Original Article

Health Awareness Programme on Knowledge Regarding Substance Abuse and its Consequences among Adolescents

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Abstract

Aim: Substance abuse among adolescents has become a global challenge and an important public health concern. Aims include to assess and compare the knowledge score on substance abuse and its consequences among the adolescents before and after administration of health awareness programme.

Materials and Methods: A pre-experimental study with single group pre-test and post-test research design with quantitative approach was undertaken on 50 adolescents selected by convenient sampling technique in Kalinga Institute of Social Sciences, Bhubaneswar. Data were collected through self-structured questionnaire.

Results: About 64% were in the age group of 17–19 years. 90% were Hindu. 52% of the father of adolescents had primary education and 54% of mothers were illiterate. 66% of the adolescents were from nuclear family. 88% were from rural area, 40% were having a history of substance abuse in the family, and 64% of them were having information about substance abuse through friends and relatives. The level of knowledge of the adolescents during pre-test was 72% inadequate knowledge. During post-test, 66% had adequate knowledge regarding substance abuse. Area wise post-test highest mean score (3.68 ± 0.47) which is 92% of maximum scores was obtained from the area "cannabis and its consequences and prevention." The highest difference in mean percentage was 39.8%. Highly significant difference was found between pre- and post-test knowledge scores at $P \leq 0.01$, health awareness programme on substance abuse was found to be effective.

Conclusion: Adolescence is the period of storm and stress. Health awareness programme is an effective method to gain knowledge and develop favorable attitude toward the prevention of substance abuse among adolescents.

Keywords: Adolescents, health awareness programme, knowledge, substance abuse

Introduction

Adolescence is a fluctuating period, wherein there is total confusion regarding everything that is supposed to be performed. It is a period, wherein the adolescents love to be popular among all their peers and ready to do things as they wish and something that gives them a thrill. They have their own social grouping, new values in selection of friends, and social acceptance.[1] Addiction, as a social disorder, is often referred to as a world-destroying disaster among students.[2]

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Substance abuse is one of the major health challenges across the world. The United Nations Office on Drugs and Crime reports that approximately 5% of the world's population used an illegal drug in 2010 and 0.6% of the world's adult population used different drugs. According to the statistics of Centers for Disease Control 2007, 6% of the United States population belonged to aged group 12 and above, whereas 18.8% of high school students had used marijuana in 2006 which was most commonly abused drug by eighth-grade students.[3] However, in India, adolescents constitute 20% (243 million) of the country's population. Among them, 54% belong to 10–14 years age group and nearly 46% are in the most vulnerable age group. In recent days, there has been gradual increase in substance use among the adolescent population and initiating substance use by an early age.[4]

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A survey conducted by a non-government organization revealed that 13% of adolescents who involved in substance use were below the age of 20 years, where 21% had used alcohol, 3% had used cannabis, and remaining 0.1% had used opium.[5] A study conducted by Gincy in Mangalore University Colleges among 15,000 students showed that 0.4% of females and 7.04% of males have used substances varying from Ganja to Heroin. Among them, 0.4% of the females and 6.6% of the males were drug addicts. It also revealed that among 15,000 students under study, 1050 students were addicts.[1] A national study conducted among 5–18-year-old children in different states of India also revealed that majority of respondents from Karnataka and Andhra Pradesh (85–89%) were the current alcohol users.[6] The most common reason for substances used were found as curiosity (16.9%), enjoyment (12.2%), to be accepted by others (12%),[7] peer pressure and whereas underprivileged adolescents get consumed to escape from unhappy, cruel parental values, unfriendly home atmosphere, and poor interpersonal relationships.[8] The common substances used by adolescents were alcohol, tobacco, cannabis, and inhalant substances which are known as gateway drugs because the use of these substances leads to further use of other hard drugs.[5]

Statement of the problem

"Effectiveness of Health awareness programme on knowledge regarding substance abuse and its consequences among the adolescents in a selected college of Kalinga Institute of Social Sciences (KISS), Bhubaneswar, Odisha."

