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Original Article

A Study to Assess the Effectiveness of Self-Instructional Module on Knowledge Regarding Substance Abuse and Its Complications among Adolescents of Selected Schools at Udaipur, Rajasthan

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Abstract

Introduction : Substance abuse, characterized by compulsive drug seeking and use despite harmful consequences, poses significant health risks and disrupts functioning. Adolescence, a vulnerable period due to ongoing brain development, increases susceptibility to experimentation. Research indicates high rates of underage substance use, with alcohol, cannabis, and opium being prevalent. Treatment-seeking data show a concerning percentage of children affected. The WHO predicts a substantial rise in substance abuse-related deaths by 2020.

Methodology : This study employed a quantitative evaluative research approach and utilized a one-group pre-test post-test research design to assess the effectiveness of a self instructional module on adolescents' knowledge regarding substance abuse and its complications. The sample consisted of 120 adolescents aged between 13-17 years, selected using non-probability convenient sampling from schools in Udaipur, Rajasthan. Data was collected through a structured questionnaire.

Results : Results indicated that prior to the intervention; the majority of respondents (90%) had inadequate knowledge, while 10% exhibited moderately adequate knowledge. Following the intervention, a significant improvement was observed, with 68.33% of respondents displaying moderately adequate knowledge and 25% attaining adequate knowledge. The mean knowledge score increased from 7.37 to 14.05, with a corresponding rise in mean percentage from 36.83% to 70.25%. The calculated t-value of 17.578 was significantly higher than the critical value of 1.984 at 0.05 level, demonstrating a significant difference between pre-test and post-test knowledge scores.

Conclusions : In conclusion, the self-instructional module successfully enhanced adolescents' understanding of substance abuse and its complexities, as demonstrated by notable improvements in knowledge scores between pre-test and post-test assessments. Moreover, the impact of demographic variables underscores the necessity for personalized approaches in combating substance abuse among youth.

Keywords : Assess; Effectiveness; Self Instructional Module; Knowledge; Substance Abuse

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Introduction

Substance abuse refers to the detrimental or hazardous use of psychoactive substances, as well as alcohol and illicit drugs. Psychoactive substance use can lead to dependence syndrome, which is a group of behavioral, cognitive and physiological phenomena that arise after repetitive substance use. This incorporates: a strong desire to take the substance; trouble with controlling its use; continued use in spite of harmful consequences; a higher priority given to substance use than to other activities, in addition to obligations; increased tolerance to the substance; and sometimes a state of physical withdrawal.[1]

Substance abuse is a global challenge with detrimental effects on health, wealth and security of nations[2], and individuals' physical and mental health. Substance abuse also affects individuals' social status and responsibilities, and abusers usually suffer from different concurrent medical, psychological and social pathologies.[3] Drug abuse by adolescents has become one of the main health-related problems in several parts of the world. Some school students experience mental health problems, others develop severe mental illness, become maladjusted to school circumstances, and finally drop out of school. Drug abusers who display symptoms of nervous tension, anxiety, depression, behavioural changes, tiredness, and loss or increase in appetite should be treated by medical specialists and counsellors to save them from fatal illness.[4]

According to the World Health Organization (WHO), substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Substance abuse is "persistent or sporadic drug use inconsistent with or unrelated to acceptable medical practice."[5] In present scenario, substance abuse has been increasing among children and adolescents. Late childhood and adolescents are periods of explorations and sizeable proportions of adolescents in many states of India experiment with drugs quite early in life.[6]

According to the World Health Organization, 275 million people have used some illicit drug at least once in 2016. Globally, alcohol use accounts for 3.3 million deaths every year.[7] In India 62.5 million people consume alcohol. It is a major risk factor for cardiovascular diseases, cancers, road traffic accidents, liver and pancreatic diseases and psychiatric problems and dependence.[8] The adverse effects of alcohol also includes physical and mental harm to family members, co-workers and the general public. Change in lifestyle, stress, increased availability and peer pressures have all been found to affect this behaviour.[9] In India 28.6% of the population use tobacco. lakh people in India die every year due to tobacco-related diseases. In Karnataka, 22.8% population use tobacco in some form.[10] Tobacco is used in cigarettes, bidis and smokeless forms like khaini, pan and gutka. Khaini and bidi are the most commonly used forms in our country. On an average, an Indian smokes about 6.2 cigarettes per day while in the lower socioeconomic group, the use of bidi is much higher.70-80% of male smokers' smoke at home increasing the risk of passive smoking.[12]

Objectives of the Study

1) To assess the pre-test level of knowledge regarding substance abuse and it's complications among adolescents.
2) To assess the post-test level of knowledge regarding substance abuse and it's complications among adolescents.
3) To compare the pre-test and post-test level of knowledge regarding substance abuse and it's complications among adolescents.
4) To evaluate the effectiveness of self instructional module on the level of knowledge regarding substance abuse and it's complications among adolescents.
5) To associate the pre-test score on knowledge regarding substance abuse and it's complications with their selected demographic variables.

