

# Efficacy of Educational Interventions on Knowledge and Practices Regarding Substance use Disorder its Management and Prevention among Undergraduate Students-A Protocol for a Systematic Review and Meta-Analysis

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## **Abstract:-**

### **Background:**

Alcohol and illegal narcotics are two examples of psychoactive compounds that, when used incorrectly, can be damaging or hazardous. Continuous consumption of substances that are psychoactive can lead to dependence. Repeated use of psychoactive substances can result in dependence syndrome.

### **Objective:**

To identify the impact of educational packages in enhancing the knowledge and practices of college students regarding prevention and management of substance use disorders.

### **Study design and methods:**

The review will be conducted according to PRISMA guidelines. The International Prospective Register for Systematic Reviews has accepted this protocol. Following

the three procedures, a literature search will be conducted on research articles published between 2011 and 2023 that are limited to the English language. A preliminary search will be made using PICO terms in the Science direct and PubMed-Medline databases. The titles and abstracts of the studies given will be combed for relevant keywords. The quality of all selected studies will be assessed using the JBI (Joanna Briggs Institute Manual) clinical appraisal checklist for RCTs and non-RCTs. Two authors will independently assess the quality of the work, and any discrepancies will be resolved.

**Results:** A descriptive synthesis will be performed and presented in the form of a narrative summary as tabular format. The summaries will include both narrative descriptions and statistical data from the studies. The meta-analysis will be done for knowledge.

**Conclusion: This review will help the health care team to acknowledge the importance of incorporating educational packages in academics to make students competent to manage the conditions with substance abuse.**

**Keywords:-** Educational Packages, Substance Abuses, Knowledge, Practices, Students.

## I. INTRODUCTION

Alcohol and illegal narcotics are two examples of psychoactive compounds that, when used incorrectly, can be damaging or hazardous. Continuous consumption of substances that are psychoactive can lead to dependence condition, which is characterized by an intense need to use the substance, difficulty controlling use, persistence in use despite adverse effects, prioritizing drug use across other activities and tasks, level of tolerance will increase, and, in some cases physical withdrawal will happen.

Repeated use of psychoactive substances can result in dependence syndrome, a collection of behavioral, cognitive, and physiological phenomena characterized by a strong desire to use the substance, difficulty controlling use, persistence in use despite negative effects, prioritizing drug use over other activities and obligations, increased tolerance, and, in rare cases, physical withdrawal.<sup>1</sup>

Substance use disorders are widespread worldwide and continue to be an intractable public health challenge for health-care systems. Drug use disorders affect 31 million people worldwide. The incidence of cannabis, opiates, and amphetamine usage in south-east Asia was determined to be 0.6%, 0.3%, and 0.6%, respectively, according to the World Drug Report 2016.<sup>3</sup> The problem is especially prevalent in teens, with figures indicating that 3% and 0.1% of cannabis and heroin users in our country are under the age of 18.<sup>2</sup>

Drinking in late adolescence related to depression in males, which led to drinking in adulthood. Furthermore, they discovered that suicidal thoughts in late adolescence are a reliable predictor of drinking at work later in life. Drug use is associated with positive psychotic symptoms such as delusions, hallucinations, and disorganized cognition, speech, and behavior.<sup>3</sup>

Alcohol, illicit drugs (such as opioids, cannabinoids, and cocaine) and tobacco, as well as psychotropic medications and solvents, are all considered "psychoactive substances." No part of the world is immune to the affect of drug addiction and trafficking today. India, too, is caught in the terrible spiral of drug misuse, with the number of drug users growing by the day.<sup>4</sup>

### ➤ Rationale

Given all of this background knowledge, it is clear that undergraduate students require the appropriate training courses in order to properly manage substance use problems and advance in their careers. After detecting this gap in the aforementioned subject, the researcher decided to conduct a study on this identified problem area. As a result, the researcher planned to perform a systematic review on the effectiveness of an educational package on knowledge and practices addressing substance use disorders, their management, and prevention among undergraduate students at various institutions.

### ➤ Objectives

To identify the impact of educational packages in enhancing the knowledge and practices of college students regarding prevention and management of substance use disorders.

