Effectiveness of STP on Knowledge Regarding Substance Abuse among Adolescents: A Pre-experimental Study

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Abstract

Background of the study: Substance abuse is a social evil found worldwide. It is prevalent mostly in young children and especially males. Large proportion of world’s population is now under the threat of substance abuse. It is maladaptive pattern of drug use leading to impairment or distress in social and occupational functioning manifested by failure to fulfil major roles. Among the environment factors attributed to drug dependence are rapid technological development with associated need for extended period of education along with the inapplicability of old solution to novel problem, television, world travel, influence freedom to speculate and experiment have encouraged youngster to question and often reject the values and goals of their parents established social values are perceived as irrelevant , all to be stripped away partly through the use of drugs in order to reveal the real person, the real humanity and the real goal of mankind. The adolescents need to educate about substance abuse to prevent its prevalence. Aim of the study: The present study was undertaken to evaluate the effectiveness of structured teaching program on knowledge regarding substance abuse among adolescents of selected schools of Punjab. Materials and methods: The research design for the present study was quasi experimental pre-experimental one group pre- and post-test. The sampling technique used was non-probability convenience sampling technique. The sample size was 60 students both male and female from class 7th, 8th, 9th, 10th selected from Govt. Senior Secondary School, Verka, Amritsar. The data analysis was done with descriptive statistics and inferential statistics. For comparison paired “t” test and to find out association of knowledge regarding substance abuse among adolescents with demographic variables chi-square test is used in the study. Results: The findings reveal that in pre-interventional assessment most subjects had moderately adequate knowledge regarding substance abuse i.e., 44 (73.3%), adequate 14 (23.3%) and only 2 (3.34%) in inadequate category. In post-interventional assessment majority of the subjects fall in adequate category i.e., 44 (73.3%) and only 16 (26.67%) in moderately adequate category. In subjects pre- and post-interventional mean±S.D. was 18.96±3.35 and 23.79±2.75, t=10.041, df =29, p = <0.0001 showing significance at the level of p= 0.05. So, hypothesis “There was statistically significant difference in mean pre- and post-intervention of knowledge regarding substance abuse among adolescents at 0.05 level of significance” was accepted. Conclusion: It was concluded after administration of STP related to substance abuse had significant difference in pre- and post-interventional score in subjects. Recommendations: It has been recommended that same study can be done on different samples in different settings to enhance its generalization.

Keywords: Adolescents, effectiveness, knowledge, substance abuse, structured teaching programme

INTRODUCTION

“Addiction is like a curse and until it is broken, its victim will perpetually remain in the shackles of bondage.”

—Oche Otorkpa
Substance abuse is a worldwide problem which grows at an alarming rate [1]. This problem crosses all lines of race, culture, education, and socio-economic status. Substance abuse is the source of all physical, social, economic, emotional as well as occupational problems. The problems included are crime, domestic violence, sexually transmitted diseases, unemployment, hopelessness, teen pregnancy, failure in school etc. [2].

Drug dependence is defined as “A state, psychic and sometimes physical, resulting from interaction between a living organism and a drug characterized by behavioral and other responses that always include a compulsion to take drug on a continuous or periodic basis in order to experience its psychic effects and sometimes to avoid the discomfort of its absence” [3].

A national household survey conducted by Rapid assessment study of drug abuse in target communities in India revealed that there are 12.71 million drug abusers in India. The most abused drugs are Alcohol-43%, Heroin-38.2%, Opium-9.3%, Cannabis-6.5%, and other opiates-4.3% respectively [4]. Several surveys based on government reports revealed that half of the registered cases under Narcotic drugs and Psychotropic substance act came from Punjab [5]. A study estimates that 1/3rd of Punjab household has at least one. Addict in the family with most affected individuals in Tarntarn district [6].

The use of drugs stated in adolescence and young adulthood. The main reason behind use of drugs that they are biologically wired to seek new adventures and strong will to take hazardous risks. Drugs helps them to fulfill their developmental drives. Main causes behind this devastating problem are genetic vulnerability, poor impulse control, psychiatric problems, peer pressure, easy availability of drugs in neighborhood [7].