Hypothesis

H_1: The mean post-test knowledge scores regarding substance abuse and it's complications among adolescents will be significantly higher than mean pre-test knowledge score at the 0.05 level of significance.

H_2 : There will be a significant association between the pre-test knowledge scores regarding substance abuse and its complications and their selected demographic variables at the 0.05 level of significance.

Methodology

Research approach : A quantitative evaluative research approach was found appropriate.

Research design : Pre-experimental one group pre-test post-test research design was used to conduct the study.

Sampling techniques : by using non-probability convenient sampling.

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Population : The target population in the present study includes adolescents (aged between 13-17 years).

Sample size : A total of 120 adolescents (aged between 13-17 years) from selected schools of Udaipur.

Setting of the study : The study was undertaken at A-one Sr. Sec. School, Ayad, Udaipur; Alok Sr. Sec. School, Hiran Magri Sector-11, Udaipur; & Govt. Sr. Sec. School, Manwakhera, Udaipur, Rajasthan.

Data Collection : Data was collected using structured questionnaire.

Variables of the Study :

- **Dependent variable :** Knowledge of adolescents regarding substance abuse and it's complications.
- **Independent variable :** The self-instructional module regarding substance abuse and it's complications.
- **Demographic variable :** In this study the selected demographic variables are age, gender, religion, area of residence, type of the family, monthly family income, family history of substance abuse, and source of information regarding substance abuse and it's complications.

Results

The analyzed data has been organized and presented in the following sections:

Section I : Description of demographic variables.

Section II : Findings related to pre-test and post-test knowledge score of adolescents regarding substance abuse and its complications.

Section III : Evaluate the effectiveness of self instructional module on knowledge regarding substance abuse and it's complications among adolescents.

Section IV : Finding related to association between pre-test knowledge score with selected demographic variables of adolescents.

Section I : Description of Demographic Variables :

This section deals with distribution of demographic variables of adolescents. The obtained data of sample characteristics were described under the sub-headings of age, gender, religion, area of residence, type of the family, monthly family income, family history of substance abuse, and source of information regarding substance abuse & its complication.

Table-1: Frequency and percentage distribution of demographic variables

N=120

S. No.	Demographic Variables	Frequency (n)	Percentage (%)
1	**Age in years**		
a)	13-14 Years	38	31.67
b)	14-15 Years	20	16.67
c)	15-16 Years	36	30.00
d)	16-17 Years	26	21.67
	Total	**120**	**100.00**
2	**Gender**		
a)	Male	54	45.00
b)	Female	66	55.00
	Total	**120**	**100.00**
5	**Religion**		
a)	Hindu	106	88.33
b)	Muslim	10	8.33
c)	Christian	4	3.33
d)	Other	0	0.00
	Total	**120**	**100.00**
3	**Area of Residence**		
a)	Urban	34	28.33
b)	Semi-Urban	20	16.67
c)	Rural	66	55.00
	Total	**120**	**100.00**
4	**Type of family**		
a)	Nuclear family	14	11.67
b)	Joint family	94	78.33
c)	Extended family	12	10.00
	Total	**120**	**100.00**
6	**Monthly family income**		
a)	$\leq$ 5000 Rs./-	32	26.67
b)	5001-10000 Rs./-	38	31.67
c)	10001-15000 Rs./-	16	13.33
d)	$\leq$ 15001 Rs./-	34	28.33
	Total	**120**	**100.00**

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7	**Family history of substance abuse**		
a)	Yes	58	48.33
b)	No	62	51.67
	Total	**120**	**100.00**
8	**Source of information regarding substance abuse & its complications**		
a)	Mass Media	46	38.33
b)	Relatives	18	15.00
c)	Health Professionals	42	35.00
d)	Others	14	11.67
	Total	**120**	**100.00**

