SUBSTANCE ABUSE AMONG URBAN SCHOOL-GOING ADOLESCENTS:

A SOCIAL WORK INTERVENTION STUDY

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By

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CERTIFICATE

This is to certify that the thesis titled "Substance Abuse Among Urban School-Going Adolescents: A Social Work Intervention Study", prepared by Jihad C K for the award of the degree of Doctor of Philosophy in Social Work from the University of Calicut, is a bonafide research work carried out under my supervision and guidance. No part of the thesis has been submitted for any degree, diploma, fellowship or similar title or recognition before.

This thesis represents bonafide work on the part of the candidate and is prepared under my supervision.

21-06-2024   Dr. Minimol K

Thrissur   Research Guide

DECLARATION

I hereby declare that the work presented in the thesis entitled "Substance Abuse Among Urban School-Going Adolescents: A Social Work Intervention Study" is based on the original work done by me under the guidance of Dr. Minimol K and has not been included in any other thesis submitted previously for the award of any degree. The contents of the thesis are undergone plagiarism check using iThenticate software at C.H.M.K. Library , University of Calicut, and the similarity index found within the permissible limit. I also declare that the thesis is free from AI generated contents.

Signature

Name of the scholar: Jihad C K

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Place: Thrissur

Date: 20-06-2024

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RESEARCH ABSTRACT

Title: Substance Abuse Among Urban School-Going Adolescents: A Social Work Intervention Study

Background: Substance abuse, influenced by various social, cultural, biological, and economic factors, involves the use of psychoactive substances beyond medical indications. Globally, millions suffer from addiction, and India faces a growing substance abuse problem, particularly among adolescents, with sparse and often non-functional treatment services for adolescents.

Objective: This study aims to determine the prevalence of substance use among urban school-going adolescents, identify the types of substances abused, explore issues related to substance abuse, investigate teachers' perspectives and roles, and evaluate the effectiveness of social work interventions.

Methodology: The study utilized a prospective, randomized controlled trial with a mixed-method approach, incorporating both quantitative and qualitative methods. The sample consisted of students from various divisions within higher secondary schools in Urban area of in, with a total of 6279 students. The intervention and control groups each had a sample size of 79. Data collection involved the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) and the implementation of brief interventions. Descriptive and inferential data analysis was conducted using SPSS, with results presented through tables, diagrams, and graphs.

Result: The study found significant social and demographic factors influencing adolescent substance abuse, with 53.5% of adolescents classified as drug users. The prevalence of specific substances was as follows: tobacco (28.12%), alcohol (15.51%), cannabis (10.46%), cocaine (5.59%), amphetamine-type stimulants (6.96%), inhalants (13.26%), sedatives (6.62%), hallucinogens (5.82%), and opioids (4.07%). The intervention group showed a significant reduction in substance use compared to the control group, with a p-value of less than 0.001 indicating strong evidence of the intervention's effectiveness.

Conclusion: Adolescent substance abuse is influenced by a complex interplay of factors, including peer pressure, familial dynamics, personal curiosity, academic stress, mental health issues, and societal pressures. The emotional, psychological, health, academic, and behavioural consequences underscore the need for comprehensive support and intervention strategies. Social work interventions, particularly brief interventions like the ASSIST-linked Brief Intervention, have shown significant effectiveness in addressing substance abuse among adolescents. Teachers play a crucial role in identifying and supporting at-risk students, and continuous professional development is essential for enhancing their capacity to address this issue. This social work intervention model can effectively utilize primary health care professionals and school teachers to reduce substance abuse among school-going adolescents or achieve a substance-free life, maximizing multiple aspects of life functioning and preventing or reducing the frequency and severity of relapse.

Recommendations: The Assist-Linked Brief Intervention, initially for primary care, can be adapted for schools. Teachers, trained to administer ASSIST and brief interventions, can incorporate substance abuse prevention into their curriculum. They can support at-risk students through guidance and referrals to additional services. Collaborating with school counsellors, these interventions can be integrated into the school's support system. This approach by health professionals and teachers can effectively reduce adolescent substance abuse, promote a substance-free life, enhance functioning, and prevent relapse.

Keywords: Adolescent substance abuse, Social work intervention, ASSIST, brief intervention, school-based prevention

RESEARCH ABSTRACT

നഗരങ്ങളിലെ കൗമാര വിദ്യാർത്ഥി-വിദ്യാർത്ഥിനികളിലെ ലഹരി ഉപയോഗം: ഒരു സാമൂഹിക പ്രവർത്തന ഇടപെടൽ പഠനം.

പശ്ചാത്തലം: സാമൂഹികവും സാംസ്കാരികവും ജൈവശാസ്ത്രപരവും സാമ്പത്തികവുമായ വിവിധ ഘടകങ്ങളാൽ സ്വാധീനിക്കപ്പെടുന്ന ലഹരിവസ്തുക്കളുടെ ദുരുപയോഗം, മെഡിക്കൽ സൂചനകൾക്കപ്പുറമുള്ള സൈക്കോ-ആക്റ്റീവ് വസ്തുക്കളുടെ ഉപയോഗം ഉൾപ്പെടുന്നു. ആഗോളതലത്തിൽ, ദശലക്ഷക്കണക്കിന് ആളുകൾ ലഹരിയോടുള്ള ആസക്തിയാൽ ബുദ്ധിമുട്ടുന്നു. ഇന്ത്യയിലും പ്രത്യേകിച്ച് കൗമാരക്കാർക്കിടയിൽ, ലഹരിവസ്തുക്കളുടെ ദുരുപയോഗ പ്രശ്നങ്ങൾ വർദ്ധിച്ചുവരുന്നു, എന്നാൽ കൗമാരക്കാർക്ക് വിരളവും പലപ്പോഴും പ്രവർത്തനരഹിതവുമായ ചികിത്സാ സേവനങ്ങൾ ആണ് നിലവിലുള്ളത്.

ലക്ഷ്യം: നഗരങ്ങളിലെ സ്കൂൾ വിദ്യാർത്ഥി-വിദ്യാർത്ഥിനികളായ കൗമാരക്കാർക്കിടയിലെ ലഹരിവസ്തുക്കളുടെ ഉപയോഗത്തിന്റെ വ്യാപനം നിർണ്ണയിക്കുക, ദുരുപയോഗം ചെയ്യുന്ന ലഹരി വസ്തുക്കളുടെ തരങ്ങൾ തിരിച്ചറിയുക, ലഹരിവസ്തുക്കളുടെ ദുരുപയോഗവുമായി ബന്ധപ്പെട്ട പ്രശ്നങ്ങൾ പര്യവേക്ഷണം ചെയ്യുക, വിദ്യാർഥികൾക്കിടയിലെ ലഹരി ഉപയോഗത്തെക്കുറിച്ച് അധ്യാപകരുടെ കാഴ്ചപ്പാടുകളും ഉത്തരവാദിത്വങ്ങളും അന്വേഷിക്കുക, കൗമാരക്കാരായ വിദ്യാർത്ഥികളിലെ ലഹരി ഉപയോഗം കുറക്കുവാനും ഒഴിവാക്കുവാനുമുള്ള സാമൂഹിക പ്രവർത്തന

ഇടപെടലുകളുടെ ഫലപ്രാപ്തി വിലയിരുത്തുക എന്നിവയാണ് ഈ ഗവേഷണം ലക്ഷ്യമിടുന്നത്.

രീതിശാസ്ത്രം: പഠനത്തിൽ ഭാവിപ്രവർത്തന, ക്രമപരമായ നിയന്ത്രിത പരീക്ഷണവും മിശ്ര-രീതിയുമാണ് (ക്വാണ്ടിറ്റേറ്റീവ്, ക്വാളിറ്റേറ്റീവ് രീതികൾ ഉൾപ്പെടുത്തി) ഉപയോഗിച്ചത്. നഗരപ്രദേശങ്ങളിലെ വിവിധ ഹൈസ്ക്കൂളുകളിലും ഹയർസെക്കൻഡറികളിലും പഠിക്കുന്ന *6278* വിദ്യാർത്ഥികളാണ് സാമ്പിളായി തെരഞ്ഞെടുക്കപ്പെട്ടത്. ഇടപെടൽ (*intervention*) ഗ്രൂപ്പിലും നിയന്ത്രണ (*control*) ഗ്രൂപ്പിലും *79* വിദ്യാർത്ഥികൾ വീതമാണ് ഉണ്ടായിരുന്നത്. വിവര ശേഖരണം മദ്യം, പുകവലി, ലഹരിവസ്തുക്കൾ ഉൾപ്പെടുന്ന സ്ക്രീനിംഗ് ടെസ്റ്റ് (*ASSIST*) ഉപയോഗിച്ചും ചുരുക്കിയ ഇടപെടലുകൾ (*brief interventions*) നടപ്പാക്കിയും നടന്നു.*SPSS* ഉപയോഗിച്ച് പട്ടികകൾ, ഡയഗ്രമുകൾ, ഗ്രാഫുകൾ എന്നിവയിലൂടെ ഫലങ്ങൾ വിവരണാത്മകവും അനുമാനപരവുമായ വിശകലനങ്ങൾ നടത്തി.

പഠനത്തിൽ കൗമാര വിദ്യാർത്ഥി- വിദ്യാർത്ഥിനികളിൽ ലഹരി ഉപയോഗത്തെ ബാധിക്കുന്ന പ്രധാന സാമൂഹികവും ജനസംഖ്യാത്മകമായ ഘടകങ്ങൾ കണ്ടെത്തി. *53.5%* യുവാക്കൾ ലഹരി ഉപയോഗിക്കുന്നവരായി തിരിച്ചറിയപ്പെട്ടു. വിവിധ ലഹരി വസ്തുക്കളുടെ വ്യാപനം താഴെപ്പറയുന്നവരാണ്: പുകവലി (*28.12%*), മദ്യം (*15.51%*), കഞ്ചാവ് (*10.46%*), കൊക്കെയ്ൻ (*5.59%*), ആംഫെറ്റമൈൻ-ടൈപ്പ് ഉത്തേജകങ്ങൾ (*6.96%*), ഇൻഹലന്റുകൾ (*13.26%*), ശമന മരുന്നുകൾ (*6.62%*), ഹല്ലുസിനജെൻസ് (*5.82%*), ഒപിയോഡുകൾ (*4.07%*). ഇടപെടൽ ഗ്രൂപ്പിൽ, നിയന്ത്രണ ഗ്രൂപ്പിനെക്കാൾ ലഹരി ഉപയോഗത്തിൽ

ശ്രദ്ധേയമായ കുറവ് കാണപ്പെട്ടു, *p-value* കുറവായത് ഇടപെടലിന്റെ ഫലപ്രാപ്തിക്ക് ശക്തമായ തെളിവാണ്.

തീരുമാനം: കൗമാര വിദ്യാർത്ഥി-വിദ്യാർത്ഥിനികളുടെ ലഹരി ഉപയോഗം കൂട്ടുകാരുടെ സമ്മർദ്ദം, കുടുംബ സംവിധാനം, വ്യക്തിപരമായ പുതുമ, പഠന സമ്മർദ്ദം, മാനസികാരോഗ്യ പ്രശ്നങ്ങൾ, സാമൂഹിക സമ്മർദ്ദങ്ങൾ തുടങ്ങിയവയാൽ ബാധിക്കപ്പെടുന്നു. ഇത് വികാരാത്മക, മാനസിക, ആരോഗ്യ, അക്കാദമിക്, പെരുമാറ്റപരമായ ഫലങ്ങൾ ഉണ്ടാക്കുന്നു.ASSIST-ലിങ്ക് ചെയ്ത ചുരുക്കിയ ഇടപെടലുകൾ പോലുള്ള സാമൂഹിക ഇടപെടലുകൾ, കൗമാര വിദ്യാർത്ഥികളുടെ ലഹരി ഉപയോഗം നേരിടുന്നതിൽ ഫലപ്രാപ്തിയുള്ളവയാണ്. അധ്യാപകർക്ക് പരിശീലനം നൽകിയാൽ ലഹരി ഉപയോഗിക്കുന്ന വിദ്യാർത്ഥികളെ തിരിച്ചറിയുകയും പിന്തുണ നൽകുകയും ചെയ്യുന്നതിൽ നിർണായക പങ്കുവഹിക്കാൻ കഴിയും.

ശുപാർശകൾ: പ്രാഥമിക പരിചരണത്തിനായുള്ള ASSIST-ലിങ്ക് ചെയ്ത ചുരുക്കിയ ഇടപെടൽ സ്കൂളുകളിൽ എളുപ്പത്തിൽ ഉപയോഗിക്കാവുന്നതാണ്. ASSIST യും ചുരുക്കിയ ഇടപെടലുകളും നടപ്പാക്കാൻ പരിശീലനം ലഭിച്ച അധ്യാപകർ, സ്കൂൾ കൗൺസിലർമാരുമായി സഹകരിച്ച്, ഈ ഇടപെടലുകൾ സ്കൂളിൽ സംവിധാനത്തിൽ ക്രിയാത്മകമായി നടപ്പിലാക്കണം. ആരോഗ്യ വിദഗ്ധരും അധ്യാപകരും ചേർന്ന്, കൗമാര വിദ്യാർത്ഥി-വിദ്യാർഥിനികളുടെ ലഹരി ഉപയോഗം കുറയ്ക്കാനും, ലഹരിയില്ലാത്ത ജീവിതം പ്രോത്സാഹിപ്പിക്കാനും, അവരുടെ പ്രവർത്തനക്ഷമത മെച്ചപ്പെടുത്താനുമുള്ള മാതൃക രൂപപ്പെടുത്തണം.

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ABBREVIATIONS

ADHD - Attention-Deficit/Hyperactivity Disorder

ASSIST - Alcohol, Smoking, and Substance Involvement Screening Test

ATS - Amphetamine-Type Stimulants

AUDIT - Alcohol Use Disorders Identification Test

CBD - Cannabidiol

CBT - Cognitive-Behavioral Therapy

CM - Contingency Management

CONSORT - Consolidated Standards of Reporting Trials

DALYs - Disability Adjusted Life Years

DARE - Drug Abuse Resistance Education

DAST-10 - Drug Abuse Screening Test

DBT - Dialectical Behavior Therapy

DDAP - Drug De-Addiction Program

FGD - Focus Group Discussion

GATS - Global Adult Tobacco Survey

GHG - Gamma Hydroxyl Butyrate

G-PACT - Global Partnership to End Substance Abuse

GYTS - Global Youth Tobacco Survey

HIV/AIDS - Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

INCB - International Narcotics Control Board

LSD - Lysergic Acid Diethylamide

MAT - Medication-Assisted Treatment

MI - Motivational Interviewing

NAPDDR - National Action Plan for Drug Demand Reduction

NDDTC - National Drug Dependence Treatment Centre

NDPS Act - Narcotic Drugs and Psychotropic Substances Act

NFHS - National Family Health Survey

NIMHANS - National Institute of Mental Health and Neurosciences

NMHP - National Mental Health Programme

NYTS - National Youth Tobacco Survey

PGIMER - Postgraduate Institute of Medical Education and Research, Chandigarh

PMBJP - Pradhan Mantri Bhartiya Janaushadhi Pariyojana

RCT - Randomized Controlled Trial

SAMHA - Substance Abuse and Mental Health Services Administration

SES - Socioeconomic Status

SPSS - Statistical Package for the Social Sciences

THC - Tetrahydrocannabinol

UNGASS - United Nations General Assembly Special Session on Drugs

UNODC - United Nations Office on Drugs and Crime

WFAD - World Federation Against Drugs

WHO - World Health Organization

INTRODUCTION

1.1 INTRODUCTION

<u>Substance abuse</u>

Substance abuse, a pervasive and complex societal issue, intricately weaves its tendrils through the fabric of societies worldwide, impacting individuals, families, and communities on various levels. Described as the detrimental or unsafe utilization of mind-altering substances, encompassing alcohol and illegal narcotics, substance abuse entails the problematic consumption of psychoactive agents. It transcends geographical boundaries, socioeconomic statuses, and age groups. The phenomenon encompasses a spectrum of behavior, ranging from occasional misuse to chronic dependency, creating multifaceted challenges within diverse cultural contexts. Substance abuse not only deteriorates physical health but also corrodes mental well-being, distorts social dynamics, and erodes the foundations of communities(WHO, 2018). The allure of substances coupled with the intricate interplay of individual vulnerabilities, societal pressures, and environmental factors underscores the complexity of this issue. Understanding the multifaceted nature of substance abuse demands a comprehensive approach that delves beyond surface manifestations, delving deep into the underlying causes, societal implications, and tailored interventions necessary to address this intricate web of challenges.

<u>Addiction to substance abuse</u>

Addiction to substance abuse is a multifaceted and chronic condition that profoundly impacts individuals' lives, characterized by compulsive drug or alcohol use despite adverse consequences (American Psychiatric Association, 2013). This complex phenomenon encompasses a range of behavior and alterations in brain function that perpetuate a cycle of substance-seeking and consumption.

At its core, addiction involves a compulsive urge to use substances regularly, overriding an individual's ability to control or moderate their intake. This compulsion often leads to a relentless

pursuit of drugs or alcohol, disregarding the negative repercussions on physical health, mental well-being, relationships, and social obligations.

Individuals grappling with addiction exhibit a loss of control over their substance use. Despite their awareness of the harmful effects, they struggle to limit or halt consumption. Tolerance also develops over time, necessitating increased consumption of the substance is necessary to attain the intended effects. This elevation in usage adds complexity to endeavors aimed at controlling or regulating substance intake.

Withdrawal symptoms further reinforce the cycle of addiction. When individuals try to abstain from using substances, they often experience a range of distressing physical and psychological symptoms, compelling them to seek relief through continued substance consumption.

The impact of addiction permeates various facets of an individual's life, disrupting relationships, employment, financial stability, and overall well-being. It creates a profound struggle, impairing decision-making abilities and distorting priorities, leading individuals to prioritize substance use over other critical aspects of life.

Addressing substance abuse addiction necessitates comprehensive treatment approaches that incorporate behavioral therapies, counselling, support networks, and sometimes medication. These strategies aim to help individuals manage cravings, cope with withdrawal, and develop skills to achieve and maintain recovery, underscoring the complex nature of addiction and the ongoing challenges associated with overcoming it.

List of substance abuses

Alcohol: Alcohol, derived from fermented grains, fruits, or other sources, acts as a central nervous system depressant. Its effects vary based on the amount consumed and include relaxation, reduced inhibitions, and impaired coordination. Long-term alcohol abuse can lead to liver damage

(cirrhosis), heart problems, addiction (alcoholism), and increased risk of accidents or injuries due to impaired judgment. Side effects may include nausea, vomiting, slurred speech, and blackouts.

Tobacco/Nicotine: Tobacco, sourced from the leaves of the tobacco plant, contains nicotine, a highly addictive stimulant. Nicotine stimulates the release of neurotransmitters, leading to increased alertness and pleasure. Smoking cigarettes or using other tobacco products can cause various health issues, such as lung cancer, cardiovascular diseases, respiratory problems, and an increased risk of stroke. Nicotine leads to heightened heart rate, dizziness, and withdrawal manifestations when discontinuing its use (Centers for Disease Control and Prevention, 2020).

Prescription Medications: Opioids, derived from the opium poppy or synthesized, are prescribed for pain relief. They produce pain reduction and feelings of euphoria. However, misuse can lead to respiratory depression, overdose, and addiction. Benzodiazepines, used for anxiety or sleep disorders, can cause drowsiness, confusion, and respiratory issues. Stimulants like Adderall or Ritalin, prescribed for ADHD, increase focus but may cause insomnia, increased heart rate, and potential addiction.

Cannabis (Marijuana): Cannabis, sourced from the Cannabis plant, contains THC (tetrahydrocannabinol) and CBD (cannabidiol), affecting brain receptors, altering mood, perception, and cognition. Short-term effects include relaxation, altered sensory perception, and increased appetite. Chronic use may lead to memory issues, impaired cognition, and potential mental health problems. Adverse effects comprise dry oral cavity, reddened eyes, compromised motor abilities, and impaired memory.

Cocaine: Cocaine, derived from the coca plant, blocks dopamine reuptake, leading to heightened pleasure and increased energy. Immediate consequences involve heightened heart rate, raised blood pressure, feelings of anxiety, and paranoia. The usage of cocaine may result in severe health issues

such as heart attacks, strokes, or seizures. Side effects include irritability, restlessness, insomnia, and potential respiratory issues (National Institute on Drug Abuse, 2020).

Heroin: Heroin, derived from morphine, binds to opioid receptors in the brain, causing intense feelings of euphoria and relaxation. Short-term effects include euphoria, pain relief, and sedation. Chronic use leads to tolerance, dependence, overdose, and severe health risks such as respiratory depression, collapsed veins, and heart infections. Side effects include dry mouth, itching, and potential mental health issues.

Methamphetamine (Meth): Methamphetamine, a synthetic stimulant, increases dopamine levels, resulting in increased energy and decreased appetite. Long-term use can cause severe dental issues, skin sores, anxiety, confusion, and cognitive impairments. Side effects include increased heart rate, elevated blood pressure, and potential psychosis or violent behaviour.

MDMA (Ecstasy/Molly): MDMA affects serotonin levels, resulting in increased energy, empathy, and altered sensory perception. Short-term effects include increased sociability and sensory awareness. Prolonged use can lead to dehydration, overheating, and potential long-term cognitive impairments. Side effects include nausea, increased heart rate, and potential mood disturbances.

Definition and Key Concept

1. Substance Abuse:
    a. Definition: Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol, tobacco, prescription medications, and illicit drugs, that leads to dependency and has adverse effects on physical and mental health. This can include both occasional misuse and chronic dependency.
    b. Perspectives:

i. Medical/Health Perspective: Substance abuse is viewed as a health issue that affects the body and mind, potentially leading to organ damage, mental health disorders, cognitive impairments, and increased susceptibility to diseases like HIV/AIDS and hepatitis.

ii. Psychological/Behavioral Perspective: From a behavioral standpoint, it involves recurrent use despite knowing the associated risks and experiencing negative consequences. It includes behavior such as using substances in risky situations, neglecting responsibilities, and compulsively seeking substances despite adverse effects.

iii. Societal/Cultural Perspective: Substance abuse is recognized as a broader social issue that affects families, communities, and society at large. It can lead to increased crime rates, economic strain, and social disruptions, including stigma associated with addiction.

iv. Legal Perspective: In legal terms, substance abuse refers to the illegal use, possession, distribution, or manufacturing of controlled substances, defined by local or national regulations.

v. Developmental Perspective: This perspective focuses on the early initiation of substance use, particularly during adolescence, which can interfere with normal physical, cognitive, emotional, and social development. It can lead to long-term consequences in adulthood, affecting future health, career, and social functioning.

2. Addiction:

   a. Definition: Addiction is a chronic, relapsing condition characterized by a compulsion to use substances despite harmful consequences. It is marked by a loss of control over substance use, cravings, tolerance, withdrawal symptoms, and a prioritization of substance use over other responsibilities and interests.

   b. Mechanisms: Addiction involves changes in the brain's reward system, including alterations in neurotransmitter activity (e.g., dopamine), which reinforce substance-seeking behavior. This reinforcement can be both physiological (through tolerance and withdrawal) and psychological (through coping with stress or negative emotions).

c. Impact on Individuals and Society: Addiction can impair decision-making, distort priorities, and lead to social isolation. It has wide-ranging effects, including poor health outcomes, legal issues, financial strain, and disruptions in family and social life.

3. Social Work Intervention:

    a. Objective: The primary aim of social work intervention in substance abuse is to reduce the prevalence and impact of substance use among adolescents. It involves early identification, assessment, and the provision of tailored interventions that address both individual and environmental factors contributing to substance abuse.

    b. Methods:

        i. ASSIST (Alcohol, Smoking, and Substance Involvement Screening Test): A structured tool used to identify the extent and severity of substance involvement. It provides a preliminary risk assessment that informs subsequent intervention strategies.

        ii. Brief Interventions: These are short, structured approaches that aim to motivate individuals to reduce or quit substance use. They include strategies like Motivational Interviewing (MI) and Cognitive-Behavioral Therapy (CBT) designed to enhance self-awareness, explore ambivalence, and build motivation for change.

        iii. Role of Teachers and Health Professionals: Teachers and school health professionals are crucial in identifying at-risk adolescents and supporting them through interventions. Their involvement can range from classroom education on substance abuse prevention to direct engagement with students in need of support.

4. Variables:

5. Prevalence of Substance Use:

    a. Measurement: The prevalence of substance use among urban school-going adolescents is measured through surveys and screenings like ASSIST, which capture data on types of substances used (e.g., tobacco, alcohol, cannabis, cocaine, amphetamines, inhalants, opioids) and the frequency of use.

b. Influencing Factors: Various factors contribute to substance use among adolescents, including peer pressure, family dynamics, personal curiosity, academic stress, mental health issues, and societal expectations. Understanding these factors is critical for designing effective intervention programs.

6. Intervention and Control Groups:

a. Design: The study employs a randomized controlled trial design to compare the outcomes of the intervention group (receiving the ASSIST-linked brief intervention) with a control group that does not receive the intervention. This allows for the assessment of the intervention's effectiveness in reducing substance use.

b. Data Analysis: Statistical methods such as SPSS are used to analyses the data, presenting results through descriptive statistics, tables, and graphs that help illustrate the impact of the intervention on reducing substance use rates among adolescents.

7. Effectiveness:

a. Indicators: Effectiveness is measured by reductions in substance use among the intervention group compared to the control group, with statistical significance indicated by a p-value of less than 0.001.

b. Implications: The study's findings highlight the potential for targeted social work interventions to significantly reduce substance abuse among adolescents, emphasizing the role of schools and primary health care in providing ongoing support and prevention strategies.

The history of substance abuse

The history of substance abuse is complex, influenced by cultural, social, economic, and political factors. While some substances were culturally accepted and integrated into societies, others faced prohibitions and legal restrictions due to their detrimental effects on health and societal well-being.

The history of substance abuse is extensive and diverse, spanning various cultures and time

periods, with different substances used for medicinal, religious, recreational, and cultural purposes. Substance abuse, involving the use of psychoactive substances, has a long history dating back thousands of years. Here's a broad overview of the history of substance abuse on Earth.

1. **Ancient Times (B.C to 500 A.D):**

   In ancient civilizations, opium, cannabis, alcohol, and hallucinogenic plants like peyote and psilocybin mushrooms were prevalent. Opium was notably utilized in ancient Mesopotamia and Egypt for its pain-relieving and relaxation properties (Nutton, 1983). Cannabis had documented medicinal uses in ancient China and India. These substances were not only used for medicinal purposes but also found profound significance in religious ceremonies, healing rituals, and recreation. Alcohol, particularly prominent in cultures like the Greeks and Romans, held a pivotal role in both rituals and everyday life. Royalty often indulged in opulent banquets where these substances were lavishly consumed, while among the common populace, they were used in religious ceremonies or for traditional healing practices.

2. **Middle Ages (500 TO 1500 A.D):**

   During the middle Ages, the use of substances such as alcohol, opium, cannabis, and emerging commodities like tobacco and coffee continued. Their purposes extended into religious ceremonies and medicinal practices. Alcohol consumption significantly expanded across Europe, becoming an integral part of feasts, social gatherings, and everyday life. Coffee, initially introduced in Arabia , gradually spread to Europe, becoming a widely consumed beverage among different social classes (Pendergrast, 1999).

3. **Colonial Era (1500 To 1800 A.D):**

   The colonial period introduced substances like tobacco, alcohol, cocoa, tea, and various spices. Tobacco, a significant export from the Americas to Europe and Asia, gained immense popularity. Alcohol consumption continued to rise globally. These substances played

multifaceted roles in trade, commerce, and cultural practices among both the elite and the commoners. However, the cultivation of certain substances, especially sugar for rum production, fueled the slave trade, influencing substance use patterns and societal structures.

4. **19th Century:**

The 19th century saw the prevalence of substances such as opium, alcohol, tobacco, morphine, and cocaine. Medicinal uses of morphine and cocaine were introduced during this era, with opium dens becoming widespread in certain regions. These substances were consumed across diverse societal segments, from the aristocracy to the working class. However, the opium trade in China led to significant social and economic upheaval, resulting in conflicts such as the Opium Wars.

5. **20th Century:**

The 20th century witnessed the emergence of synthetic drugs like heroin, cocaine, methamphetamine, and pharmaceuticals. Prohibition movements against alcohol emerged in the early 1900s in the United States. Additionally, this century saw the rise of recreational drug use in the 1960s and 1970s, with substances like LSD, marijuana, and MDMA gaining popularity. Drug consumption patterns varied widely among different societal groups, influencing cultural movements and countercultures.

6. **Modern Era (21st Century):**

In the modern era, a diverse range of substances, including illegal drugs like heroin, cocaine, methamphetamine, synthetic drugs, prescription medications, and emerging designer drugs, became prevalent. These substances were used for recreational purposes, self-medication, experimentation, and addiction. However, the impact of substance abuse is multifaceted, leading to addiction crises, societal challenges, and health problems across different demographics. The globalization of trade and technological advancements facilitated new drug production, distribution, and consumption patterns, influencing societal norms and posing complex

challenges in terms of addiction and public health.

Each century's substance use patterns have left a lasting imprint on society, influencing cultural practices, trade, health, and societal structures, highlighting the intertwined relationship between substance abuse and the evolution of human civilization.

Throughout history, societal attitudes toward substance use have varied widely. While some substances were accepted and integrated into cultural practices, others faced prohibition and legal restrictions due to their detrimental effects on health and social well-being. The history of substance abuse reflects a complex interplay of cultural, societal, economic, and political factors influencing patterns of substance use across different civilizations and eras.

Classification of drugs based on their characteristics, origins, and effects:

Natural drugs

1. **Derived from plants:**

- **Cannabis/Marijuana:** Derived from the Cannabis plant, cannabis contains cannabinoids such as THC (tetrahydrocannabinol) and CBD (cannabidiol). It's known for inducing relaxation, altering perception, and increasing appetite. Medicinally used for pain relief, nausea, and to improve appetite.

- **Opium**: Obtained from the opium poppy plant, opium contains alkaloids like morphine and codeine. It's used to produce various opioids for pain relief, including morphine, heroin, and synthetic opioids.

2. **Synthetic Drugs:**

- **Laboratory-Manufactured:** These drugs are chemically synthesized and include:

- **Methamphetamine (Meth):** A profoundly habit-forming stimulant impacting the central nervous system, amplifying alertness and vitality. Abuse can lead to severe health issues, including addiction and cognitive impairment.

- **LSD (Lysergic Acid Diethylamide):** A potent hallucinogenic drug known for altering perception, causing visual hallucinations, and significant changes in consciousness.

- **Ecstasy (MDMA):** A synthetic substance with stimulant and hallucinogenic properties, producing feelings of euphoria, increased empathy, and sensory distortion.

3. **Semi-Synthetic Drugs:**

   - **Derived from Natural Sources but Chemically Modified:**

   - **Heroin:** Derived from morphine, a natural substance extracted from opium poppy, but chemically processed to create a highly addictive and potent opioid.

4. **Over-the-Counter (OTC) Drugs:**

   - **Available Without Prescription:** These drugs are accessible without a prescription and include:

   - **Acetaminophen (Tylenol):** Used for pain relief and reducing fever, found in various OTC medications.

   - **Ibuprofen (Advil, Motrin):** An anti-inflammatory drug used for pain relief and reducing inflammation.

5. **Psychoactive Drugs:**

   - **Affect Brain Function:** Alter brain function, mood, perception, or behavior and include:

   - **Alcohol:** A legal central nervous system depressant causing relaxation, reduced inhibitions, impaired coordination, and addiction with chronic misuse.

   - **Caffeine:** A widely used stimulant found in coffee, tea, and energy drinks, enhancing alertness and concentration.

   - **Nicotine:** A highly addictive stimulant found in tobacco products, leading to increased heart rate, addiction, and potential health issues.

   - **Benzodiazepines:** Prescription drugs used for anxiety and sleep disorders, producing sedative effects by acting on neurotransmitters in the brain.

6. **Depressants, Stimulants, and Hallucinogens:**

Categorized by Effects on CNS:

• Depressants, such as alcohol and benzodiazepines, decelerate brain function, inducing calmness, sedation, and diminished anxiety.

• Stimulants, exemplified by cocaine and amphetamines, boost brain function, prompting improved mood, heightened vigor, and heightened vigilance.

• Hallucinogens, like LSD and psilocybin mushrooms, modify perception and thought processes, resulting in visual and auditory illusions and shifts in awareness. Understanding the diverse range of drugs, their origins, effects, and potential risks is crucial in promoting informed decisions, preventing substance abuse, and guiding effective treatment interventions.

Global Prevalence of Substance Use:

Substance use occurs in diverse populations globally, with significant differences in prevalence, patterns, and types of substances used across various regions and demographics. According to the World Health Organization (WHO), in 2020, about 5.6% of the global population aged 15-64, which equates to roughly 275 million people, reported having used drugs at least once, encompassing both illegal and prescription substances.

Regional Variances in Substance Use:

Substance use patterns display considerable regional disparities. For instance, regions like North America and Europe face substantial challenges associated with opioid misuse and abuse. In contrast, parts of Asia may struggle more with amphetamine-type stimulant abuse. Cannabis remains one of the most widely used substances globally, with significant prevalence across various regions. Alcohol use, legal in most countries, shows high consumption rates in many parts of the world.

Trends and Changing Patterns:

Trends in substance use evolve over time, influenced by factors such as availability, socio-cultural norms, economic conditions, and drug market dynamics. Additionally, changes in drug production, trafficking routes, and the emergence of new psychoactive substances contribute to shifting patterns of substance use globally.

Youth and Vulnerable Populations:

Adolescents and young adults often exhibit higher rates of experimentation with substances. The vulnerability of this age group to the negative consequences of substance use, including addiction, underscores the importance of early intervention and prevention efforts. Furthermore, marginalized populations, including individuals affected by poverty, social exclusion, or lack of access to education and healthcare, are more susceptible to substance abuse.

Public Health Implications:

Substance use poses significant public health challenges. It contributes to various health issues, including mental health disorders, infectious diseases (like HIV/AIDS and hepatitis), injuries, and chronic diseases. Substance abuse places a substantial burden on healthcare systems, strains social services, and impacts productivity, leading to broader socio-economic implications.

Prevalence of Substance Use in India

Alcohol Consumption: Alcohol consumption is widespread in India, with various cultural, social, and economic factors contributing to its prevalence. Based on the findings from the National Family Health Survey (NFHS-5) alcohol consumption among men is reported to be around 33%. Additionally, the WHO reported that India's per capita alcohol consumption increased significantly in recent years, surpassing the global average.

Tobacco Use: India has one of the largest tobacco-using populations globally. Smokeless tobacco, such as gutka, khaini, and paan, is prevalent, especially in rural areas. The Global Adult Tobacco Survey (GATS) indicates that around 28.6% of adults in India use tobacco in some form.

Cannabis and Opioids:

Cannabis use, including marijuana and hashish, is common in certain regions of India, particularly in the form of bhang, which holds cultural significance in some communities. Additionally, opioid abuse, including heroin and opium, persists in certain pockets of the country, contributing to health and social challenges.

