement—58% of the participants demonstrated good knowledge, and the average score increased to 2.45. Only 13% remained in the poor knowledge category.*

Conclusion: *The structured teaching program proved to be highly effective in improving awareness and understanding of substance abuse among adolescent boys. Incorporating such educational initiatives into school curricula can play a key role in helping young people make healthier, informed decisions and reduce the risk of substance-related problems.*

Keywords: *Adolescent boys, Knowledge, Schools, Structured Teaching Program, Substance Abuse*.

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INTRODUCTION

Adolescence is recognized as the period for the onset of behaviors and conditions that not only affect health limited to that time but also lead to adulthood disorders. Unhealthy behaviors such as smoking, drinking, and illicit drug use often begin during adolescence; they are closely related to increased morbidity and mortality and represent major public health challenges. Unemployment, poor health, accidents, suicide, mental illness, and decreased life expectancy all have drug misuse as a major contributing factor. (Henkel D 2011, WHO 2015)

Substance abuse has a major impact on individuals, families, and communities as its effects are cumulative, contributing to costly social, physical, and mental health problems. (Sussman S et al 2008)

Several factors can enhance the risk for initiating or continuing substance abuse including socioeconomic status, quality of parenting, peer group influence, and biological/inherent predisposition toward drug addiction. (NIDA 2010)

This culminates in a cycle where these individuals cease to perform as effective members of society and instead are consumed by their addictions. (Mcintyre P 2002)

Substance use and dependence are among the most prevalent causes of adolescent morbidity and mortality. Substance abuse describes a pattern of substance (drug) use leading to significant problems or distress such as failure to attend school, substance use in dangerous situations (driving a car), substance-related legal problems, or continued substance use that interferes with friendships and/or family relationships. Substance abuse, as a disorder, refers to the abuse of illegal substances or the abusive use of legal substances. Alcohol is the most common legal drug of abuse. People can often stop substance abuse on their own or with a little help when they realize it is interfering with their lives. (https://www.stanfordchildrens.org)

Global trade and liberalization of socio-cultural interaction of society have made easy access to use and spread of narcotic substances. Drug addiction is a universal phenomenon with its roots in history and tradition. The drug abuse problem has become a global challenge. From a transit country India is fast becoming a major consumer of different kinds of drugs. It has become a worldwide phenomenon among students.

Substances frequently abused by adolescents include, but are not limited to, the following:

- Alcohol
- Marijuana
- Tobacco
- Prescription drugs
- Hallucinogens
- Cocaine
- Amphetamines
- Opiates
- Anabolic steroids
- Inhalants
- Methamphetamine

REVIEW OF LITERATURE

Aju M S, Aditi C, Adithya, Aishwarya, Meera Chandran, Jilu John,2025 conducted a study on A Study to Assess the Effectiveness Of Structured Teaching Program me On Knowledge Regarding Substance Abuse Among Adolescent Boys In Selected Nursing School, Bangalore. Results: Results revealed that a substantial increase in knowledge following the intervention. The mean pre-test score was 28.24% (SD=3.13), while the mean post test score was 71.76% (SD=1.96). The calculated t-value was 22.46 for the pre-test, which is statistically significant at $p<0.05$ level. The study concluded that there is significant difference between the pre-test and post-test knowledge score and study was effective in increasing knowledge among the adolescents in selected schools.

M Shanmukha Devi et al 2025 conducted a study on A Descriptive Study To Assess The Level Of Knowledge Regarding Substance Abuse Among Adolescent Boys In M.P.P.H Schools, Denduluru. Results: The study revealed that 45% of participants had inadequate knowledge, 40% had moderately adequate knowledge, and only 15% had adequate knowledge regarding substance abuse. No statistically significant association was found between knowledge levels and demographic variables such as age, education, type of family, income, religion, family history of substance use, or source of information ($p > 0.05$). The findings indicate a general lack of awareness among adolescent boys, regardless of demographic background. This underscores the need for school-based

educational interventions and community awareness programs to strengthen knowledge and reduce the risk of substance abuse. Integrating such programs into the school curriculum can empower adolescents to make informed and healthy lifestyle choices.

Das S, Kamath VG, Prabhu DA, Praharaj SK, Pandey AK,2025 conducted a study on Knowledge and Attitude Regarding Substance Use and Its Determinants Among College Students in a Coastal Town of South India. Results: The mean age of study participants was 19 ± 1.38 years with 39(1.8%) of them indulging in substance use. Around 434(20%) and 1866(86%) of them had good knowledge and positive attitude towards substance use respectively. Though the substance users had better knowledge as compared to non-users, attitude was better in the non-users. Paternal education, affluent socioeconomic status and usage of substances significantly correlated with knowledge. Gender and substance usage were independent predictors of attitude.

RESEARCH METHODOLOGY

The research approach adopted for this study was quantitative approach as the researcher aimed at assessing the effectiveness of structured teaching program on knowledge regarding substance abuse among adolescent boys. The research design adopted for this study was pre experimental study with randomization. The study was conducted at selected schools. In the study accessible population consists of adolescent boys. The sample of the study consists of adolescent boys.in selected schools. The sample size was 100. The sampling technique adopted in the present study was simple random sampling technique using lottery method.

