

# Effectiveness Of Brief Educational Intervention On Knowledge And Awareness Regarding Substance Abuse Among Urban Adolescent Students

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## **ABSTRACT**

### **Introduction**

*Globally, substance abuse is a major public health and social concern. With changes in lifestyle, globalization in substance marketing has increased acceptance of substances. Substance use disorder is the one of major cause for premature death and disabilities in the world, especially among the low- and middle-income countries, particularly in the youth, following lack of knowledge regarding its complications, peer group pressure and influence by social media etc. There is dearth of studies exploring the knowledge and awareness of substance use among students and effectiveness of brief interventions to improve the same. The objective of the study is to understand the level of knowledge and awareness on substance among the targeted group and to evaluate the effectiveness of brief educational intervention towards enhancing the awareness and knowledge among youth.*

### **Methods:**

*175 students were assessed on various domains of knowledge and awareness about substance use. A brief session imparting knowledge along with a roleplay to improve awareness was conducted for 90 minutes and reassessed. The difference in knowledge and awareness were assessed using paired t test.*

### **Results:**

*The mean age is 17.53 years with standard deviation of 1.593. And there are statistically significant changes following intervention in all the domains of knowledge and awareness.*

### **Conclusion:**

*Knowledge and awareness regarding substance addiction is found to be extremely poor among adolescents particularly in the pre assessment phase, and the current study is an evident that even a brief educational intervention can have considerable impact on improving knowledge and awareness.*

*Effectiveness of brief educational intervention on knowledge and awareness regarding Substance abuse among urban adolescent student*

## 1. INTRODUCTION:

World Health Organisation reports states that around 2 billion people across the world consumes alcohol of which about 7.6 million are diagnosed with alcohol use disorder (1). Alcohol drinking is referred to as the third leading cause of death and reason for 5.5% Disability Adjusted Life Years (DALYs) all over the world. Further, termed to be 10 causative factors, resulting towards 3% loss DALYs in India – reported by Global Burden of Disease study on the risk factors of death and disability (2). 27% of the drug users were adult male as reported by National Survey of drug use in India (3). Worldwide alcohol consumption has led to significant health and social problems (4). Despite social occupational and health consequences alcohol usage is prevalent in people of all age and socio-economic groups (5).

Drug abuse and illicit trafficking for sure is multicultural concern and regarded as one of the most prominent social problem in various countries including India. Drug abuse is regarded mainly the result of interaction between person abused drug, and the environment which changing patters from time to time – especially among the adolescent (6). Substance use disorders is regarded as a major cause for premature death and disabilities across the world, especially among the low- and- middle income countries, particularly in the adolescent population (7).

Adolescent period is regarded as the “Golden period” or healthy times of life, but several public health and social behavioural problems start emerging and also peak during this phase of life following experimentation, risk taking behaviour associated with impulsivity and vulnerability, which results in the initiation of substance use (8). The most common used drugs till date are alcohol, Cannabis and Opium (9). Available data points out 21%, 3% and 0.1% respectively were below 18 years (10). Drug usage not only affect one’s health, education and occupation but also incurs huge financial and social burden to our society (11). Studies also found association between substance abuse and delinquent behaviour and ill health (12). Substance abuse also results in decrease of job productivity and attendance increases health care coast’s, also an escalation of domestic violence and violent crimes (13). Also, results in impairment in cognitive functioning, further, negatively affects memory and impacts the ability to learn (14). Existing studies have found a high correlation between adolescent abuse and becoming a problem drug user in adulthood (15).

Over-all review-based findings suggest that despite several strategies undertaken knowledge and awareness regarding this giant problem and its effects are still less, this is because of easy access to drug at certain places and various multiple factors also contribute to substance addiction (16).

Most of the past studies focussed on assessment of drug abuse status, but it is prudent to pay more attention to interventions in this age group in order to increase their knowledge and correct their attitude toward illegal drugs and strengthening their confidence in this regard. So that these interventions can have an important role in decreasing the rate of drug abuse in this age group and consequently in the whole community (17).

The research gap clearly indicates that research should focus on evaluating the effectiveness of specific interventional components with standardized intervention and outcome measures,

which are utmost important to improve substance outcome among adolescent which is lacking. Further not much literature is available on feasibility and effectiveness of brief interventions.

There is dearth of studies exploring the knowledge and awareness of substance use disorders among students and effectiveness of brief interventions to improve the same Hence so, keeping this in mind the current study aims at studying the awareness and knowledge and effectiveness of brief intervention among the targeted population.

## **2. OBJECTIVES:**

- 1.To identify the level of knowledge and awareness on substance use among the targeted group.
- 2.To evaluate the effectiveness of brief educational intervention towards enhancing the awareness and knowledge.

### **Methods:**

This study was conducted as part of community mental health programme in a college in urban Chennai. Prior permission was obtained from the concerned authorities of the institution. A total of 175 students were recruited in the study after obtaining informed consent. The study followed a pre- and post-design. Baseline surveys were conducted prior to the intervention. The mass education intervention was delivered by a team of experts over a period of 90 minutes. The intervention involved were Guest Lectures by experts, Role Play, Puppet show & Poster display by Psychiatric Social Work trainees.