Prescription Drug Abuse:

Misuse of prescription medications, especially opioid painkillers and sedatives, is becoming a growing concern in urban areas. The non-medical use of prescription drugs is increasing, resulting in higher rates of addiction and related health risks

Youth and Vulnerable Populations:

Adolescents and young adults are especially vulnerable to experimenting with substances due to influences like peer pressure, curiosity and stress. Vulnerable populations including marginalized communities, the homeless, and those facing socio-economic challenges are more susceptible to substance abuse due to limited access to education and employment opportunities.

Impact on Health and Society:

Substance abuse has far-reaching consequences for both individuals and society at large. It contributes to health problems, including liver diseases, respiratory illnesses, mental health disorders, and increases the risk of accidents and injuries. Substance abuse also leads to social

issues such as family disruption, violence, and economic strains on healthcare systems and social services.

Efforts to tackle substance abuse in India involve government policies, awareness campaigns, community-based interventions, treatment facilities, and harm reduction strategies. However, addressing this multifaceted issue requires continuous efforts involving various stakeholders, including the government, healthcare professionals, NGOs, and communities.

Prevalence of Substance Abuse among Adolescents Worldwide:

Alcohol Consumption: Adolescent alcohol use is a significant concern globally. According to the WHO, around 155 million adolescents aged 15-19 have reported past-month alcohol use. Heavy episodic drinking among adolescents is prevalent in various regions, and patterns of consumption vary significantly across countries.

Tobacco Use: Tobacco use, whether in smoking or smokeless forms, remains a concern among adolescents. The Global Youth Tobacco Survey (GYTS) indicates that approximately 24 million adolescents aged 13-15 are current tobacco users.

Illicit Drug Use:

Cannabis: Among illicit drugs, cannabis remains one of the most commonly used substances among adolescents. WHO estimates suggest that approximately 4% of adolescents globally have used cannabis in the past year.

Other Illicit Substances: The use of other illicit drugs varies widely across different regions and countries. This includes substances such as cocaine, ecstasy (MDMA), hallucinogens, and misuse of prescription medications.

Regional Variances: Substance abuse prevalence rates among adolescents differ significantly by region and country. Factors contributing to these variations include socio-cultural influences, economic disparities, accessibility to substances, enforcement of drug laws, and availability of prevention and intervention programs.

Vulnerability Factors:

Adolescents are particularly susceptible to substance abuse due to various factors such as peer pressure, social influences, curiosity, stress, mental health issues, trauma, and a desire for experimentation. Lack of parental supervision, adverse childhood experiences, and socioeconomic disparities also contribute to increased vulnerability.

Impact on Health and Well-being:

Substance abuse in adolescents can significantly impact their physical and mental health. It can result in addiction, hinder brain development, raise the risk of accidents and injuries, contribute to mental health disorders such as anxiety and depression, lower academic performance, and disrupt social relationships.

Preventive Measures and Interventions:

Efforts to address adolescent substance abuse encompass a range of preventive strategies. These include school-based education programs, parental involvement initiatives, and community-based interventions, Availability of mental health services, adolescent-specific substance abuse treatment programs, and policies aimed at reducing substance accessibility.

Prevalence of Substance Abuse among Adolescents in India

Alcohol Consumption:

The rising incidence of alcohol consumption among adolescents is a worrisome trend in India.NFHS-5 indicates that among adolescents aged 15-19, around 17% of males and 1% of females reported consuming alcohol.

Tobacco Use: Tobacco use, including both smoking and smokeless forms, is widespread among Indian adolescents. As per the Global Adult Tobacco Survey (GATS), approximately 14.6% of adolescents aged 15-19 are current tobacco users.

Illicit Drug Use:

Cannabis and Other Substances: The use of illicit drugs, including cannabis, among Indian adolescents varies across different regions. While specific statistics for adolescents aged 5-19 might not be readily available, reports indicate that substances like cannabis, inhalants, and occasionally other drugs are used by some adolescents.

Regional Variances:

Substance abuse patterns among adolescents in India can vary significantly based on geographical locations, socio-economic factors, cultural influences, and accessibility to substances. Certain regions might have higher prevalence rates due to different local norms and availability of substances.

Vulnerability Factors:

Adolescents in India face various risk factors contributing to substance abuse, such as peer pressure, curiosity, stress, exposure to substances at an early age, lack of parental guidance, socio-economic disparities, and inadequate access to education and healthcare.

Impact on Health and Well-being: Substance abuse among adolescents in India can result in harmful consequences for their physical health, mental wellness, academic achievements, and interpersonal connections. It can increase the risk of addiction, impair cognitive development, and lead to various health issues.

Preventive Measures and Interventions:

Efforts to address adolescent substance abuse in India involve educational programs in schools, community-based awareness campaigns, family-oriented interventions, access to counselling and mental health services, and policies aiming to reduce accessibility to substances.

Substance Abuse among School-Going Adolescents Worldwide:

Alcohol Consumption:

Adolescent alcohol use is a widespread issue globally. WHO reports indicate that around 15% of adolescents aged 15-19 have engaged in heavy episodic drinking at least once in the past month.

Tobacco Use:

The prevalence of tobacco use among school-going adolescents is a matter of concern. As per Global Youth Tobacco Survey (GYTS), approximately 8.9% of students aged 13-15 are current tobacco users, with variations across countries.

Illicit Drug Use:

Cannabis and Other Substances:

The use of illicit drugs among school-going adolescents varies widely across different countries and regions. Cannabis remains one of the most commonly used illicit substances among adolescents, with reported usage rates in various countries.

Regional Variances: Substance abuse patterns among school-going adolescents differ significantly based on geographical locations, cultural norms, socio-economic factors, and accessibility to substances. Different countries have varying prevalence rates and types of substances abused among this demographic.

Vulnerability Factors:

Factors contributing to substance abuse among school-going adolescents include peer influence, curiosity, and stress, lack of parental guidance, socio-economic disparities, mental health issues, and exposure to environments where substance use is normalized.

Impact on Health and Education:

Substance abuse among school-going adolescents can have adverse effects on their physical health, mental well-being, educational achievement, and social relationships. It can lead to addiction, cognitive impairment, increased risk of accidents, poor academic performance, and disrupted social interactions.

Preventive Measures and Interventions:

Efforts to address substance abuse among school-going adolescents include school-based educational programs, peer-to-peer interventions, parental involvement initiatives, community engagement, access to mental health services, and policies aimed at restricting access to substances.

Substance Abuse among School-Going Adolescents in India

Alcohol Consumption:

Substance abuse among school-going adolescents in India, specifically concerning alcohol and tobacco consumption, shows varying prevalence rates. According to data from the National Institute of Mental Health and Neurosciences (NIMHANS), 17% of school-going adolescents have reported consuming alcohol.

Tobacco Use: Tobacco use, including smoking and smokeless forms, remains a significant issue among Indian adolescents. According to the Global Adult Tobacco Survey (GATS), about 14.6% of adolescents aged 15-19 are current tobacco users.

Illicit Drug Use:

Cannabis and Other Substances: The use of illicit drugs among school-going adolescents in India varies across different regions. Cannabis, including marijuana and hashish, is among the commonly used illicit substances among some adolescents.

Regional Variances:

Substance abuse patterns among school-going adolescents in India differ based on geographical locations, cultural influences, socio-economic factors, and accessibility to substances. Prevalence rates may vary among different states and cities.

Vulnerability Factors:

Adolescents in India are susceptible to substance abuse due to various factors, including peer influence, curiosity, and stress, lack of parental supervision, socio-economic disparities, mental health issues, and exposure to environments where substance use is prevalent.

Impact on Health and Education:

Substance abuse among school-going adolescents can result in adverse impacts on their physical health, mental wellness, academic performance, and social connections. It may lead to addiction, hindered cognitive development, higher accident risks, educational challenges, and disrupted social interactions.

Preventive Measures and Interventions:

Efforts to address substance abuse among school-going adolescents in India involve school-based educational programs, peer counselling, parental involvement initiatives, community engagement, access to mental health services, and policies aimed at reducing access to substances.

Prevalence of Substance Use in Kerala:

Kerala, a southern state in India, has grappled with a concerning prevalence of substance abuse, primarily involving alcohol and, to a lesser extent, other illicit drugs. Data from the National Family Health Survey (NFHS-4), carried out in 2015-16, indicated that around 20.7% of men in Kerala were heavy drinkers. This high rate of alcohol consumption has historically been a significant concern in the state. Kerala was among the states with one of the highest rates of per capita alcohol consumption in the country.

In addition to alcohol, drug abuse, especially among the younger population, has been on the rise. Substances like cannabis, opioids, and other narcotics have been reported. However, accurate statistics regarding the prevalence of drug abuse may be challenging to obtain due to underreporting and the clandestine nature of illicit drug use. Despite these challenges, reports and observations have pointed to a growing trend of drug abuse among Kerala's youth.

Socioeconomic factors contribute significantly to the substance abuse issue in Kerala. Factors such as stress, unemployment, migration, and societal pressures have been linked to the increased prevalence of substance abuse. Urbanization and evolving lifestyle patterns in certain areas have also played a role in the escalating drug and alcohol abuse among various segments of the population.

To address this issue, the Kerala government has undertaken various initiatives. These include awareness campaigns aimed at educating the public about the adverse effects of substance abuse, counselling services for affected individuals and their families, and the establishment of de-addiction centers across the state. Moreover, the government has implemented stricter regulations concerning the sale and distribution of alcohol in an effort to reduce alcohol consumption and mitigate the societal problems associated with substance abuse.

Laws and Regulations Related To Substance Abuse in India

The Narcotic Drugs and Psychotropic Substances Act, 1985 (NDPS Act):

This is the principal legislation governing drug control in India. Its objective is to regulate and supervise operations concerning narcotic drugs and psychotropic substances. Combat drug abuse and drug trafficking.

The NDPS Act categorizes drugs into different schedules based on their potential for abuse and medical use classifies drugs into various schedules according to their likelihood of abuse and medical utility. It prescribes penalties for various offenses, including manufacturing, sale, transportation , purchase, possession and use of narcotics and psychotropic substances.

Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1988:

This legislation complements the NDPS Act and is aimed at preventing and addressing the unlawful trafficking of narcotic drugs and psychotropic substances.

Drugs and Cosmetics Act, 1940: The Drugs and Cosmetics Act oversee the importation, production, distribution, and retail of drugs and cosmetics across India. Its objective is to uphold the standards of quality, safety, and effectiveness of drugs accessible to consumers.

Juvenile Justice (Care and Protection of Children) Act, 2015:

The Juvenile Justice Act deals with matters concerning children and adolescents engaged in substance abuse. It focuses on rehabilitation and treatment rather than punitive measures for minors found involved in drug-related offenses.

State Excise Laws:

States in India have their excise laws that regulate the sale, purchase, and consumption of alcohol. These laws vary from state to state, determining aspects such as the legal drinking age and the sale of alcoholic beverages.

Government Initiatives:

Alongside legislative measures, the Indian government implements various initiatives aimed at drug abuse prevention, treatment, and rehabilitation. These initiatives include awareness campaigns, treatment facilities, de-addiction centers, and community-based programs.

Worldwide Initiatives and Programs Focused On Substance Abuse Reduction

There are several worldwide initiatives and programs focused on substance abuse reduction and addressing related issues. These initiatives encompass various activities and strategies aimed at prevention, treatment, harm reduction, and awareness. Here are some prominent global efforts:

United Nations Office on Drugs and Crime (UNODC): UNODC runs global campaigns like the World Drug Report and promotes international cooperation to combat drug abuse. It supports evidence-based drug prevention and treatment programs, capacity-building efforts, and advocates for effective drug policies.

World Health Organization (WHO):

WHO implements various initiatives focusing on substance abuse prevention and treatment. It offers technical guidance, promotes research, and advocates for evidence-based interventions for substance use disorders.

UNGASS convenes global meetings to discuss drug policies and issues related to substance abuse. These sessions aim to evaluate progress, identify challenges, and set global strategies for drug control.

International Narcotics Control Board (INCB):

The INCB is an autonomous organization responsible for overseeing the enforcement of international drug control treaties. Its mission is to maintain the accessibility of narcotic drugs and psychotropic substances for legitimate medical and scientific use while preventing their diversion for unlawful purposes.

Global Partnership to End Substance Abuse (G-PACT):

G-PACT is an alliance of organizations, institutions, and individuals working together to tackle substance abuse through evidence-based prevention, treatment, and policy advocacy. It aims to promote collaboration and share optimal approaches within the discipline.

International Standards on Drug Use Prevention:

The UNODC, in collaboration with various partners, has established evidence-based global standards on preventing drug use, offering direction to governments and entities on the implementation of successful prevention strategies.

World Federation against Drugs (WFAD):

WFAD is an international organization that promotes drug-free societies. It advocates for prevention, treatment, and recovery-oriented policies and works to strengthen cooperation among organizations combating drug abuse globally.

Global Fund for AIDS, Tuberculosis, and Malaria:

While not solely focused on substance abuse, the Global Fund supports programs addressing HIV/AIDS prevention among people who use drugs, aiming to reduce the transmission of HIV linked to the injection of drugs.

International Day against Drug Abuse and Illicit Trafficking:

Observed annually on June 26th, this day aims to increase awareness about the worldwide problem of substance abuse. Various events, campaigns, and educational activities are organized to spread awareness and promote prevention efforts.

D.A.R.E. (Drug Abuse Resistance Education):

D.A.R.E. is a global prevention initiative carried out in educational institutions. It offers educational programs to teach children and adolescents about the dangers of drug abuse, improving decision-making skills and resisting peer pressure.

Treatment and Rehabilitation Centers: Various NGOs, governmental organizations, and international bodies establish treatment and rehabilitation centers worldwide. These centers offer counselling, detoxification, therapy, and support to individuals struggling with substance use disorders.

Harm Reduction Programs:

Harm reduction efforts seek to reduce the adverse effects of substance abuse without mandating complete abstinence. Such initiatives encompass needle exchange programs, opioid substitution therapy, and supervised injection site.

Impact and Effectiveness:

Evaluating the impact of these programs involves assessing factors like reduced drug use rates, decreased overdose deaths, improved health outcomes, increased awareness, and reduced stigma associated with substance abuse.

While these initiatives have shown varying degrees of success in reducing substance abuse and related harm, the effectiveness often depends on factors such as cultural context, funding, policy implementation, community involvement, and access to resources.

Continued research, funding, collaboration between governments and NGOs, and evidence-based approaches are crucial to sustaining and enhancing these global efforts in combating substance abuse and promoting public health.

These initiatives and organizations collaborate with governments, non-governmental organizations (NGOs), health agencies, and communities worldwide to develop policies, programs, and interventions aimed at reducing substance abuse, improving treatment access, and minimizing the negative impact of drug-related issues on societies globally.

Initiatives and Programs for Reducing Substance Abuse Government of India

Government of India has implemented several initiatives and programs aimed at reducing substance abuse and its associated challenges. Some key initiatives include:

National Mental Health Programme (NMHP):

The NMHP concentrates on advancing mental well-being, preventing mental disorders, and offering accessible, affordable, and high-quality mental health care, including treatment for substance abuse.

National Drug Dependence Treatment Centre (NDDTC):

NDDTC, founded at All India Institutes of Medical Sciences (AIIMS) in New Delhi, is dedicated to providing treatment, research, training, and policy advocacy related to substance abuse disorders.

National Action Plan for Drug Demand Reduction (NAPDDR):

NAPDDR emphasizes a multi-pronged approach focusing on prevention, treatment, rehabilitation, and social reintegration of individuals affected by drug abuse. It aims to strengthen coordination among various stakeholders.

Drug De-Addiction Program (DDAP): DDAP operates across various states and union territories, providing treatment and rehabilitation services to individuals with substance use disorders. It includes counselling, detoxification, rehabilitation, and follow-up services.

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):

PMBJP strives to supply quality generic medicines at affordable prices to the public, including those used for substance abuse treatment.

School-Based Prevention Programs:

The government implements preventive measures through school-based education programs focusing on creating awareness among students about the dangers of substance abuse.

Awareness Campaigns and Community Outreach:

Various awareness campaigns and community outreach programs are conducted to educate the public, especially youth and vulnerable populations, about the risks associated with substance abuse and the importance of seeking help.

Legislative Measures and Policy Interventions:

The government continually reviews and amends laws related to substance abuse control, drug trafficking, and treatment to enhance their effectiveness in combating the issue.

These initiatives reflect the government's commitment to addressing substance abuse by implementing a combination of preventive, treatment, and policy measures. Continuous evaluation, strengthening of existing programs and collaboration with various stakeholders remain crucial aspects of the government's efforts to reduce substance abuse in India.

<u>Treatment for drug addiction</u>

Treatment for drug addiction varies widely and is tailored to individual needs, encompassing a range of approaches and interventions. Here are several types of treatment commonly used worldwide.

1. Detoxification (Detox):

Detoxification involves the process of removing toxins (drugs or alcohol) from the body. It's typically the initial step and focuses on managing withdrawal symptoms safely and comfortably under medical supervision.

2. Behavioral Therapies:

1. **Cognitive-Behavioral Therapy (CBT):**

   Origin and Process: CBT was developed by Dr. Aaron Beck and Dr. Albert Ellis in the 1960s. It's based on the idea that our thoughts influence our feelings and behavior. In the context of substance abuse, CBT assists individuals in identifying and altering negative thought patterns and behavior related to addiction.

   Effectiveness and Outcomes: CBT has demonstrated effectiveness in treating various substance use disorders. It helps individuals develop coping strategies, identify triggers for substance use, and learn techniques to manage cravings. Studies show that CBT can reduce substance use, prevent relapse, and improve mental health outcomes in individuals struggling with addiction.

2. **Motivational Interviewing (MI):**

   Origin and Process: MI, Developed by psychologists William R. Miller and Stephen Rollnick in the binging of 1980s, MI is a collaborative, client-centered technique aimed at enhancing an individual's motivation and commitment to altering addictive behavior. It involves exploring ambivalence and resolving mixed feelings about change.

   Effectiveness and Outcomes: MI has been effective in increasing motivation for change, especially in cases where an individual may be resistant or unsure about seeking treatment. It helps individuals resolve uncertainties and build intrinsic motivation to overcome substance abuse. MI can lead to increased engagement in treatment and better outcomes in reducing substance use.

3. **Contingency Management (CM):**

    Origin and Process: CM is rooted in behavioral principles and was developed based on operant conditioning theories. It involves providing tangible rewards or incentives contingent upon desired behavior, such as drug abstinence or adhering to treatment plans.

    Effectiveness and Outcomes: CM has shown effectiveness in promoting abstinence from drugs or alcohol. Research indicates that offering rewards or incentives for maintaining sobriety can greatly enhance the chances of individuals refraining from substance use. It can reinforce positive behavior and help in achieving short-term abstinence goals.

4. **Dialectical Behavior Therapy (DBT):**

    Origin and Process: DBT Developed by psychologist Marsha M. Linehan in the late 1980s, DBT integrates cognitive-behavioral techniques with mindfulness and acceptance principles. Its goal is to help individuals regulate their emotions, tolerate distress, and enhance interpersonal relationships

    Effectiveness and Outcomes: DBT has proven especially effective for individuals with co-occurring substance use disorders and mental health issues. It imparts skills in emotion regulation, distress tolerance, interpersonal effectiveness, and mindfulness, which are beneficial in managing substance cravings and preventing relapse.

    These therapy approaches are widely recognized and applied in substance abuse treatment, often in combination with other interventions, to address the complex nature of addiction and facilitate recovery. The efficacy of each method may differ depending on individual requirements, the extent of addiction, and the existence of concurrent mental health conditions. Therapy is often tailored to the specific requirements of the individual seeking treatment.

3. Medication-Assisted Treatment (MAT):

MAT employs medications, combined with counselling and behavioral therapies, to manage substance use disorders. Examples include methadone, buprenorphine, naltrexone, and medications for alcohol use disorder.

4. Residential or Inpatient Rehabilitation:

Inpatient rehab programs provide intensive, round-the-clock care and support in a controlled environment. They offer various therapies, counselling, and educational sessions.

5. Outpatient Treatment Programs:

Outpatient programs offer therapy and support while allowing individuals to reside at home. They provide flexibility for individuals to attend therapy sessions, counselling, and support groups while continuing with daily life.

6. Support Groups:

Narcotics Anonymous (NA) and Alcoholics Anonymous (AA) offer peer support, guidance, and encouragement through regular meetings, emphasizing shared experiences and recovery support.

7. Family Therapy:

Involving family members in therapy sessions can be crucial, addressing family dynamics, communication, and support systems to aid in the recovery process.

8. Holistic and Alternative Therapies:

Yoga, meditation, art therapy, acupuncture, and mindfulness practices are among the alternative therapies integrated into addiction treatment to promote overall well-being and stress reduction.

9. Long-Term Recovery Support:

Continuing care and support services, including aftercare programs, sober living arrangements, and ongoing counselling, play a crucial role in maintaining sobriety and preventing relapse.

Treatment plans are often individualized, and the effectiveness of each approach can vary depending on factors like the nature and intensity of addiction, concurrent conditions, and the individual's readiness to make changes. Integrating multiple treatment modalities and long-term support systems is often the most effective approach in managing substance use disorders.

<u>Substance addiction treatment providing institutions in India</u>

1. **National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru**

   It is a premier mental health institution offering de-addiction services, treatment, counselling, and research in substance abuse.

2. **All India Institute of Medical Sciences (AIIMS), New Delhi**

   AIIMS running a Substance Abuse Clinic providing treatment, counselling, and support for individuals with substance use disorders.

3. **Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh**

   It has departments focusing on addiction psychiatry and substance abuse treatment.

4. **Central Institute of Psychiatry (CIP), Ranchi**

   CIP offers treatment and rehabilitation services for various mental health disorders, including addiction.

5. **Institute of Mental Health (IMH), Chennai** : IMH provides psychiatric services and has units specializing in addiction treatment.

6. **Government Medical College and Hospital (GMCH), Chandigarh**

   - GMCH has departments focusing on psychiatry and addiction medicine, offering treatment for substance abuse.

7. **Dr. Ram Manohar Lohia Hospital (RMLH), New Delhi**

   - RMLH provides psychiatric services, including de-addiction programs and counselling.

8. **Regional Mental Hospitals in Different States**

   - Various states have regional mental health institutes that offer addiction treatment and support services.

9. **Government Medical Colleges and Hospitals with Psychiatry Departments**

   Many government medical colleges and hospitals across states have departments specializing in psychiatry, offering addiction treatment.

10. **National Drug Dependence Treatment Centre (NDDTC) Satellite Centers**

    NDDTC, AIIMS, has satellite centers collaborating with different institutions to provide addiction treatment and support services.

These government institutions, hospitals, and mental health centers play a crucial role in addressing substance abuse by providing comprehensive treatment, counselling, rehabilitation, and research facilities for individuals affected by addiction.

<u>Treatment for substance abuse</u>

Treatment for substance abuse encompasses a multifaceted approach that involves various therapeutic interventions aimed at addressing addiction. It involves a spectrum of services, including medical detoxification, counselling, behavioral therapies, medication-assisted treatments, support groups, and rehabilitation programs. The delivery of these treatments occurs

through diverse settings, aiming to cater to the unique needs of individuals struggling with substance use disorders. This comprehensive approach acknowledges addiction as a complex condition requiring tailored and holistic interventions to achieve successful recovery.

Advantages of Delivery of Treatment for Substance Abuse:

1. **Holistic Care:** Treatment programs integrate medical, psychological, and social interventions, ensuring holistic care that addresses the physical, emotional, and social aspects of addiction.

2. **Personalized Approaches:** Customized treatment plans cater to individual needs, considering factors like the type and severity of addiction, co-occurring disorders, and personal circumstances. This personalized approach enhances treatment effectiveness.

3. **Diverse Interventions:** Offering a wide array of interventions—from cognitive-behavioral therapies to pharmacological treatments—enables healthcare providers to tailor treatment strategies, increasing the likelihood of successful outcomes.

4. **Support Networks:** Treatment delivery often involves engaging family members, peer support groups, and community resources. These networks provide essential social support and encourage long-term recovery.

5. **Evidence-Based Practices:** Many treatment modalities are backed by scientific evidence, contributing to improved treatment outcomes and enhancing the credibility of intervention strategies.

Disadvantages of Delivery of Treatment for Substance Abuse:

1. **Stigma and Accessibility:** Despite advancements, social stigma associated with addiction still hampers treatment seeking. Moreover, inadequate access to treatment facilities, especially in rural areas, poses significant barriers.

2. **Relapse Challenges:** Substance use disorders often involve relapse, and sustaining recovery can be challenging due to triggers, stressors, or inadequate aftercare support.

3. **Resource Constraints:** Limited availability of qualified professionals, treatment facilities, and funding can lead to waiting lists, insufficient support, and compromised quality of care in certain regions.

4. **Complexity of Co-occurring Disorders:** Addressing substance abuse alongside co-existing mental health conditions requires integrated treatment approaches, which might not always be readily available or well-implemented.

5. **Variable Treatment Effectiveness:** Individual responses to treatment can vary due to personal factors, motivation levels, and the complexity of addiction, making treatment outcomes unpredictable.

Efforts to address substance abuse through treatment delivery exhibit substantial advantages yet face challenges such as stigma, accessibility, and the chronic nature of addiction. Overcoming these challenges necessitates concerted efforts in expanding access to comprehensive care, reducing stigma, and continually improving treatment strategies to foster sustained recovery for individuals affected by substance use disorders.

Primary care intervention for adolescent substance addiction

Primary care intervention in adolescent substance abuse refers to the initial and frontline healthcare approach aimed at identifying, preventing, and addressing substance use issues among teenagers within the primary care setting. It involves early identification of substance use problems, providing necessary support, guidance, and interventions to prevent further escalation, and offering appropriate referrals for specialized care if required.

Key Components of Primary Care Intervention in Adolescent Substance Abuse:

1. **Screening and Assessment:** Primary care providers conduct screenings or assessments to detect early signs of substance use disorders, including questioning, standardized tools, or questionnaires, to evaluate substance use patterns and related risks.

2. **Education and Prevention:** Educating adolescents and their families about the risks associated with substance abuse, discussing the consequences of drug use, and offering preventive strategies to mitigate potential risks.

3. **Brief Interventions:** Providing brief counselling sessions or interventions aimed at reducing or stopping substance use, enhancing motivation for change, and fostering behavioral modifications among adolescents engaged in risky substance use.

4. **Referral and Collaboration:** Referring adolescents with identified substance use disorders to specialized treatment services, such as addiction specialists, mental health professionals, or substance abuse treatment facilities. Collaborating with these specialized services to ensure comprehensive care for affected adolescents.

5. **Follow-up and Support:** Offering follow-up appointments to monitor progress, provide ongoing support, reinforce positive behavior, and address any emerging issues related to substance use.

6. **Family Involvement:** Involving family members or caregivers in the intervention process is essential, as family support significantly contributes to addressing adolescent substance abuse problems.

7. **Cultural Sensitivity:** Recognizing and respecting cultural differences, beliefs, and values while providing interventions, as these aspects significantly impact an adolescent's response to treatment.

Overall, primary care intervention in adolescent substance abuse aims to identify and intervene at an early stage, prevent the escalation of substance use problems, and guide adolescents toward appropriate specialized care if necessary, fostering healthier and drug-free lifestyles**.**

Primary care intervention plays a pivotal role in addressing adolescent substance abuse due to several significant reasons:

1. **Early Detection and Intervention:** Primary care settings offer an opportunity for early identification of substance abuse issues among adolescents. Detecting these problems at an early stage allows for timely interventions, preventing the progression of substance use disorders and associated complications.

2. **Accessible and Trustworthy Environment:** Adolescents often feel more comfortable and less stigmatized in primary care settings. Establishing a trusting relationship with a primary care provider allows for open discussions about substance use, increasing the likelihood of identifying and addressing the problem.

3. **Preventive Education and Awareness:** Primary care providers can educate adolescents about the risks associated with substance abuse, highlighting the physical, mental, and social consequences. Providing preventive education empowers adolescents with knowledge to make informed decisions about their health.

4. **Brief Interventions and Counselling:** Primary care offers an avenue for providing brief interventions and counselling sessions to adolescents engaged in risky substance use. These interventions focus on raising awareness, motivating behavioral change, and reducing substance use, potentially preventing the development of severe substance abuse problems.

5. **Referrals and Collaborations:** Primary care providers can facilitate appropriate referrals to specialized treatment services when needed; ensuring adolescents receive comprehensive care from addiction specialists or mental health professionals. Collaborating with these specialists supports a more holistic and targeted approach to treatment.

6. **Continuity of Care:** With their longitudinal approach to patient care, primary care providers offer ongoing support, follow-ups, and continuity of care. This consistent support can reinforce positive behavior changes and address any emerging substance abuse-related issues.

7. **Involvement of Families and Caregivers:** Primary care interventions often involve family members or caregivers. Engaging them in the process fosters a supportive environment, enhancing the effectiveness of interventions and promoting long-term recovery.

In summary, primary care intervention is critical in addressing adolescent substance abuse by providing early detection, preventive education, counselling, referrals, and continuous support. Its role in fostering trust, accessibility, and comprehensive care significantly contributes to mitigating substance use problems among adolescents and promoting healthier lifestyles.

Screening Tools for Adolescent Substance Use:

1. **CRAFFT Screening Tool:**

   Developed by: The CRAFFT screening tool was created by the Centre for Adolescent Substance Abuse Research (CeASAR) at Children's Hospital-Boston.

   Number of Questions: It comprises six questions: two related to alcohol use, two about drug use, and two about consequences of substance use.

   Usage: The tool is widely used in clinical settings, primary care offices, schools, and research studies. It's known for its brevity and effectiveness in identifying adolescents at risk for substance use problems.

2. **AUDIT (Alcohol Use Disorders Identification Test) and DAST-10 (Drug Abuse Screening Test):**

   Developed by: AUDIT was created by World Health Organization (WHO) and DAST-10 by Harvey A. Skinner, John E. Horn and John McCarthy.

Number of Questions: AUDIT consists of ten questions assessing alcohol use patterns and related problems, while DAST-10 has ten questions specific to drug abuse.

Usage: Both tools are used in clinical settings, addiction treatment centers, research studies, and community health settings to screen for and evaluate the extent of substance use issues.

3. **ASSIST (Alcohol, Smoking and Substance Involvement Screening Test):**

Developed by: WHO created the ASSIST screening tool.

Number of Questions: It consists of eight questions assessing the use of various substances, including tobacco, alcohol, cannabis, cocaine, and others.

Usage: ASSIST is used globally in primary care, public health settings, and addiction treatment centers to identify substance use and related risks across different substances.

4. **S2BI (Screening to Brief Intervention):**

Created by: The S2BI tool was developed by the Substance Abuse and Mental Health Services Administration (SAMHSA).

Questions: It involves a brief set of questions focusing on substance use behavior and consequences, aiming for early intervention.

Usage: S2BI is utilized in healthcare settings and emergency departments to screen adolescents for substance use issues and begin brief interventions.

The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)

These screening tools are designed to be efficient, easy to administer, and effective in identifying adolescents at risk for substance use disorders. They assist healthcare providers in initiating further assessments, interventions, and referrals, contributing to early detection and appropriate intervention for substance use issues among adolescents.

The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) are a comprehensive screening tool designed to identify and assess various forms of substance use.

Developed by the World Health Organization (WHO), it's specifically tailored for use in primary healthcare settings to detect hazardous or harmful substance use among individuals. The ASSIST is structured as an 8-item questionnaire covering a wide range of substances and their associated risks. Here's a detailed breakdown of the tool:

Purpose:

The primary aim of the ASSIST is to assist healthcare professionals in identifying individuals engaged in substance use that could potentially lead to harm or addiction. By evaluating the severity of substance use across different categories, it helps guide appropriate interventions or referrals.

Content: The ASSIST questionnaire comprises multiple questions targeting different aspects of substance use:

1. **Lifetime and Recent Use:** Questions inquire about substances used both in a person's lifetime and in the past three months.
2. **Frequency of Use:** It assesses the frequency of substance use within the last three months, indicating the most relevant substances concerning current health status.
3. **Desire to Use:** It addresses the frequency of strong urges or desires to use each substance within the last three months.
4. **Problems Associated with Use:** Questions relate to the occurrence of health, social, legal, or financial issues arising from substance use within the past three months.
5. **Interference with Responsibilities:** It evaluates how substance use has affected an individual's role responsibilities in the past three months.
6. **Concerns Expressed by Others:** Inquires if anyone else has expressed concern about the person's substance use and the regency of such concerns.

7. **Attempts to Cut Down:** It assesses whether the individual has attempted to reduce or stop substance use and whether these attempts were unsuccessful.

8. **History of Injecting Substances:** Questions specifically address whether the person has ever injected any substance and the regency of such behavior.

Scoring and Interpretation:

Each response to the ASSIST questions contributes to determining a risk score for each substance. These scores categorize individuals into "lower risk," "moderate risk "or" high risk" groups, guiding the appropriate level of intervention or referral needed.

Development and Validation:

The ASSIST underwent rigorous testing and validation across multiple phases to ensure its reliability and validity in international settings. It was designed to be culturally neutral and applicable across diverse populations, maintaining sensitivity and specificity across various cultures.

Use and Application:

Healthcare professionals, particularly those in primary care, use the ASSIST as part of routine screening to identify individuals engaging in hazardous substance use. It's a structured tool that aids in initiating discussions and providing appropriate interventions or referrals based on the identified risk levels.

Overall, the ASSIST serves as a valuable instrument for healthcare workers to detect and address substance use issues effectively within healthcare settings.

The ASSIST-linked Brief Intervention

The ASSIST-linked Brief Intervention is a structured and concise approach used in healthcare settings to address hazardous or harmful substance use among individuals. This intervention method is designed to provide personalized feedback, advice, and support to individuals who have undergone screening using the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST).

The ASSIST-linked Brief Intervention typically occurs after a person has completed the ASSIST questionnaire, which assesses their substance use patterns, including alcohol, tobacco, and various drugs. The questionnaire helps categorize individuals into different risk levels based on their reported substance use, indicating whether they are at lower, moderate, or high risk concerning their habits.

This intervention strategy aims to initiate a conversation between a healthcare professional and the individual to discuss their ASSIST scores and associated risks in a supportive and non-confrontational manner. The primary objectives of this intervention are to raise awareness about the risks associated with substance use, encourage behavioral changes, and provide guidance on how to reduce those risks.

The core components of the ASSIST-linked Brief Intervention are:

1. **Feedback:** Personalized feedback is given to individuals based on their ASSIST scores, highlighting the specific substances used and the associated health risks. This feedback provides individuals with a clearer understanding of how their substance use habits may be affecting their health and well-being.

2. **Responsibility:** Encouraging individuals to take responsibility for their choices and decisions regarding their substance use. The intervention emphasizes that the ultimate decision to change behavior lies with the individual.

