

“A Study to Assess the Effectiveness of Behavioural Intervention Bundle on Substance Refusal Skills among College Students in a Selected College in Kozhikode

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ABSTRACT

Substance abuse continues to be a growing global concern, underscoring the need for early identification and effective intervention, particularly within the Indian context. This study aimed to assess the effectiveness of a behavioural intervention bundle on substance refusal skills among college students in the Kozhikode district. A quasi-experimental one-group pretest–post-test design was adopted, involving 80 students aged 18–26 years selected through convenience sampling. Data were collected using the Drug and Alcohol Refusal Self-Efficacy Scale (DASES). Before the intervention, 71.25% of participants demonstrated moderate refusal skills, while 28.75% exhibited low skills; none reported high refusal skills. Following the intervention, 13.75% showed high refusal skills, 73.75% moderate skills, and 12.5% low skills. A significant improvement was observed in refusal skills (mean difference = 9.76, $p < 0.05$). A significant association was found between prior information on substance use and refusal skills, whereas no association was noted with other demographic variables. The findings indicate that the behavioural intervention bundle was effective in enhancing substance refusal skills among college students.

Keywords: Behavioural intervention bundle, Substance refusal skills, College students

INTRODUCTION

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs, in a manner that is not medically intended or prescribed. Such misuse often results in adverse consequences for an individual's physical health, psychological well-being, interpersonal relationships, and social and occupational functioning. Commonly abused substances include alcohol, tobacco, amphetamines, barbiturates, benzodiazepines, cannabis, cocaine, hallucinogens, methaqualone, and opioids. Evidence from various countries indicates that rising crime rates have been significantly associated with substance abuse.

The health implications of substance misuse are extensive. A weakened immune system increases vulnerability to infections, while cardiovascular complications may range from arrhythmias to myocardial infarction. Injected drug use further contributes to complications such as collapsed veins and infections of blood vessels. Individuals with substance use disorders (SUDs) are also at heightened risk for comorbid health conditions, including lung and heart diseases, stroke, cancer, and mental health disorders. Diagnostic tools such as imaging scans, chest radiography, and laboratory tests often reveal the physiological damage caused by long-term drug use.

Management of SUDs aligns with treatment approaches for other chronic illnesses, emphasising a comprehensive and sustained care model. Essential components of treatment include pharmacological interventions, behavioural therapies, counselling, and recovery support services (RSS). Peer-support groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) also play a crucial role in promoting long-term

recovery. At the community and policy levels, strategies to reduce the supply of illicit substances include crop eradication, crop substitution, prosecution of traffickers, and restrictions on drug availability.

Brief interventions for substance abuse have long been implemented by counsellors, social workers, psychologists, physicians, nurses, vocational rehabilitation programs, and emergency departments as part of early identification and prevention efforts. Strengthening refusal skills is recognised as an important preventive strategy, enabling individuals to decline participation in risky behaviours such as drug or alcohol use. Substance abuse not only harms individuals but also has profound social, familial, and occupational consequences. It contributes to family dysfunction, negatively affects children and other dependents, and imposes a substantial burden on society. In workplace settings, substance misuse is associated with reduced productivity, increased absenteeism, workplace accidents, high staff turnover, low morale, theft, and interpersonal conflicts.

Problem Statement

A study to assess the effectiveness of behavioural intervention bundle on substance refusal skills among college students in a selected college, Kozhikode district.

Objectives

1. To assess the substance refusal skills among college students before administering behavioural intervention bundle.
2. To evaluate the effectiveness of behavioural intervention bundle on substance refusal skills among college students.
3. To determine the association between substance refusal skills and selected demographic variables.

Hypothesis

H1: There is a significant increase in the mean post-test score of substance refusal skills of college students after the behavioural intervention bundle in the experimental group.

H2: There is a significant association between the mean pretest score of college students with selected demographic variables among the experimental group.

METHODOLOGY

Research Approach: Quantitative research approach

Research Design: Quasi-experimental research design.

Population- The population of study is the college students studying in selected college, Kozhikode district.

Sampling Technique-Convenience sampling technique

Sampling Criteria

Inclusion Criteria

1. Students aged 18–26 years.
2. Students willing to provide informed consent.
3. Students not currently participating in any other behavioral or drug-prevention programs.

Exclusion Criteria

1. Students who are not willing to participate in the study.
2. Students younger than 18 years or older than 26 years.

Setting of the Study: The study was conducted in a selected college in the Kozhikode district.