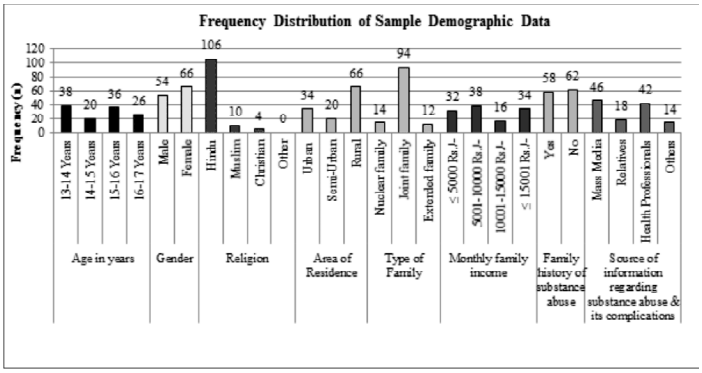

Figure-1 : Frequency and percentage distribution of demographic variables

Section II : Findings Related to Pre-Test and Post-Test Knowledge Score of Adolescents Regarding Substance Abuse and Its Complications:

Table-2 : Frequency and percentage distribution of respondents according to the pre-test and post-test knowledge score regarding substance abuse and it's complications N = 120

Level of Knowledge	Score	Pre-test		Post-test	
		Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Inadequate knowledge (≤50%)	0 - 10	108	90 %	8	6.67 %
Moderately adequate knowledge (51-75%)	11 - 15	12	10 %	82	68.33 %
Adequate knowledge (≥76%)	16 - 20	0	0 %	30	25 %

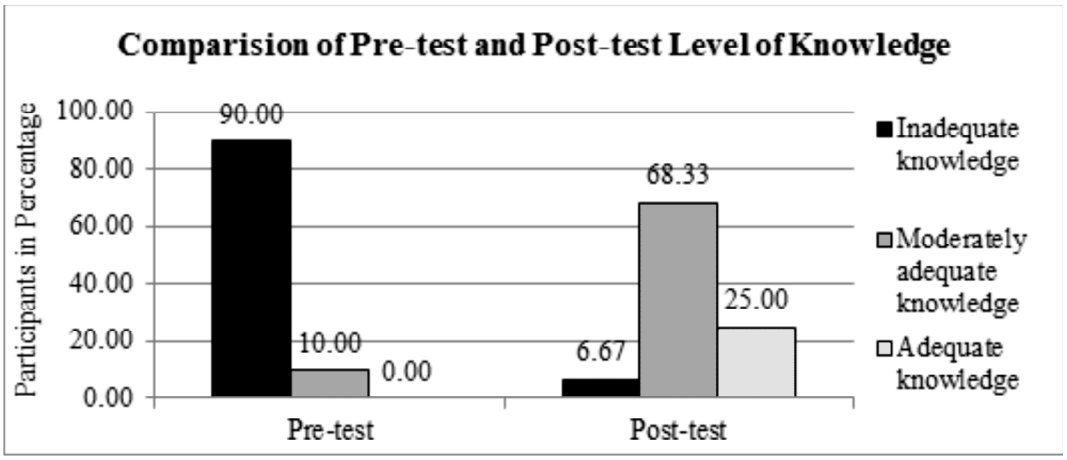

Figure-2 : Frequency and percentage distribution of respondents according to the pre-test and post-test knowledge score regarding substance abuse and it's complications

Section III : Evaluate The Effectiveness of Self-Instructional Module on Knowledge Regarding Substance Abuse and Its Complications Among Adolescents:

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Table-3 : Effectiveness of self instructional module on knowledge regarding substance abuse and it's complications among adolescents

N = 120

Test	Mean	Mean (%)	SD	Mean Difference	Mean Difference (%)	df	Paired 't' Test	Inference (P Value = 0.05)
Pre test	7.37	36.83	2.17	6.68	33.42	119	17.578	S (1.984)
Post test	14.05	70.25	1.98					

S=Significant

Section IV : Finding Related to Association Between Pre-Test Knowledge Score with Selected Demographic Variables of Adolescents:

Table-4 : Association between the pre-test knowledge score with selected demographic variables

N=120

S. No.	Demographic Variable	Knowledge Level Inadequate	Moderate	Total	df	Calculated Chi-square (X^2)	P value (0.05 level)	Inference
1	**Age in years**							
a)	13-14 Years	34	4	38	3	4.166	7.815	NS
b)	14-15 Years	20	0	20				
c)	15-16 Years	30	6	36				
d)	16-17 Years	24	2	26				
	Total	**108**	**12**	**120**				
2	**Gender**							
a)	Male	42	12	54	1	16.296	3.841	S
b)	Female	66	0	66				
	Total	**108**	**12**	**120**				
5	**Religion**							
a)	Hindu	98	8	106	3	11.153	7.815	S
b)	Muslim	6	4	10				
c)	Christian	4	0	4				
d)	Other	0	0	0				
	Total	**108**	**12**	**120**				
3	**Area of Residence**							
a)	Urban	32	2	34	2	10.667	5.991	S
b)	Semi-Urban	14	6	20				
c)	Rural	62	4	66				
	Total	**108**	**12**	**120**				
4	**Type of family**							
a)	Nuclear family	10	4	14				