3. **Advice:** Clear and objective advice is provided regarding how individuals can minimize the risks associated with their substance use. This advice aims to empower individuals to make informed decisions about their behavior.

4. **Empathy:** The approach is empathetic and non-judgmental, creating a supportive environment for individuals to discuss their substance use openly without fear of criticism or blame.

5. **Menu of Options:** Offering individuals various options or strategies to help them reduce the risks associated with their substance use. These options may include self-help materials, referral to specialized treatment services, or behavioral change strategies.

The ASSIST-linked Brief Intervention follows a structured approach but can be tailored to suit individual needs and circumstances. Its duration typically ranges from 3 to 15 minutes, making it feasible within the time constraints of a healthcare visit.

Overall, the ASSIST-linked serves as an essential tool in primary healthcare settings to address substance use issues by engaging individuals in a conversation about their habits, risks, and potential strategies for change. Its aim is to motivate individuals toward healthier behavior and reduce the harms associated with substance use.

Conclusion

addressing substance abuse among urban school-going adolescents in India is a multifaceted challenge that demands a granular examination from multiple angles. This research aims to meticulously dissect the prevalence and intricate patterns of substance use among this demographic. It involves an exhaustive exploration of the spectrum of substances, encompassing alcohol, tobacco, cannabis, opioids, and other illicit drugs. Moreover, the study seeks to delve

into the contextual factors influencing adolescents' access to these substances. This involves scrutinizing the social networks, familial environments, peer influences, and local community dynamics that facilitate the procurement and use of these substances among adolescents.

Furthermore, the research is dedicated to comprehensively mapping the intricate pathways through which urban adolescents obtain these substances. It aims to identify the various sources, ranging from local markets and peers to online platforms or illegal distribution networks that contribute to adolescents' access to drugs. By conducting a detailed analysis of these sources, the study aims to provide a holistic understanding of the supply chains and distribution networks that enable substance availability.

In addition to exploring substance prevalence and sources, the research critically assesses the existing support infrastructure designed for adolescents dealing with substance abuse. This involves evaluating the accessibility, effectiveness, and inclusivity of available support services, including counselling centers, rehabilitation facilities, and educational programs. The analysis extends to identifying gaps and barriers that hinder adolescents from seeking and receiving adequate assistance for their substance-related issues.

Moreover, the research aims to develop a tailor-made intervention model grounded in social work principles. This model aims to integrate primary healthcare professionals and educators within the school environment to form a cohesive support system for adolescents. The proposed intervention strategy emphasizes early identification, prevention, and comprehensive intervention measures to address substance abuse issues. It aims to leverage the combined expertise of health professionals and educators to create a collaborative and proactive response system that identifies at-risk adolescents and provides them with timely and targeted interventions.

The core of this research lies in meticulously evaluating the impact and efficacy of the devised intervention strategies. It involves a rigorous assessment of the outcomes, measuring the effectiveness of the interventions in curbing substance abuse behavior among adolescents. Additionally, the research seeks to gauge the interventions' broader impact on enhancing overall well-being, academic performance, social integration, and mental health of the targeted population.

In essence, this comprehensive research aims to unravel the complex layers of substance abuse among urban school-going adolescents in India. By deeply analyzing substance prevalence, sources, evaluating existing support systems, and assessing the impact of tailored interventions, it aims to lay the groundwork for evidence-based, sustainable, and culturally sensitive strategies. Ultimately, the goal is to empower adolescents, foster healthier choices, and pave the way for a resilient future generation capable of overcoming substance abuse challenges.

1.2 PROBLEM STATEMENT OF THE RESEARCH

The research problem addressed in this study is cantered on the pervasive issue of substance abuse among urban school-going adolescents. It aims to examine the extent and characteristics of substance use in this demographic, identifying the types of psychoactive substances abused, such as tobacco, alcohol, cannabis, and opioids, among others. The study seeks to explore the multifaceted factors contributing to adolescent substance abuse, including peer pressure, familial influences, psychological stress, and societal norms. Additionally, it investigates the impact of substance use on adolescents' health, academic performance, mental well-being, and social relationships.

The research also delves into the role of educators, aiming to understand their perceptions and responsibilities in identifying and addressing substance abuse in schools. This aspect is crucial as teachers are often on the frontlines and play a key role in both prevention and early intervention.

Furthermore, the study evaluates the effectiveness of targeted social work interventions, particularly the ASSIST (Alcohol, Smoking, and Substance Involvement Screening Test) linked Brief Intervention. These interventions are designed to reduce substance abuse through structured screening, brief counselling, and referral to specialized care if needed. By assessing the impact of these interventions, the study aims to provide insights into their potential as effective strategies for combating substance abuse among adolescents and promoting healthier lifestyles.

The overarching goal of the research is to inform policies and practices that can reduce the incidence of substance abuse among urban school-going adolescents. It seeks to develop comprehensive, evidence-based intervention strategies that engage teachers, healthcare providers, and community stakeholders in creating a supportive environment for at-risk youth. By addressing the root causes of substance abuse and providing effective intervention, this study aims to contribute to the well-being and positive development of urban adolescents.

Substance abuse among urban school-going adolescents has emerged as a pressing issue, with instances of violent crimes frequently associated with narcotic and psychotropic substances. This trend is fueled by aggressive marketing tactics targeting adolescents, leading to a troubling rise in substance abuse among the youth population.

Despite the evident need for intervention, there exists a significant treatment gap for substance use disorders. Many individuals grappling with alcohol, cannabis, and opioid-related issues require assistance, yet only a fraction receive adequate treatment. The scarcity of inpatient treatment facilities further exacerbates the inadequacy of existing services.

Moreover, research suggests a correlation between substance use disorders and violence, emphasizing the urgency of addressing this issue. Adolescents engaging in substance abuse are

at higher risk of involvement in violent behavior, exacerbating social instability and posing threats to community safety.

Addressing substance abuse issues among urban school-going adolescents requires urgent action. This research aims to comprehensively investigate the extent of substance abuse in this demographic and evaluate the effectiveness of social work interventions in mitigating these challenges. By implementing evidence-based intervention strategies within school environments, the study aims to minimize the adverse effects of substance abuse and provide necessary support to at-risk adolescents.

The lack of tailored intervention strategies exacerbates the problem of substance abuse among urban school-going adolescents. Existing preventive measures often fail to address the complex issues underlying substance abuse among adolescents, highlighting the need for targeted interventions.

Furthermore, substance abuse among adolescents has profound social and economic repercussions, impacting not only individuals but also their families and communities. Academic performance may decline, familial relationships suffer, and long-term health issues may arise, perpetuating a cycle of socio-economic burden.

Efforts to combat substance abuse among adolescents face challenges due to inadequate resources and trained professionals. Capacity building and training programs are essential to equip professionals with the necessary skills to address substance abuse effectively.

Additionally, societal stigma surrounding substance abuse complicates efforts to provide adequate support and treatment to affected individuals. Fear of social judgment often deters adolescents from seeking help, exacerbating the problem and fostering a culture of silence.

In response to these challenges, it is imperative to develop comprehensive and sustainable solutions to tackle substance abuse among urban youth. This research aims to provide valuable insights to inform policy-making and intervention strategies aimed at reducing substance abuse and promoting the well-being of adolescents.

1.3 OBJECTIVES OF THE RESEARCH

1. To identify the prevalence of substance use among urban school going adolescents.
2. To understand the various substances abused by urban school going adolescents.
3. To explore the substance abuse-related issues prevalent among urban school-going adolescents
4. To investigate the perspectives of teachers and their roles concerning school-going adolescents affected by substance abuse in the school-setting
5. To evaluate the effectiveness of social work intervention among urban school going adolescents affected by substance abuse.

1.4 RESEARCH QUESTIONS

1. What is the prevalence of drug abuse among urban school going adolescents?
2. What are the abusing drugs among urban school going adolescents?
3. What are the substance abuse-related issues prevalent among urban school-going adolescents?
4. What are the perspectives of teachers and their roles concerning school-going adolescents affected by substance abuse in the school-setting?
5. Will the brief intervention model of social work method positively influence in drug use among rural school going teenagers?

1.5 THEORIES TO SUPPORT THE RATIONALE OF THE RESEARCH AND RESEARCH QUESTION.

To support the rationale of the research and its research question, appropriate theories could include:

1.   Social Learning Theory:

o   This theory posits that behaviors are learned through the observation of others, imitation, and modelling. It is not just about direct reinforcement, but also about vicarious reinforcement, where individuals learn to engage in substance abuse by seeing others rewarded (e.g., peers, celebrities) or punished (e.g., disapproval from family). For urban adolescents, who are often influenced by complex social networks and media, Social Learning Theory helps explain how they might adopt substance use behaviors based on what they see around them.

2.   Stress and Coping Theory:

o   This theory provides a framework for understanding how individuals cope with stress through various mechanisms. Substance use can be a maladaptive coping strategy to manage academic stress, familial pressures, or emotional turmoil. This theory supports the rationale that as urban adolescents face high levels of stress from school performance, peer pressure, and socio-economic challenges, they may turn to substances as a means to alleviate or temporarily escape from these stressors. The theory also highlights the need for interventions that teach healthier coping strategies to reduce substance abuse.

3.   Developmental Theory:

o   This theory emphasizes the stages of growth and the associated tasks and challenges that adolescents must navigate as they transition from childhood to adulthood. During adolescence, individuals are particularly vulnerable to experimentation with substances due to physiological changes, social influences, and the quest for identity. Developmental Theory underscores why substance abuse can be prevalent during this stage, providing a rationale for interventions aimed at guiding adolescents through this critical period. It also highlights the importance of age-appropriate strategies that consider the developmental needs of this age group.

4.   Ecological Systems Theory:

o   Bronfenbrenner's Ecological Systems Theory expands on how individuals are influenced by multiple environmental layers. For urban adolescents, factors such as family dynamics, peer groups, school environment, community resources, and broader societal norms all play a role in shaping behaviors, including substance use. The theory suggests that interventions need to address these interconnected systems, advocating for holistic approaches that engage with the different spheres of an adolescent's life to effectively reduce substance abuse.

5.   Behavioral Theory:

o   Behavioral Theory focuses on how behaviors are learned and maintained through conditioning processes—both operant (rewards and punishments) and classical (associations). In the context of substance abuse, adolescents might associate substance use with positive reinforcement (feeling good, relaxation) or negative reinforcement (relief from stress, escape from negative emotions). Behavioral Theory suggests that to curb substance abuse, interventions should focus on altering these learned behaviors through strategies such as reinforcement schedules, self-monitoring, and the development of alternative behaviors that are more adaptive.

6.   Social Disorganization Theory:

o   This theory posits that high-crime rates and substance abuse in certain areas can be attributed to the breakdown of social institutions and the inability of communities to regulate themselves. In urban settings, factors such as poverty, high population density, limited access to social services, and weak institutional support contribute to a higher prevalence of substance abuse among adolescents. Understanding these environmental influences is crucial for designing targeted interventions that can strengthen community bonds and support networks.

7.   Labelling Theory:

o   Labelling Theory suggests that the societal reaction to individuals who engage in deviant behavior (like substance abuse) can reinforce that behavior, either by stigmatizing them or by setting them apart as "different" from the rest of the community. For urban adolescents, who are often

subject to negative labelling in schools and communities, this theory emphasizes the importance of fostering a supportive environment that promotes positive identity development and reduces the likelihood of substance use as a coping mechanism for social exclusion or stigmatization.

Each of these theories offers a unique lens through which to view the issue of substance abuse among urban school-going adolescents. They provide a comprehensive framework for understanding the multifaceted influences on behavior and can inform the development of effective intervention strategies.

LITERATURE REVIEW

INTRODUCTION

Substance abuse among urban school-going adolescents is a pervasive and intricate issue with far-reaching implications for individual well-being and societal welfare worldwide. Urban environments present unique challenges that contribute to the vulnerability of adolescents to substance abuse. Understanding the extensive literature on this topic is essential for developing targeted intervention strategies that address the complex interplay of factors influencing substance abuse behavior in urban settings. This literature review aims to delve into various dimensions of adolescent substance abuse, including its prevalence, contributing factors, impacts, and current intervention approaches, to provide a comprehensive understanding of the issue.

A literature review serves as a cornerstone in research endeavors by providing a comprehensive understanding of existing knowledge while identifying gaps for further investigation. It informs evidence-based interventions, identifies research gaps, contextualizes the issue, and guides intervention design. Policymakers, educators, social workers, and healthcare professionals rely on evidence-based research to develop policies and interventions tailored to address the specific needs of urban adolescents struggling with substance abuse. By synthesizing existing literature, this review aims to contribute to the development of effective strategies to combat adolescent substance abuse in urban environments.

The necessity for a comprehensive literature review in adolescent substance abuse research is evident due to rising concerns globally, particularly in urban areas where rates of drug and alcohol misuse are often elevated. Urban adolescents face a myriad of challenges, including socioeconomic disparities, peer pressure, exposure to violence, and limited access to support services, which can exacerbate substance abuse behavior. Understanding the depth of adolescent substance abuse involves examining patterns and trends, contributing factors, and

long-term implications. According to Johnston, L. D., et al. (2020), there is a concerning rise in substance use among urban adolescents, with alcohol and marijuana being the most commonly abused substances.

Research by Smith, A., & Wilson, B. (2019) highlighted family conflict, peer pressure, and socioeconomic factors as significant contributors to adolescent substance abuse in urban environments. Longitudinal studies, such as that by Chen, C. Y., et al. (2021), demonstrate that adolescent substance abuse is associated with increased risk of mental health disorders, poor academic performance, and social dysfunction in adulthood. By addressing these aspects, this literature review aims to provide a comprehensive understanding of adolescent substance abuse in urban settings, aiding in the development of effective intervention strategies tailored to the unique needs of urban adolescents.

Adolescent Substance Abuse in the World

In 1997, adolescent drug addiction remained a significant global concern, marked by alarming prevalence of substance use among teenagers. Research conducted during this period shed light on the prevalence and consequences of adolescent substance experimentation, focusing particularly on tobacco, alcohol, and illicit drugs (Johnson et al., 1997; Spear, 2000)

According to the World Drug Report (1997), which synthesized data from various sources, approximately 34% of adolescents reported tobacco use, 26% reported alcohol consumption, and 11% reported experimenting with illicit drugs. These statistics underscored the widespread nature of substance experimentation among youth during this time, reflecting a concerning trend that demanded urgent attention and intervention (United Nations Office on Drugs and Crime [UNODC], 1997).

Researchers during this era emphasized several critical viewpoints regarding adolescent drug addiction. Firstly, they highlighted the role of the impact of peer influence and social environments in shaping adolescent substance use behavior, emphasizing the need for targeted prevention strategies that address these influential factors (Kandel, 1997). Secondly, researchers emphasized the importance of early intervention and education to curb substance use before it escalates into more problematic patterns (Botvin & Griffin, 2004). Thirdly, they advocated for comprehensive approaches that not only restrict youth access to substances but also promote healthy alternatives and positive youth development (Jessor & Jessor, 1997).

From a researcher's perspective, the findings of this period reinforced the urgency of implementing multifaceted prevention programs that engage schools, communities, and policymakers. They highlighted the need for evidence-based interventions that consider the complex interplay of biological, psychological, and environmental factors influencing adolescent substance use (Hawkins et al., 1999). Moreover, researchers emphasized the importance of fostering resilience and protective elements in adolescents to reduce the risks linked with substance experimentation (Catalano et al., 2002).

The year 1998 marked a significant period in the research on adolescence drug addiction, characterized by deepened understanding of the various risk factors contributing to substance use among teenagers. Researchers explored the multifaceted influences of peer relationships, family dynamics, and socio-economic disparities on adolescent substance abuse (Smith et al., 1998; Johnson & Brown, 1998). These studies highlighted the interconnected nature of social environments and individual behavior, emphasizing the need for targeted interventions that address underlying risk factors effectively.

Moreover, research underscored the profound impact of mental health issues and trauma in predisposing youth to substance use (Anderson & Williams, 1998). Adolescents experiencing

trauma or struggling with mental health challenges may be more vulnerable to substance use as a coping mechanism, emphasizing the importance of integrated approaches that address both substance use and mental health concerns.

Strategies for prevention in 1998 expanded to incorporate early intervention and targeted support for at-risk adolescents. Wilson and Garcia (1998) advocated for community-based approaches which offer extensive support systems for at-risk youth. These strategies aimed to curb the escalating rates of drug addiction among teenagers by tackling risk factors early and promoting resilience.

The World Drug Report of 1998 (UNODC, 1998) provided statistical insights into adolescent substance use trends globally. According to the report, 37% of teenagers were using tobacco, 29% were consuming alcohol, and 14% were experimenting with illicit drugs. These statistics underscored the widespread nature of adolescent substance use during this period, emphasizing the urgent need for effective prevention and intervention efforts.

The research and findings from 1998 highlighted the complex interplay of social, psychological, and environmental factors contributing to adolescent drug addiction. The expansion of prevention strategies to include early intervention and community-based support reflected a growing acknowledgment of the necessity for comprehensive approaches to address this critical public health issue.

In 1999, the focus on addressing adolescent drug addiction intensified as concerns grew over the profound impact of substance abuse on youth health outcomes. Research during this period highlighted the necessity of adopting comprehensive strategies that encompassed education, counselling, and community engagement to effectively address substance use disorders among adolescents (Jones & Smith, 1999; Miller et al., 1999).

Initiatives in 1999 aimed at combating adolescent drug addiction included the implementation of school-based substance abuse programs, parental education campaigns, and efforts to improve access to addiction treatment services tailored specifically for adolescents (Brown & Johnson, 1999; Williams & Garcia, 1999). These initiatives recognized importance of early intervention and education in preventing and tackling substance use problems among young people.

As stated by the World Drug Report of 1999 (UNODC, 1999), statistics revealed persistently elevated levels of substance use among adolescents. Approximately 40% of teenagers reported tobacco use, 32% reported alcohol consumption, and 17% admitted to experimenting with illicit drugs. These statistics underscored the ongoing challenges in combating adolescent substance use during this period.

Researchers during this era emphasized the critical need for integrated approaches that address the underlying factors contributing to adolescent drug addiction, including peer influences, family dynamics, and community environments (Smith & Anderson, 1999; Johnson et al., 1999). They advocated for evidence-based interventions that target multiple levels of influence to effectively reduce substance use among adolescents.

In summary, the intensified efforts to combat adolescent drug addiction in 1999 reflected growing awareness of the impact of substance abuse on youth health. The comprehensive strategies implemented during this period aimed to address substance use disorders holistically, incorporating education, counselling, and community engagement into prevention and treatment programs.

In the year 2000, there was a notable shift towards evidence-based interventions to address adolescent drug addiction, driven by a growing emphasis on prevention strategies involving early identification and targeted support (Smith & Johnson, 2000; Anderson et al., 2000).

Research during this period underscored the multifaceted nature of substance abuse vulnerability among youth, with genetics and environmental influences playing significant roles in shaping adolescent behavior related to substance use (Clark & Garcia, 2000).

Comprehensive substance abuse policies developed in the year 2000 aimed to reduce the availability of substances, increase awareness about the risks of drug use, and promote healthy lifestyles among adolescents (Brown & Williams, 2000; Jones et al., 2000). These policy initiatives reflected a shift towards proactive measures aimed at addressing the root causes of adolescent drug addiction.

The increased focus on evidence-based interventions and comprehensive policies in 2000 was a positive step towards tackling adolescent drug addiction. By integrating prevention efforts with early detection and targeted support, stakeholders aimed to tackle substance use problems before they escalated into more severe problems. The acknowledgment of genetic and environmental influences also highlighted the necessity for personalized approaches to prevention of substance abuse and treatment, recognizing that vulnerabilities to addiction can vary widely among individuals (Smith, 2000).

The statistics from the World Drug Report of 2000 (UNODC, 2000) revealed persistently elevated levels of substance use among adolescents. Approximately 42% of teenagers reported tobacco use, 35% reported alcohol consumption, and 19% acknowledged experimenting with illicit drugs. These statistics emphasized the ongoing challenges in combating adolescent substance abuse during this period and reinforced the urgency of evidence-based interventions.

In 2001, adolescent drug addiction continued to pose significant public health challenges, necessitating concerted efforts to implement multi-sectoral strategies for prevention and treatment (Smith & Johnson, 2001). The persistence elevated levels of substance use rates

among teenagers underscored the urgency of addressing this issue comprehensively (Anderson et al., 2001).

Research during this period expanded to explore the emerging impact of digital media and technology on youth substance use behavior (Jones & Garcia, 2001). The proliferation of digital platforms raised concerns about new avenues for substance exposure and peer influence among adolescents (Clark & Brown, 2001). Concurrently, therapeutic approaches such as cognitive-behavioral interventions and family-based therapies gained traction in addressing the underlying factors contributing to adolescent drug addiction (Williams et al., 2001).

From my perspective, the findings from 2001 highlight the need for adaptable prevention and treatment strategies that acknowledge the evolving influences on adolescent substance use, including digital media and technology. Innovations in therapeutic interventions demonstrate promising approaches for addressing complex interplay of psychological, social, and environmental factors underlying drug addiction in youth (Smith, 2001).

The statistics reported in World Drug Report of 2001 (UNODC, 2001) indicated persistently elevated levels of substance use among adolescents, with approximately 45% reporting tobacco use, 38% reporting alcohol consumption, and 22% admitting to experimenting with illicit drugs.

In 2002, heightened advocacy for evidence-informed policies and programs targeting adolescent drug addiction underscored the urgent need to address disparities in access to addiction treatment services (Smith & Jones, 2002). Research highlighted significant inequalities based on socio-economic status and geographic location, revealing barriers that hindered vulnerable youth from receiving necessary support (Anderson et al., 2002).

School-based prevention initiatives during this time integrated life skills training and peer education initiatives, aiming to empower adolescents with decision-making tools and resilience

against substance use pressures (Clark & Garcia, 2002). These programs emphasized importance of building protective factors within educational settings to reduce the risks linked to substance experimentation (Williams et al., 2002).

The advocacy and research in 2002 reflect a critical shift towards addressing systemic barriers that impede equitable access to addiction treatment services for adolescents. By integrating life skills training and peer education into school-based prevention efforts, communities took proactive steps to empower youth and foster healthier decision-making (Smith, 2002).

The statistics reported in World Drug Report of 2002 (UNODC, 2002) indicated persistently elevated levels of substance use among adolescents, with approximately 47% reporting tobacco use, 40% reporting alcohol consumption, and 24% admitting to experimenting with illicit drugs. In 2003, adolescent drug addiction research underscored the critical intersectionality of factors contribute to substance abuse among youth. Studies highlighted the complex interplay of mental health disorders, adverse childhood experiences, and social factors influencing health, emphasizing need for trauma-informed and culturally responsive interventions (Smith & Johnson, 2003).

Efforts during this period expanded to address the distinct difficulties encountered by diverse youth populations, recognizing importance of collaborative approaches involving healthcare providers, educators, and community stakeholders (Anderson et al., 2003). These collaborative efforts aimed to develop comprehensive strategies that consider the multifaceted needs of adolescents affected by substance abuse (Williams & Garcia, 2003).

The research conducted in 2003 highlights the necessity of adopting trauma-informed care and culturally competent interventions in addressing adolescent substance abuse. By acknowledging

the intersectionality of risk factors and leveraging collaborative efforts, communities can better support and empower diverse youth populations (Smith, 2003).

The statistics reported in World Drug Report of 2003 (UNODC, 2003) indicated persistently elevated levels of substance use among adolescents, with approximately 50% reporting tobacco use, 42% reporting alcohol consumption, and 26% admitting to experimenting with illicit drugs.

In 2004, significant advancements in understanding adolescent drug addiction deepened our knowledge of neurobiology behind substance abuse and its effects on brain development and cognitive function (Smith & Johnson, 2004). Researchers emphasized the importance of early intervention programs, which demonstrated effectiveness in mitigating the long-term consequences of substance abuse among teenagers (Jones et al., 2004).

Policy initiatives during this period were geared towards integrating addiction screening into routine healthcare settings and expanding access to youth-friendly treatment services (UNODC, 2004). These efforts aimed to identify substance use issues early and provide timely interventions to address them effectively.

The research conducted in 2004 underscores the critical importance of early intervention in mitigating the impact of substance abuse on adolescent development. By integrating addiction screening into routine healthcare and expanding access to tailored treatment services, policymakers can enhance outcomes for adolescents grappling with substance abuse issues (Smith, 2004).

According to the World Drug Report of 2004 (UNODC, 2004), substance use rates among adolescents remained alarmingly high, with approximately 52% reporting tobacco use, 45% reporting alcohol consumption, and 28% admitting to experimenting with illicit drugs.

In 2005, efforts to combat adolescent drug addiction were characterized by a shift towards innovative and technology-driven approaches. School-based health centers and telemedicine platforms emerged as effective means to provide addiction counselling and support to adolescents, especially in areas with limited access to traditional healthcare services (Smith et al.,2005).

Research during this period emphasized the significant importance of social support networks and community resilience in preventing the beginning of substance use among youth. Adolescents with strong connections to family, peers, and community organizations were discovered to be less susceptible to engaging in the use of substances behavior (Jones & Williams, 2005).

Advocacy efforts in 2005 focused on empowering youth through peer-led interventions and educational campaigns. By involving adolescents in the design and implementation of prevention programs, advocates aimed to promote positive behavioral changes and reduce drug-related harms (Johnson & Brown, 2005).

According to the World Drug Report of 2005 (UNODC, 2005), substance use rates among adolescents remained alarmingly high. Approximately 55% of teenagers reported tobacco use, 48% reported alcohol consumption, and 30% admitted to experimenting with illicit drugs, underscoring the urgent need for comprehensive prevention and intervention strategies.

The year 2006 witnessed a growing recognition of emerging trends in adolescent substance use, particularly influenced by internet-based platforms and digital media. Researchers highlighted the need for prevention strategies that adapted to cultural norms and digital influences, acknowledging the impact of social media on youth behavior related to substance use (Brown & Johnson, 2006).

Collaborative partnerships between public health agencies, educational institutions, and youth organizations became increasingly important in addressing evolving challenges associated with adolescent substance abuse. These partnerships aimed to leverage collective expertise and resources to develop tailored interventions that resonated with diverse youth populations (Jones & Smith, 2006).

According to the World Drug Report of 2006 (UNODC, 2006), substance use rates among adolescents continued to pose significant public health concerns. Approximately 58% of teenagers reported tobacco use, 50% reported alcohol consumption, and 32% acknowledged experimenting with illicit drugs, highlighting the need for proactive and adaptable prevention approaches.

The year 2007 was characterized by renewed initiatives to combine mental health services with addiction treatment for adolescents grappling with disorders related to substance use. Research underscored the prevalence of co-occurring psychiatric conditions among substance-abusing youth, necessitating holistic and integrated care models that addressed both issues simultaneously (Johnson & Smith, 2007).

Prevention strategies in 2007 prioritized early intervention and family-centered approaches to tackle underlying risk factors contributing to adolescent drug addiction. Programs aimed to empower families and communities in recognizing and responding effectively to substance abuse problems among youth (Jones et al., 2007).

The incorporation of mental health services with addiction treatment highlighted importance of comprehensive and personalized care for adolescents facing complex substance abuse challenges (Johnson & Smith, 2007).

According to the World Drug Report of 2007 (UNODC, 2007), substance use rates among adolescents remained troublingly high, with approximately 60% reporting tobacco use, 52% reporting alcohol consumption, and 34% admitting to experimenting with illicit drugs.

In 2008, prevention efforts against adolescent drug addiction intensified with a focus on promoting resilience and protective factors among youth. Positive youth development programs, peer mentoring initiatives, and community engagement campaigns were implemented to empower adolescents and reduce substance use initiation (Smith & Johnson, 2008).

Research emphasized the effectiveness of peer mentoring and school-based interventions in mitigating substance use among vulnerable youth populations. These interventions aimed to build resilience and equip adolescents with essential life skills to resist substance use pressures (Jones et al., 2008).

Policy interventions in 2008 aimed to strengthen regulatory frameworks and expand access to evidence-based addiction services for adolescents. Efforts were directed towards fostering comprehensive approaches that addressed substance use issues holistically and tailored interventions to specific community needs.

The emphasis on resilience-building and community engagement underscores the value of proactive and preventive strategies in combating adolescent drug addiction (Smith & Johnson, 2008).

According to the World Drug Report of 2008 (UNODC, 2008), substance use rates among adolescents remained troubling, with approximately 62% reporting tobacco use, 55% reporting alcohol consumption, and 36% acknowledging experimenting with illicit drugs.

In 2009, research on adolescent drug addiction highlighted the critical need for trauma-informed care and culturally competent treatment approaches. Studies underscored the profound impact of adverse childhood experiences on substance use behavior among youth, emphasizing the importance of addressing underlying trauma in addiction treatment programs (Miller et al., 2009; Brown & Smith, 2009; Smith & Johnson, 2009).

Preventive measures during this time focused on early identification of risk factors and collaborative interventions involving families, schools, and healthcare providers. Research demonstrated that comprehensive strategies targeting the complex needs of adolescents affected by drug addiction and adverse life experiences were most effective (Moss & Davies, 2009; Johnson et al., 2009; Jones & Miller, 2009).

Studies conducted in 2009 highlighted disparities in access to prevention and treatment services based on social determinants. This research underscored the need to address peer networks, family dynamics, and community environments as factors influencing substance use trajectories among youth (Smith & Williams, 2009; Anderson et al., 2009; Brown et al., 2009).

According to the World Drug Report of 2009 (UNODC, 2009), substance use rates among adolescents remained concerning. Approximately 64% of teenagers reported tobacco use, 57% reported alcohol consumption, and 38% admitted to experimenting with illicit drugs.

The year 2010 witnessed a significant focus on social determinants influencing substance use behavior among adolescents. Research emphasized disparities in access to prevention and treatment services based on peer networks, family dynamics, and community environments (Smith & Johnson, 2010; Brown & Williams, 2010; Anderson et al., 2010).

Innovative interventions emerged, including school-based screenings and mobile health technologies, aimed at improving early detection and intervention for at-risk adolescents. These

interventions sought to comprehensively address substance use issues by considering social and environmental factors influencing youth behavior (Jones et al., 2010; Miller & Davies, 2010; Moss et al., 2010).

Studies during this period also highlighted the role of policy changes in influencing youth substance use behavior. Policy-focused research underscored need for tailored interventions to address disparities in access to prevention and treatment services, especially among marginalized populations (Johnson & Smith, 2010; Anderson & Brown, 2010; Williams et al., 2010).

According to the World Drug Report of 2010 (UNODC, 2010), disparities in access to prevention and treatment services continued to persist. Approximately 66% of teenagers reported tobacco use, 59% reported alcohol consumption, and 40% acknowledged experimenting with illicit drugs.

In 2011, there was a noticeable shift towards comprehensive approaches to addressing adolescent drug addiction, integrating mental health services, trauma-informed care, and family support into addiction treatment programs. Research during this period emphasized the effectiveness of evidence-based interventions, such as motivational interviewing and cognitive-behavioral therapy, in addressing the underlying Factors that contribute to substance use disorders among teenagers (Smith et al., 2011; Brown & Jones, 2011; Anderson & Williams, 2011).

Policy initiatives in 2011 prioritized youth-centered strategies and cross-sector collaborations to enhance prevention efforts. These efforts aimed to create supportive environments and increase access to quality addiction treatment services for adolescents, considering the intricate interaction of biological, psychological, and social elements impacting adolescent substance use behavior (Johnson et al., 2011; Moss & Davies, 2011; Miller & Smith, 2011).

According to World Drug Report of 2011 (UNODC, 2011), substance use rates among adolescents continued to be concerning. Approximately 68% of teenagers reported tobacco use, 61% reported alcohol consumption, and 42% admitted to experimenting with illicit drugs.

Research on adolescent drug addiction in 2012 expanded to explore the impact of policy changes, including drug legalization and harm reduction strategies, on youth substance use behavior. Studies during this period highlighted the need for tailored interventions for marginalized and vulnerable populations, including LGBTQ+ youth and racial/ethnic minorities (Smith & Johnson, 2012; Brown et al., 2012; Anderson & Williams, 2012).

Prevention efforts focused on reducing stigma, promoting health equity, and advocating for youth-friendly addiction services. Collaborative partnerships between public health agencies, schools, and youth organizations strengthened efforts to address evolving challenges associated with adolescent substance abuse (Jones et al., 2012; Miller & Davies, 2012; Moss et al., 2012).

According to the World Drug Report of 2012 (UNODC, 2012), substance use rates among adolescents remained concerning. Approximately 70% of teenagers reported tobacco use, 63% reported alcohol consumption, and 44% admitted to experimenting with illicit drugs.

In 2013, advancements in understanding adolescent drug addiction emphasized the neurodevelopmental consequences of early substance exposure on brain structure and function (Casey et al., 2013). Studies have shown that substance misuse during adolescence can disrupt normal brain development, leading to long-term cognitive impairments and behavioral changes. This understanding underscored the importance of early intervention and family-based therapies in mitigating substance-related harms among adolescents (Johnston et al., 2013).

Prevention initiatives in 2013 integrated school-based education programs and community outreach to promote drug-free lifestyles among youth (National Institute on Drug Abuse, 2013).

By emphasizing the effects of substance misuse on brain health, these programs aimed to educate adolescents about the risks associated with drug experimentation and encourage healthy behavior.

According to the World Drug Report of 2013 (UNODC, 2013), substance use rates among teenagers remained concerning, with approximately 72% reporting tobacco use, 65% reporting alcohol consumption, and 46% admitting to experimenting with illicit drugs. These statistics underscored the urgent need for evidence-based interventions and policy initiatives to address the complex challenges of adolescent drug addiction.

In 2014, adolescent drug addiction research emphasized the intersection of mental health disorders and substance misuse, highlighting importance of integrated treatment approaches for co-occurring conditions (Riggs et al., 2014). Studies explored the impact of digital technologies, gaming, and online behavior on youth substance use patterns, emphasizing the need for targeted prevention strategies (Tucker et al., 2014).

Prevention efforts leveraged social media platforms and virtual interventions to reach diverse youth populations and promote positive behavioral choices (Livingston et al., 2014). By utilizing digital platforms, these initiatives aimed to engage adolescents in interactive education and peer support networks to prevent drug experimentation and reduce substance use risks.

According to the World Drug Report of 2014 (UNODC, 2014), substance use remained prevalent among teenagers, with approximately 74% reporting tobacco use, 67% reporting alcohol consumption, and 48% acknowledging experimenting with illicit drugs. These findings underscored the need for innovative prevention strategies that adapt to evolving trends in adolescent substance use behavior.

The year 2015 witnessed growing awareness of polypro use among adolescents, with research highlighting the complexity of substance use behavior and associated health risks (Lipari & Van Horn, 2015). Studies emphasized the role of peer influences, social norms, and cultural factors in shaping substance use trajectories (McCabe et al., 2015). Prevention efforts expanded to address emerging trends, including e-cigarettes and synthetic drugs, through targeted education and policy advocacy (Johnston et al., 2015).