Chandigarh commission for children’s rights interviewed 161 students in the age group 13–19 years. The study revealed that 40% of students started consuming drugs at the age of 13–14 years. Most students preferred smoking over drinking Alcohol. “Teen drug addiction is increasing day by day and not showing any sign of slowing down. Because gaining access to alcohol can, sometimes, be difficult for teens, they often resort to different types of drugs such as ganja, weed, cocaine, tobacco, ‘cool lip’, cold medications, ‘nila thotha’ and heroin,” says the study [8].

A Study was conducted on drug dependence in adolescents in north India was found that most of them came from nuclear family (63.5%), with urban background (83.5%) and were school dropouts (54.1%). Mean age-at-first use of the primary substance was 14.8 Year. The commonest used substances were opioids (76.2%) and nicotine (54.2%) respectively. The main reason was curiosity (78.8%) for drug abuse. About one-fifth (21.2%) of the subjects indulged in high-risk behavior such as having sexual intercourse with multiple sexual partners. Nearly half of the subjects had positive family history of either drug dependence (40.2%) or psychiatric disorder (5.5%) [9].

Several risk factors have identified among adolescents and early adults drug abuse which include family conflicts, academic difficulties, depression, conduct disorders, peer pressure, ignorance, relief from stress, increased energy, to relieve pain, escape from reality, to keep alert and for feeling of excitement [10]. The overall prevalence of psychosocial problems among adolescents was found to be 31.2%. The psychosocial problems are more in males as compared to females [11].

Despite all efforts being made by parents, teachers, large number of adolescents faces one or many problems. When the problem is aggravated, the parents may seek help. But most of them face minor problems; modifying their behavioral patterns, personality [12]. So, it is high time to carry out effective intervention to create awareness among the adolescents about prevention of substance abuse. Thus, adolescents can be prevented from substance abuse consumption with timely and proper motivation. Structure teaching programme is one of such effective intervention on prevention of substance abuse which can be carried out to bring the awareness among adolescents’ student in school set up.
Objectives of the study
- To assess the pre-interventional knowledge regarding substance abuse among adolescents in experimental group.
- To determine the post-interventional knowledge regarding substance abuse among adolescents in experimental group.
- To compare the pre and post-interventional knowledge regarding substance abuse among adolescents in experimental group.
- To find out the association of knowledge regarding substance abuse among adolescents with selected demographic variables in experimental group.

MATERIALS AND METHODS
The research approach use in the study is quantitative and research design is pre-experimental one group pre- and post-test design which includes manipulation with no randomization and no control. The intervention given was structured teaching programme on substance abuse. The present study was conducted in government Senior Secondary School Verka, Amritsar. The selection of research setting was done based on geographical proximity, feasibility, the economy in terms of time, easy transport facilities, administrative approval, and availability of the sample. The adolescents were selected based on convenience sampling technique. The target population was adolescent boys and girls studying in Amritsar. The sample size was 60 adolescents selected by using non-probability convenience sampling technique.

Keys
Experimental group 01: Pre-test to assess knowledge about the substance abuse- Pre-test assessment
Experimental group X: Structured teaching program on substance abuse- Intervention
Experimental group 02: Post-test to assess knowledge about the substance abuse after 7 days- Post-test assessment

Following tools are used to measure variable under study.

It consists of two sections:
Section A: Demographic variables: This part consists of items related to respondent about age, gender, class, type of family, religion, family monthly income, and use of drugs in family.
Section B: Structured questionnaire: Structured questionnaire on knowledge assessment of adolescent boys and girls on substance abuse. It consists of items related to knowledge on substance abuse. Scoring was assigned to each statement as one for correct response and zero for wrong response with minimum and maximum score for 0 to 30. Total administration time is approximately 5–10 minutes (Table 1).

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Score</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>0–15</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Moderately adequate</td>
<td>16–23</td>
<td>51–75</td>
</tr>
<tr>
<td>Adequate</td>
<td>24–30</td>
<td>&gt;75</td>
</tr>
</tbody>
</table>

The tool was examined by experts in the field of nursing for content clarity, relevance, appropriateness meaningfulness and validity. Pilot study was conducted in January 2020 on 20% sample and found to be feasible. Try out tool was done to ensure the reliability and understanding of the tool. The scale has relatively high internal consistency and stability (r=0.88) stability established through split half method. Findings revealed that it was feasible to conduct the study. Prior to administration of tool to participants all the questions and queries were discussed and sort out before actual data collection. An informed written consent form was signed by each subject before data collection. All the subjects were ensured that confidentiality and anonymity was maintained throughout the study. Permission was obtained from institutional ethical committee to carry out the
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Written Permission was taken from Govt. Senior Secondary School, Verka, Amritsar. On day one, pre-test assessment of knowledge of substance use was assessed in subjects in selected group. On the same day intervention related to knowledge regarding substance abuse was given to selected group. Then after 7th day post-test was done. The data was analyzed by statistical package for social sciences (SPSS) version 16. The p0.05 level of significance was established as a criterion of statistical significance for all the statistical procedures performed. Appropriate descriptive and inferential statistics were used to analyze data as per purpose of the study.