Objectives

The objectives of this study were to assess and compare the score of the knowledge regarding effectiveness of health awareness programme on substance abuse and its consequences among the adolescents before and after administration of health awareness programme.

Hypothesis

H_1: There will be a significant difference between the pre-test and post-test knowledge scores after intervention.

Research Methodology

Research design

This was a single group pre-test and post-test pre-experimental research design.

Research setting

The study was conducted at KISS, KISS Deemed to be University, Bhubaneswar, Odisha.

Sample

The participants were Std. 11th and Std.12th students of KISS.

Sample size

A total of 50 adolescents were undertaken for the study.

Sampling technique

This was a non-probability convenience sampling technique.

Development of research tool

- A self-structured closed-ended knowledge questionnaire which includes close-ended questionnaire in the form of multiple choice question was developed in this study to obtain answers from the adolescents. The steps followed in preparing the tool were as follows: Review of literature, opinion and suggestion from experts, and the investigators own experience in the community field. The tools consist of the following:
- Section-A: It includes demographic variables of adolescents such as age, sex, religion, education of father, education of mother, type of family, place of residence, history of substance abuse in the family, and source of information about substance abuse.
- Section-B: Self-structured questionnaire contains 20 knowledge items. The questions were divided into different areas which include introduction, definition, causes, types, impact, prevention, and treatment.
- Score interpretation: The total score was 20. Each correct answer was awarded with one score while incorrect answers were given zero score [Tables 1-5].

Preparation of the first draft of teaching package: The first draft of health awareness programme was developed on the basis of information obtained during extensive literature review and objectives in blueprint. The entire content was prepared as poster, suspense chart, flip chart, and model.

Data collection procedure: Before collecting data, administrative permission was sought from the authorities of the areas. With prior informed consent from the adolescents and assuring them about the confidentiality of the information, interview schedule was used as the method of collecting data. Using tool pre-test was conducted. Same day health awareness was provided in the form of intervention. The investigator then demonstrated the poster, suspense chart, flip chart, and model. On the 7th day, knowledge was assessed using the same tool. All subjects were very cooperative and the investigator expressed her gratitude for their cooperation.

Results

Major findings of the study

1. Finding related to demographic variables of adolescents: The finding related to demographic variable revealed that majority 32 (64%) of adolescents belongs to the age group of 17–19 years. 25 (50%) were male and female. 45 (90%) were Hindu. 33 (66%) had nuclear family. 44 (88%) were from rural area. Educational

Table 1: Percentage of scores revealing the level of knowledge

Level of knowledge	Knowledge score in (%)	Knowledge score
Inadequate knowledge	>50	0–10 marks
Moderately adequate knowledge	50–75	11–15 marks
Adequate knowledge	<75	16–20 marks

qualification of father 26 (52%) was primary education. Majority educational qualification of mother 27 (54%) were illiterate. 20 (40%) family had a history of substance abuse. 18 (36%) adolescents had source of knowledge from mass media and 32 (64%) from friends and relatives.

Table 2: Distribution of subjects according to the demographic variable $n=60$

Demographic variables	F (%)
Age (in years)	
14–16	18 (36)
17–19	32 (64)
Sex	
Male	25 (50)
Female	25 (50)
Religion	
Hindu	45 (90)
Christian	5 (10)
Type of family	
Nuclear	33 (66)
Joint	17 (34)
Educational qualification of father	
Illiterate	15 (30)
Primary	26 (52)
Secondary	6 (12)
Higher secondary and above	3 (6)
Educational qualification of mother	
Illiterate	27 (54)
Primary	17 (34)
Secondary	5 (10)
Higher secondary and above	1 (2)
Residence	
Rural	44 (88)
Urban	2 (4)
Slum	4 (8)
History of substance abuse	
Yes	20 (40)
No	30 (60)
Source of information	
Mass media	18 (36)
Friends/others	32 (64)

Table 3: Frequency and percentage distribution of level knowledge on pre-test and post-test knowledge score regarding substance abuse and its consequences among the adolescent $n=60$