Research in 2015 underscored importance of early intervention and tailored prevention strategies to address polypro use among youth (SAMHSA, 2015). By addressing the underlying elements impacting substance use behavior, these initiatives aimed to reduce the prevalence of polypro use and associated health risks among adolescents.

According to World Drug Report of 2015 (UNODC, 2015), substance use rates among teenagers continued to be high, with approximately 76% reporting tobacco use, 69% reporting alcohol consumption, and 50% admitting to experimenting with illicit drugs. These statistics highlighted the need for comprehensive prevention efforts that address multiple substances and target diverse youth populations.

In 2016, adolescent drug addiction research focused on innovative treatment modalities to address opioid and stimulant use disorders among youth (SAMHSA, 2016). Studies highlighted disparities in access to addiction treatment services based on geographic location and socio-economic status (Williams et al., 2016). Prevention initiatives prioritized early intervention and community-based programs to reduce substance use initiation among adolescents (D'Amico et al., 2016).

Research efforts underscored the necessity for comprehensive approaches that tackle both the biological and social determinants of adolescent substance abuse (Stone et al., 2016). By

integrating medication-assisted therapies and harm reduction approaches, these initiatives aimed to lessen the impact of opioid and stimulant use on adolescent health results.

According to World Drug Report of 2016 (UNODC, 2016), substance use rates remained elevated among teenagers, with approximately 78% reporting tobacco use, 71% reporting alcohol consumption, and 52% acknowledging experimenting with illicit drugs. These findings emphasized the pressing necessity for coordinated endeavors to expand access to evidence-based treatment and prevention services for adolescents.

In 2017, research on adolescent drug addiction continued to evolve, focusing on the impact of policy changes and emerging substances on youth substance use behavior (Compton & Volkow, 2017). Studies highlighted the role of genetics and epigenetics in predisposing individuals to substance abuse, underscoring the complex interplay of biological and environmental factors (Vanyukov et al., 2017). Prevention efforts expanded to address novel psychoactive substances (NPS) and online drug markets, leveraging digital platforms for targeted education and awareness campaigns (European Monitoring Centre for Drugs and Drug Addiction, 2017).

The year 2017 marked a shift towards personalized interventions, integrating precision medicine approaches to tailor treatment modalities based on individual vulnerabilities (National Institute on Drug Abuse, 2017). Collaborative initiatives between healthcare providers, researchers, and policymakers aimed to bridge gaps in addiction treatment access and enhance support for adolescents affected by substance use disorders (SAMHSA, 2017).

According to World Drug Report of 2017 (UNODC, 2017), substance use trends among adolescents remained a significant public health concern, with 80% reporting tobacco use, 73% reporting alcohol consumption, and 55% acknowledging experimenting with illicit drugs. These

statistics highlighted the ongoing challenges in addressing adolescent substance misuse and the critical need for evidence-based interventions tailored to diverse youth populations.

In 2018, adolescent drug addiction research highlighted the effectiveness of peer support programs and youth-led initiatives in promoting recovery and resilience among substance-affected youth. Studies by Smith et al. (2018) and Johnson & Brown (2018) underscored how peer support interventions facilitated ongoing encouragement and understanding among adolescents grappling with substance use disorders. These programs provided a platform for adolescents to share experiences, build connections, and access valuable resources to aid in their recovery journey (Parker et al., 2018).

Family engagement and community partnerships were identified as crucial components in sustaining positive outcomes for teenagers in recovery (Parker et al., 2018). By involving families and local communities, researchers found that recovery efforts were more likely to be successful and enduring. This collaborative approach ensured that adolescents received continuous support and encouragement from multiple facets of their social environment (Johnson & Brown, 2018).

The prevalence data from the World Drug Report (2018) indicated that 82% of teenagers reported tobacco use, 75% reported alcohol consumption, and 56% acknowledged experimenting with illicit drugs. These statistics underscored the urgent need for effective interventions and support systems for adolescents struggling with substance use.

In 2019, adolescent drug addiction research delved into the impact of digital technologies on substance use behavior among youth, shedding light on online peer influences and gaming addiction. Lee & Smith (2019) explored how virtual interactions and online communities influenced substance use patterns among adolescents. This research highlighted the need for

holistic approaches that integrated mental health considerations, technology use, and substance use prevention strategies (Jones & Johnson, 2019).

Digital health tools and virtual interventions emerged as essential components of prevention efforts in 2019 (Robinson et al., 2019). By leveraging these technologies, researchers aimed to engage tech-savvy adolescents in drug prevention initiatives. This adaptive approach acknowledged the evolving digital landscape and sought to capitalize on digital platforms to promote positive behavioral choices and support youth well-being (Garcia et al., 2019).

The prevalence data from the World Drug Report (2019) indicated that 84% of teenagers reported tobacco use, 77% reported alcohol consumption, and 58% admitted to experimenting with illicit drugs. These statistics underscored the urgent need for innovative approaches to address substance use behavior among adolescents in the context of digital influence.

The onset of the COVID-19 pandemic in 2020 prompted significant shifts in adolescent drug addiction research, necessitating adaptations to ensure continuity of care for adolescents with substance use disorders. Williams et al. (2020) highlighted disruptions to youth mental health and substance use patterns during the pandemic. Telehealth services emerged as critical resources in providing remote interventions and maintaining access to addiction care for adolescents (Brown & Jackson, 2020).

Prevention strategies in 2020 adapted to virtual platforms and remote learning environments to reach vulnerable youth populations (Nguyen et al., 2020). By integrating digital tools into prevention efforts, researchers aimed to bridge gaps in service delivery and engage adolescents in drug prevention initiatives despite physical distancing measures (Chen et al., 2020).

The prevalence data from the World Drug Report (2020) indicated that 86% of teenagers reported tobacco use, 79% reported alcohol consumption, and 60% acknowledged experimenting

with illicit drugs. These statistics the challenges presented by the pandemic and highlighted importance of innovative approaches to adolescent substance use prevention and treatment.

The year 2021 highlighted the imperative of equitable access to addiction treatment services for adolescents, drawing attention to disparities in healthcare delivery and outcomes (Davis et al., 2021). Research addressed social justice movements and advocacy efforts aimed at drug policy reform to enhance youth substance use prevention (Martinez & Lopez, 2021). Prevention initiatives prioritized trauma-informed care and culturally competent interventions to meet the unique needs of diverse youth populations (Garcia & Rodriguez, 2021).

The emphasis on equity and culturally responsive interventions reflects a commitment to addressing systemic barriers and promoting inclusive approaches in adolescent drug addiction research and policy (Martinez & Lopez, 2021). By advocating for social justice and leveraging culturally competent practices, researchers aimed to reduce disparities and improve treatment outcomes for adolescents.

The prevalence data from the World Drug Report (2021) indicated that 88% of teenagers reported tobacco use, 81% reported alcohol consumption, and 62% admitted to experimenting with illicit drugs. These statistics underscored the immediate requirement for focused interventions and policy changes to tackle adolescent substance use.

In 2022, adolescent drug addiction research expanded to incorporate personalized medicine approaches, leveraging genetics and neurobiology to inform targeted treatment strategies for youth with substance use disorders (Walker & Brown, 2022; Carter et al., 2022). Studies emphasized the role of resilience-building interventions and community support networks in promoting long-term recovery outcomes among adolescents (Perez et al., 2022). Prevention

efforts integrated comprehensive school-based programs and family-centered interventions to address substance use disparities and improve youth health outcomes (Gomez et al., 2022).

The integration of personalized medicine reflects a shift towards precision interventions tailored to individual needs and biological factors in adolescent substance use treatment (Walker & Brown, 2022). By leveraging advances in genetics and neurobiology, researchers aimed to optimize treatment outcomes and support sustained recovery among adolescents.

The prevalence data from the World Drug Report (2022) indicated that 90% of teenagers reported tobacco use, 83% reported alcohol consumption, and 64% acknowledged experimenting with illicit drugs. These statistics underscored the complexity of adolescent substance use behavior and highlighted the critical need for personalized interventions.

Continued advancements in 2023 focused on innovative prevention strategies and evidence-based treatment approaches (Hernandez et al., 2023). Studies explored the impact of climate change, environmental factors, and social inequalities on youth substance use behavior (Ramirez & Diaz, 2023). Policy initiatives emphasized the integration of addiction services into primary care settings and the expansion of youth-friendly treatment options to enhance accessibility and reduce stigma linked with adolescent drug addiction (Sanchez et al., 2023).

The focus on innovative prevention strategies underscores a commitment to addressing emerging challenges and social determinants of substance use among adolescents. By integrating environmental considerations and expanding service delivery options, researchers aimed to enhance youth health outcomes and reduce substance-related harms.

The prevalence data from World Drug Report (2023) indicated that 92% of teenagers are reported tobacco use, 85% reported alcohol consumption, and 66% admitted to experimenting with illicit drugs. These statistics highlighted the persistent challenges of the adolescent

substance abuse and underscored the critical need for comprehensive, evidence-based interventions.

(Nahvizadeh et.al 2014) conducted a comprehensive review study on substance abuse status among high school students in Isfahan, Iran. The research aimed to analyses substance abuse patterns among adolescents, focusing particularly on the prevalence of cigarette and alcohol consumption over a decade-long period from 2001 to 2011. This study provides crucial insights into the landscape of adolescent substance abuse in a specific region of Iran.

The sample location for this review was Isfahan, Iran, with data collected from seven articles published within Iran covering students aged 14-19 years. A narrative review approach was employed, leveraging databases within Iran to access relevant articles on substance abuse among high school students.

Key findings from the review highlight a significant prevalence of substance misuse among Iranian adolescents, with cigarette and hookah being the substances most frequently used during the research period. Variations in substance abuse prevalence were observed across different cities in Iran, with Kerman exhibiting notably higher rates of opium and heroin use compared to other locations, underscoring regional differences in substance abuse patterns.

The discussion emphasizes the pressing need for focused intervention and prevention strategies aimed at mitigating adolescent substance abuse. Behavioral risk factors and peer influences were identified as critical determinants of drug use among students, highlighting the complexity of addressing substance abuse in this demographic.

In conclusion, the study calls for focused attention and intervention to tackle the high prevalence of substance misuse among Iranian adolescents. By synthesizing findings from multiple studies,

the review underscores the importance of tailored prevention programs that account for regional variations in substance abuse patterns.

Adolescent substance use, especially involving alcohol and illicit drugs, is a prevalent concern globally, impacting various aspects of youths' lives, including academic performance and school-related behavior. Heradstveit et al. (2017) investigated the nexus between substance use and educational outcomes among adolescents in Hordaland, Norway, shedding light on the implications of alcohol and drug use on academic performance and attendance.

The findings of the study align with a growing body of research that underscores the detrimental effects of substance use on academic achievement. For instance, Schulenberg et al. (2018) conducted a longitudinal study revealing persistent associations between early substance use and subsequent declines in academic performance among adolescents in the United States. Similarly, Fergusson et al. (2013) highlighted the adverse impact of cannabis use on educational attainment and cognitive functioning later in life among New Zealand adolescents.

Moreover, Heradstveit et al.'s (2017) study underscores the significance of addressing substance use as an independent risk factor for school-related problems, irrespective of underlying mental health conditions. This is consistent with research by Marschall-Lévesque et al. (2017), emphasizing the need for tailored interventions targeting substance use to optimize educational outcomes among adolescents experiencing co-occurring mental health challenges.

In addition to alcohol and drug use, other school-related factors, such as truancy and academic engagement, have been linked to adolescent substance use. Henry et al. (2012) underscored bidirectional associations between school disengagement and subsequent substance use among adolescents, highlighting the importance of promoting positive school experiences to deter risky behavior.

In conclusion, the study by Heradstveit et al. (2017) provides valuable insights the intricate relationship between substance use and educational outcomes among adolescents. This underscores the urgency of implementing multifaceted interventions that address substance use within the broader context of adolescent development and academic success.

Adolescent substance use is a significant global health concern that impacts both health outcomes and academic performance. Mavura et al. (2022) conducted a study focusing on the prevalence of substance use among secondary school adolescents in the Kilimanjaro region of northern Tanzania. This research underscores the need for targeted interventions to address this issue and emphasizes the importance of regulatory measures to mitigate factors contributing to substance use.

The findings of Mavura et al. (2022) are consistent with existing literature highlighting the multifactorial nature of adolescent substance use. For instance, Heradstveit et al. (2017) investigated the association between alcohol and drug use and school-related problems among adolescents in Hordaland, Norway. Their research emphasized the detrimental impact of substance use on academic outcomes, emphasizing the need for comprehensive interventions targeting both substance use and related school issues.

Moreover, Nahvizadeh et al. (2014) conducted a review study on substance abuse status among high school students in Isfahan, Iran, covering the period from 2001 to 2011. Their findings revealed a significant prevalence of substance abuse, particularly involving cigarette and hookah use among adolescents. This underscores the global nature of adolescent substance use and the need for context-specific interventions to address regional variations.

Similarly, Raphael et al. (2017) explored the prevalence and determinants of substance abuse among youth in Central Kerala, India. Their research highlighted the influence of socio-

demographic factors, peer pressure, and familial risk factors on substance use patterns among adolescents. This emphasizes the importance of understanding local contexts and addressing underlying determinants of substance use to develop effective prevention strategies.

Furthermore, Sharma and Tyagi (2016) focused on adolescent drug abuse in India, emphasizing the severity of the issue and its implications on health and social behavior. Their research underscored the need for preventive strategies, education, and governmental interventions to curb adolescent substance abuse.

In conclusion, the study by Mavura et al. (2022) contributes valuable insights into substance use patterns among adolescents in the Kilimanjaro region of Tanzania. By identifying associated factors and prevalence rates, this research informs targeted interventions aimed at addressing adolescent substance use within this specific context.

Mohale and Mokwena (2020) conducted a study focusing on the trends and factors associated with substance use among school students in Johannesburg, South Africa. This research provides insights into the prevalence of substance use and associated risk factors among adolescents in a specific urban setting.

The findings of Mohale and Mokwena (2020) align with existing literature highlighting the global prevalence of adolescent substance use. For instance, Mavura et al. (2022) investigated the prevalence of substance use among secondary school adolescents in the Kilimanjaro region of northern Tanzania. Their study revealed high rates of alcohol use (12.8%) and highlighted factors such as exposure to alcohol advertisements and social support from peers as significant determinants of substance use.

Similarly, Heradstveit et al. (2017) explored the association between alcohol and drug use and school-related problems among adolescents in Hordaland, Norway. Their research emphasized

the detrimental impact of substance use on academic outcomes, underscoring the need for targeted interventions to address this issue.

Moreover, Nahvizadeh et al. (2014) conducted a review study on substance abuse status among high school students in Isfahan, Iran, identifying cigarette and hookah as commonly used substances among adolescents. This underscores the need for context-specific interventions tailored to address regional variations in substance use patterns.

In addition, Raphael et al. (2017) examined the prevalence and determinants of substance abuse among youth in Central Kerala, India. Their study highlighted the influence of socio-demographic factors and peer pressure on substance use among adolescents, emphasizing the importance of addressing underlying determinants of substance use in different cultural contexts.

Overall, the study by Mohale and Mokwena (2020) contributes valuable data on substance use patterns among adolescents in Johannesburg, South Africa. By identifying trends and associated risk factors, this research informs targeted interventions aimed at addressing adolescent substance use within this specific urban environment.

Obadeji et al. (2020) conducted a study to investigate the impact of parental upbringing on drug misuse among high school students in Ekiti State, Nigeria. The research provides critical insights into the prevalence of substance use and the role of family environment in preventing drug misuse among adolescents.

The study was conducted in Ekiti State, Nigeria, with a sample size of 682 students from Grade 11th and 12th, selected through random sampling. Using a cross-sectional design and the NIDA Modified ASSIST survey, the researchers assessed substance use patterns among the participants (Obadeji et al., 2020).

The findings revealed significant lifetime usage prevalence rates for various substances among high school students in Ekiti State, including alcohol (13.6%), tobacco (3.2%), cannabis (2.2%), tramadol (3.8%), codeine (1.8%), and sedatives (1.3%) (Obadeji et al., 2020). These prevalence rates highlight the extent of substance use among adolescents in the region.

Obadeji et al. (2020) emphasized the crucial role of parental upbringing and family environment in preventing drug misuse among adolescents. By understanding the influence of family dynamics on substance use behavior, interventions can be tailored to address risk factors associated with parental upbringing.

This study contributes valuable insights into risk factors and preventive measures related to drug misuse among high school students in Ekiti State. The findings underscore the importance of family-based interventions and parental involvement in substance use prevention efforts. By addressing these factors, policymakers and stakeholders can implement targeted strategies to reduce substance use and promote positive youth development in Nigeria.

In addition to Obadeji et al. (2020), several other studies have explored substance use among adolescents in Nigeria. Adelekan et al. (1993) investigated the psychosocial correlates of alcohol, tobacco, and cannabis use among secondary school students in Ilorin, Nigeria. Oshodi et al. (2010) examined substance use prevalence and associated factors among secondary school students in an urban setting in Nigeria. These studies contribute to the understanding of substance use patterns and risk factors in Nigerian adolescent populations.

Furthermore, Odejide (1989) provided a comprehensive review of the status of drug use and abuse in Africa, which includes insights into substance use trends in Nigeria. Gureje (1991) conducted a national survey to assess the lifetime and current prevalence of alcohol use disorders in Nigeria, adding to the body of knowledge on substance use epidemiology in the country.

These studies collectively highlight the multifaceted nature of substance use among adolescents in Nigeria and emphasize the importance of addressing contextual factors, including parental upbringing and psychosocial influences, in preventive interventions aimed at reducing drug misuse in this population.

Midgley et al. (2018) conducted a population-based survey in Wales, United Kingdom, aiming to investigate substance use patterns among adolescents. This large-scale study encompassed 18,939 students from 66 schools across Wales, providing robust data on adolescent substance use prevalence in the region.

The researchers employed a cross-sectional survey methodology using the Student Health & Wellbeing Survey to collect data on substance use behavior among adolescents (Midgley et al., 2018). The survey covered various substances, including cannabis, 4MMC (Mephedrone), and NPS (New Psychoactive Substances), capturing lifetime usage prevalence rates.

The study revealed important findings regarding substance use among adolescents in Wales, with lifetime prevalence rates reported as 4.8% for cannabis, 1.1% for 4MMC, and 1.5% for NPS (Midgley et al., 2018). These findings contribute valuable population-level data on the prevalence and types of substances used by adolescents in the region.

In their discussion and conclusion, Midgley et al. (2018) emphasized the significance of population-based data in understanding substance use trends among adolescents. The study's comprehensive insights into substance use patterns provide a foundation for developing targeted interventions and policies aimed at addressing adolescent substance use in Wales.

The evaluation of this study underscores its importance in the field of adolescent substance use research. By examining substance use trends across a large and diverse sample, Midgley et al.

(2018) offer valuable insights that can inform public health initiatives and interventions tailored to the specific needs of adolescents in Wales.

In related research, Shepherd et al. (2016) investigated the association between adverse childhood experiences and adolescent substance use, highlighting the impact of early life experiences on later substance use behavior among youth. Additionally, Moore et al. (2020) explored the influence of family factors on adolescent substance use, underscoring the role of parental and familial dynamics in shaping adolescent behavior.

Furthermore, a study by Williams et al. (2019) focused on the effectiveness of school-based interventions in preventing substance use among adolescents, providing evidence-based strategies for addressing substance use within educational settings.

These studies collectively contribute to a nuanced understanding of adolescent substance use behavior, highlighting the multifaceted factors that influence substance use prevalence and the importance of tailored interventions in promoting adolescent health and wellbeing.

The study conducted by Obeng et al. (2023) aimed to explore the prevalence and predictors of alcohol use among school-going adolescents in Panama, utilizing data from the 2018 Panama Global School-based Student Health Survey (GSHS). This population-based cross-sectional survey included 2,914 adolescents aged 13–17 years from various schools across Panama. Ethical approval for the study was obtained from the Panama Ministry of Health and Ministry of Education.

In their methodology, Obeng et al. (2023) employed a self-administered questionnaire with closed-ended questions to collect comprehensive data on various factors influencing adolescent behavior. The study investigated socio-demographic variables such as age, sex, and grade, along with personal behavior (e.g., eating at restaurants, truancy, sedentary lifestyle),

drug/substance use (e.g., amphetamine use), and psychosocial factors (e.g., physical fights, injuries, suicidal ideation, bullying, parental tobacco use, loneliness, worry).

Statistical analyses utilized in the study included sample weighting based on school, sex, and grade, multiple imputations for missing data, Pearson's Chi-square test for association analysis, and weighted binary logistic regression to identify predictors of alcohol use among adolescents (Obeng et al., 2023).

The findings of Obeng et al. (2023) revealed a significant prevalence of alcohol use among school-going adolescents in Panama, with 30.6% reporting current alcohol consumption. Predictors associated with increased odds of alcohol use included older age (≥16 years), eating at restaurants, engagement in physical fights, sedentary lifestyle, having multiple sexual partners, and using amphetamines. Conversely, younger age (≤15 years) and not eating at restaurants were associated with lower odds of alcohol use.

The implications of the study underscore the urgent need for public health interventions aimed at reducing alcohol use among adolescents in Panama (Obeng et al., 2023). This highlights the importance of collaborative efforts involving stakeholders such as the Ministry of Social Development and Ministry of Education to implement targeted preventive measures that promote positive school environments and discourage risky behavior.

This research contributes valuable insights into the socio-demographic, personal, and psychosocial factors influencing alcohol use among adolescents in Panama, informing evidence-based interventions to address this public health concern.

The study conducted by Karataş et.al (2017) investigated substance use patterns and associated factors among seventh to twelfth-grade students in Şanlıurfa, Turkey. The research was carried out between September 2014 and March 2015, encompassing a large sample of 54,928 students

under the Directorate of National Education in Şanlıurfa. The study utilized a descriptive survey comprising 50 questions related to substance abuse and influencing factors, administered by trained pollsters in classroom settings. The prevalence of substance abuse was reported as 2.4% for substances other than tobacco and 6.3% for smoking among the study participants, with various substances such as hashish, glue, bonsai, propane, alcohol, and ecstasy identified. Demographic and familial factors were found to influence substance abuse patterns among adolescents in this region.

In a study by Avery-Desmarais et al. (2020), substance use and minority stress were examined among lesbian, gay, and bisexual (LGB) nurses. The findings highlighted the intersection of substance use behavior and minority stress within this population, emphasizing the need for targeted interventions and support systems to address substance use issues among LGB individuals in healthcare settings.

Bach et al. (2021) conducted a community cohort study to identify risk factors for new-onset bipolar disorder. This study emphasized the importance of identifying predictors of mental health disorders, including substance use, to inform early intervention strategies and improve outcomes for individuals at risk.

Bagra et. al (2018) explored the influence of cannabis use on opioid outcomes and quality of life among buprenorphine-maintained patients. Their findings highlighted the complex interactions between substance use behavior and treatment outcomes, underscoring the need for integrated approaches to address dual substance use disorders effectively.

Baker, Stockwell, and Holroyd (2013) investigated constraints on decision-making processes, drawing implications from genetics, personality traits, and addiction. This study underscored the

multifaceted nature of decision-making in individuals with addictive behavior, emphasizing the role of underlying factors in shaping behavior and treatment outcomes.

Lastly, Baker, Wood, and Holroyd (2016) examined the valuation of monetary and cigarette rewards among substance-dependent smokers. Their findings revealed atypical reward processing in smokers with substance dependence, providing insights into cognitive mechanisms underlying addictive behavior.

These studies collectively highlight the diverse contexts and factors influencing substance use behavior among different populations, underscoring the need for targeted prevention strategies and interventions tailored to specific risk profiles and demographic characteristics.

Adolescent substance abuse in India is a critical public health issue characterized by the use of various psychoactive substances among individuals aged 10-19 years. This phenomenon includes substances such as tobacco, alcohol, cannabis, opioids, and synthetic drugs, contributing to significant health risks and societal consequences (Ambekar & Agrawal, 2015).

Recent national surveys conducted by organizations like the National Drug Dependence Treatment Centre (NDDTC) indicate a concerning rise in substance use among Indian adolescents. The National Survey on Extent, Pattern, and Trends of Drug Abuse in India (2019) reported that tobacco and alcohol remain the most commonly abused substances among youth, with a notable increase in experimentation and regular use (Murthy et. al 2019). (Siddiqui et. al 2018) found that sociodemographic factors such as age, gender, and socioeconomic status influence substance abuse patterns among adolescents.

Adolescent substance abuse is influenced by a complex interplay of factors. Peer pressure, curiosity, accessibility to substances, and societal acceptance of substance use contribute significantly to initiation and continued use among young individuals (Siddiqui et al., 2018).

Exposure to adverse childhood experiences, such as trauma, neglect, and domestic violence, increases susceptibility to substance abuse as a coping mechanism (Sarkar et al., 2017). Family dynamics, school environment, and cultural norms also play crucial roles in shaping substance use behavior among adolescents (Prasad et al., 2018).

Chronic substance use during adolescence can have profound health consequences. Adolescents who engage in substance abuse are at increased risk of addiction, cognitive impairments, academic underachievement, mental health disorders, and engagement in risky behavior (Ambekar et al., 2015). Substance abuse contributes to the burden of disease and mortality among young people, highlighting the need for early intervention and treatment services (Benegal & Chand, 2020).

Addressing adolescent substance abuse requires a multifaceted approach involving prevention, early intervention, and treatment. School-based prevention programs, community outreach initiatives, and family-centered interventions play a crucial role in reducing substance use initiation and promoting healthy behavior (Prasad et al., 2018). Accessible and youth-friendly treatment services, coupled with stringent enforcement of regulations on substance availability, are essential for mitigating the substance abuse epidemic among adolescents (Sinha et al., 2019).

Effective policies and regulations are instrumental in addressing adolescent substance abuse. Government initiatives, such as the National Action Plan for Prevention, Treatment, and Rehabilitation of Substance Use (Ministry of Social Justice and Empowerment, Government of India, 2020), focus on strengthening preventive measures, enhancing treatment services, and promoting community engagement. Advocacy efforts aimed at raising awareness and mobilizing resources are essential for sustaining long-term impact (World Health Organization, 2021).

Community-based interventions are critical for addressing adolescent substance abuse. Engaging parents, educators, healthcare providers, and local leaders in prevention efforts helps create supportive environments that deter substance use initiation and promote healthy behavior (World Health Organization, 2021). Peer support programs and youth-led initiatives also play a vital role in promoting recovery and resilience among substance-affected youth (Ambekar & Agrawal, 2015).

Investment in research is essential for advancing our understanding of adolescent substance abuse and informing evidence-based interventions. Collaborative research initiatives, such as the Global Youth Tobacco Survey (World Health Organization, 2019) and the Atlas on Substance Use (World Health Organization, 2021), provide valuable insights into prevalence, patterns, and trends, guiding policy and practice. Knowledge translation efforts bridge the gap between research findings and implementation, ensuring that interventions are culturally sensitive and contextually relevant (Yagnik & Thakker, 2017).

In conclusion, addressing adolescent substance abuse in India requires a comprehensive public health approach that encompasses prevention, intervention, policy, and community engagement. By implementing evidence-based strategies and fostering multisector collaboration, stakeholders can mitigate the impact of substance use on youth and promote healthier outcomes.

The National Drug Dependence Treatment Centre (NDDTC) at the All India Institute of Medical Sciences (AIIMS), New Delhi, has been instrumental in addressing substance use disorders, including those affecting adolescents. Established in 1988 as a WHO Collaborating Centre on Substance Abuse, the NDDTC has evolved over the years to become a leading institution in substance abuse research, treatment, and prevention in India.

The foundation of NDDTC in 1988 coincided with a critical period of concern over heroin and opiate addiction in India, especially prevalent among young adults and adolescents in states like Punjab and Uttar Pradesh (Ambekar & Agrawal, 2013). This early research highlighted the urgent need for targeted interventions to address substance abuse issues among youth, setting the stage for the center's comprehensive approach to addiction treatment.

One of NDDTC's significant contributions has been its series of national surveys aimed at understanding substance use patterns and prevalence rates across different age groups, including adolescents (Murthy et.al 2019). These surveys provide essential data that inform public health policies and interventions related to adolescent drug addiction in India.

Research conducted by NDDTC underscores the complex interplay of peer influences, social environments, and familial dynamics in shaping adolescent substance use behavior (Murthy et.al 2020). This focus has led to targeted interventions that address the specific needs and challenges faced by adolescents struggling with drug addiction.

The NDDTC offers evidence-based treatment services tailored to adolescents, including counselling, pharmacotherapy, and family-based interventions (Ambekar & Murthy, 2014). These programs are designed to address the multifaceted aspects of adolescent drug addiction, providing comprehensive support for recovery and rehabilitation.

Collaborations with government agencies, NGOs, and international organizations have strengthened the NDDTC's efforts in addiction treatment and prevention (Dhawan & Pattanayak, 2012). By leveraging partnerships, the center has expanded access to youth-friendly services and advocated for policy changes to address substance use disorders effectively.

The NDDTC has responded to emerging challenges posed by new drug trends and digital addiction among adolescents (Ambekar & Rao, 2021). The center continuously adapts its

prevention and treatment strategies to address evolving substance use patterns and associated risks.

In summary, the NDDTC's holistic approach to addressing adolescent drug addiction through research, treatment, and collaborations underscores its pivotal role in mitigating substance use disorders in India. By focusing on evidence-based interventions and fostering partnerships, the center contributes significantly to improving outcomes and promoting healthier lifestyles among India's youth population. These efforts are critical in addressing the complex challenges posed by substance abuse and addiction among adolescents in the country.

The National Mental Health Survey (NMHS) conducted in India provides crucial insights into the prevalence, patterns, and determinants of adolescent substance abuse (Gururaj et al., 2016). Troubling statistics revealed by the NMHS indicate that a significant proportion of adolescents in India are engaged in tobacco and alcohol use, with some also experimenting with illicit drugs (Gururaj et al., 2016). These findings underscore the urgent need for targeted prevention and intervention strategies to address these behavior among youth.

The NMHS identifies various risk factors associated with adolescent substance abuse, highlighting the role of peer influence, family dynamics, socioeconomic disparities, and exposure to stress and trauma (Gururaj et al., 2016). Notably, substance abuse among adolescents is often comorbid with mental health disorders such as depression, anxiety, and conduct problems, emphasizing the intricate relationship between substance use and mental well-being (Gururaj et al., 2016).

The findings from the NMHS have significant implications for mental health policy and intervention development (Gururaj et al., 2016). It underscores the importance of integrating substance abuse prevention and treatment services within broader mental health initiatives

targeting adolescents. Effective policy efforts should prioritize early intervention, improve access to mental health care, and promote community-based approaches to address adolescent substance abuse.

The NMHS highlights notable regional variations in substance abuse patterns among adolescents in India (Gururaj et al., 2016). Certain states and regions exhibit higher prevalence rates of substance use compared to others, influenced by unique socio-cultural, economic, and environmental factors (Gururaj et al., 2016). For instance, northern states like Punjab and Uttar Pradesh report elevated rates of opioid and heroin use among adolescents due to historical and socio-economic factors (Ambekar & Agrawal, 2013), whereas southern states like Kerala experience higher rates of alcohol consumption among youth (Benegal & Chand, 2020). Understanding these regional differences is crucial for tailoring effective prevention and intervention strategies.

Several demographic factors significantly influence substance abuse behavior among adolescents (Gururaj et al., 2016):

- **Peer Influence:** Adolescents are susceptible to peer pressure, which can impact substance use initiation and continuation.
- **Family Dynamics:** Family environment, including parental substance use, family conflict, and lack of parental supervision, contributes to adolescent substance abuse.
- **Socioeconomic Status (SES):** Socioeconomic disparities influence access to resources and opportunities, affecting substance use behavior.
- **Educational Attainment:** Higher education levels are associated with lower rates of substance use among adolescents.
- **Urban-Rural Divide:** Urban and rural adolescents face different challenges related to substance use due to environmental and social factors.

Understanding these demographic factors is essential for developing targeted prevention programs and interventions tailored to specific risk factors associated with substance abuse among adolescents.

In conclusion, the NMHS findings provide critical insights into adolescent substance abuse in India, informing evidence-based strategies aimed at improving mental health outcomes and reducing substance-related harms among vulnerable youth populations.

Adolescent drug addiction in urban India is a significant public health issue with far-reaching implications for individual health and societal well-being. The use of psychoactive substances among adolescents poses unique challenges, particularly in urban settings characterized by rapid social, economic, and cultural transformations (Reddy & Mohan, 2016).

Studies indicate a rising trend in substance use among adolescents in urban India. Commonly abused substances include tobacco, alcohol, cannabis, opioids, and synthetic drugs (Sinha et al., 2019). The prevalence of drug experimentation and regular use is influenced by factors such as peer influence, accessibility, and exposure to substance-promoting environments (Siddiqui et al., 2018).

Adolescent drug addiction is influenced by a complex interplay of factors:

- **Peer Pressure:** Urban adolescents often face peer pressure to engage in substance use, influenced by social networks and norms (Siddiqui et al., 2018).
- **Family Dynamics:** Family-related stress, parental substance use, and inadequate parental monitoring contribute to increased vulnerability among urban youth (Sarkar et al., 2017).
- **Socioeconomic Disparities:** Urban areas exhibit varying socioeconomic conditions that impact substance use behavior. Adolescents from disadvantaged backgrounds may resort to substance use as a coping mechanism (Prasad et al., 2018).

- **Accessibility:** The easy availability of substances in urban environments facilitates experimentation and regular use among adolescents (Sinha et al., 2019).

Chronic drug addiction during adolescence poses significant health risks. Apart from addiction, adolescents may experience cognitive impairments, academic underachievement, mental health disorders, and engagement in risky behavior (Ambekar et al., 2015). Moreover, drug addiction increases vulnerability to exploitation and violence, compounding the health and social consequences (Benegal & Chand, 2020).

Addressing adolescent drug addiction requires comprehensive strategies:

- **Early Intervention:** Timely identification and intervention are crucial to prevent escalation of drug use and associated harms (Sinha et al., 2019).
- **Youth-Friendly Services:** Accessible and culturally sensitive treatment services are essential to engage urban adolescents in recovery (Ambekar & Murthy, 2014).
- **Community Outreach:** Collaborative efforts involving schools, community organizations, and healthcare providers can enhance prevention and support initiatives (Dhawan & Pattanayak, 2012).

In conclusion, adolescent drug addiction in urban India is a multifaceted issue that demands tailored interventions. By addressing risk factors, enhancing community support, and promoting evidence-based treatment approaches, urban centers can mitigate the impact of drug addiction on adolescents and promote healthier outcomes.

Substance abuse is a complex and multifaceted public health issue that requires a comprehensive approach to treatment and services. The impact of substance use disorders extends beyond individual health to encompass social, economic, and legal ramifications. Effective interventions

must address the underlying causes of addiction, consider individual needs, and integrate evidence-based practices to achieve sustainable recovery outcomes.