Variables

1. Independent Variable: Behavioral intervention bundle.
2. Dependent Variable: Substance refusal skills.

Data Collection Tools

Section A: Demographic Data

A demographic questionnaire was used to collect information on age, gender, religion, type of family, family history of substance use, previous information regarding substance use, and sources of exposure to substances.

Section B: Drug and Alcohol Refusal Self-Efficacy Scale (DASES)

The DASES consists of 16 items and was used to assess the effectiveness of the behavioral intervention bundle on substance refusal skills among college students.

Data Collection Procedure

Data collection commenced after obtaining approval from the Institutional Ethics Committee and securing permission from the concerned authorities at KMCT Hospital and the selected college. Participants were chosen using a non-probability convenience sampling technique based on their availability and willingness to participate. Before data collection, the investigator introduced the study to the students, explained its purpose, and provided information regarding confidentiality and voluntary participation. Written informed consent was obtained from each eligible participant. Baseline data were first collected using the demographic questionnaire, followed by administration of the Drug and Alcohol Refusal Self-Efficacy Scale (DASES) to assess pre-intervention refusal skills. Following the pre-test, the behavioral intervention bundle was administered to the participants. The intervention included structured sessions focusing on substance-related awareness, skill-building activities, refusal techniques, and interactive discussions designed to enhance refusal efficacy. The sessions were conducted in small groups to facilitate active participation. After one week, the same DASES scale was re-administered to the participants to measure changes in substance refusal skills. The collected data were then checked for completeness, organized systematically, and prepared for statistical analysis.

Ethical Considerations

The research proposal was presented in front of research committee of KMCT COLLEGE OF NURSING and approval was obtained. Ethical clearance for the study was obtained. Then was bought permission from KMCT ethics committee. Informed consent was obtained from the subjects.

RESULTS

Substance abuse poses significant risks to individuals' health, relationships, and socio-occupational functioning. This study aimed to assess the effectiveness of a behavioural intervention bundle in enhancing substance refusal skills among college students in the Kozhikode district of Kerala. A quasi-experimental one-group pre-test–post-test design was employed, and 80 students aged 18–26 years were selected through convenience sampling. Data were collected using the standardised Drug and Alcohol Refusal Self-Efficacy Scale (DASES).

The intervention yielded a notable improvement in refusal skills. Pre-test findings showed that 71.25% of participants demonstrated moderate refusal skills, while 28.75% exhibited low skills, and none reported high levels of refusal skills. Post-test results indicated marked improvement, with 73.75% demonstrating moderate skills, 13.75% high skills, and only 12.5% low skills. The mean score increased from 55.51 (SD = 14.93) to 65.27 (SD = 16.64), with a statistically significant Z-value of 5.99 ($p < 0.05$). A significant association was observed between substance refusal skills and prior information on substance use, while no significant associations were found with other demographic variables.

These findings highlight the effectiveness of the behavioural intervention bundle in strengthening substance refusal skills among college students and underscore its potential for use in substance-use prevention programs within educational settings.

SI NO	Demographic characteristics		Frequency (f)	Percentage (%)
01	Age	18-20 years	69	86.25%
		21-23 years	9	11.25%
		24-26 years	2	2.5%
02	Gender	Male	14	17.5%
		Female	66	82.5%
03	Religion	Hindu	40	50%
		Christian	3	3.75%
		Muslim	37	46.25%
04	Type of family	Joint	4	5%
		Nuclear	76	95%
05	Family history of substance abuse	Yes	1	1.25%
		No	79	98.75%
06	Previous information regarding substance use	Yes	34	42.5%
		No	46	57.5%
07	If YES, source of information on substance use	Media	47	58.75%
		Peer	4	5%
		Others	29	36.25%
		Articles		

Score of refusal skill	Experimental group			
	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
High	0	0	11	13.75%

Moderate	57	71.25%	59	73.75%
Low	23	28.75%	10	12.5%

Table 2: Frequency (percentage) distribution of substance refusal skills in the experimental group.

The study shows that 71.25% had moderate refusal skill and 28.75% had low refusal skills in pre-test. 13.75% had high refusal skills and 73.75% had moderate refusal skill and 12.5% had low refusal skills in post-test.