DATA ANALYSIS AND INTERPRETATION

Objective 1: To Assess the Pre-test Knowledge Regarding Substance Use Among Adolescent Boys (N = 100)

Table 1: Distribution of Participants According to Pre-test Knowledge Level

Knowledge Level	Frequency (f)	Percentage (%)
Good	21	21%
Average	49	49%
Poor	30	30%
Total	**100**	**100%**

Statistical Measures (Knowledge)

(Scoring: Poor = 1, Average = 2, Good = 3)

- **Mean** = (21×3 + 49×2 + 30×1) / 100
  = (63 + 98 + 30) / 100
  = **1.91**
- **Median** = **2 (Average category)**
- **Mode** = **2 (Average category)**

ANALYSIS

The distribution shows that nearly half of the adolescent boys (49%) had an average level of knowledge regarding substance use, while 30% demonstrated poor knowledge, and only 21% had good knowledge.

The mean knowledge score of 1.91 indicates that the overall level of knowledge among participants is slightly below average, suggesting insufficient awareness about substance use and its consequences.

The median and mode both fall in the average category, indicating that the majority of participants are clustered around a moderate level of understanding.

However, the presence of a considerable proportion (30%) in the poor knowledge category highlights a significant knowledge deficit. This suggests that many adolescents lack adequate information regarding the harmful effects and prevention of substance use.

Objective 2: To Assess the Post-test Knowledge Regarding Substance Use Among Adolescent Boys (N = 100)

Table 2: Distribution of Participants According to Post-test Knowledge Level

Knowledge Level	Frequency (f)	Percentage (%)
Good	58	58%
Average	29	29%
Poor	13	13%
Total	**100**	**100%**

Statistical Measures (Knowledge)

(Scoring: Poor = 1, Average = 2, Good = 3)

- **Mean** = (58×3 + 29×2 + 13×1) / 100
  = (174 + 58 + 13) / 100
  = **2.45**
- **Median** = **3 (Good category)**
- **Mode** = **3 (Good category)**

ANALYSIS

The post-test findings reveal a marked improvement in knowledge levels among adolescent boys. A majority of participants (58%) attained a good level of knowledge, while 29% were in the average category, and only 13% remained in the poor category.

The mean knowledge score increased to 2.45, indicating a substantial shift towards higher knowledge levels compared to the pre-test.

Both the median and mode fall in the good category, showing that the central tendency of the group has moved upward, with most participants now demonstrating a strong understanding of substance use and its consequences.

The reduction in the poor knowledge category from a higher baseline to just 13% suggests that the teaching program effectively addressed knowledge gaps among the majority of participants.

DISCUSSION

Objective 1: Pre-test Knowledge Regarding Substance Use

The present study revealed that, in the pre-test assessment, 49% of adolescent boys had average knowledge, while 30% demonstrated poor knowledge and only 21% had good knowledge regarding substance use. The mean knowledge score was 1.91, indicating that the overall knowledge level was slightly below average, with a considerable proportion of participants lacking adequate awareness.

These findings are comparable with the study conducted by Pandya et al. (2025), which assessed knowledge and attitude regarding substance use among senior secondary school students in Rajasthan. The study reported that although students had some level of awareness, knowledge was not comprehensive and gaps persisted in understanding substance-related risks, with only a limited proportion demonstrating adequate knowledge levels.

Similarly, another study by Sashank (2025) also highlighted that a substantial number of school students possessed only moderate or inadequate knowledge regarding substance abuse, emphasizing the need for structured educational interventions.

The findings of the present study are in alignment with these studies, as the majority of participants were clustered in the average and poor knowledge categories, indicating insufficient baseline awareness. However, the proportion of students with good knowledge in the present study (21%) appears relatively lower compared to some other settings, suggesting variability based on educational exposure and contextual factors.

Thus, it can be inferred that adolescents generally possess partial and fragmented knowledge regarding substance use, reinforcing the importance of implementing structured teaching programs to enhance their understanding and promote preventive behavior.

Objective 2: Post-test Knowledge Regarding Substance Use

The present study revealed that in the post-test, 58% of participants had good knowledge, while 29% had average knowledge and only 13% had poor knowledge. The mean knowledge score increased to 2.45, indicating a substantial improvement in knowledge levels following the intervention.

These findings are comparable with the study conducted by Sharma et al. (2020), which evaluated the effectiveness of a structured teaching program on substance abuse among adolescents. The study reported a significant increase in knowledge scores post-intervention, with a majority of participants shifting from moderate to good knowledge levels.

The findings of the present study are consistent with this study, as a clear improvement in knowledge was observed after the intervention. The proportion of participants with good knowledge increased markedly, while those with poor knowledge decreased, demonstrating the effectiveness of the structured teaching program.

CONCLUSION:

The findings of this study show that many adolescent boys initially had limited understanding of substance abuse. After participating in the structured teaching program, their knowledge improved significantly. This suggests that well-planned educational sessions can make a real difference in helping young people understand the risks of substance use and make healthier choices. It also highlights the importance of including such programs in school education to better protect adolescents from substance-related harm.

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