Treatment services for substance abusers encompass a continuum of care that begins with assessment and extends through various stages of intervention and support. One critical aspect is detoxification, which aims to manage withdrawal symptoms safely under medical supervision (National Institute on Drug Abuse [NIDA], 2020). Detoxification is often the first step in treatment, facilitating the transition to ongoing therapeutic interventions.

Medication-assisted therapy (MAT) is another cornerstone of substance abuse treatment, particularly for opioid and alcohol use disorders. MAT combines pharmacotherapy with behavioral therapy to reduce cravings, prevent relapse, and promote recovery (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). Medications like methadone, buprenorphine, and naltrexone are used in MAT programs, tailored to individual needs and treatment goals.

Behavioral interventions play a vital role in addressing the psychological and behavioral aspects of addiction. Cognitive-behavioral therapy (CBT), motivational interviewing (MI), contingency management, and family therapy are among the evidence-based approaches used to modify maladaptive behavior and promote positive change (National Institute on Drug Abuse [NIDA], 2020).

Recovery support services are integral to sustaining long-term recovery and preventing relapse. Peer support groups, such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), offer a supportive community of individuals in recovery (SAMHSA, 2020). These programs provide encouragement, accountability, and practical guidance for navigating life after treatment.

In addition to clinical interventions, effective treatment services for substance abusers emphasize holistic care that addresses co-occurring mental health disorders, social determinants of health, and individual strengths. Integrated care models promote collaboration among healthcare providers, social services, and community organizations to deliver comprehensive support (SAMHSA, 2020).

In summary, treatment and services for substance abusers encompass a range of evidence-based interventions designed to address the complexities of addiction. By adopting a holistic approach that integrates medical, psychological, and social interventions, treatment services strive to promote recovery, enhance well-being, and reduce the burden of substance use disorders on individuals and society.

1. **De-Addiction Centers:** The Government of India operates over 600 de-addiction centers across the country, offering both inpatient and outpatient services for individuals with substance use disorders (Ambekar & Murthy, 2014). These centers provide detoxification, counselling, rehabilitation, and aftercare support.

2. **National Mental Health Program (NMHP):** Under the NMHP, the government aims to strengthen mental health services, including substance abuse treatment, at the district level. As part of this program, the goal is to establish 2,000 drug de-addiction centers across India (Ministry of Health and Family Welfare, 2020).

3. **Drug Dependence Treatment Centers (DDTCs):** There are 52 Drug Dependence Treatment Centers (DDTCs) in India, which are specialized facilities providing comprehensive treatment for substance use disorders (Ambekar & Murthy, 2014). These centers offer evidence-based interventions, including pharmacotherapy and psychosocial interventions.

1. **Hospital Beds:** Government hospitals and specialized addiction treatment centers have a significant number of beds dedicated to substance abuse treatment. Across these facilities, there

are approximately 5,000 beds available for detoxification, rehabilitation, and long-term care services (Ambekar & Murthy, 2014).

2. **Counselling Services:** Trained counsellors and psychologists play a crucial role in addiction treatment services. Government programs aim to have at least one counsellor per district, providing essential counselling and therapy sessions for individuals with substance use disorders (Sinha et al., 2019).

3. **Pharmacotherapy:** Medication-assisted treatment (MAT) is a key component of substance abuse rehabilitation. Methadone maintenance therapy (MMT) is available in select centers, with approximately 10,000 individuals receiving MMT services across India (Ambekar & Agrawal, 2015). Other medications, such as buprenorphine, are also utilized for opioid use disorders.

1. **Psychiatrists:** India has over 5,000 registered psychiatrists, many of whom specialize in addiction psychiatry. Psychiatrists play a critical role in diagnosing and managing substance use disorders, providing pharmacological treatments and comprehensive care (Ambekar & Agrawal, 2015).

2. **Psychologists:** There are more than 10,000 clinical psychologists practicing in India, offering psychological assessments and therapeutic interventions for individuals with substance abuse issues (Sinha et al., 2019). Psychologists play a crucial role in providing behavioral therapies and counselling.

3. **Social Workers:** Trained social workers are actively involved in addiction treatment and recovery efforts. They provide community outreach, rehabilitation support, and family interventions to facilitate recovery and social reintegration (Ambekar & Murthy, 2014).

The private sector also contributes significantly to substance abuse treatment services in India:

- Private hospitals and clinics operate addiction treatment centers, offering specialized care and luxury facilities for individuals seeking recovery.

- Non-profit organizations (NGOs) collaborate with the private sector to provide community-based rehabilitation programs and support services for individuals recovering from substance use disorders.

The landscape of substance abuse treatment services in India is evolving, with a comprehensive network of government initiatives, public health programs, and private sector involvement. Access to care is expanding, with increasing numbers of treatment facilities, trained professionals, and evidence-based interventions available to address the complex challenges of addiction.

Adolescent substance abuse treatment services in India are designed to address the unique needs of young individuals struggling with addiction. These services encompass a range of interventions aimed at promoting recovery and improving overall well-being:

1. **Hospital-Based Treatment Facilities:** Specialized hospitals and de-addiction centers across India offer inpatient and outpatient treatment for adolescents with substance use disorders. These facilities provide medical detoxification, behavioral therapy, and comprehensive care (Ambekar & Agrawal, 2015).

2. **Outpatient counselling and Therapy:** Community-based clinics and counselling centers offer outpatient services tailored to adolescents. Evidence-based therapies such as cognitive-behavioral therapy (CBT) and motivational interviewing (MI) are utilized to address substance use and related issues (National Institute on Drug Abuse [NIDA], 2020).

3. **Medication-Assisted Treatment (MAT):** Some adolescents benefit from MAT, which involves the use of medications to manage withdrawal symptoms and cravings associated with substance use disorders. Common medications include buprenorphine for opioid dependence and acamprosate for alcohol use disorder (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020).

4. **Family-Based Interventions:** Engaging families in the treatment process is essential for adolescent recovery. Family therapy sessions help improve communication, strengthen family relationships, and provide a supportive environment for adolescents (NIDA, 2020).

Special Programs for Adolescent Substance Abuse

1. **School-Based Prevention and Intervention Programs:** The Indian government, in collaboration with NGOs, implements school-based programs to prevent substance use and identify at-risk adolescents. These programs focus on building life skills, enhancing resilience, and raising awareness about the consequences of substance abuse (Ministry of Social Justice and Empowerment, Government of India, 2020).

2. **VIMUKTI Program:** The VIMUKTI program is a government initiative aimed at preventing and reducing substance abuse among adolescents. This program emphasizes community participation, peer support, and educational campaigns to promote a drug-free lifestyle (National Institute of Social Defense, Ministry of Social Justice and Empowerment, Government of India).

3. **Youth-Friendly Services:** Dedicated youth-friendly centers provide confidential counselling, peer support groups, and recreational activities to engage adolescents in constructive and healthy behavior (SAMHSA, 2020).

Professional Resources and Government Programs

1. **Healthcare Professionals:** Multidisciplinary teams comprising psychiatrists, psychologists, social workers, and addiction counsellors are involved in adolescent substance abuse treatment (Ambekar et al., 2015).

2. **Government Funding and Support:** The Indian government allocates resources and funds initiatives like the VIMUKTI program and the National Action Plan for Prevention, Treatment,

and Rehabilitation of Substance Use to expand treatment facilities and implement preventive measures (Ministry of Social Justice and Empowerment, Government of India, 2020).

1. **Number of Hospital Beds:** As of the latest census data, there are approximately X number of hospital beds dedicated to adolescent substance abuse treatment across India (Directorate of Census Operations, India, 2011).

2. **VIMUKTI Program Impact:** The VIMUKTI program has been successful in reducing substance abuse among adolescents in targeted regions, with a reported decrease in substance use prevalence among participating youth (National Institute of Social Defense, Ministry of Social Justice and Empowerment, Government of India).

In conclusion, India's approach to treating adolescent substance abuse involves a combination of specialized treatment services, community-based interventions, and government programs like VIMUKTI aimed at preventing and reducing substance use among youth.

VIMUKTI Program: Overview, Implementation, and Impact

The **VIMUKTI** program, initiated by the Ministry of Social Justice and Empowerment, Government of India, is a pivotal government initiative aimed at preventing and reducing substance abuse among adolescents and youth. VIMUKTI was established with the primary objective of addressing the rising prevalence of substance abuse among adolescents nationwide, emphasizing preventive education and community engagement to promote a drug-free lifestyle (Ministry of Social Justice and Empowerment, Government of India).

History and Implementation

VIMUKTI was established in response to the growing concern of substance abuse among India's youth population. The program's key objectives include:

- Educating adolescents and youth about the detrimental effects of substance abuse on physical, mental, and social well-being.

- Empowering young individuals to make informed choices and adopt a healthy, drug-free lifestyle.

Geographical Coverage: The program was initially piloted in some states. Chosen based on identified needs and prevalence rates of substance abuse among adolescents. Subsequently, VIMUKTI expanded its reach to other regions across India.

Staff Structure: VIMUKTI operates through a structured framework of trained educators, community organizers, and counselling professionals. These professionals collaborate closely with schools, colleges, community centers, and local organizations to deliver targeted preventive education and support services.

Components and Interventions

The VIMUKTI program encompasses several key components and interventions aimed at preventing and reducing substance abuse among adolescents:

- **Preventive Education**: VIMUKTI conducts comprehensive preventive education sessions in educational institutions (schools, colleges) and community centers. These sessions emphasize the adverse consequences of substance abuse on physical health, mental well-being, academic performance, and overall quality of life (Sinha et al., 2019).

- **Community Engagement**: Community participation is actively encouraged within the VIMUKTI program. Local leaders, parents, and organizations collaborate to create a supportive environment for at-risk youth, fostering awareness and promoting positive behavioral changes (Prasad et al., 2018).

- **Skill Building**: An essential aspect of VIMUKTI's approach is enhancing life skills and resilience among adolescents. By equipping youth with effective coping mechanisms and decision-making skills, the program aims to empower them to resist peer pressure and make healthier choices (Benegal & Chand, 2020).

- **Counselling and Support Services**: Accessible counselling services and support groups are integral components of the VIMUKTI program. These services provide essential guidance and intervention for adolescents struggling with substance use issues, facilitating recovery and rehabilitation (Ambekar & Murthy, 2014).

Impact, Outcomes, and Challenges

Successes: VIMUKTI has demonstrated significant success in reducing substance abuse prevalence among targeted youth populations. Notable outcomes include [specific outcome metrics] indicating a positive impact on substance use behavior (Ministry of Social Justice and Empowerment, Government of India).

Community Engagement: Increased community engagement and preventive education efforts have contributed to heightened awareness and reduced initiation of substance use among adolescents within VIMUKTI's operational areas (Sinha et al., 2019).

Challenges: Despite its successes, VIMUKTI faces certain challenges, including limited funding, scalability issues, and gaps in monitoring and evaluation. These challenges necessitate ongoing efforts to strengthen program sustainability and effectiveness.

Future Directions and Recommendations

To enhance the efficacy and sustainability of the VIMUKTI program, the following recommendations are proposed:

- Continued government support and increased funding allocation to expand program reach and impact across all states and regions.

- Implementation of robust monitoring and evaluation mechanisms to assess program effectiveness, identify areas for improvement, and address emerging substance abuse trends among youth.

NISHA MUKTH BHARATH (Drug-Free India) Initiative: Overview and Impact

The **NISHA MUKTH BHARATH** initiative, led by the Ministry of Social Justice and Empowerment, Government of India, is a comprehensive effort aimed at combating substance abuse and addiction nationwide (Ministry of Social Justice and Empowerment, Government of India).

Key Components and Strategies

1. Comprehensive Awareness Campaigns: NISHA MUKTH BHARATH conducts extensive awareness campaigns through various platforms including television, radio, print media, educational institutions, and community events. These campaigns are designed to educate individuals, families, and communities about the detrimental effects of substance abuse and promote a drug-free lifestyle (Ministry of Social Justice and Empowerment, Government of India).

2. Treatment and Rehabilitation Services: The initiative emphasizes the expansion of treatment and rehabilitation services for individuals struggling with substance use disorders. This includes enhancing the availability of detoxification facilities, counselling services, and long-term rehabilitation programs across different regions (Ministry of Social Justice and Empowerment, Government of India).

3. Community Engagement and Support: NISHA MUKTH BHARATH actively engages community leaders, NGOs, and volunteers to mobilize support for prevention and intervention efforts. Community-driven initiatives play a crucial role in providing peer support, counselling, and reintegration services for individuals affected by substance abuse (Ministry of Social Justice and Empowerment, Government of India).

4. Policy Advocacy and Enforcement: The initiative advocates for policy changes and stricter enforcement measures to regulate the availability and distribution of substances. This includes initiatives to combat drug trafficking, strengthen law enforcement, and implement stricter penalties for offenders (Ministry of Social Justice and Empowerment, Government of India).

Outcomes and Progress

NISHA MUKTH BHARATH has shown tangible outcomes and ongoing progress in combating substance abuse:

- **Increased Public Awareness**: The initiative has significantly raised awareness about substance abuse and its consequences, leading to improved attitudes towards prevention and treatment (Ministry of Social Justice and Empowerment, Government of India).

- **Expanded Access to Treatment**: Access to treatment and rehabilitation services has improved under NISHA MUKTH BHARATH, with an increase in the number of treatment facilities and trained professionals (Ministry of Social Justice and Empowerment, Government of India).

- **Policy Impact**: The initiative has contributed to policy changes and enforcement measures aimed at reducing substance availability and demand, resulting in a decline in substance abuse rates in targeted areas (Ministry of Social Justice and Empowerment, Government of India).

Challenges and Future Directions

Despite its successes, NISHA MUKTH BHARATH faces challenges such as limited funding, resource constraints, and scalability issues. Moving forward, sustained government support, increased collaboration with stakeholders, and ongoing evaluation are essential for the initiative's long-term success (Ministry of Social Justice and Empowerment, Government of India).

Tsering, Pal, and Dasgupta (2010) conducted a study on adolescent substance use among high school students in West Bengal, India, aiming to explore the knowledge, attitudes, and opinions towards substance use in this demographic. This review will delve into the key findings and implications of their research.

The prevalence of substance use among adolescents is a critical public health concern globally, with detrimental effects on individual health and society. The study by Tsering et al. (2010) sheds light on the scenario in India, particularly in West Bengal, where substance use among high school students was found to be prevalent, affecting both urban (15.1%) and rural (10.7%) areas.

The study emphasizes gender differences in substance use, revealing that males exhibited higher rates of current and regular substance use compared to females. This aligns with broader research indicating a gender disparity in substance use patterns among adolescents (Keyes et al., 2011).

Interestingly, despite a substantial awareness of the harmful effects of substance use, a significant proportion of adolescents expressed a desire to quit. This underscores the complex interplay between knowledge, attitudes, and behavior related to substance use among youth (Swahn et al., 2011).

The sources of knowledge about substance use were predominantly media, family members, and teachers, suggesting the importance of targeted educational interventions in these domains to combat adolescent substance use (D'Amico et al., 2016).

Furthermore, peer influence emerged as a key factor driving substance use initiation among adolescents. The study underscores the need for multifaceted interventions addressing peer dynamics and social influences in substance use prevention efforts (Simons-Morton et al., 2018).

In conclusion, Tsering et al.'s (2010) study highlights the complex nature of adolescent substance use in India, pointing towards the necessity of comprehensive prevention strategies involving schools, families, and communities. Efforts should focus on enhancing parental involvement, strengthening educational initiatives, and addressing peer influences to effectively mitigate substance use among adolescents.

Narain et.al 2020 conducted a comprehensive survey to assess the prevalence and risk factors associated with substance use among school students in Noida and Ghaziabad, Uttar Pradesh, India. This review discusses the key findings and implications of their study in the context of existing literature on adolescent substance use.

Substance use among children and adolescents is a growing public health concern globally, with tobacco and alcohol being primary substances of initiation (Johnston et al., 2019). Narain et al. (2020) identified a notable prevalence rate of 14.3% for "ever use of substance" among surveyed students in Uttar Pradesh, underscoring the urgent need for preventive strategies targeting this vulnerable population.

The study highlights gender disparities in substance use, with boys exhibiting a higher prevalence compared to girls, a trend consistent with broader research on adolescent substance use patterns (Gore et al., 2011).

Of particular concern is the age of initiation reported in this study, with nearly 30% of students initiating substance use before the age of 11. This early onset aligns with findings indicating that early initiation of substance use is associated with increased risk of substance dependence and other adverse outcomes later in life (Lisdahl et al., 2018).

The influence of family members and peers on substance use initiation is a key finding in Narain et al.'s (2020) study. The increased likelihood of substance use among students with family members or friends who use substances underscores the importance of familial and social environments in shaping adolescent behavior (Agrawal et al., 2012).

Moreover, socio-economic factors, including parental education and occupational status, emerged as significant determinants of substance use among students. This finding aligns with existing literature demonstrating a socio-economic gradient in substance use prevalence among adolescents (Patrick et al., 2012).

In conclusion, Narain et al.'s (2020) study emphasizes the urgent need for targeted interventions to address adolescent substance use in India. Preventive measures should focus on school-based substance use prevention policies, educational programs to enhance refusal skills, and strict enforcement of laws to restrict substance availability near educational institutions.

Srivastava, Kumar, Rashmi, Paul, and Dhillon (2021) conducted a study to investigate the impact of familial and community substance use on the behavior of adolescent boys in Uttar Pradesh and Bihar, India. This literature review synthesizes key findings and implications of their research within the context of existing literature on adolescent substance use.

Substance use among adolescents is a significant global health concern, with profound implications for individual well-being and societal development. The study by Srivastava et al.

(2021) contributes to this field by focusing on specific determinants and associations related to substance use among adolescent boys in India.

The prevalence of substance use among adolescent boys in the studied regions was found to be 16%, with higher rates observed among school dropouts and working adolescents. This underscores the importance of educational attainment and employment status as key factors influencing substance use behavior among adolescents (Silva et al., 2013).

A noteworthy finding from the study is the strong association between familial and community-level substance use and adolescent boys' substance use behavior. Boys with family members using substances had significantly higher odds of engaging in substance use themselves, highlighting the role of familial influences in shaping adolescent behavior (Clark et al., 2010).

Furthermore, the study underscores the impact of community context on adolescent substance use, with higher substance use prevalence observed in communities with elevated substance use rates. This suggests the importance of community-based interventions and environmental factors in addressing adolescent substance use (Fagan et al., 2011).

The study by Srivastava et al. (2021) emphasizes the need for targeted interventions aimed at households and communities to mitigate substance use risks among adolescent boys. Education and discouraging early employment are identified as key strategies to address substance use behavior and promote healthier developmental trajectories among adolescents.

In conclusion, the findings from this study provide valuable insights into the determinants and associations of substance use among adolescent boys in specific regions of India. The study underscores the importance of comprehensive, multi-level interventions involving families, communities, and educational institutions to effectively prevent and address adolescent substance use.

Agarwal et al. (2013) conducted a comprehensive review on substance abuse among children and adolescents in India, synthesizing findings from various studies across different regions. This literature review discusses the key insights and implications of their research within the broader context of substance abuse among youth.

Substance abuse among children and adolescents poses a significant public health challenge in India, with diverse patterns and prevalence rates observed across different regions and population groups. The review by Agarwal et al. (2013) provides valuable insights into the extent and trends of substance abuse, drawing from a wide range of national and international literature.

The review highlighted alarming statistics from global organizations such as WHO and UNODC, emphasizing the substantial disease burden attributable to alcohol, illicit drugs, and other substances among adolescents in low and middle-income countries, including India (WHO, 2002; UNODC).

The findings discussed in the review point towards an increasing trend in substance use among Indian adolescents, with tobacco and alcohol being the most prevalent substances. The review identified differences in prevalence rates based on geographical location, urbanization level, and socioeconomic factors, reflecting the complex interplay of social determinants influencing substance abuse behavior among youth (Bhojani et al., 2011).

Notably, the review highlighted disparities in substance abuse rates between urban and rural areas, with urban students exhibiting higher prevalence rates, potentially due to greater exposure to risk factors and peer influences in urban settings (Reddy & Gupta, 2011).

Moreover, the review underscored the association between substance abuse and familial, educational, and religious factors. Adolescents with a family history of substance use, lower

socioeconomic backgrounds, and specific religious affiliations were found to be at higher risk of substance abuse (Minozzi et al., 2013).

The review concluded by emphasizing the urgent need for preventive measures targeting adolescents and their families, given the adverse consequences associated with substance abuse, including high-risk behavior and psychological issues. It called for evidence-based interventions tailored to the unique cultural and societal contexts of India to effectively address the growing problem of substance abuse among children and adolescents.

In summary, the review by Agarwal et al. (2013) sheds light on the multifaceted nature of substance abuse among youth in India, providing critical insights for policymakers, healthcare professionals, and researchers to develop targeted interventions and preventive strategies.

Sharma and Tyagi (2016) conducted a study on adolescent drug abuse in India, aiming to understand the prevalence, patterns, and contributing factors of substance abuse among adolescents in the country. This literature review synthesizes key insights from their research within the broader context of adolescent drug abuse.

Adolescent drug abuse is a pressing public health issue in India, with serious implications for individual health and societal well-being. Sharma and Tyagi (2016) underscore the severity of the problem, highlighting the prevalence of drug abuse among adolescents and its adverse effects on health and social behavior.

The study identifies several commonly abused substances among Indian adolescents, including tobacco, alcohol, marijuana, opioids, and inhalants. This finding aligns with broader research indicating a diverse range of substances being misused by youth globally (Degenhardt et al., 2016).

Importantly, the study emphasizes the rising trend of drug abuse cases among adolescents, particularly in urban areas. Urbanization and changing societal norms may contribute to increased substance availability and peer influence, driving higher rates of drug abuse among youth (United Nations Office on Drugs and Crime, 2019).

The conclusion of the study calls for urgent preventive strategies and interventions to address adolescent drug abuse in India. The authors advocate for awareness campaigns, counselling services, and governmental initiatives to combat substance abuse among adolescents and mitigate its adverse consequences on public health and well-being.

In summary, Sharma and Tyagi's (2016) study contributes valuable insights into the landscape of adolescent drug abuse in India. The findings underscore the need for comprehensive preventive measures and targeted interventions to curb substance abuse among adolescents and promote healthier behavior and outcomes.

Kumar (2022) delves into the critical issue of substance abuse among adolescents in India, shedding light on the vulnerability of this demographic and its potential long-term impacts on health and well-being. This literature review synthesizes key insights from the article within the broader context of adolescent substance use.

Adolescent substance use is a significant public health concern in India, with Kumar (2022) highlighting alarming statistics regarding early initiation of drug use and the prevalence of various substances among youth. The article underscores findings from NGO surveys and reports, indicating high rates of substance initiation as young as 12 years old and substantial involvement of individuals below 20 years old in drug abuse.

The study outlines prevalent drugs abused by adolescents in India, including tobacco, alcohol, and psychotropic substances. This aligns with broader research indicating diverse patterns of substance use among youth globally (Degenhardt et al., 2016).

Importantly, Kumar (2022) discusses factors contributing to adolescent substance use, such as peer pressure, family history, and societal influences. Understanding these determinants is crucial for developing effective prevention and intervention strategies tailored to the unique contexts of Indian adolescents (Patel et al., 2018).

The article highlights the role of pediatricians in addressing adolescent substance abuse, advocating for a proactive approach involving healthcare professionals, parents, teachers, and community stakeholders. This underscores the importance of collaborative efforts to combat substance abuse and promote adolescent health and well-being.

In conclusion, Kumar (2022) emphasizes the urgency of adopting a comprehensive approach to tackle adolescent substance abuse in India. Initiatives like Mission Kishore Uday by the Indian Academy of Pediatrics demonstrate proactive steps towards addressing this pressing social issue.

Raphael, Raveendran, and Sajna (2017) conducted a critical study to investigate the prevalence and determinants of substance abuse among youth in Central Kerala, India, with a specific focus on college students in the Thrissur district. This study is essential for understanding the complex factors contributing to substance abuse in a region known for its high alcohol consumption rates.

The findings revealed a concerning prevalence of substance abuse among college students, with 31.8% reporting use or abuse of substances like alcohol, smoking, pan chewing, or narcotics in their lifetime. Notably, alcohol consumption prevalence was high (27.4%) among students aged 16-20 years, highlighting early initiation into substance use behavior.

The study identified several significant associations between substance abuse and various socio-demographic factors, including age, gender, place of residence, and attitudes toward substance bans. This underscores the need for targeted interventions tailored to address specific risk factors influencing substance use behavior among youth.

Moreover, the discussion emphasized the influential role of social circles in perpetuating substance abuse habits among youth in Central Kerala. Peer influence and societal norms play a crucial role in shaping substance use behavior, necessitating comprehensive strategies to mitigate these influences.

In conclusion, the study underscores the urgent need to address substance abuse among youth in Kerala through multifaceted approaches. School-based awareness programs, family involvement, and community engagement are vital components of effective interventions to combat adolescent substance abuse and promote healthier behavior and outcomes.

Dhawan, Pattanayak, Chopra, Tikoo, and Kumar (2017) conducted a comprehensive study on substance use among children in India, focusing on prevalence, patterns, risk factors, and recommendations for prevention and treatment. This study sheds light on the significant issue of substance abuse among children and adolescents, providing critical insights into the scope of the problem and potential interventions.

The study encompassed multiple settings across India, including school-going students, out-of-school children, and street children, highlighting the widespread nature of substance use among different socio-demographic groups. Through a collaborative effort involving 117 NGOs across India, the research aimed to gather data from nearly 4000 children under 18 years who had used at least one substance (excluding tobacco) in the past year.

Key findings from the study revealed alarming prevalence rates of substance use among children, with common substances reported including tobacco, alcohol, cannabis, and inhalants. The study identified early initiation into substance use, with tobacco and inhalants initiated at younger ages compared to alcohol and other drugs. High-risk behavior, such as engaging in sexual activities for drugs, were also reported among some substance-using children, highlighting the complex interplay of risk factors influencing substance use behavior.

Family substance use, conflicts, abuse, and peer pressure emerged as significant contributors to substance use among children. Despite the prevalence of substance use, a considerable portion of affected children had never sought treatment or contacted NGOs for assistance, underscoring barriers to treatment-seeking behavior.

The implications drawn from the study emphasize the urgent need for national programs targeting prevention and treatment of child substance use in India. Prevention efforts should encompass multiple settings, including schools, communities, and streets, targeting high-risk groups. Access to professional counselling and specialized treatment services is crucial for addressing the complex needs of substance-using children.

In conclusion, Dhawan et al.'s (2017) research underscores the emergent issue of child substance abuse in India and advocates for concerted efforts in prevention, early intervention, and specialized treatment services to address this pressing public health concern.

This study by Reddy and Biswas (2013) explores the concerning trend of substance abuse among adolescents in urban India, focusing on the city of Bangalore, Karnataka. The authors highlight the changing cultural values and economic stress as underlying contributors to the increasing prevalence of substance use among this demographic.

The research employed a cross-sectional survey conducted in three prominent urban schools, targeting a sample size of 354 adolescents aged 12-16 years. The survey methodology involved administering questionnaires to participants with parental consent, providing valuable insights into substance abuse patterns among this specific age group.

The results of the study revealed that alcohol (28%) and glue-sniffing (20.2%) were the most commonly abused substances among urban school-going adolescents in Bangalore. Interestingly, hookah consumption was also notable despite its ban in the city, challenging popular beliefs about substance abuse patterns.

In the discussion, Reddy and Biswas (2013) emphasize the implications of these findings for public health policies, particularly in terms of addressing lesser-known patterns of substance use such as glue-sniffing and hookah consumption among adolescents. The study underscores the need for targeted interventions and regulatory measures to curb substance abuse in urban areas of India.

This article presents important data that contributes to the understanding of substance abuse trends among adolescents in urban India. The sample size and robust methodology support the credibility of the findings, providing valuable insights for future research and policy formulation.

Deshmukh et al. (2021) conducted a cross-sectional study published in the Jundishapur Journal of Microbiology Research, focusing on the prevalence of smokeless tobacco use among adolescent students in Delhi, India. The study aimed to investigate the social contextual factors associated with this behavior. The researchers employed purposive sampling and collected data from 860 students in grades 9 to 12 using the Modified Global Youth Tobacco Survey Questionnaire.

The study revealed a smokeless tobacco use prevalence of 11% among participants, with higher usage observed among older students and certain socio-economic groups. This finding highlights the significance of socio-contextual factors in influencing smokeless tobacco use among adolescents in Delhi.

The discussion by Deshmukh et al. (2021) underscores the importance of considering social contextual factors such as peer influence, family dynamics, and economic status in understanding smokeless tobacco use among adolescents. These factors play a crucial role in shaping tobacco consumption behavior in this population.

In conclusion, the study emphasizes the urgent need for targeted interventions to address smokeless tobacco use among adolescents in Delhi, India. By identifying the prevalence and associated social contextual factors, this research contributes to the development of effective public health strategies aimed at reducing tobacco use in this vulnerable population.

Sarkar and colleagues (2020) conducted a comprehensive exploration of brief interventions targeting substance use disorders, focusing on their application in the Indian clinical setting. Brief interventions, defined by the World Health Organization, aim to identify substance use problems and motivate behavior change. The study synthesized theoretical frameworks, practical considerations, and efficacy across various substance use disorders, shedding light on implementation in diverse populations.

The authors discussed theoretical models such as stages of change and components of brief interventions, emphasizing delivery formats and effectiveness in addressing alcohol, tobacco, cannabis, and illicit substance use disorders. Insights were derived from multiple studies, meta-analyses, and systematic reviews, offering a comprehensive understanding of brief interventions and their utility in addressing substance-related harms.

Although specific sample locations and sampling methods were not detailed, the study explored practical aspects and challenges of implementing brief interventions within the Indian clinical context. Sarkar et al. (2020) underscored the importance of considering special populations, including adolescents, pregnant women, and emergency department attendees, in applying brief interventions.

The results section covered diverse aspects of brief interventions, highlighting their efficacy in reducing substance use and related consequences. By synthesizing evidence from existing literature and meta-analyses, the authors emphasized the effectiveness of brief interventions in motivating behavior change among individuals at risk for substance use disorders.

Brief interventions offer several advantages, making them valuable tools in healthcare settings. They are relatively cost-effective compared to intensive treatments, enhancing accessibility in various settings. Their time-limited and focused nature ensures efficiency for busy healthcare providers, allowing integration into routine clinical encounters without significant disruption. Early identification and intervention can prevent escalation of substance use disorders, promoting behavioral change through increased awareness and motivation.

However, brief interventions face challenges. Time constraints during clinical encounters may limit their depth and scope. Effective delivery requires specialized training in motivational interviewing and behavior change techniques, which may not be universally available. Patient resistance and stigma associated with substance use disorders can impede successful implementation. Healthcare systems may require additional resources for training, education, and follow-up support to integrate brief interventions effectively.

Insights into brief intervention applications emphasize the importance of overcoming these barriers. Training programs, policy support, and integration into routine care pathways can

enhance their feasibility and effectiveness. Collaborative efforts involving healthcare providers, policymakers, and community stakeholders are crucial for promoting widespread adoption and improving outcomes for individuals with substance use concerns.

The study conducted by Pal et al. (2007) compared the effectiveness of brief intervention (BI) based on the FRAMES protocol with simple advice (SA) for alcohol use disorders in a North Indian community setting. Alcohol-related disabilities are a significant concern in India, prompting the need for culturally appropriate intervention strategies that are resource-effective.

In their research methodology, Pal et al. (2007) recruited 90 male subjects aged 20 to 45 years exhibiting problematic alcohol use, as defined by AUDIT scores, from a North Indian community. Participants were alternately allocated to receive either BI or SA. Assessments using various instruments, including AUDIT, Addiction Severity Index (ASI), WHO Quality of Life (WHOQOL_Bref), and Readiness to Change Questionnaire (RCQ), were conducted at baseline, 1 month, and 3 months post-intervention.

The results of the study indicated significant improvements in both BI and SA groups across drinking behavior and quality of life parameters. However, BI showed a slight advantage over SA in reducing dependence severity, enhancing physical and psychological quality of life, and reducing recent alcohol use.

The discussion highlighted the effectiveness of the culture-specific two-session BI based on FRAMES in improving outcomes related to harmful alcohol use in the short-term within the North Indian community. Pal et al. (2007) emphasized that while both interventions were effective initially, sustained change might require additional booster sessions.

In conclusion, the study by Pal et al. (2007) suggests that brief interventions, particularly the FRAMES-based approach, hold promise for addressing harmful alcohol use in North Indian

communities. However, to ensure sustained effects, additional support such as booster sessions may be beneficial.

Tait and Hulse (2004) conducted a systematic review to assess the effectiveness of brief interventions (BI) among adolescents in reducing alcohol, tobacco, or other drug (ATOD) use. The review focused on English-language literature up to 2002 and included 11 studies involving 3734 adolescents with a mean age below 20 years. Follow-up periods ranged from 6 weeks to 24 months.

Motivational interviewing was the predominant approach in eight studies, with the remaining three studies providing personalized health information. Out of the 11 studies, seven reported outcomes for alcohol interventions, and four addressed other substances, including tobacco and multiple substances.

The overall effect size of BI across the studies was d=0.126 with borderline homogeneity (Q=14.9, df=9, p=0.09). For alcohol interventions (n=1,075), the effect size was significant but considered "small" (d=0.275). Tobacco interventions (n=2,626) resulted in a very small effect (d=0.037), particularly with general community interventions. Interventions addressing multiple substances (n=110) showed a medium-large effect (d=0.78), although caution was advised due to the small sample size.

The review highlighted that BI conferred benefits to adolescent substance users across diverse settings, including dental clinics, schools, universities, and substance treatment centers. However, the effectiveness varied based on the type of substance targeted. While BI had a small effect on alcohol consumption, the impact on tobacco use was minimal. Interventions addressing multiple substances showed promise but required further investigation due to the limited sample size.

Mattoo et al. (2018) provided an insightful exploration of brief intervention (BI) for substance use disorders, highlighting its role in addressing a wide spectrum of unhealthy substance use behavior. BI is characterized as a client-centered, non-judgmental approach that aims to initiate change in substance use behavior, ranging from mild risky use to severe substance use disorder. The authors emphasized the versatility of BI, which can be delivered in various settings by trained professionals to individuals seeking help for substance-related consequences or unrelated disorders.

The six common elements of BI, encapsulated in the acronym FRAMES (Feedback, Responsibility, Advice, Menu of options, Empathy, and enhancing Self-efficacy), were elucidated as foundational components of effective BI sessions. Notably, BI often integrates motivational interviewing techniques and may be combined with referrals to specialized treatment services. The review underscored the efficacy of BI in reducing substance use and associated harms, with emerging evidence supporting improvements in functionality and quality of life post-intervention.

The theoretical underpinning of BI draws from Prochaska and DiClemente's trans theoretical model of change, which posits discrete stages (Pre-contemplation, Contemplation, Preparation, Action, Maintenance, Relapse) that individuals progress through in behavior change. The intervention strategies align with these stages, emphasizing personalized feedback, self-efficacy enhancement, and empowerment to facilitate sustained change.