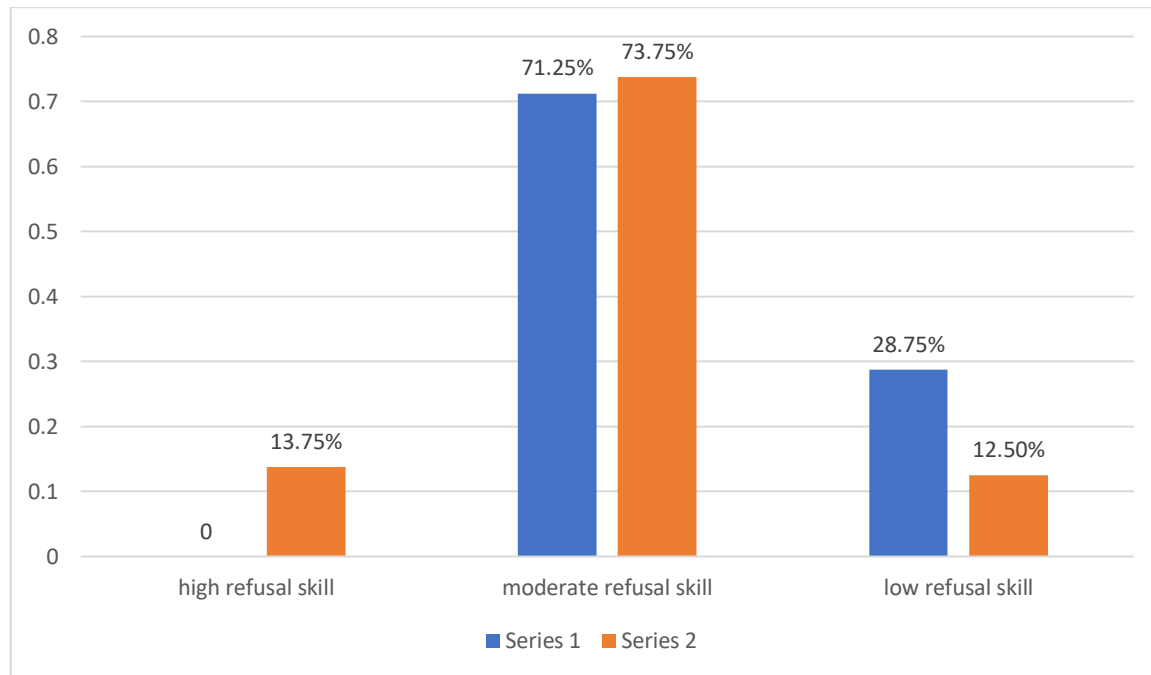


Fig.1. figure shows that distribution of percentage of sample according to substance refusal skill in experimental group there is a significant association between the mean pretest score of college students only with previous information regarding substance use and no association with other sociodemographic variables.

DISCUSSION

The findings of the present study are supported by a similar study conducted by Lee et al. (2023), which investigated the relationship between refusal self-efficacy and prescription opioid misuse among adolescents. The researchers employed a longitudinal design and utilised stratified sampling across multiple high schools. A total of 480 students were followed over 12 months. Standardized tools, including the Peer Influence Index and the Drug Refusal Self-Efficacy Scale, were administered to assess influencing factors. The results demonstrated that adolescents with higher levels of peer-context refusal self-efficacy exhibited significantly lower rates of opioid misuse. The study concluded that peer-focused refusal skill training plays a crucial role in preventing substance misuse among youth.

RECOMMENDATIONS

1. A similar study can be replicated on a large sample to validate and generalise the study findings.
2. A similar study can be conducted on school students
3. Random sampling technique can be used instead of convenient sampling technique.
4. A control group can also be included for evaluating the effectiveness of behavioural intervention bundle and to compare the results between both groups.
5. A similar study can be conducted on adults in the community setting.

CONCLUSION

Based on the findings of the study, in the experimental group, none of them had substance refusal skills in the pre-test. After behaviour intervention bundle, the level of substance refusal skills has been increased in the post-test. The result highlights the effectiveness of behaviour intervention bundle on substance refusal skills. The behavioral intervention bundle regarding substance refusal skills was effective in improving knowledge regarding substance refusal skills, and it will help refuse the use of substances. The t-value computed between pre-test and post-test scores is 5.99, which shows that there is a significant increase in the effectiveness of substance refusal skills after the behavioural intervention bundle.

Conclusion

Based on the study findings, the participants in the experimental group demonstrated low to moderate levels of substance refusal skills during the pre-test phase. Following the administration of the behavioral intervention bundle, a marked improvement in refusal skills was observed in the post-test assessment. The results clearly indicate the effectiveness of the intervention in enhancing substance refusal skills among college students. The behavioural intervention bundle not only improved participants' refusal abilities but also strengthened their knowledge and confidence in resisting substance use. The computed t-value of 5.99 confirms a statistically significant increase in refusal skills following the intervention. Overall, the study supports the use of behavioral interventions as an effective strategy for substance-use prevention among young adults.

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