RESULTS

Description of Selected Socio-demographic
The socio-demographic profile of subjects shows that majority belongs to the age of 14 years 20 (33.34%), 16 (26.66%) in 16 years, 12 (20%) and 12 (20%) in 13 years as well as 15 years respectively. The number of male and female subjects was equal. Maximum students studied in 8th 18 (30%) and 9th class 18 (30%). Majority of subjects belongs to Sikh religion 30 (50%). More than half subjects belong to rural area 44 (73.34%), had nuclear family 38 (63.34%) and family monthly income 10,001–20,000 were 24 (40%). In relation to Family members habits of smoking, alcoholism, drug addiction etc. wise distribution of adolescents, most adolescents in experimental said their family members are indulged in these habits 48 (80%) and least 12 (20%) in no category.

Distribution of Student’s Knowledge regarding Substance Abuse
The findings of Table 2 represent that during the pre-test assessment the majority of subjects were in moderately adequate category i.e., 44 (73.34%) but in post-test assessment fall in adequate category 44 (73.34%) respectively.

Distribution to Evaluate the Effectiveness of Structured Teaching Programme on Adolescent’s Substance Abuse (N=60)
Table 3 depicts the comparison of pre and post-interventional knowledge regarding substance abuse among adolescents in subjects. The pre- and post-interventional mean±S.D. was 18.96±3.35 and 23.79±2.75, t=10.041, df =29, p = <0.0001 showing significance at the level of 0.05. It was concluded that administration of STP related to substance abuse had significant difference in pre- and post-interventional score in subjects.

Table 2. Assessment of level of knowledge of adolescents on substance abuse in pre- and post-test (N=60).

<table>
<thead>
<tr>
<th>Knowledge related to substance abuse Range (0–30)</th>
<th>Pre-test score of subjects</th>
<th>Post-test score of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Inadequate (less than 50%)</td>
<td>2</td>
<td>3.34%</td>
</tr>
<tr>
<td>Moderately adequate (50–75%)</td>
<td>44</td>
<td>73.34%</td>
</tr>
<tr>
<td>Adequate (more than 75%)</td>
<td>14</td>
<td>23.34%</td>
</tr>
</tbody>
</table>

Table 3. Assessment of effectiveness of structured teaching programme on adolescent’s knowledge related to substance abuse

<table>
<thead>
<tr>
<th>Domain</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>Paired “t” test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Knowledge</td>
<td>18.96</td>
<td>3.35</td>
<td>23.79</td>
</tr>
</tbody>
</table>

Key: *= Significant, Level of significance p=0.05

Determine the Association between Pre-test Knowledge Scores of Adolescent’s Substance Abuse and Their Selected Socio-demographic Variables
The findings reveal association of pre-interventional knowledge regarding substance abuse among adolescents with religion $\chi^2$ (df) = 30.121 (6), p-value=0.00 and family member habits of smoking, alcohol, addiction etc. $\chi^2$ (df) = 15.106 (2), p-value= 0.00 in experimental group. Other demographic
variables like age in years, gender, class, habitat, type of family, family monthly income shows no significant association.

CONCLUSION
The findings of the study conducted on 60 adolescents revealed that in the pre-test majority of subjects had moderately adequate knowledge regarding substance abuse 44 (73.34%) but after STP intervention maximum lies in adequate category 44 (73.34%). So, it can be concluded that the STP was helpful to increase their knowledge related to substance abuse. We need to provide education to adolescents regarding evil of substance abuse at larger level to save future of our nation.

Limitations
The study was limited only to adolescents studying in schools of Amritsar further restricts the generalization of the study to a particular setting.

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This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflicts of Interest
The author declared that there was no conflict of interests with any organization regarding the materials discussed in this manuscript.

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REFERENCES