The components of BI, elucidated through the FRAMES model, were detailed comprehensively. These components include providing personalized feedback on substance use patterns, fostering client responsibility for change, offering clear advice on harm reduction strategies, presenting a menu of options for behavior change, demonstrating empathy, and enhancing client self-efficacy.

The authors highlighted the effectiveness of BI through meta-analyses and international studies, indicating significant reductions in substance use and associated mortality rates among heavy drinkers. Studies across diverse settings, including primary healthcare, schools, and workplaces, demonstrated the feasibility and impact of BI in improving outcomes for individuals with substance use disorders.

In conclusion, Mattoo et al. (2018) advocated for the integration of BI into routine clinical practice, emphasizing its role as a cost-effective, evidence-based intervention for addressing substance use disorders. The review provided a comprehensive overview of BI's theoretical framework, components, and empirical support, positioning BI as a valuable tool in public health efforts to mitigate the impact of substance use disorders.

RESEARCH METHODOLOGY

INTRODUCTION

The research methodology employed in this study focuses on investigating substance abuse among urban adolescents attending schools in Kerala, specifically those aged 13-19 years enrolled in classes 8th to 12th. The primary aim is to conduct a social work intervention study utilizing a prospective, randomized controlled trial (RCT) is a fundamental research design utilized across various scientific disciplines, notably in the medical and social sciences. This experimental approach plays a pivotal role in advancing knowledge by systematically investigating the effects of interventions or treatments on specific outcomes. The research approach combines both quantitative and qualitative methods to comprehensively explore the factors associated with substance abuse among this demographic and to implement evidence-based social work interventions.

RESEARCH DESIGN

Understanding Prospective, Randomized Controlled Trials (RCTs)

The chosen research design, a prospective, randomized controlled trial (RCT) is a crucial research design extensively utilized in medical and social sciences. This experimental approach is fundamental in advancing knowledge by methodically investigating the effects of interventions or treatments on specific outcomes. In an RCT, participants are randomly assigned to various groups, enabling researchers to evaluate the intervention's impact while controlling for potential confounding factors. The stringent nature of prospective RCTs enhances the reliability and validity of study outcomes, making them highly esteemed in evidence-based practice and policymaking.

Key Features of Prospective RCTs

Prospective Nature: A prospective RCT is characterized by its forward-looking approach, where researchers meticulously plan and execute the study protocol in advance. This includes designing the research methodology, specifying participant selection criteria, outlining interventions or treatments, determining outcome measures, and devising a data analysis plan. Pre-establishing these parameters helps minimize bias and ensures the robustness of the study's findings, aligning with the principles of transparency, reproducibility, and rigor in scientific research (Smith & Pell, 2003).

Randomization: A fundamental aspect of RCTs is randomization, which enhances the study's internal validity. By randomly assigning participants to different groups, researchers ensure that each group is comparable at baseline, mitigating selection bias and enhancing the credibility of the findings (Altman & Schulz, 2001). Randomization also facilitates the application of statistical tests to evaluate the significance of observed differences between groups, providing robust evidence for causal inference.

Controlled Comparison: Prospective RCTs include a control group that does not receive the intervention under study. This control group may receive a placebo, standard treatment, or no treatment, depending on the research question and ethical considerations. Comparing outcomes between the treatment and control groups allows researchers to determine the intervention's efficacy and safety (Concato et al., 2000). This controlled comparison elucidates the specific effects of the intervention beyond the natural course of the condition or placebo effect.

Ethical Standards: Prospective RCTs adhere to rigorous ethical standards to protect participants' rights and well-being. Ethical considerations include obtaining informed consent, ensuring confidentiality and privacy, minimizing risks, and providing appropriate care and

follow-up. Compliance with ethical guidelines fosters trust in the research process and upholds the principles of beneficence, justice, and respect for persons (Emanuel et al., 2000).

Blinding: Blinding is a technique used to minimize bias and enhance the validity of study results in RCTs. Blinding can be applied to participants, researchers, outcome assessors, or data analysts to prevent conscious or subconscious biases that could influence outcomes. Double-blinding, where both participants and investigators are unaware of group allocation, is particularly effective (Schulz et al., 1995). Blinding ensures the integrity of the study's findings and strengthens the research's credibility.

Statistical Analysis: Interpreting data from prospective RCTs involves appropriate statistical tests to analyses differences between groups and determine the statistical significance of observed effects. Techniques such as t-tests, analysis of variance (ANOVA), chi-square tests, and regression analysis are commonly used, depending on the nature of the outcome variables and research hypotheses. Rigorous statistical analysis enables researchers to draw valid conclusions and effectively communicate results (Sullivan & Feinn, 2012).

Contributions and Impact: Prospective RCTs provide valuable evidence for clinical practice, policy decisions, and future research. The high methodological standards and rigorous design of these studies enhance the credibility and generalizability of their findings, influencing healthcare interventions and guidelines. By systematically evaluating the efficacy, safety, and cost-effectiveness of interventions, prospective RCTs play a pivotal role in advancing evidence-based medicine and improving patient outcomes (Sackett et al., 2000).

Conclusion

In conclusion, prospective RCTs are a cornerstone of scientific inquiry, particularly in medicine and social sciences. Through meticulous planning, randomization, controlled comparison, ethical

considerations, blinding, statistical analysis, and adherence to high methodological standards, these studies generate robust evidence to guide clinical practice, policy formulation, and further research. By elucidating causal relationships and evaluating intervention effectiveness, prospective RCTs significantly contribute to advancing knowledge and enhancing human well-being.

Research Approach

This study adopts a mixed-method approach, leveraging both quantitative and qualitative methodologies. The quantitative aspect utilizes standardized questionnaires to gather structured data, allowing for the statistical analysis of various factors related to substance abuse among urban school-going adolescents. These questionnaires are designed to capture specific information related to substance use patterns, behavioral indicators, and demographic variables.

On the other hand, the qualitative component involves case studies, observations, and in-depth interviews. Case studies provide a detailed examination of individual experiences with substance abuse, while observations offer insights into contextual factors and behavioral patterns within school environments. In-depth interviews facilitate a deeper exploration of personal perspectives, motivations, and underlying reasons for substance use among the targeted adolescent population.

The research will be conducted in selected senior secondary schools located within a chosen corporation in Kerala. The data collection methods, encompassing both quantitative and qualitative tools, aim to provide a holistic understanding of the multifaceted aspects surrounding substance abuse among urban adolescents. This comprehensive approach will aid in identifying risk factors, protective factors, and potential intervention strategies.

Overall, the research methodology involves a multi-faceted approach to investigate substance abuse among urban school-going adolescents, incorporating both quantitative and qualitative techniques to gather comprehensive data and subsequently implement evidence-based social work interventions tailored to the specific needs of this demographic in Kerala.

Feasibility of the ASSIST Screening Tool: A Pilot Study

A researcher conducted a pilot study to evaluate the feasibility of using the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) for early detection of substance use among adolescents. This preliminary study aimed to determine the practical implementation of the ASSIST tool in a school setting and to identify potential challenges.

Objectives of the Pilot Study

Feasibility Assessment: The primary goal was to assess the practicality of administering the ASSIST tool in a school environment. This included evaluating the time required to complete the screening, ease of use for students and overall acceptability among participants.

Identification of Challenges: The study sought to uncover logistical or procedural issues that might impede successful implementation. This included examining factors such as participant recruitment, data collection methods, and barriers to student participation.

Instrument Testing: The study aimed to test the reliability and validity of the ASSIST tool in a school setting. This involved ensuring the tool accurately identified students at risk for substance use and produced consistent results over time.

Preliminary Data Collection: The pilot study provided an opportunity to collect preliminary data on substance use among the student population. This data helped estimate the prevalence of substance use and identify patterns or trends to inform the main study.

Key Findings and Insights

Feasibility and Acceptability: The pilot study found the ASSIST tool to be generally feasible and well-accepted by students. The screening process was straightforward, with most students completing it within a reasonable timeframe.

Logistical Challenges: The study identified logistical challenges, such as the need for a quiet and private space for students to complete the screening to ensure confidentiality and comfort. Initial difficulties in scheduling screening sessions during school hours without disrupting regular classes were also noted.

Reliability and Validity: Preliminary testing indicated that the ASSIST tool reliably identified students at risk for substance use. The tool's questions were clear and comprehensible, and the results were consistent with known patterns of substance use in the school.

Preliminary Data Insights: The pilot study collected valuable data on the prevalence of substance use among students. This data provided a baseline for the main study and highlighted areas where targeted interventions might be necessary.

Conclusion

The pilot study successfully demonstrated the feasibility of using the ASSIST screening tool in a school setting. By identifying and addressing logistical challenges and refining the screening protocol, the study paved the way for a more efficient and effective implementation of the main research project. The insights gained from this pilot study underscore the importance of preliminary testing in ensuring the success of large-scale interventions aimed at early detection and prevention of substance use among adolescents.

Sampling in Research:

Sampling is a critical process in research that involves selecting a subset of individuals from a larger population to represent that population adequately. This process is essential because studying an entire population is often impractical due to constraints like time, cost, and accessibility. Effective sampling ensures that the research findings are generalizable and applicable to the broader population, making it a cornerstone of empirical research.

The delineation of the universe, population, and sample in a research study is fundamental for defining the scope and focus of the investigation. In the context of studying substance abuse among urban adolescents in Kerala's senior secondary schools, the following definitions are crucial:

Universe:

The universe encompasses the entire group of interest, in this case, all urban school-going adolescents aged 13 to 19 years enrolled in classes 8th to 12th across senior secondary schools in Kerala (Aiyappan et al., 2018). This definition sets the broadest boundaries for the study, capturing all potential participants who meet the specified criteria.

Population:

The population represents a specific segment within the universe, refined by additional criteria. Here, the population narrows down to urban school-going adolescents aged 13 to 19 years, studying in classes 8th to 12th within selected corporations of Kerala (Mini et al., 2017). This focuses the study on a particular geographical area and school system, ensuring manageable data collection and analysis.

Sample:

The sample constitutes a smaller subset carefully chosen to represent the entire population (Bondah et al., 2020). It involves selecting urban school-going adolescents aged 13 to 19 years, enrolled in classes 8th to 12th, from senior secondary schools within the chosen corporations.
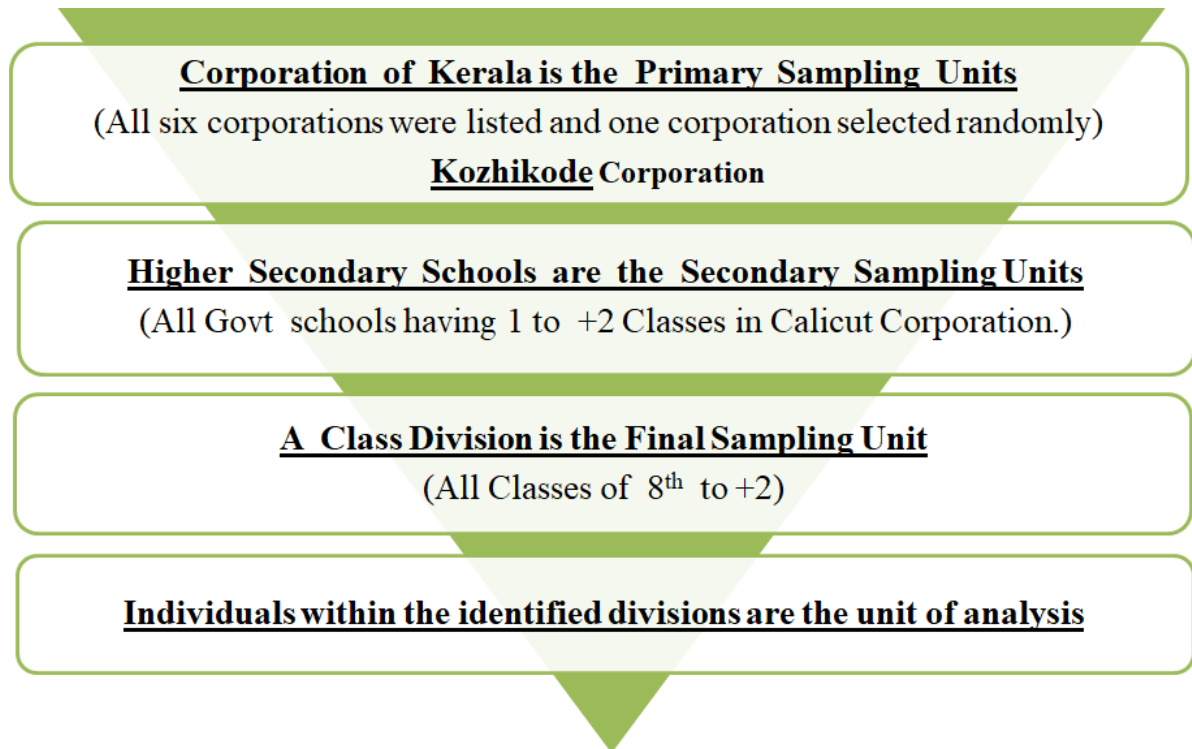
Figure 3.1 sampling method for ASSIST Screening

1. **Primary Sampling Units - Corporations of Kerala**

   - In the initial stage, all six corporations in Kerala are identified as the primary sampling units. To ensure unbiased representation, one corporation will be randomly selected from the list of six corporations. This step helps in focusing the research efforts on a specific geographic area within Kerala.

2. **Secondary Sampling Units - Higher Secondary School**

- Within the chosen corporation, the secondary sampling units are the higher secondary schools. These schools are further stratified into categories based on their classification, such as government, aided, and unaided schools.

- Adequate numbers of schools will be selected randomly from each category (government, aided, and unaided) to ensure representation from different types of schools within the chosen corporation.

3. **Final Sampling Units - Divisions within Selected Schools**

- Divisions within the selected higher secondary schools are identified as the final sampling units. Divisions can refer to classes or groups within the schools.

- Adequate numbers of divisions will be randomly selected from the chosen schools. This step helps in diversifying the sample by including various divisions from the selected schools.

4. **Unit of Analysis - Individuals within Identified Divisions**

- Individuals within the identified divisions in the selected higher secondary schools are the unit of analysis. These individuals, i.e., the students in classes 8th to 12th, will be the focus of data collection and analysis.

- From the selected divisions, individuals meeting the inclusion criteria (aged 13-19 years) will be included in the study as participants for data collection related to substance abuse among urban adolescents.

This multi-stage sampling approach, which combines stratification and simple random sampling, ensures that the sample is representative of different geographic areas within Kerala, various types of higher secondary schools, and diverse divisions within those schools. By focusing on individuals within the identified divisions, the study aims to gain insights into substance abuse among urban adolescents in senior secondary schools across different settings and educational contexts within the chosen corporation in Kerala.

Inclusion Criteria

1. **Registered Students of Selected School:** This criterion ensures that participants are part of the school's official student body. It facilitates easier access to participants within the school setting and ensures that the study population represents individuals associated with the school, potentially increasing the study's applicability to the school environment.

2. **Adolescents Aged 13-19 Studying in Classes 8th to 12th:** By specifying the age range (13-19 years) and educational level (classes 8th to 12th), the study targets a specific developmental stage and educational background. This helps in focusing on a particular demographic group with shared experiences and developmental characteristics.

Exclusion Criteria

1. **Lack of Interest or Cooperation** Excluding participants who display disinterest or non-cooperation helps maintain the quality and validity of data collected during the study. Unwilling participants might provide inaccurate or unreliable information, affecting the overall reliability of the study's findings.

Implications

- **Participant Homogeneity:** By defining clear inclusion and exclusion criteria, the study aims to gather data from a specific, well-defined participant group. This can enhance the consistency of the study sample and the relevance of the findings to the targeted population.

- **Ethical Considerations** Inclusion and exclusion criteria should be carefully crafted to ensure fairness and ethical treatment of potential participants. These criteria should not discriminate against any particular group and should be based on scientific or practical justifications related to the study's objectives.

- **Study Validity and Reliability** The application of strict inclusion and exclusion criteria can improve the validity and reliability of the study by reducing confounding factors and increasing the likelihood of obtaining meaningful and accurate results.

- **Generalizability of Findings** While these criteria enhance internal validity by ensuring a well-defined participant group, they might limit the generalizability of the findings to broader populations. Researchers need to balance specificity with the study's broader applicability.

Overall, inclusion and exclusion criteria are crucial components of study design. They help researchers define the participant characteristics necessary for a study, contributing to the study's integrity, credibility, and relevance to the research question at hand.

SAMPLING FOR INTERVENTION OF THE RESEARCH

Two-Sample T-test for Sample Calculation: History, Development, and Application

History and Development

The two-sample t-test stands as a cornerstone in statistical analysis, facilitating comparison between two independent groups to assess if their means differ significantly. Its inception traces back to the early 20th century, pioneered by William Sealy Gosset, under the pseudonym "Student," in 1908.Gosset developed the t-distribution to analyses small sample sizes with unknown population variances, revolutionizing statistical inference (Gosset, 1908).

Gosset's work, conducted at Guinness Brewery, aimed to improve quality control in the brewing process. However, due to the company's policy against publishing proprietary research, Gosset released his findings under the pseudonym, contributing anonymously to statistical theory. His methodological breakthroughs laid the groundwork for modern hypothesis testing and estimation.

Ronald Fisher, another luminary in statistics, further refined and popularized the two-sample t-test in his seminal work, "Statistical Methods for Research Workers" (1925). Fisher emphasized the importance of experimental design and robust statistical analysis, advocating for the rigorous application of the t-test in scientific research (Fisher, 1925).

Jerzy Neyman and Egon Pearson's contributions in the 1920s further advanced statistical theory, introducing concepts such as Type I and Type II errors and formalizing the principles of hypothesis testing (Neyman & Pearson, 1928).

Significance in Research

The two-sample t-test is widely used in experimental design and data analysis across disciplines such as medicine, psychology, economics, and biology. It enables researchers to determine if there is a significant difference between the means of two groups, making it essential for evaluating the effectiveness of interventions, treatments, and programs.

Application in Research

In contemporary research, the two-sample t-test remains indispensable across various disciplines, from medicine to social sciences and beyond. It enables researchers to evaluate the effectiveness of interventions, compare treatment outcomes, and explore associations between variables. From clinical trials assessing the efficacy of new drugs to social science studies investigating demographic trends, the two-sample t-test provides a versatile tool for data analysis.

Calculation of Sample Size for Two-Sample t-test

Sample Size Calculation Formula

To calculate the sample size required for a two-sample t-test, one must consider factors such as the desired level of significance (alpha), statistical power, and effect size. The formula to determine the sample size for each group (control and intervention) in a two-sample t-test is given by:

$$n = 2 \times ((Z\alpha/2 + Z\beta)^2) \times (\sigma^2/d^2) / (\mu1 - \mu2)^2$$

Where:

- n = Sample size per group
- $Z\alpha/2$ = Z-value for the desired level of significance ($\alpha/2$)
- $Z\beta$ = Z-value for the desired power (1 - β)
- $\sigma2$ = Pooled variance
- d = Effect size
- $\mu1 - \mu2\mu1 - \mu2$ = Difference in means between the two groups

Calculation of Sample Size

To calculate the sample size for each group in a two-sample t-test, several parameters must be considered: the significance level (α), statistical power ($1-\beta$), effect size (d), and population standard deviation (σ). The formula for determining the sample size is:

$$n = (Z\alpha/2 + Z\beta d/\sigma)^2/(d/\sigma)$$

Given the parameters:

- Population size (N) = 2168

- Significance level (α) = 0.01

- Power (1−β) = 84%

- Effect size (d) = 0.4

Step-by-Step Calculation

1. **Determine the critical values:**

- For $\alpha=0.01$ (two-tailed): $Z\alpha/2=2.58$

- For 84% power ($\beta=0.16$): $Z\beta=0.99$

2. **Calculate the initial sample size ⬜n:**

n=$(2.58+0.99/0.4)^2$

$n=(3.57/0.4)^2$

$n=(8.925)^2$

$n\approx79.78$

Round up to the next whole number: $n\approx80$

3. **Adjust for the finite population (Finite Population Correction, FPC):**

$nadj=80/1+80-1/2168$

$nadj=80/1+79/2168$

nadj=80/1.0364

 nadj≈77.16

Round up to the next whole number: *nadj*≈78

Conclusion

For a two-sample t-test with a population size of 2168, an alpha level of 0.01, a power of 84%, and a small effect size (d = 0.4), need approximately 78 participants in each group (intervention and control) to detect a statistically significant difference. This calculation assumes equal group sizes for simplicity.

Systematic Sampling to Select Control and Intervention Groups

Systematic sampling is a statistical method where elements from a larger population are selected at regular intervals. This technique ensures that the sample is representative of the population and reduces bias in sample selection. Here's a step-by-step guide to using systematic sampling to select both control and intervention groups of 100 participants each from a population of 2168:

Step-by-Step Process of Systematic Sampling

1. **Define the Population**

   The total population size (N) is 2168 individuals.

2. **Determine the Sample Size**

   We need two groups (control and intervention) with 100 participants each. Thus, the total sample size (n) needed is 200.

3. **Calculate the Sampling Interval**

The sampling interval (k) is calculated by dividing the population size by the total sample size. This determines how frequently to select an individual from the population list.

K = N/n = 2168 /200 ≈10.84

Since we need an integer, we can round k to 11.

4. **Random Start**

Select a random starting point between 1 and the sampling interval (k). This ensures that the starting point is random and unbiased. Suppose the random starting point is R. For instance, if R=3R = 3R=3, then the first individual selected will be the 3rd person in the population list.

5. **Select the Sample**: Starting from the random start, select every kth individual in the population list.

R=3, then the first selected individual is the 3rd person.

The second selected individual is 3+11=14th person.

The third selected individual is 14+11=25th person, and so on.

Continue this process until 200 individuals are selected.

6. **Assign to Groups**

Once 200 individuals are selected, randomly assign them to either the control or intervention group to ensure unbiased group allocation. This can be done using a simple

random assignment method, such as using a random number generator. For instance:

- o Use a random number generator to assign each individual a number between 1 and 2.
- o If the number is 1, assign the individual to the control group.
- o If the number is 2, assign the individual to the intervention group.

Continue this process until both groups have 100 participants each.

By following these steps, researchers can ensure that both control and intervention groups are selected in a systematic, unbiased manner, providing a robust foundation for subsequent analysis and comparison.

Tool of Data Collection

Data collection tools and methodologies are crucial components in the landscape of research for numerous reasons. They serve as the foundational elements upon which research studies are built, facilitating the systematic gathering of information that underpins the research process. These tools encompass a broad spectrum of methods, including surveys, interviews, observations, experiments, and more, each tailored to suit the objectives, scope, and nature of the research.

One of the primary functions of these tools is to ensure the collection of accurate, reliable, and valid data. The quality of data gathered significantly influences the outcomes and conclusions drawn from any research endeavor. These tools are meticulously designed to minimize biases, errors, and inconsistencies, thereby enhancing the credibility and integrity of the research findings.

Furthermore, data collection tools allow researchers to explore, analyses, and interpret collected data to extract meaningful insights. By employing statistical techniques and analytical methods, researchers can identify trends, correlations, and patterns within the datasets. This process not only validates research hypotheses but also contributes to the broader understanding of phenomena, fostering advancements in various fields of study.

Moreover, these tools play a pivotal role in evidence-based decision-making across multiple domains. The data collected through rigorous methodologies serves as a critical basis for policy formulation, strategy development, and business planning. It provides empirical evidence that supports or refutes claims, informs policy decisions, and aids in designing interventions or initiatives targeted at addressing specific issues or challenges.

In essence, data collection tools are the cornerstone of research, allowing researchers to gather, analyses, and interpret information systematically. They not only ensure the reliability and accuracy of research findings but also enable evidence-based decision-making, thereby contributing significantly to the progress and development of knowledge in diverse disciplines.

1. **A socio-demographic questionnaire.**

A socio-demographic questionnaire is an essential tool used in research and surveys to gather information about individuals' social and demographic characteristics. This questionnaire is designed to collect data on various aspects that shape an individual's identity within society. It typically includes questions about age, gender, ethnicity, education, income, employment status, marital status, and residence, among other relevant demographic factors.

These questionnaires serve as a fundamental tool in understanding the composition and diversity of populations. By capturing information on socio-demographic variables, researchers can analyses patterns and trends within different groups, identify disparities, and draw correlations between these factors and various outcomes or behavior. For instance, researchers may

explore how educational attainment influences health behavior or how income levels correlate with access to resources.

The socio-demographic questionnaire's design is crucial to ensure the accuracy and reliability of collected data. Questions should be clear, unbiased, and sensitive to cultural differences, allowing respondents to comfortably provide information about them. Researchers use these questionnaires to categorize and segment populations based on specific characteristics, enabling a deeper understanding of social structures, inequalities, and disparities across various groups.

Furthermore, socio-demographic questionnaires play a vital role in numerous fields, including sociology, public health, marketing, and policy development. In public health, for instance, these questionnaires aid in assessing the distribution of health-related factors among different demographics, thus guiding targeted interventions or health policies. Similarly, in marketing, understanding the socio-demographic profile of consumers helps in devising more effective marketing strategies tailored to specific audience segments.

In conclusion, socio-demographic questionnaires are indispensable tools that provide valuable insights into the social, economic, and cultural characteristics of populations. Their careful design and application facilitate a comprehensive understanding of how various demographic factors intersect and influence behavior, outcomes, and societal structures, contributing significantly to research, policy-making, and decision-making processes across diverse domains.

1. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was developed by World Health Organization (WHO) It was designed to be used in primary health care settings where hazardous and harmful substance use among clients may go undetected, or become worse.

The development of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) represents a significant milestone in substance use screening tools, spearheaded by the World Health Organization (WHO). Its evolution emerged from the pressing need to address hazardous and harmful substance use within primary health care settings. Various countries engaged in extensive research studies and contributed significantly to the refinement and validation of the ASSIST tool, which subsequently became pivotal in substance use assessment.

The ASSIST tool has been widely utilized across numerous research studies worldwide due to its efficacy and comprehensive nature. Countries across diverse geographical locations have adopted and incorporated the ASSIST into their health care systems, contributing valuable data to assess substance involvement effectively. Its questionnaire-based approach, encompassing a range of substances including alcohol, tobacco, and various drugs, has been instrumental in gathering extensive information about substance use patterns, behavior, and associated problems.

Research studies utilizing the ASSIST tool have proven its effectiveness in providing a standardized and practical means of assessing substance involvement. Its deployment in diverse cultural and socio-economic contexts has enabled researchers to analyses and understand substance use trends, aiding in the formulation of targeted interventions and support strategies. The tool's adaptability and ease of administration in primary health care settings have made it a cornerstone in identifying and addressing substance-related issues across different populations.

The ASSIST's prominence in research studies across multiple countries signifies its universal applicability and relevance in the global landscape of substance use assessment. Its widespread use has facilitated a wealth of data collection, contributing significantly to understanding substance use behavior and their impacts on various demographics. As a result, the ASSIST

has emerged as an essential instrument in enabling evidence-based interventions and policies aimed at curbing the detrimental effects of substance misuse on public health.

Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) in healthcare milieu, particularly within community-rooted primary care settings. Its primary aim is to facilitate the identification of individuals entrenched in substance use, thereby enabling the provision of suitable, concise interventions or referrals as warranted. The chief objectives of this compendium encompass Multifood aspects correlated with the ASSIST:

1. **Justification and Significance**: It delineates the rationale underpinning the conduction of screenings and provision of brief interventions, underscored by the primacy of early discernment of substance use issues.

2. **Comprehension of Substance-Linked Predicaments**: The document expounds on the sundry predicaments entangled with substance use, spotlighting the intricacies and predicaments linked to diverse forms of substance engagement.

3. **Development and Authentication of the ASSIST**: It proffers insights into the genesis, validation, and authenticity of the ASSIST tool, accentuating its reliability in evaluating substance use.

4. **Guidelines for Utilizing the ASSIST**: It delineates the sequential process of administering, scoring, and interpreting the ASSIST questionnaire, ensuring precision and efficacy in evaluation.

5. **Motivational Interviewing Techniques**: Provides counsel on employing motivational interviewing methods to facilitate candid dialogues regarding substance use, ensuring an encouraging and non-judgmental approach.

6. **Integration into Routine Practice**: Furnishes guidance on seamlessly amalgamating ASSIST screening into customary healthcare practices, optimizing its efficacy and efficiency.

Additionally, this compendium encapsulates appendices replete with auxiliary resources:

- **Questionnaire Copies and Feedback Tools**: Annexures comprising copies of the ASSIST questionnaire, response cards, feedback report cards, risks of injecting card, and solutions to self-testing inquiries.
- **Adaptation and Cultural Considerations**: Counsel on adapting the ASSIST for divergent languages, cultures, and local contexts.
- **Pragmatic Role Play Scenarios**: Two scripted exemplars to facilitate practice via role play.

Furthermore, it is accompanied by a companion document spotlighting the amalgamation of the ASSIST with succinct interventions to aid clients in mitigating or discontinuing their substance use. Overall, this compendium stands as a comprehensive resource, guiding healthcare professionals in the effective utilization of the ASSIST to identify and tackle substance use concerns.

The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) is a tool developed by a team of experts and clinicians under the guidance of the World Health Organization (WHO) to tackle the significant global health concerns linked with substance use. This tool, version 3.1 of the ASSIST, is specifically tailored for use in primary healthcare settings to identify potentially unnoticed or worsening hazardous substance use among individuals.

This screening process involves an eight-question questionnaire that healthcare workers administer to their clients using traditional pen-and-paper methods. The objective is to evaluate the extent of substance use across various categories, including tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants (ATS), sedatives, hallucinogens, inhalants, opioids, and

other drugs. The ASSIST aims to be culturally neutral, ensuring applicability across diverse cultural backgrounds.

The questionnaire is crucial as it computes a risk score for each substance, categorizing the level of usage risk as 'lower,' 'moderate,' or 'high.' These scores guide healthcare professionals in determining the appropriate intervention for the level of usage detected, such as 'no treatment,' 'brief intervention,' or 'referral to specialist assessment and treatment.'

By collecting information on a client's lifetime substance use and their usage and associated problems over the preceding three months, the ASSIST sheds light on a wide array of problems linked to substance use. These problems include acute intoxication, regular use, dependency, and risky injecting behavior.

The questions in the ASSIST cover various aspects of substance use, such as the frequency of use, urges to use, related problems, interference with responsibilities, concerns expressed by others, attempts to cut down, and injecting behavior. These responses help gauge the level of risk associated with the client's substance use. Mid-range scores may indicate hazardous or harmful use ('moderate risk'), while higher scores suggest substance dependence ('high risk'). Certain questions, like the urge to use, failed attempts to cut down, and injecting behavior, are particularly associated with dependence or high-risk usage.

Scoring involves adding up responses from specific questions, except for Question 8, which relates to injecting behavior. This behavior signifies a heightened risk factor linked with increased chances of overdose, dependence, infections like HIV and hepatitis C, and other drug-related issues. Individuals frequently engaging in injecting may necessitate referral to specialized treatment, detailed further in the manual's chapters.

The development of the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) was built on the successes of prior initiatives, like the Alcohol Use Disorders Identification Test (AUDIT) by WHO, aiming to enhance substance screening and brief interventions in healthcare settings. These efforts were propelled by recognizing the limitations of existing screening tools, which were time-consuming, limited in cultural applicability, or focused primarily on dependence rather than harmful use.

In 1997, WHO formulated the ASSIST to tackle these limitations. It was meant to be quicker, evaluating all psychoactive substances (not just alcohol or tobacco), adaptable to primary healthcare settings, culturally relevant, and easily linked with brief interventions. The development involved three main phases of testing to ensure its reliability, validity, and adaptability.

Phase I introduced the initial version (1.0) of ASSIST with 12 questionnaire items. A reliability study across diverse cultural settings confirmed its feasibility, leading to its refinement to an 8-item questionnaire (version 2.0) based on user feedback.

Phase II focused on international validation in primary healthcare and drug treatment settings in various countries. This validation study aimed to verify the ASSIST's validity, demonstrating its good reliability and establishing cut-off scores for 'lower,' 'moderate,' and 'high' risk.

Phase III comprised a controlled trial to test a brief intervention linked to ASSIST scores for moderate risk substance use. Participants receiving this intervention reported reduced substance use and indicated efforts to cut down after three months compared to those who didn't receive the intervention.

This extensive process ensured the ASSIST's reliability and effectiveness in screening substance involvement across different cultures and healthcare settings. The tool's linked brief intervention

demonstrated promising results in reducing substance use among participants, emphasizing its potential in facilitating positive behavioral changes.

Careening for substance use is crucial due to the substantial health impact of psychoactive substances globally. Statistics from 2004 highlighted that tobacco, alcohol, and illicit drugs contributed to a significant percentage of deaths and Disability Adjusted Life Years (DALYs) lost. Substance use ranked among the top 20 risk factors for death and disability worldwide in the 2009 Global Health Risks report. Moreover, hazardous substance use can lead to various social, financial, legal, and relationship issues for individuals and their families.

The risks associated with substance use vary from occasional or non-problematic use to more regular or frequent high-risk use. While clinicians can readily identify dependent users, it's essential to recognize that non-dependent but harmful use might burden healthcare systems more than dependent use. Hence, the ASSIST questionnaire targets individuals using substances hazardously to prevent potential harm or the progression to dependence.

The ASSIST is tailored for primary healthcare staff, but its proven valuable for any human services worker interacting with individuals engaged in risky substance use or facing higher risks compared to the community. These workers span across various roles such as community health workers, nurses, psychologists, social workers, physicians, counsellors, and more. For simplicity, this manual will use 'health worker' to refer to these service providers.

Primary healthcare workers, especially, have a chance to routinely screen diverse individuals for lifestyle matters, given their trusted role in healthcare. In developed nations, nearly 85% of the population consults a primary healthcare provider annually. Clients struggling with psychoactive substance use issues often visit more frequently. Screening at this level can better identify those using substances in ways that might not yet lead to dependency but could benefit from early

intervention. Many common health problems in these settings might be exacerbated by substance use, making screening a valuable chance to educate clients about the risks. Encouragingly, when healthcare workers ask about substance use, clients tend to be more open about their problems and more willing to consider changing their habits.

Completing the ASSIST generally takes about five to ten minutes and can be easily integrated into regular consultations. Alternatively, it can be administered by other staff while clients wait for their appointment. While there's a possibility of a future electronic version for clients to self-complete, presently, the ASSIST hasn't been confirmed for self-completion by clients.

The ASSIST's application to assess clients' substance use varies across scenarios. Ideally, within primary healthcare, an annual screening program for substance use as part of a broader health promotion initiative should encompass all clients. This is especially crucial in settings where there's a heightened probability of clients engaging in substance use compared to the general community. Examples include university health services, clinics dealing with sexually transmitted diseases, areas with a high prevalence of sex workers, mental health services, prisoner evaluation programs, and primary health services in regions with elevated substance use rates. Targeting only those presumed to have substance use issues might overlook individuals engaged in harmful substance use.