A pretested semis structured questioner was used to assess knowledge and attitude of respondents towards substance use, both in pre- and post-intervention phases. The questionnaire included components related to respondent's perception about drugs of addiction, the features of drug addiction, short term and long-term complication of drug and role of deaddiction centre in managing drug addiction. A Likert scale of 1-7 is used where 1 signifies not at all true and 7 signifies very true.

The data collected was analysed using SPSS software version 20. The demographic data was presented in frequencies, mean and standard deviation. Paired t – test was performed to assess to compare mean score of questionnaires before and after the educational intervention.

## **3. RESULTS:**

The mean age of 17.53 years with standard deviation of 1.593. Component wise awareness on substance abuse clearly reveals that following mass education intervention there are statistically significant differences in all the domains of knowledge and awareness.

Only 54% of the adolescent students were aware of drug addiction and drug habituation in the pre intervention phase, but post intervention reveals 69% were sensitized. Further, about 53% students were only aware of various drugs causing addiction, which increased up to 67% post intervention. Similarly, only 44% were aware about of clinical features of various addictive drugs, post intervention awareness was increased up to 57%. Awareness on short term complications of drugs increased from 48% to 61% & on long term complication from 48% to 61%.

No much awareness was present about punishments for use of illegal drugs. Knowledge in participants shifted from 41% to 56% about De-addiction centre and its role in management of persons with substance use problems. Knowledge on physiological and psychological dependence due to drugs improved from 39% to 53% post educational intervention. The

awareness about various methods for addiction increased from 40% to 53%. The knowledge on De-addiction centre and its services was poor and post intervention it has increased to 22%.

S. No	Questions	Pre-Intervention	Post-Intervention	P value
1	I know about drug addiction and drug habituation.	5.47(3.25)	6.92(2.61)	<0.001*
2	I am aware about various drugs causing addiction	5.37(3.19)	6.71(2.56)	<0.001*
3	I know about clinical features of various addictive drugs.	4.14(2.87)	5.73(2.86)	<0.001*
4	I am aware about short term complications of drug abuse.	4.46(3.07)	6.09(2.97)	<0.001*
5	I am aware about long term complications of drug abuse.	4.87(3.22)	6.11(2.92)	<0.001*
6	I know about punishment for use of illegal drugs.	5.07(3.28)	5.81(3.02)	0.001*
7	I know about de-addiction centre and its role in drug addictive patients.	4.13(2.88)	5.69(2.91)	<0.001*
8	I know about physiological and psychological dependence due to drugs.	3.99(3.01)	5.31(3.02)	<0.001*
9	I am aware about various methods for addiction of various drugs.	4.05(3.33)	5.39(3.02)	<0.001*
10	I am aware of the de-addiction centre services.	1.87(2.36)	2.22(2.62)	<0.001*

Table 1: Knowledge and awareness of Substance use pre and post educational intervention among urban college students. The mean scores and standard deviation on likert scale pre and post intervention are represented(1-not at all true and 7 –very true).

\*signifies p value less than 0.05

#### 4. DISCUSSION:

The study reports findings of effectiveness of a brief educational intervention on knowledge and awareness regarding substance use among urban college students.

Drug abuse is affected by knowledge and attitude of person towards drugs. Therefore, to change one's behavior his knowledge and attitude towards such behaviors should be corrected by proper representation of facts (17). We emphasized the same in our Guest Lecture and interactive workshop by a team of mental health professionals and their trainees - on the topic of "Ill effects on substance use".

The initiation of substance use is following to lack of knowledge regarding its, complications, peer-group pressure and further by influence of social media and its multifaceted consequences are well documented in the literature (19). A study by Institute of Drug Abuse (NIDA) emphasized the strategy of targeting modifiable risk factors and enhancing protective factors through family, school and community prevention programmes (20). As involving parents and teachers in group sessions will yield better results as any behavioural changes and

deviant traits can be addressed at an early stage. An Indian study reported that study materials regarding substance abuse and their harmful effect should be imparted to teachers and latter should be introduced in school curriculum (21). Our current study corroborates the findings of previously mentioned studies that awareness through educational interventions can bring about enhancement in knowledge. Yet another study reported level of knowledge on harmfulness of substance use among students was high whereby media was quoted for source of information (22). Many other studies also reported poor awareness, attitudes and knowledge among adolescents (23).

#### ***STRENGTHS & LIMITATIONS:***

The sample size of the study was 175, adequate enough to understand the effectiveness of the brief educational intervention. The effectiveness of the intervention should be interpreted with caution as long term impact cannot be commented. There is a need for long-term follow up studies. Screening for substance usage can also be focused to identify the prevalence of drugs usage among the targeted population.

#### **Future Directions:**

Similar interventional programmes involving parents and teachers could be planned by Social Workers for better impact.

Multiple sessions with small group discussions could be done for better understanding of the problem and plan early interventions in the targeted population.

#### **5. CONCLUSION:**

Knowledge and awareness regarding substance use is found to be extremely poor among adolescents, which in turn may cause poor utilization of services. Focussed educational programs, even a brief single scan bring improvement in knowledge and awareness about substance use disorder.

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