## II. METHODS

This review will adhere to PRISMA Guidelines and the Prospero Registration No. is **CRD42022312162**

### ➤ Eligibility Criteria

This systematic review's literature search will only include studies in the English language that were published between 2011 and 2022.

- P- College students/undergraduate student's/ University students/students
- I- Educational Intervention/Educational packages
- C- No Intervention
- O- Knowledge and practice.

The studies for this review will be chosen based on the following criteria.

- Studies are accessible through electronic databases and published in peer-review journals.
- Study design: Randomized control trials and non-randomized control trials.
- Intervention: This review will cover studies with educational interventions or packages which includes information about types of substance use disorder (Opioids, cannabis, alcohol, cocaine, sedative hypnotics, and other stimulants like tobacco, hallucinogens, and volatile solvents) its management and prevention on knowledge and practices as the main variables.
- Population: college students/under graduate students among all gender, regions, race and country.
- Settings: Studies organized in rural or urban areas or educational institutions and hostels.
- Outcomes: The research will be involved if they address either knowledge or practices related to the management and prevention of substance use disorders.
- Books, unpublished works, and databases with simply abstracts will not be included.

➤ *Information Sources:*

Preliminary search will be done in Science Direct and PubMed databases with keywords based on PICO and abstracts and titles will be checked for additional keywords.

A detailed search will be undertaken in databases such as PubMed-Medline, CINAHL plus databases, Science Direct, and the Cochrane library, using an effective search technique. In addition to this Citation pearl searching will, be done for relevant studies.

➤ *Search strategy:*

• *Science Direct database:*

Educational interventions AND Knowledge AND Practices AND substance use disorder AND students. (Filters: Research articles, 2011-2022).

### III. STUDY RECORDS

➤ *Data Management*

Search articles planned to uploaded in Zotero software (Reference Manager) and duplications. Articles details maintained in the Reference Manager throughout this review.

➤ *Selection Process*

As regards the relevance of the review topic, two authors independently will take a look at the initial abstract and titles of the articles in the screening process. In accordance with the eligibility criteria, screening shall be carried out after such full text assessment. Two authors will screen separately, and any disputes planned to handle through conversation with the third author.

➤ *Data collection Process:*

Each selected article will be assessed for quality based on a clinical appraisal checklist created by JBI (Joanna Briggs Institute Manual)<sup>6</sup> Two independent reviewers will conduct the quality appraisal, and the third reviewer will seek out any disagreements. Two authors will screen separately, and any disputes planned to handle through conversation with the third author. The Cochrane data extraction form will be used for collecting data from the studies that have been chosen.<sup>7</sup>

➤ *Data items*

This evaluation cover studies with variables like educational interventions or packages which includes information about types of substance use disorder (Opioids, cannabis, alcohol, cocaine, sedative hypnotics, and other stimulants like tobacco, hallucinogens, and volatile solvents)) its management and prevention on knowledge & practices as the main variables and college students/under graduate students as population.

➤ *Outcomes and Prioritization:*

In this study we are going to assess the effectiveness of Educational interventions on Knowledge and Practices regarding substance use disorder its management and prevention among undergraduate students, so knowledge and practices are main outcomes in this review, to get support for the utilization of these interventions to the future studies.

➤ *Risk of bias in individual studies*

Each of the studies included in this review will be evaluated using the Cochrane Risk Bias Assessment Tool for RCTs.

➤ *Data synthesis*

Study findings will be collected based on the objectives. A descriptive synthesis will be performed and given in the form of a narrative summary in tabular form. The summaries will include both narratives and statistical results from research. The meta-analysis will be done for knowledge variable using SMD (Standardized mean difference) and heterogeneity will be assessed by I<sup>2</sup> statistics.

➤ *Meta-bias(es):*

Publication bias will be assessed for the included research.

➤ *Confidence in cumulative evidence*

The GRADEpro Approach is going to be used to evaluate the evidence's reliability.<sup>8</sup>

### IV. CONCLUSION

Since students are the productive population needed for the development of the nation, they can be protected from engaging in substance abuse. The education and awareness programs will help them gain more knowledge and develop a negative attitude against substance abuse. This review will help the health care team to acknowledge the importance of incorporating educational packages in academics to make students competent to manage the conditions with substance abuse.

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