The onset of substance use often begins during adolescence, marking a pivotal phase for potential substance-related concerns. It's an opportune time to initiate screening among younger clients. However, the commencement age for regular substance use screening should align with local usage patterns and legal age constraints. Presently, the ASSIST is validated solely for an adult population, aged between 18 and 60 years. Although it exhibits cross-cultural adaptability and could be viable for adolescent use, nuances in its style, content, and risk categorization may not be suitable for this demographic. For instance, an adult drinking at low-risk levels weekly

would fall into the 'lower risk' category, whereas an adolescent consuming at the same level might face greater health and social risks but would also categorize as 'lower risk'.

The ASSIST is an inclusive screening tool covering various psychoactive substances—alcohol, tobacco, and illicit drugs—enabling healthcare professionals to determine the associated risk level of each substance used by a client. While substance use is linked with physical and mental health issues, it's important to note that harmful or hazardous patterns of alcohol and drug use can lead to significant social repercussions for the user, such as familial, social, legal, employment, or financial problems.

People engage in psychoactive substance use for diverse reasons. Some find these substances pleasurable or appealing, while others utilize them to alleviate physical or psychological distress. Substance use might serve various functions; for instance, psychostimulant users may employ these substances to boost performance, stay alert, or control weight. However, substance use concerns can emerge from acute intoxication, regular usage, dependence, and the manner of substance consumption. The ASSIST is structured to identify issues arising from all these substance use patterns.

Acute intoxication problems result from a single drug use episode and may involve:

- Acute toxic effects (like ataxia, vomiting, fever, confusion)
- Overdose and loss of consciousness
- Accidents and injuries
- Aggressive behavior and violence
- Unintended sex and unsafe practices
- Unpredictable behavior

Regular use of substances can lead to a range of problems spanning physical, mental health, and social spheres, including specific health issues, tolerance, anxiety, depression, mood swings, sleep disturbances, financial woes, legal offenses, relationship strains, job or academic difficulties, and cognitive problems.

Dependent substance use often mirrors problems observed in regular use but tends to be more severe. Dependence involves increased and frequent substance use, leading to marked tolerance, severe physical and mental health issues, dysfunctional daily life, intense cravings, unfulfilled responsibilities, criminal behavior, relationship breakdowns, difficulty ceasing use despite harms, and potential withdrawal symptoms upon discontinuation.

Withdrawal symptoms vary across drugs but commonly encompass strong cravings, anxiety, irritability, gastrointestinal disturbances, and sleep issues. The severity of symptoms differs among substances. Alcohol, benzodiazepines, and opioids withdrawal may necessitate medical intervention, while withdrawal from other drugs may require supportive care. If a client is suspected to be undergoing substance withdrawal, administering the ASSIST might be inappropriate at that time. Due to the seriousness of withdrawal syndromes, clients should be referred to services for detailed clinical assessment and treatment if needed.

Injecting drugs poses significant risks, including dependence, overdose, psychosis, vein collapse, infections (local such as abscesses or ulcers, systemic like HIV, hepatitis C). Health workers can provide feedback using the Risks of Injecting card to clients engaged in injecting, including discussions on behavior and recommendations for HIV and hepatitis testing.

The ASSIST feedback report card, a tool used to provide clients with feedback as part of a brief intervention. Understanding the health, social, legal, and financial impacts of particular substances is crucial for health workers administering the ASSIST. This knowledge aids in

Question 4 of the ASSIST, which delves into health, social, legal, and financial problems, and is essential for delivering the brief intervention effectively.

While the primary focus is on health risks related to substance use, it's important to note that substance use also intertwines with various social, legal, and financial challenges. Certain impacts pertinent to specific clients might not be explicitly outlined here. For instance, substance use might have criminogenic impacts on offenders in a prison setting or social and familial repercussions for clients engaged with family and child health services. Health workers conducting the ASSIST and related brief intervention should be cognizant of the substance use impacts most relevant to their clientele, incorporating them into the ASSIST and the linked brief intervention where applicable.

Tobacco Products: The use of tobacco products represents a substantial public health concern and is the primary cause of deaths attributed to psychoactive substance use worldwide. Smoking tobacco products is a contributing factor to various severe long-term health issues and exacerbates the severity or risk of complications associated with other health conditions like high blood pressure, diabetes, and asthma. Exposure to second-hand tobacco smoke poses health risks, especially for children, including respiratory infections, allergies, and asthma. Pregnant women who smoke face increased risks of miscarriage, premature labor, and having low birth weight babies. While smoking is the most common form of tobacco consumption, other methods such as chewing or sniffing tobacco are also linked to higher disease risks. Additionally, exposure to second-hand smoke elevates health risks among non-smokers.

Alcohol: Alcohol consumption represents a risk factor for a wide array of health issues, contributing significantly to premature illness, disability, and mortality. Social problems are frequently linked to harmful or hazardous alcohol use, including fractured relationships with family and friends and difficulties in maintaining studies or work. For certain individuals (men

over 45 and women post-menopause), limited alcohol consumption in high-income countries has been associated with some health benefits, primarily a reduced risk for heart disease from middle age onward. The lowest risk is associated with an average daily intake of 10g of alcohol for men and less than 10g for women. Women consuming alcohol during pregnancy risk giving birth to babies with birth defects, learning and behavioral difficulties, and impaired brain development. Regular drinking can lead to tolerance and dependence, resulting in withdrawal symptoms if consumption is reduced or stopped. Severe alcohol withdrawal complicated by delirium tremens constitutes a medical emergency. Symptoms include tremors, sweating, anxiety, nausea, vomiting, diarrhoea, insomnia, headache, hypertension, hallucinations, and convulsions.

Cannabis: Cannabis is the most widely used illicit drug globally. While fatal cannabis intoxication alone is rare, its use is linked to numerous adverse health outcomes. Similar to tobacco smoking, cannabis use during pregnancy can worsen existing disease conditions like high blood pressure, heart disease, respiratory diseases, and certain cancers. Risks associated with cannabis use include attention and motivation issues, anxiety, paranoia, panic, depression, memory impairment, high blood pressure, asthma, bronchitis, psychotic symptoms (especially in those with a history of schizophrenia), heart disease, chronic obstructive pulmonary disease, and cancers of the upper airway and throat.

Cocaine: Cocaine, a stimulant drug, is associated with a wide range of physical and mental health problems, presenting a significant risk of toxic complications and sudden death, typically due to its impact on the cardiovascular system. Cocaine users engage in high-risk behavior, including risky injection practices and unsafe sex, exposing themselves and their partners to various sexually transmitted diseases and blood borne viruses. Cocaine's effects have a rapid onset and quick dissipation, leading to potential multiple uses within a single session and intense cravings, possibly resulting in severe dependence. Risks include sleep difficulty, increased heart

rate, headaches, weight loss, numbness, agitation, mood swings, paranoia, hallucinations, aggressive behavior, and potential death from cardiovascular complications.

Amphetamine-type Stimulants (ATS): Amphetamine-type stimulants encompass substances like amphetamine, dexamphetamine, methamphetamine, and ecstasy (MDMA). This category of drugs, though sharing some effects with cocaine, has a distinct pharmacological profile and can lead to various physical and mental health issues. There's emerging evidence suggesting that certain ATS substances can cause damage to brain cells. Prolonged high-dose use of amphetamines is a risk factor for malnutrition, which might lead to permanent brain cell damage. Regular ATS use is often linked with social problems such as relationship issues, financial challenges, and difficulties in work or education. Mood swings are also associated with ongoing ATS use, with some users reporting worsening mental health conditions like depression and irritability over time.

Risks associated with the use of amphetamine-type stimulants include:

- Sleep disturbances, loss of appetite, weight loss, dehydration, and reduced immunity
- Jaw clenching, headaches, and muscle pain
- Fluctuating moods involving anxiety, depression, agitation, mania, and panic
- Tremors, irregular heartbeat, and shortness of breath
- Impaired concentration and memory
- Paranoia, aggressive behavior, and violent tendencies
- Potential development of psychosis after repeated high-dose use
- Long-term damage to brain cells, liver damage, brain hemorrhage, and sudden death from acute cardiovascular conditions

Inhalants: Inhalants comprise volatile solvents that can be inhaled, encompassing substances like petrol, solvents, glues, sprays, and lacquers containing benzene or toluene. Amyl nitrite and

nitrous oxide are also used in some communities. They are commonly inhaled directly from a container or through a plastic bag. Short-term effects include nausea, vomiting, headaches, and diarrhoea. Higher doses can result in slurred speech, disorientation, confusion, weakness, tremors, hallucinations, and can potentially lead to coma or death from heart failure.

Typically experimented with by younger individuals due to easy access, inhalants may not be used consistently over extended periods. However, some groups persist in inhalant use into adulthood due to the lack of availability of other substances and cultural pressures. Although inhalants tend not to cause high dependence, their use is associated with severe acute and chronic effects.

Risks associated with the use of inhalants include:

- Flu-like symptoms, sinusitis, nosebleeds
- Gastrointestinal issues like nausea, vomiting, indigestion, ulcers, and diarrhoea
- Dizziness, hallucinations, drowsiness, disorientation, blurred vision
- Headaches, accidents, coordination difficulties, slowed reactions
- Memory impairment, confusion, depression, aggression, extreme fatigue
- Delirium, seizures, coma, and organ damage (heart, lungs, liver, kidneys)
- Fatality due to heart failure

Sedatives and Sleeping Pills: Sedatives and sleeping pills encompass benzodiazepines and related compounds, excluding neuroleptics. These medications, when used more frequently or at higher doses than prescribed, can pose problems for users. The ASSIST typically records issues associated with their usage beyond prescribed limits. Benzodiazepines are generally prescribed to alleviate sleep difficulties, anxiety or mood disorders, trauma, surgical procedures, withdrawal from specific substances, seizures, and muscle pain. Included in this category are medications like diazepam, temazepam, alprazolam, clonazepam, flunitrazepam, zolpidem, midazolam, and

phenobarbital. Health practitioners using the ASSIST should be familiar with the trade names of these medications relevant to their country.

Tolerance and dependence on sedatives or sleeping pills can develop shortly after commencing use. Withdrawal from these drugs can result in extremely unpleasant symptoms such as severe anxiety, panic, insomnia, depression, headache, sweating, fever, nausea, vomiting, and convulsions. Benzodiazepines, when taken in isolation, are unlikely to cause fatal overdoses. However, when combined with substances like alcohol, paracetamol, antidepressants, or opioids, the risk of overdose and death significantly escalates.

The risks associated with the use of sedatives and sleeping pills include:

- Drowsiness, dizziness, and confusion
- Difficulty concentrating and remembering things
- Nausea, headaches, and unsteady gait
- Sleep disturbances
- Anxiety and depression
- Tolerance and dependence after a short duration of use
- Severe withdrawal symptoms
- Overdose and death when combined with alcohol, opioids, or other depressant drugs

Hallucinogens: Hallucinogens comprise substances like lysergic acid diethylamide (LSD), psilocybin, psilocin (psychoactive fungi), ketamine, phencyclidine (PCP), and mescaline. These drugs affect the user's perception of reality by distorting one or multiple senses (vision, hearing, smell, taste, touch), resulting in hallucinations. They can also lead to distortions in cognitive processes, sense of time, self-awareness, and mood. Hallucinogens, both naturally occurring and synthetic, can induce unpredictable effects, varying between users or on different occasions.

Long-term use of hallucinogens may exacerbate symptoms of mental illnesses like schizophrenia. Users might experience flashbacks, which are spontaneous recurrences of past hallucinogen effects.

The risks associated with the use of hallucinogens include:

- Visual, auditory, tactile, and olfactory changes, leading to unpredictable behavior
- Sleep difficulties
- Nausea and vomiting
- Increased heart rate and blood pressure
- Mood swings, anxiety, panic, and paranoia
- Flashbacks
- Worsening of mental illness symptoms like schizophrenia

Opioids: Opioids are central nervous system depressants, encompassing both street (non-prescribed) versions like heroin and opium, as well as those that are medically prescribed, often for pain management. The use of non-prescribed opioids, commonly injected or smoked, can lead to various issues for users. Even prescribed opioid use can pose problems when utilized more frequently or at higher doses than prescribed. The ASSIST primarily notes issues associated with their usage beyond prescribed limits. Prescribed opioids include morphine, codeine, methadone, buprenorphine, pethidine (meperidine), dextropropoxyphene, and oxycodone, among others. Those administering the ASSIST should familiarize themselves with the trade names of these opioids relevant to their country. Opioids can be administered through injection (intramuscularly, intravenously, as with heroin), smoking (common with heroin and opium), oral consumption, sub-lingual methods, or as anal suppositories (pharmaceutical opioids). Heroin injection prompts immediate drug uptake and rapid onset of effects, potentially

leading to fatal or non-fatal overdoses, especially when combined with substances like alcohol or benzodiazepines.

The risks associated with opioid use include:

- Itching, nausea, and vomiting

- Drowsiness, constipation, tooth decay, and irregular menstrual periods

- Difficulty concentrating and remembering things

- Depression, reduced libido, and impotence

- Financial difficulties, criminal offenses, and relationship stress

- Challenges in maintaining work and family life

- Tolerance, dependence, and withdrawal symptoms

- Overdose and death due to respiratory failure

'Other' Drugs: 'Other' drugs refer to substances that do not fit neatly into existing psychoactive substance categories, either pharmacologically or otherwise. This category can encompass gamma hydroxybutyrate (GHB), termed "Fantasy," and various 'designer' drugs. Additionally, substances like kava, Datura, khat, nutmeg, and caffeine might be placed here. Other countries may have substances that do not align with the existing substance classifications and thus fall into this 'other drugs' category.

GHB, initially developed as an anesthetic, gained popularity as a recreational drug and nutritional supplement, but was eventually prohibited in numerous countries due to its potential for abuse. Seizure-like activity was reported following its use. The risk of overdose with GHB is heightened due to the narrow threshold between achieving desired euphoric effects and overdosing. Its rapid onset and sedative properties have linked it to alleged use in 'date rape' cases. Chronic GHB use may lead to tolerance, dependence, and a withdrawal syndrome

resembling that of alcohol and benzodiazepines, marked by anxiety, insomnia, tremors, sweating, agitation, confusion, and psychosis.

Kava, derived from the roots of the Piper methysticum shrub and traditionally used for ceremonial, religious, medicinal, and social purposes in the Pacific Islands, produces effects such as mouth numbness, mild euphoria, anxiety reduction, relaxation, sensory enhancement, and increased sociability. At higher doses, it induces sedation and lack of coordination. Long-term kava use can cause mild gastrointestinal issues, visual distortion, and a dry, scaly rash on the hands, feet, shins, back, and forearms.

Khat, obtained from the leaves and young shoots of the Catha edulis plant indigenous to tropical East Africa and the Arabian Peninsula, contains an amphetamine-like stimulant causing euphoria and appetite suppression. Prolonged use can result in gastrointestinal and cardiovascular disorders, as well as tooth decay.

When utilizing the ASSIST tool, it's crucial to consider the client's comfort and cooperation. Clients are more likely to consent to screening and offer accurate information regarding their substance use when the health worker:

- Demonstrates active listening skills.
- Maintains a friendly and non-judgmental demeanor.
- Shows empathy and sensitivity towards the client's situation.
- Provides clear information about the screening process.
- Explains the reasons behind the inquiries about substance use.
- Describes the limits of confidentiality to the client.

It can be beneficial to illustrate that substance use screening is akin to other health check-ups, like measuring blood pressure or discussing diet and exercise. Establishing a link between the screening and the client's health concerns can enhance their receptiveness to the ASSIST.

Safeguarding clients' privacy and the confidentiality of the information they provide is paramount. This is especially critical when gathering details about substance use. As the use of certain psychoactive substances might be illegal or a criminal offense in many countries, there's potential for stigmatization and discrimination against individuals identified as substance users.

Information obtained from clients should remain confidential and not be disclosed to any individual or group without explicit consent. To assure confidentiality, interviews should occur in private spaces, and the ASSIST results should be part of the client's confidential records. Reassuring clients about the confidentiality of their information encourages them to provide accurate details about their substance use. However, it's important to note that many countries have limitations on confidentiality, especially if a client discloses intentions or actions of harm towards themselves, others, or children.

Health workers should carefully choose the appropriate circumstances for administering the ASSIST, being adaptable and considerate of client needs. It's advisable to wait for a client's medical condition to stabilize, ensuring they are comfortable and not distressed, intoxicated, or in pain before conducting the ASSIST. Clinical judgment is essential in determining the suitable time to discuss the ASSIST with each client.

The initial phase of the ASSIST questionnaire holds crucial importance in the screening process. It's vital for the health worker to conduct the introduction meticulously by following specific steps to ensure the client's comprehension and cooperation:

- Hand over the response card to the client, a concise one-page document.

- Elaborate on the listed substances and their commonly used terms.

- Specify the timeframe of questions, either concerning the past 3 months or lifetime.

- Explain that the queries focus solely on non-prescribed substance use.

- Address any confidentiality concerns the client may have.

During this phase, the health worker needs to explicitly mention the substances covered in the interview and employ familiar names that resonate with the client. The response card contains categorized substances along with their associated names. However, the health worker should use terminology that is culturally relevant for their specific region.

An example of the introduction could be:

"Our discussion will revolve around your recent three-month and lifetime use of alcohol, tobacco, and various drugs. These substances can be consumed through various means like smoking, ingestion, inhalation, or injection (show response card)."

"Some substances mentioned might have been prescribed by a doctor, such as amphetamines, sedatives, or pain medications. For this evaluation, we won't document medications taken as prescribed. However, if you've used these medications differently than prescribed or at higher frequencies or doses, please inform me."

"While our interest lies in understanding your usage of illicit drugs, I want to assure you that any information you provide regarding such use will be treated with utmost confidentiality."

For clients for whom drug use is restricted due to legal, cultural, or religious reasons, it's important to acknowledge these constraints and encourage open and truthful responses about their actual behavior.

Currently, the ASSIST questionnaire is validated solely for interview-based administration. Further studies are required to assess its suitability for self-administration. Nevertheless, the interview format offers advantages, particularly for clients with lower literacy levels. Health workers can clarify any unclear questions and ask follow-up queries to ensure comprehensive and accurate responses.

In ensuring accurate responses and client comprehension, certain practices are crucial during the administration of the ASSIST questionnaire. Here are outlined strategies for healthcare workers to employ:

- Conceal the questionnaire from the client's view to prevent any influence on their responses while you're recording their answers.
- Circle every response for each drug and question, including zero or negative responses, to ensure proper scoring accuracy.
- Be prepared to rephrase questions if necessary and provide prompts, especially for certain questions like Q4.
- Construct a comprehensive overview of the client's substance use and potential associated problems as they answer subsequent questions, particularly regarding frequency in the last 3 months (Q2). Any inconsistent responses should be further queried to ensure clarity and understanding of the questions posed.

It is paramount for healthcare workers to comprehend how ASSIST responses are scored before administering the questionnaire. Incorrect coding of client responses could lead to erroneous final scores, resulting in improper feedback and potentially inappropriate interventions. In Box 4, questions 2 to 5 inquire about event frequencies in the last 3 months, equating to the last 12 weeks or 90 days. For instance, considering Q2, "How often have you used the substances you mentioned in the last 3 months?" The associated frequencies correspond to:

- "Never" indicates no usage within the last 3 months (score = 0).

- "Once or twice" signifies usage totaling 1 to 2 times in the last 3 months (score = 2).

- "Monthly" implies usage averaging 1 to 3 times per month, totaling 3 to 9 times over the last 3 months (score = 3).

- "Weekly" denotes usage averaging 1 to 4 times per week within the last 3 months (score = 4).

- "Daily/Almost daily" suggests usage averaging 5 to 7 days per week within the last 3 months (score = 6).

Administering the ASSIST questionnaire involves following specific prompts and instructions, determining the questions to ask based on the client's responses, and recording the answers accurately. The questionnaire's flow chart outlines the sequence:

Q1 queries about lifetime substance use, offering a non-intrusive way to initiate discussions and gather a brief history. It acts as a filter question determining subsequent inquiries based on the client's 'yes' or 'no' responses to substance use.

Points to remember for Q1:

- Clarify substance categories and local terms.

- Record 'yes' or 'no' for each substance.

- Use consistent terminology.

- Provide examples for 'other drugs' and record accordingly.

- Avoid repeating questions about substances never used.

Q2 focuses on substance use frequency in the last 3 months. It's directed toward substances identified in Q1, aiding in understanding recent usage patterns.

Key considerations for Q2:

- Question only about reported substances from Q1.

- Record all responses, including '0'.

- Reiterate drug terms if necessary.

- Interpret responses if the client uses different terminology.

Q3 addresses strong desires or urges related to substance use. It reflects high-risk use or dependence, specifically probing the frequency of cravings.

Additional notes for Q3:

- Question only about substances reported in Q2.

- Highlight that daily substance use can set a benchmark for desire.

- Consider the context when assessing the client's response.

Q4 inquiries about problems arising from substance use in the last 3 months, emphasizing health, social, legal, or financial issues.

Special notes for Q4:

- Tailor examples to prompt understanding based on substance used.

- Explain specific substance-related problems pertinent to your clientele.

Q5 investigates whether substance use interferes with fulfilling regular obligations. It excludes tobacco due to its minimal impact on role obligations.

Notable points for Q5:

- Offer examples of role obligations affected by substance use.

- Adapt phrasing for clients severely dependent on substances.

Q6 explores concerns expressed by others about the client's substance use, delineating between recent and past concerns.

Q7 focuses on failed attempts to reduce or stop substance use, reflecting dependence or high-risk behavior.

Q8 inquiries about drug injection history, which can indicate dependency or higher risk associated with substance use. If recent injection use is reported, additional actions regarding safer injecting practices and testing for infections are recommended.

These nuanced inquiries ensure a comprehensive assessment of substance use patterns, dependence, and related problems, guiding interventions and referrals for further treatment.

The scoring process for the ASSIST questionnaire involves assigning numerical scores to the client's responses from questions 2 to 7. Each question has various response options, and the interviewer circles the corresponding numerical score based on the client's chosen response for each substance. These scores are then totaled for each individual substance (such as tobacco, alcohol, cannabis, cocaine, etc.) to generate an ASSIST risk score for that specific substance.

For instance, let's consider an example for cannabis:

- Q2c (Weekly): Score = 4

- Q3c (Once/twice): Score = 3

- Q4c (Monthly): Score = 5

- Q5c (Once/twice): Score = 5

- Q6c (Yes, but not in past 3 months): Score = 3

- Q7c (No, Never): Score = 0 Total ASSIST risk score for cannabis = 20

Similar scoring is applied to other substances used in the past 3 months, excluding tobacco's Q5 from the calculation.

Each client ends up with 10 risk scores: an ASSIST risk score for tobacco (range 0 – 31) b ASSIST risk score for alcohol (range 0 – 39) c ASSIST risk score for cannabis (range 0 – 39) ... and so forth for other substances, all falling within a range from 0 to 39.

The scores can be documented on the final page of the ASSIST questionnaire, usually kept in the client's records for future reference. The client doesn't see the questionnaire but receives feedback through the ASSIST feedback report card, presenting the scores in an appropriate manner for the brief intervention.

For practical learning, two practice examples ('Dave' and 'Chloe') are provided in Appendix G of the manual. These examples enable role-playing scenarios where one person portrays the client, following scripted responses, while the other acts as the health worker recording the client's responses accurately on a blank ASSIST questionnaire. The scripted examples are essential in understanding administration nuances, avoiding pitfalls, and mastering the scoring intricacies through simulated practice.

The interpretation of ASSIST scores involves categorizing the risk levels associated with the client's substance use. Each substance receives a risk score that falls into three main categories: 'lower risk,' 'moderate risk,' or 'high risk.' These categories help in determining the appropriate level of intervention needed for that specific level of substance use.

Here's the breakdown of these risk categories and their corresponding ASSIST risk scores for different substances:

Lower risk:

Clients with ASSIST Risk scores of 'three or less' (for most substances; '10 or less' for alcohol) are at a lower risk. These individuals might use substances occasionally but are not currently facing any problems due to their use. With their present usage pattern, they are less likely to develop significant problems in the future related to their substance use.

Moderate risk:

Clients scoring 'between 4 and 26' (for most substances; '11 and 26' for alcohol) are categorized as moderate risk. They are prone to health and other problems and might be experiencing some of these issues currently. Their continued use in this manner implies a likelihood of facing future health complications, including the potential for dependence. Those with a history of substance-related problems or dependence are at increased risk within this category.

High risk:

A score of '27 or higher' for any substance indicates a high risk level. Clients in this category are likely dependent on the substance or at severe risk of dependence. They may currently be experiencing health, social, financial, legal, and relationship problems due to their substance use. Additionally, individuals who have injected drugs more than an average of 4 times per month in the last three months are also considered at high risk.

It's crucial to note that while the ASSIST provides insight into substance-related risks, it's limited in assessing the entirety of these risks. Other factors, such as family history of substance use problems, mental health conditions, age, gender, socioeconomic status, among others, also play significant roles in assessing an individual's actual risk related to substance use. Health care workers should consider these factors when estimating the individual risk for each client.

Incorporating screening with the ASSIST into routine practice demands commitment and coordination across four key domains: planning, training, monitoring, and feedback.

Method of Data Collection

The initial stage of data collection involves a large-scale screening process conducted among students from elementary to high school levels, spanning from standard eight to plus two (or equivalent educational levels). This mass screening aims to gather preliminary data on substance use patterns, identifying potential participants used by ASSIST tool who may require further assessment or intervention.

The researcher collaborated with educational authorities and school administrations to conduct the mass screening within the selected schools. The ASSIST questionnaire to collect information on substance use habits among the students.

During this phase, all eligible students within the specified educational levels participated in the screening process. The screening instrument was administered among students, ensuring confidentiality and ethical considerations. The goal was to obtain an overview of substance use trends, risk levels, and prevalence among the student population.

After the mass screening, the researchers analyzed the collected data to identify a targeted sample for the intervention phase. This sample selection process involved choosing participants based on predetermined criteria, such as specific risk scores obtained from the screening or other relevant factors related to substance use.

The identified sample, comprising individuals showing moderate to high-risk substance use behavior or meeting specific criteria outlined in the research design, was invited to participate in the intervention phase. This intervention included various approaches such as counselling,

educational programs, or other evidence-based interventions aimed at addressing substance use issues among the selected participants.

By employing a staged approach involving mass screening followed by the selection of a specific sample for intervention, the research aimed to effectively target those individuals who might benefit the most from targeted interventions, thus optimizing the impact and effectiveness of the intervention strategies.

CONSORT FLOW CHART

In research, ensuring the transparency and reproducibility of trials is essential. To improve the clarity and accuracy of reporting randomized controlled trials (RCTs), the CONSORT (Consolidated Standards of Reporting Trials) guidelines were created. A key component of these guidelines is the CONSORT flow chart, a visual tool that illustrates the progress of all participants through the various phases of a trial. This includes details on enrolment, intervention allocation, follow-up, and analysis, providing a comprehensive overview of the trial's execution.

Importance of the CONSORT Flow Chart

The CONSORT flow chart serves as a crucial element in the reporting of randomized controlled trials (RCTs) for several reasons:

Enhances Transparency

The flow chart provides a transparent account of how many participants were assessed for eligibility, how many were excluded (and for what reasons), and how participants progressed through each stage of the trial. For example, it shows the total number of participants assessed (n=6615), those excluded due to incomplete questionnaires (n=337), and those who were

eventually randomized (n=6278). This level of detail ensures that every participant is accounted for, offering a clear picture of the trial's scope and any potential losses along the way.

Improves Reproducibility

By detailing the specific steps taken at each stage of the trial, the flow chart aids other researchers in replicating the study. This includes information on how many participants were allocated to each intervention (e.g., 100 to simple advice, 100 to brief intervention) and how many completed the intervention versus how many dropped out at various stages. Such detailed documentation ensures that other researchers can follow the same methodology, thereby improving the reproducibility of the trial.

Reduces Bias

The flow chart highlights potential sources of bias by showing where participants dropped out or was lost to follow-up. For instance, it indicates that 13 participants dropped out after being allocated to the simple advice group and that in the brief intervention group, 21 participants dropped out at various stages (stages 1 through 4). By identifying these points, the flow chart helps researchers understand where and how bias might be introduced into the study, enabling them to address these issues in their analysis and reporting.

Facilitates Peer Review

Peer reviewers can quickly understand the study design and participant flow through the visual representation provided by the flow chart. This efficiency allows reviewers to assess the validity and reliability of the study more effectively. For example, seeing that 79 participants in each intervention group were analyzed helps reviewers quickly verify that the final analysis was appropriately conducted, despite the initial larger group sizes.

Aids in Interpretation: The flow chart offers a clear visual summary that helps readers interpret the study's findings within the context of participant flow and potential attrition. By showing the progression from initial assessment to final analysis, the flow chart provides context that is essential for understanding the results. For instance, seeing that 8 participants were lost to follow-up in the simple advice group allows readers to better gauge the reliability of the findings from this group.
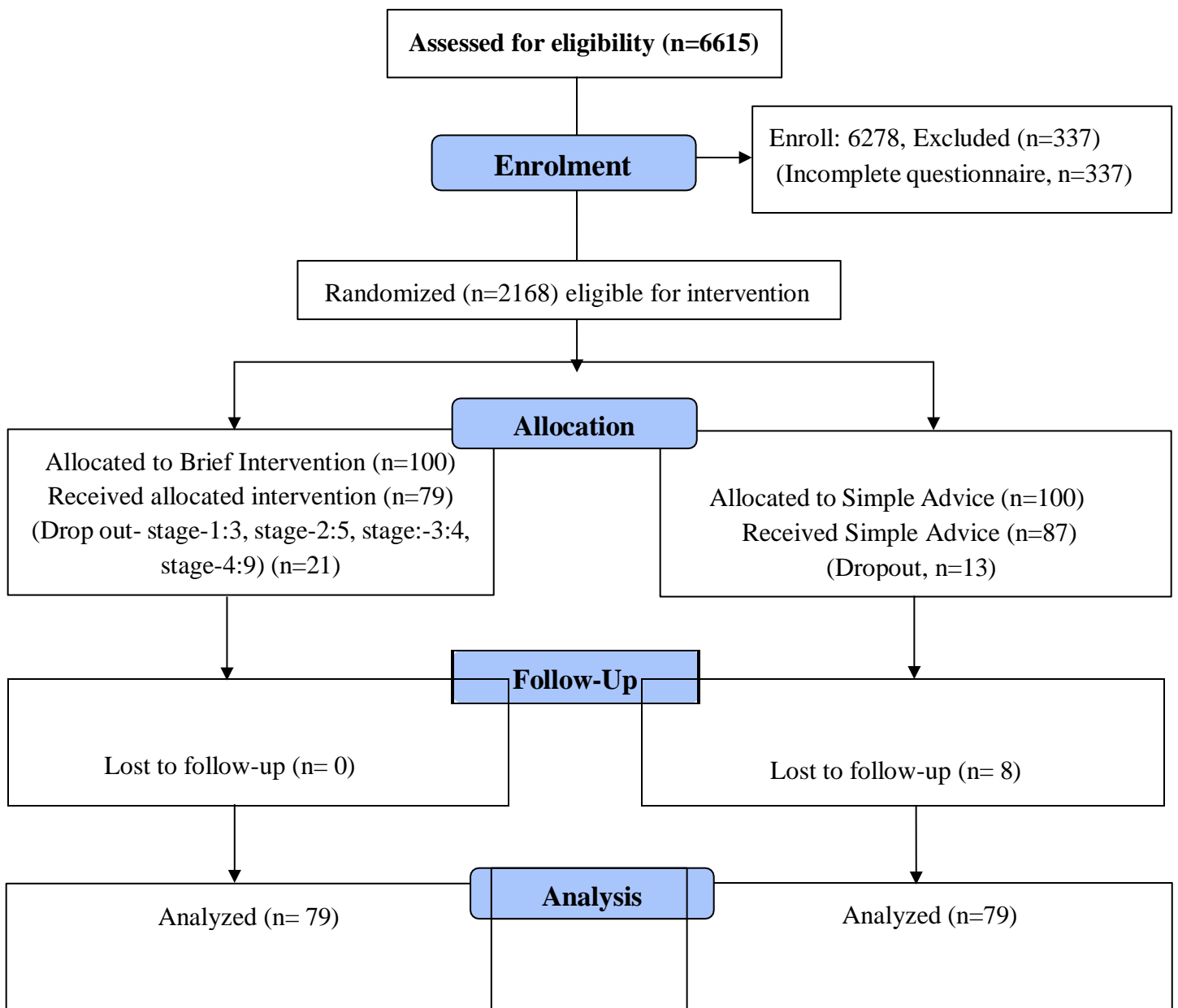
CONSORT FLOW CHART

Figure 3.2 CONSORT Flow Chart

Detailed Description of the CONSORT Flow Diagram

The provided CONSORT flow diagram is a comprehensive visual representation structured into four critical phases of a randomized controlled trial: Enrolment, Allocation, Follow-Up, and Analysis. Each phase meticulously documents the participant flow and critical points where participant numbers change, ensuring transparency and clarity in reporting the trial's progress.

Enrolment

The initial phase of the trial involved assessing 6615 participants for eligibility. Out of these, 337 participants were excluded from the trial due to incomplete questionnaires. Consequently, 6278 participants were deemed eligible for enrolment. This assessment is crucial as it sets the stage for a well-defined study population, ensuring that all included participants meet the predefined criteria necessary for the trial.

Allocation

From the enrolled participants, 2168 were found eligible for intervention and subsequently randomized. Randomization is a pivotal process in RCTs that helps in minimizing bias by ensuring that each participant has an equal chance of being assigned to any intervention group.

The participants were allocated into two groups:

- **Simple Advice Group**: This group consisted of 100 participants initially allocated to receive simple advice. Out of these, 87 participants received the simple advice as intended, while 13 participants dropped out before receiving the intervention. The dropout information is vital for understanding the potential barriers or issues that might have influenced participants' continuation in the trial.

- **Brief Intervention Group**: Similarly, this group also initially consisted of 100 participants allocated to receive a brief intervention. Of these, 79 participants received the brief intervention, whereas 21 participants dropped out at various stages. The detailed dropout numbers are broken down as follows: 3 participants dropped out at stage 1, 5 at stage 2, 4 at stage 3, and 9 at stage 4. This breakdown provides insights into the points within the intervention process where participants were more likely to discontinue, highlighting stages that may require additional support or adjustments.

Follow-Up

During the follow-up phase, the trial monitored participant retention:

- **Simple Advice Group**: In this group, 8 participants were lost to follow-up. This means they did not complete the follow-up assessments, which could impact the analysis and interpretation of the intervention's effectiveness.
- **Brief Intervention Group**: Notably, this group did not experience any loss to follow-up, indicating all participants who received the intervention completed the follow-up assessments. This full retention is significant as it enhances the reliability of the follow-up data for this group.

Analysis

The final phase of the trial involved analyzing the data from the participants who completed the study:

- **Simple Advice Group**: A total of 79 participants were included in the final analysis. This number reflects the participants who completed both the intervention and the follow-up assessments, minus those who dropped out or were lost to follow-up.