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b)	Joint family	94	0	94	2	58.624	5.991	S
c)	Extended family	4	8	12				
	Total	**108**	**12**	**120**				
6	**Monthly family income**							
a)	≤ 5000 Rs./-	30	2	32	3	5.152	7.815	NS
b)	5001-10000 Rs./-	34	4	38				
c)	10001-15000 Rs./-	12	4	16				
d)	≤ 15001 Rs./-	32	2	34				
	Total	**108**	**12**	**120**				
7	**Family history of substance abuse**							
a)	Yes	58	0	58	1	12.473	3.841	S
b)	No	50	12	62				
	Total	**108**	**12**	**120**				
8	**Source of information regarding substance abuse & its complication**							
a)	Mass Media	42	4	46	3	13.812	7.815	S
b)	Relatives	12	6	18				
c)	Health Professionals	40	2	42				
d)	Others	14	0	14				
	Total	**108**	**12**	**120**				

S = Significant or NS = Non Significant

Conclusions

In conclusion, the study effectively assessed the impact of a self-instructional module on adolescents' knowledge regarding substance abuse and its complications in selected schools in Udaipur, Rajasthan. Results showed a significant improvement in knowledge scores from pre-test to post-test, indicating the effectiveness of the module. Additionally, demographic variables such as gender, religion, area of residence, family history of substance abuse, and source of information were found to influence initial knowledge levels. These findings underscore the importance of tailored interventions in addressing substance abuse among adolescents, while also highlighting the need for continued research and education in this area.

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Conflict of Interest : There are no conflicts of interest

References

1. Okpye, N.N. (2001). The adolescents and hard drugs: a psychological concern. In Okonkwo RUN & Okoye RO (Eds.), The Nigerian adolescent in perspective (pp. xx-xx). Nigerian Society for Education.
2. WHO Expert Committee on Dependence-Producing Drugs. (1965). Fourteenth report. Geneva: World Health Organization. World Health Organization Technical Report Series No. 312. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/39802/WHO_TRS_312.pdf?sequence=1

3. World drug report 2008. (2008). United Nations Office for Drug Control and Crime Prevention. Retrieved from https://www.unodc.org/unodc/en/data-and-analysis/WDR-2008.html
4. Fareo, D.O. (2012). Drug abuse among Nigerian adolescents: strategies for counselling. Journal of International Social Research, 5(20), 341-347.
5. Johnston, L.D., O'Malley, P.M., Bachman, J.G., & Schulenberg, J.E. (2012). Monitoring the future: national survey results on drug use: 1975-2011. Volume II: college students and adults ages 19-50. Ann Arbor, MI: Institute for Social Research.
6. Soul City Institute for Social Justice. (Year). A review of literature on drug and substance abuse amongst youth and young women in South Africa. Retrieved from https://www.soulcity.org.za/research/literature-reviews/soul-city-institute-drug-abuse-youth-south-africa.pdf/view
7. WHO. (Year). Management of substance abuse. Retrieved from https://www.who.int/substance_abuse/en/
8. Chethana, K.V. (2016). Prevalence of alcohol consumption among adults in urban field practice area NMC, Raichur, Karnataka, India. International Journal of Community Medicine and Public Health, 3(10), 2903-2907.
9. Esser, M.B., Gururaj, G., Rao, G.N., et al. (2015). Harms to adults from others' heavy drinking in five Indian states. Alcohol and Alcoholism, 51(2), 177-185.
10. Shashikantha, S.K., & Jagadeesh, D. (2018). Awareness regarding tobacco consumption in any form and its ill effects on health in a rural community in Mandya district, Karnataka. Community Medicine, 9(8), 605-609.
11. Global GATS. (Year). Adult Tobacco Survey: Fact Sheet, India 2016-17. Retrieved from http://www.who.int/tobacco/surveillance/survey/gats/GATS_India_2016-17_FactSheet.pdf
12. Mohan, P., Lando, H.A., & Panneer, S. (2018). Assessment of tobacco consumption and control in India. Integrative Medicine Insights, 9.

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