Level of knowledge	Pre-test	Post-test
	Frequency (%)	Frequency (%)
Inadequate knowledge	36 (72)	0 (0)
Moderate knowledge	14 (28)	17 (34)
Adequate knowledge	0 (0)	33 (66)

2. Finding related to the level of knowledge regarding substance abuse and its consequences among the adolescent:
   - In pre-test, majority of adolescents 36 (72%) had inadequate knowledge and 14 (28%) had moderate knowledge.
   - During post-test, the majority of the adolescents 33 (66%) had adequate knowledge where 17 (34%) had moderate knowledge regarding on substance abuse and its consequences.
3. Finding on area wise distribution of knowledge score regarding substance abuse and its consequences among the adolescent:

   The highest mean score (3.68 ± 0.47) which is 92% of maximum score was obtained for the area of "cannabis, its consequences and prevention." The lowest mean score (2.16 ± 0.68) which is 72% was obtained by them for the area of "smoking its consequences, treatment, and prevention" and shows the highest difference in mean percentage was 39.8%. Further, for all the other areas, the difference in mean percentage reveals the effectiveness of health awareness of substance abuse and its consequences.
4. Finding related to effectiveness of health awareness programme substance abuse and its consequences:

   There was a significant difference between the post-test knowledge score and pre-test knowledge score. As a calculation $P = 0.001$ value is lesser than tabulated $P = 0.01$ value, health awareness programme on substance abuse and its consequences was found to be effective.

Discussion

In the past two decades, there has been a dramatic increase in the demand for interventions to address the substance abuse problem. According to Mullen *et al*., 51% of high school seniors and 59% of young adults admitted to having used an illicit substance.[9] Further, Mathur *et al*. discussed that studies in India show that 80% of adults start using psychoactive substance before 18 years of age and if they continue with it addiction may be developed within 3 years with increased risk of physical and mental illness.[10] A study supported to this study revealed that substance use was found among family

Table 4: Area wise distribution of mean, mean percentage, and standard deviation on pre-test and post-test knowledge score $n=60$

Areas	Pre-test	Post-test	Difference in mean %
	Mean±SD (%)	Mean±SD (%)	
Definition of substance abuse	1.22±0.54 (61)	1.80±0.40 (90)	29
Causes of substance abuse	0.90±0.58 (45)	1.58±0.49 (79)	34
Cannabis - its impact, prevention, and treatment	2.10±0.83 (52.2)	3.68±0.47 (92)	39.8
Alcohol - its impact, prevention, and treatment	3.78±1.40 (42)	6.60±1.21 (73.33)	31.33
Smoking - its impact, prevention, and treatment	1.44±0.67 (48)	2.16±0.68 (72)	24

Table 5: Comparison between level of pre-test and post-test knowledge scores among the adolescents regarding substance abuse and its consequences

Characteristic	Pre-test Mean±SD	Post-test Mean±SD	*P* value
Level of knowledge	9.530±1.67	16.163±1.67	0.001

brother (5.15), best friends smoke (2.92) and adolescent students also reported that only 16% of students having ever tried cigarette or bidi smoking.[11]

There is a supportive study in this regard conducted by Goswami *et al*., which shows a study was conducted among 91 adolescent's age of 17–18 years from various B.Sc. Nursing colleges at Udaipur district of Rajasthan using one group, pre-test and post-test design was used for this study. Self-structured knowledge questionnaires (pre-test-post-test) were administered. The present study shows that pre-test knowledge level of students was significantly ($P < 0.05$) less toward substance abuse. The study reveals that proper education (STP) enhances post-test knowledge among students regarding substance abuse.[12]

Conclusion

Adolescence is a period of both opportunities and a time of vulnerability and hazard. During this period, they make significant choice about their health behavior pattern that will continue into adulthood. Community health nurses can utilize this health awareness programme to sensitize nurses in school and community setting for prevention and promotion of adolescents from substance use.

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