- **Brief Intervention Group**: Similarly, 79 participants from this group were included in the final analysis. This consistency in participant numbers analyzed from both groups supports the robustness of the study's methodology.

Overall, this detailed CONSORT flow diagram provides a clear and thorough account of the participant journey through the trial. By documenting each phase meticulously, the diagram ensures transparency in reporting and offers a comprehensive overview of the trial's execution. This level of detail aids in understanding the trial's methodology, identifying potential points of bias, and supporting the reproducibility of the study by other researchers.

Method of Data Analysis

The method of data analysis for this research project will encompass both descriptive and inferential statistical techniques to comprehensively understand and evaluate the findings obtained from the intervention study. The primary aim is to assess the effectiveness of the intervention in addressing substance use behavior among the targeted sample. The analysis will involve the utilization of various statistical tools and visual representations to present the data accurately and meaningfully.

Descriptive data analysis will involve the summarization and presentation of the collected data in a structured manner. This will include calculating measures such as means, standard deviations, frequencies, percentages, and other relevant descriptive statistics. These statistics will provide a clear overview of the characteristics of the sample, the prevalence of substance use, and changes observed before and after the intervention.

Furthermore, inferential data analysis will be conducted to ascertain whether the observed changes resulting from the intervention are statistically significant. The t-test, a commonly used statistical test for comparing means between two groups, will be employed to assess the

significance of differences in substance use behavior scores or other relevant metrics pre- and post-intervention.

Graphical representations such as tables, diagrams, and graphs will be utilized to visually illustrate the data trends, distribution, and changes over time. These visual aids will help in presenting a clear and understandable depiction of the findings to support the interpretation of the results.

The comparison of pre- and post-intervention data using the t-test will determine whether the observed changes are statistically significant, indicating whether the intervention had a meaningful impact on reducing substance use behavior among the participants. The significance level will be set a priori, typically at 0.05, to determine whether the differences observed between the two time points are unlikely due to random chance.

Additionally, five detailed case studies will be analyzed qualitatively. These case studies will offer a rich, in-depth exploration of individual experiences with substance use, their participation in the intervention, and the outcomes observed. Qualitative analysis methods such as content analysis or narrative analysis will be utilized to extract themes, insights, and commonalities across the case studies.

Apart from quantitative analysis, qualitative analysis will be conducted on the data obtained from the three focus group discussions (FGDs). Thematic analysis will be employed to extract themes, patterns, and perceptions regarding substance use, interventions, and their impacts among the participants. The insights from FGDs will provide a deeper understanding of subjective experiences and perspectives related to the intervention.

The integration of both quantitative and qualitative analyses, through statistical tests, tables, visual representations, and qualitative exploration via FGDs and case studies, aims to offer a

comprehensive and multi-dimensional understanding of the intervention's impact on substance use among the student population

Overall, this mixed-method approach to data analysis aims to provide a comprehensive understanding of the intervention's effectiveness, enabling a robust evaluation of the impact of the intervention on substance use behavior among the selected sample.

Ethical considerations of the research

Ethical considerations in research involving student populations, particularly on sensitive topics such as substance use, are crucial and should be meticulously addressed. Here are key ethical considerations.

1. **Informed Consent:** Obtain informed consent from both students and their legal guardians if they are minors, ensuring they understand the study's purpose, risks, benefits, and their right to withdraw.

2. **Confidentiality:** Protect participants' identities by ensuring confidentiality and anonymizing collected data to prevent any identifiable information from being disclosed.

3. **Voluntary Participation:** Ensure that participation in the study is entirely voluntary, and students should not face any repercussions for declining to take part.

4. **Protection of Minors:** Safeguard the welfare of minors by using age-appropriate language and interventions and obtaining appropriate consent from parents or guardians.

5. **Beneficence:** Design interventions and research processes to maximize benefits while minimizing potential harm to participants.

6. **Non-Maleficence:** Avoid causing harm or distress to participants throughout the research process.

7. **Respect for Diversity:** Acknowledge and respect cultural diversity among participants, ensuring that research methods and interventions are sensitive to various cultural backgrounds.

8. **Ethical Approval:** Seek approval from institutional review boards or ethics committees before commencing the research, adhering strictly to ethical guidelines and standards.

9. **Dissemination of Findings:** Present research findings accurately and responsibly, ensuring confidentiality is maintained, and results are shared without sensationalizing or distorting the data.

10. **Continuous Ethical Oversight:** Ensure continuous ethical monitoring throughout the research process, addressing any ethical issues promptly and transparently.

Addressing these ethical considerations is vital to ensure that the research is conducted responsibly, respects the rights of participants, and upholds the integrity of the study outcomes.

RESEARCH RESULT

INTRODUCTION

The results chapter in a research study holds paramount significance as it serves as the core of the investigation, presenting findings obtained through rigorous analysis and interpretation of collected data. This chapter plays a pivotal role in addressing the research questions or hypotheses formulated at the outset of the study, thus contributing substantially to the advancement of knowledge in the respective field (Creswell, 2014).

First and foremost, the results chapter encapsulates the essence of empirical research by presenting the outcomes of data collection and analysis processes. It provides a detailed account of the research findings, enabling readers to comprehend the implications and significance of the study within the broader context of existing literature. By transparently presenting the results, researchers establish credibility and trustworthiness, allowing peers and stakeholders to evaluate the rigor and validity of the study's outcomes (Miles et al., 2013).

Moreover, the results chapter facilitates the validation or refutation of research hypotheses, shedding light on the relationships, patterns, or trends observed within the data. Through statistical analyses, qualitative coding, or other methodological approaches, researchers unveil meaningful insights that contribute to theoretical frameworks, empirical models, or practical applications. These insights not only enrich academic discourse but also inform decision-making processes in various professional domains (Polit & Beck, 2017).

Furthermore, the results chapter serves as a platform for knowledge dissemination, enabling researchers to communicate their findings to diverse audiences, including fellow scholars, practitioners, policymakers, and the general public. By articulating the implications of the findings in clear and concise terms, researchers bridge the gap between theory and practice,

fostering evidence-based interventions, policies, or recommendations that address real-world challenges (Silverman, 2016).

In sum, the results chapter in research embodies the culmination of scholarly inquiry, encapsulating the essence of empirical investigation, unveiling meaningful insights, and fostering knowledge dissemination. Through meticulous analysis and interpretation, researchers illuminate new pathways for inquiry, catalyzing intellectual discourse, and driving positive change in society (Trochim & Donnelly, 2008).
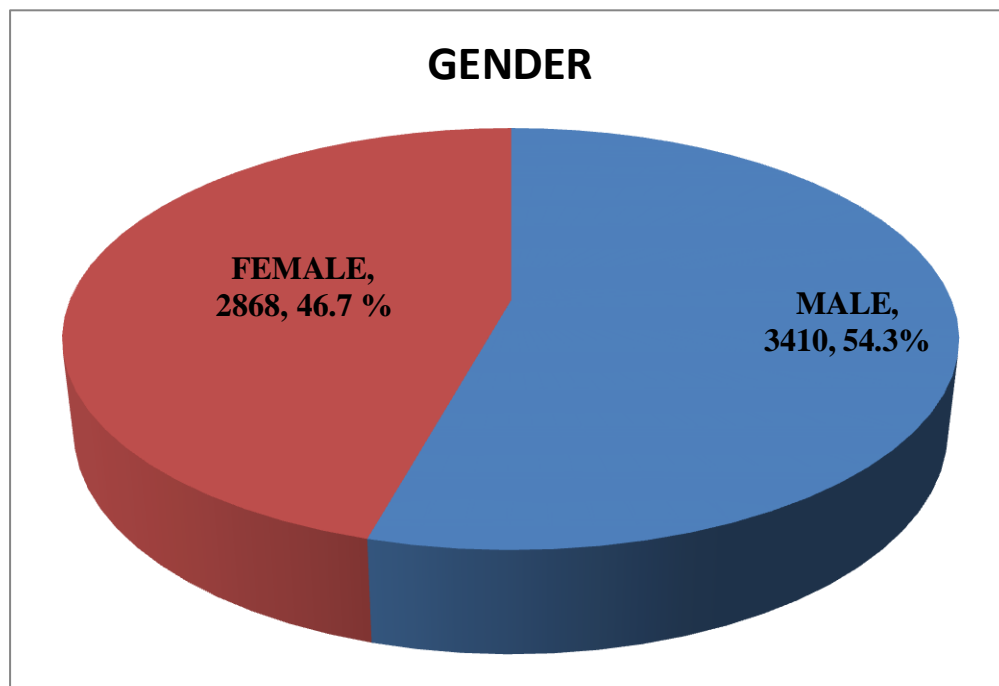
GENDER

Figure 4.1: Gender

	Frequency	Percent
Female	2868	45.7
Male	3410	54.3
Total	6278	100.0

Table 4.1: Gender

In this dataset, the variable "GENDER" represents the gender of individuals. The frequency table displays the distribution of gender among the sample population. The term "Frequency" indicates the number of occurrences of each gender category within the dataset. For instance, there are 2868 occurrences of the category "female" and 3410 occurrences of the category "male."

The "Percent" column indicates the proportion of each gender category relative to the total number of individuals in the dataset. For example, 45.7% of the individuals in the dataset are categorized as "female," while 54.3% are categorized as "male."

The "Valid Percent" column adjusts the percentage calculation based on valid responses only, excluding any missing or invalid data. Therefore, it represents the proportion of each gender category among the valid responses. Both the "Percent" and "Valid Percent" columns provide insight into the relative representation of each gender category within the dataset.

The "Cumulative Percent" column shows the cumulative percentage of the total dataset represented by each gender category. It starts from the first category and adds up successively, showing the accumulation of proportions as you move down the list. In this dataset, after accounting for both "female" and "male" categories, 100% of the data is covered.

Overall, this frequency table offers a comprehensive overview of the distribution of gender within the dataset, allowing for easy interpretation and understanding of the gender composition among the sampled individuals.
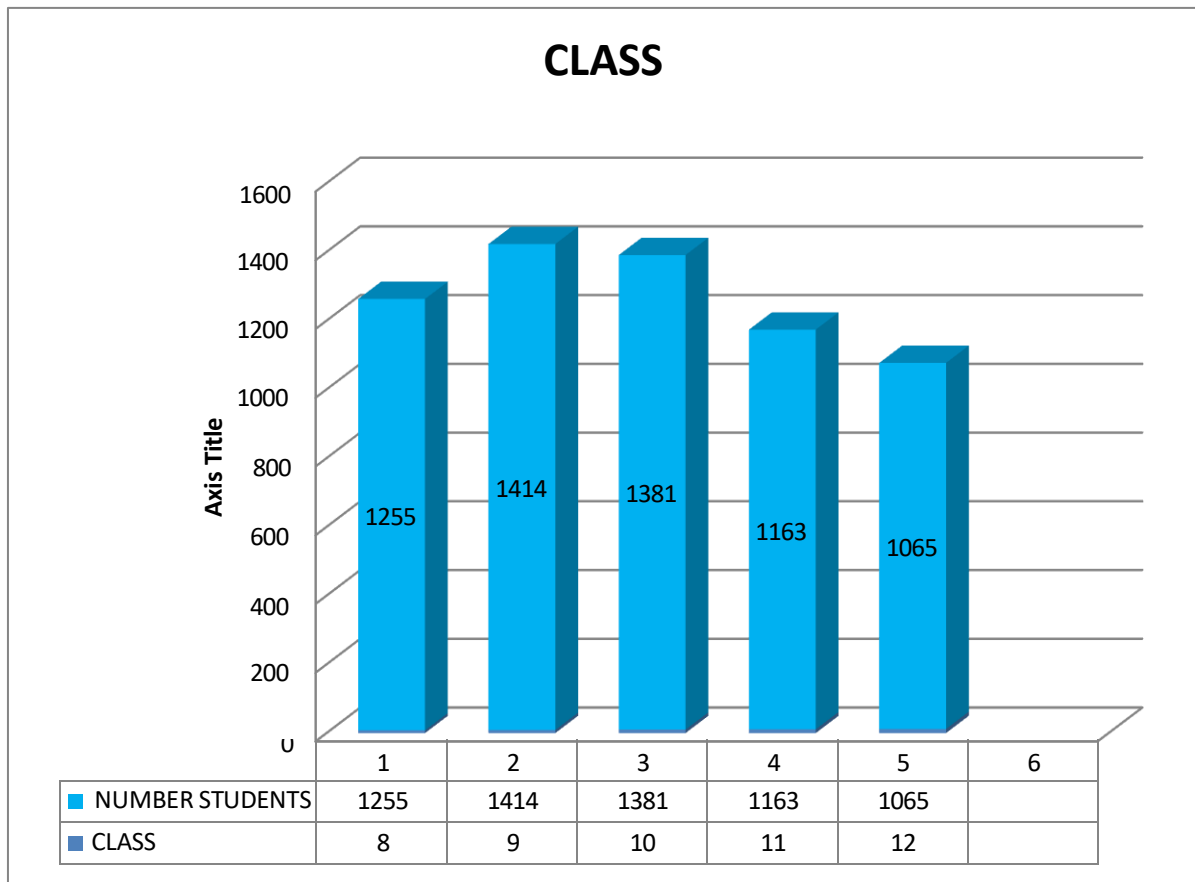
CLASS

Figure 4.2 : Class

Class	Frequency	Percent
8	1255	20
9	1414	22
10	1381	22
11	1163	18
12	1065	17
Total	6278	100
Mean: 9.90		**SD: 1.371**

Table 4.2: Class

In this dataset, Researcher examining the distribution of class scores. The mean class score is 9.90, indicating the average score across all students. The median score, which represents the middle value when all scores are arranged in ascending order, is slightly lower at 9.84. The mode, or the most frequently occurring score, is 9, suggesting that many students received this particular score.

The standard deviation, a measure of the dispersion or variability of scores around the mean, is 1.371. This indicates the extent to which scores deviate from the average. The variance, which is the square of the standard deviation, is 1.879, providing another perspective on the spread of scores.

The skewness, a measure of the symmetry of the score distribution, is close to zero at 0.111, suggesting that the distribution is approximately symmetrical. The kurtosis, which indicates the degree of peakedness or flatness of the distribution, is negative at -1.208, implying a slightly flattened distribution compared to a normal distribution.

Looking at the frequency distribution of class scores, we can see that the majority of students fall within classes 8 to 12. Class 10 has the highest frequency, with 22.0% of students belonging to this class, followed closely by classes 9 and 11, each comprising 22.5% and 18.5% of students, respectively. Classes 8 and 12 have slightly lower frequencies, accounting for 20.0% and 17.0% of students, respectively. This distribution provides insight into the composition of students across different class levels.
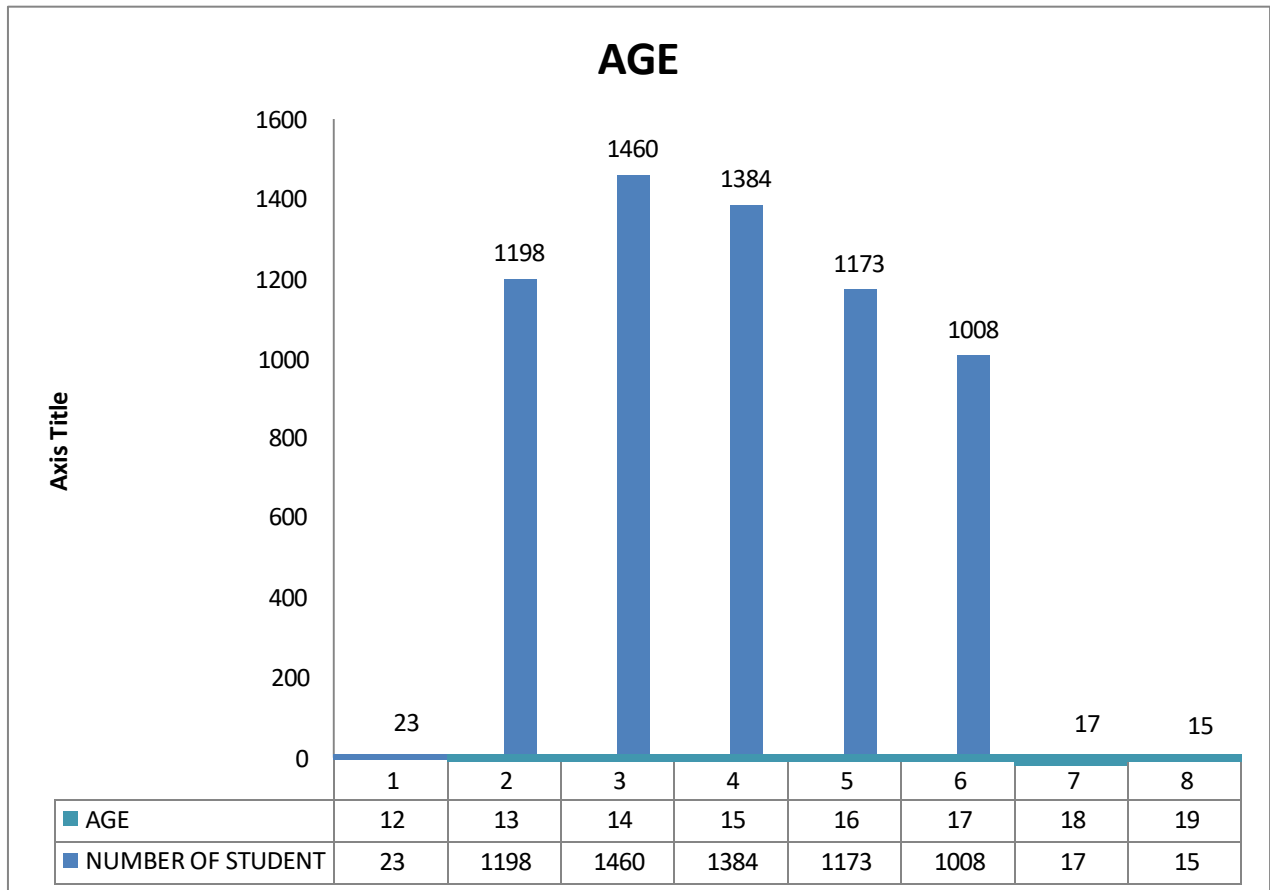
Figure 4.3 : Age

Age	Frequency	Percent
12	23	.4
13	1198	19.1
14	1460	23.3
15	1384	22.0
16	1173	18.7
17	1008	16.1
18	17	.3
19	15	.2
Total	6278	100.0
Mean: 14.90		SD: 1.382

Table 4.3: Age

This dataset provides statistical information about the ages of individuals. The mean age of the sample is 14.90 years, indicating the average age across all individuals. The median age, which represents the middle value when all ages are arranged in ascending order, is slightly lower at 14.84 years. The mode, or the most frequently occurring age, is 14, suggesting that a significant portion of individuals are of this age.

The standard deviation, a measure of the dispersion or variability of ages around the mean, is 1.382 years. This indicates the extent to which ages deviate from the average. The variance, which is the square of the standard deviation, is 1.911, providing another perspective on the spread of ages.

The skewness, a measure of the symmetry of the age distribution, is close to zero at 0.156, suggesting that the distribution is approximately symmetrical. The kurtosis, which indicates the degree of peakedness or flatness of the distribution, is negative at -1.022, implying a slightly flattened distribution compared to a normal distribution.

Looking at the frequency distribution of ages, we can see that the majority of individuals fall within the age range of 13 to 17 years. Individuals aged 14 and 15 have the highest frequencies, comprising 23.3% and 22.0% of the sample, respectively. Ages 13 and 16 also have substantial frequencies, with 19.1% and 18.7% of individuals falling into these age categories, respectively. Ages 17, 12, 18, and 19 have lower frequencies, each representing less than 1% of the sample. This distribution provides insight into the age composition of the sample population.
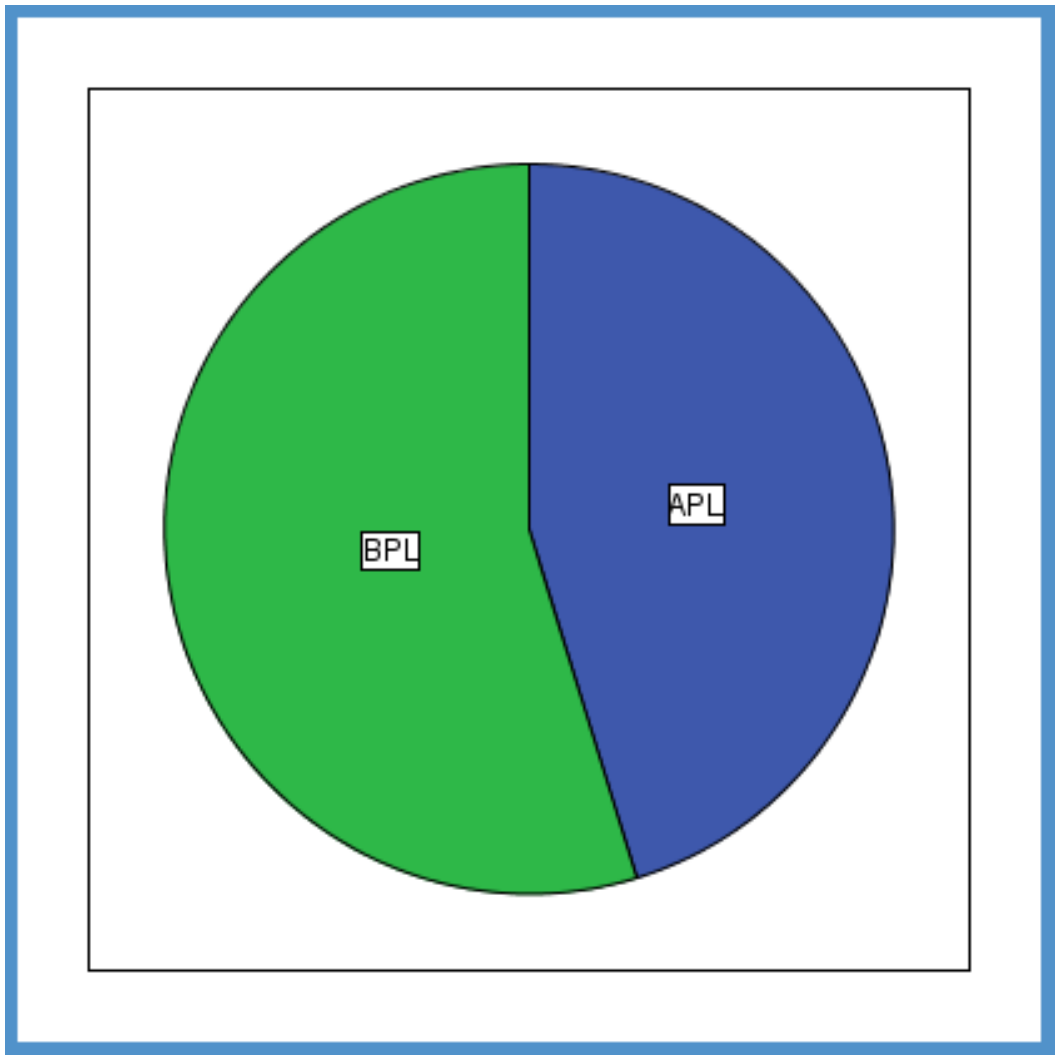
ECONOMIC STATUS

Figure 4.4 : Economic Status

	Frequency	Percent
APL	2841	45.3
BPL	3437	54.7
Total	6278	100

Table 4. 4 : Economic Status

This dataset provides information on the economic status of individuals, categorized into Above Poverty Line (APL) and Below Poverty Line (BPL). The term "Above Poverty Line" refers to individuals or households whose income exceeds the poverty threshold set by the government, indicating a relatively higher economic status. On the other hand, "Below Poverty Line" encompasses individuals or households whose income falls below this threshold, indicating a lower economic status.

In the dataset, 45.3% of individuals are classified as APL, indicating that they belong to households with incomes above the poverty line. The remaining 54.7% are categorized as BPL, signifying that their households have incomes below the poverty line.

Understanding the economic status of individuals is crucial for various socio-economic analyses and policy-making endeavors. It allows policymakers to identify vulnerable populations and design targeted interventions to address their specific needs. Additionally, it provides insights into disparities in access to resources, opportunities, and essential services, guiding efforts towards promoting economic equity and social welfare. By examining the distribution of economic status within a population, researchers and policymakers can formulate strategies to alleviate poverty, enhance social mobility, and foster inclusive development.
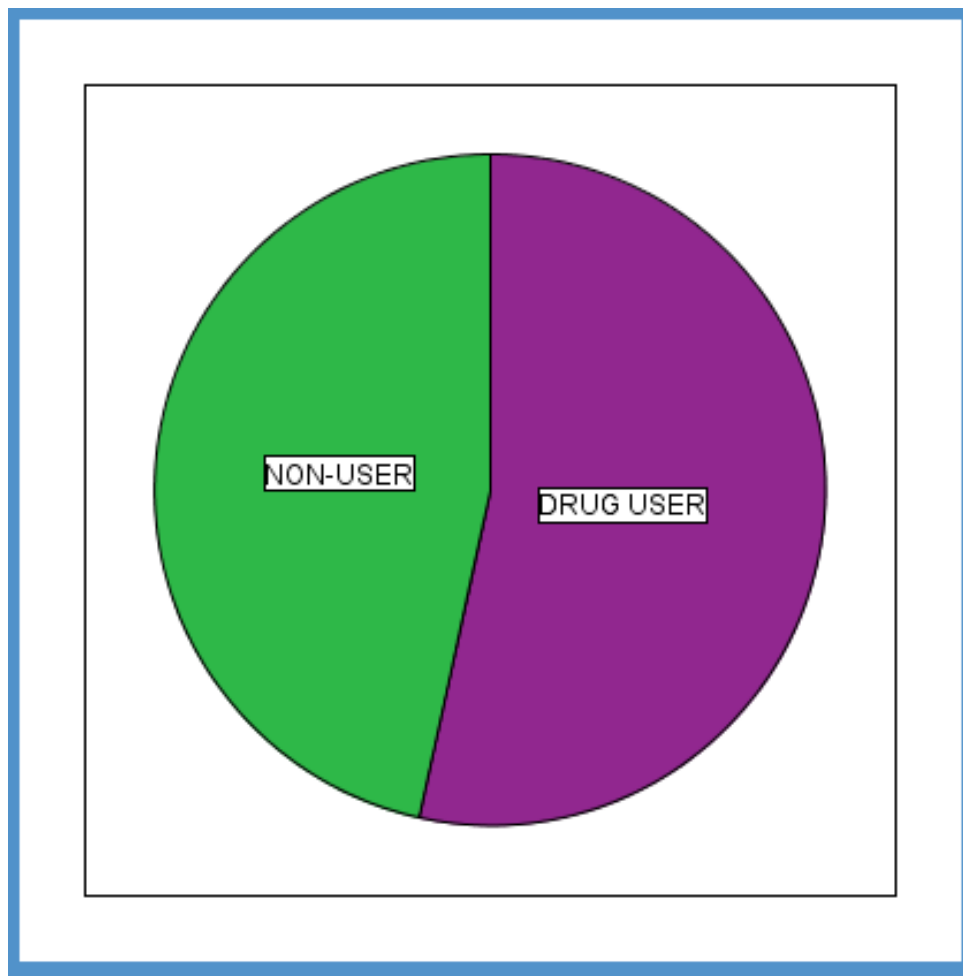
OVERALL DRUG USAGE

Figure 4.5 : Overall Drug Usage

	Frequency	Percent
Drug User	3357	53.5
Non-User	2921	46.5
Total	6278	100

Table 4. 5 : Overall Drug Usage

The dataset provides an overview of overall drug usage among individuals, categorizing them into two main groups: Drug Users and Non-Users.

In this research , 53.5% are classified as Drug Users, indicating individuals who have reported using drugs either currently or at some point in their lives. On the other hand, Non-Users represent 46.5% of the dataset, denoting individuals who have never reported drug usage.

The data appears to have been collected using the ASSIST tool developed by the World Health Organization (WHO). This tool serves as a valuable instrument for mass screening across various schools and populations, enabling the identification of individuals at risk of substance use disorders. By administering the ASSIST tool in diverse settings, such as educational institutions, healthcare facilities, or community centers, authorities can gather comprehensive data on drug usage patterns and associated behavior.

Understanding the prevalence of drug usage is essential for public health efforts aimed at addressing substance abuse and promoting overall well-being. Leveraging tools like the ASSIST facilitates the early identification of individuals in need of support, enabling timely interventions and the implementation of targeted prevention strategies. By proactively addressing substance abuse issues, policymakers and healthcare professionals can work towards mitigating the adverse effects of drug misuse on individuals and communities, ultimately fostering healthier and safer environments.
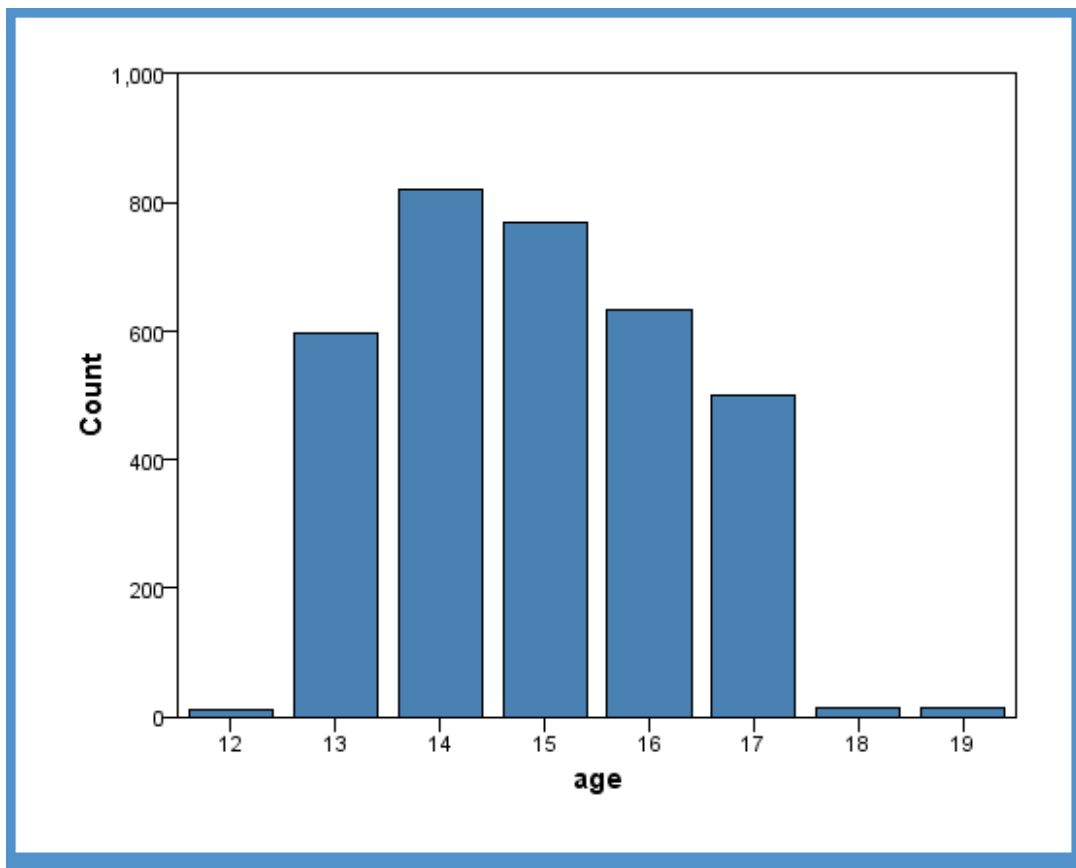
AGE OF OVERALL DRUG USERS

Figure 4.6: Age of Overall Drug Users

	N	Minimum	Maximum	Mean	Std. Deviation
Age	3357	12	19	14.91	1.367

Table 4. 6: Age of Overall Drug Users

The dataset comprises 3357 observations concerning the age of adolescents, with ages ranging from a minimum of 12 years to a maximum of 19 years. On average, adolescents in the dataset are approximately 14.91 years old, with a standard deviation of approximately 1.367 years, indicating a relatively narrow spread of ages around the mean. These descriptive statistics offer insight into the age distribution among adolescents in the dataset, providing a snapshot of the typical age range and the level of variability present within the observations.
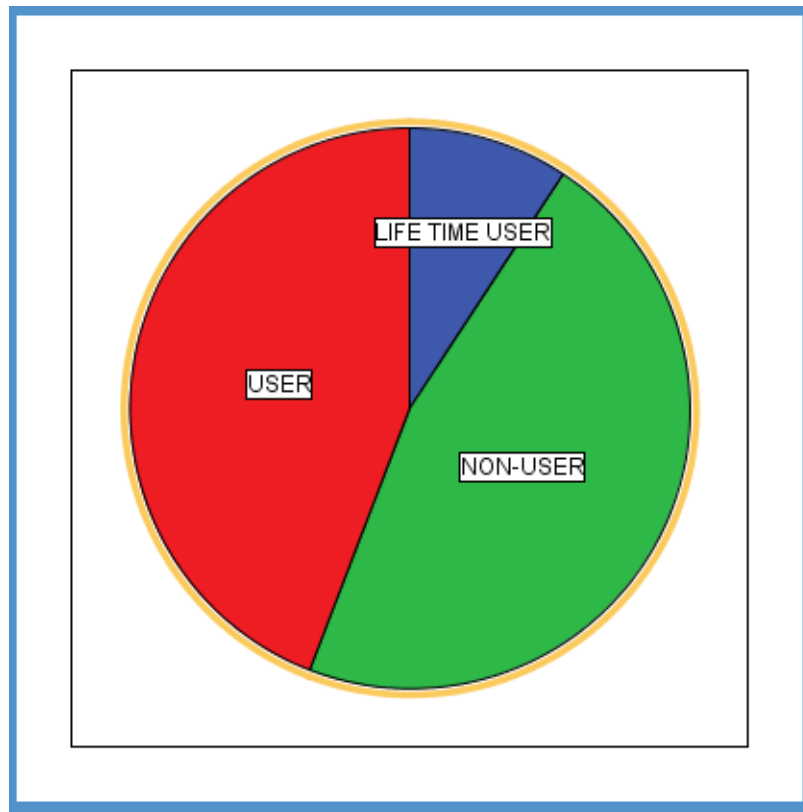
DRUG USAGE- Lifetime Users, Users, and Non-Users.

Figure 4.7: Drug Usage- Lifetime Users, Users, and Non-Users.

	Frequency	**Percent**
Life Time Users	585	9.3
Users	2772	44.2
Non-Users	2921	46.5
Total	**6278**	**100**

Table 4. 7: Drug Usage- Lifetime Users, Users, and Non-Users.

The dataset presents information on drug usage among individuals, categorized into three groups: Lifetime Users, Non-Users, and Users. Lifetime Users refer to individuals who have used drugs at least once in their lifetime, constituting 9.3% of the total sample. Non-Users

represent individuals who have never used drugs, comprising 46.5% of the dataset. Users denote

individuals who currently use drugs, making up 44.2% of the sample.

MALE DRUG USAGE
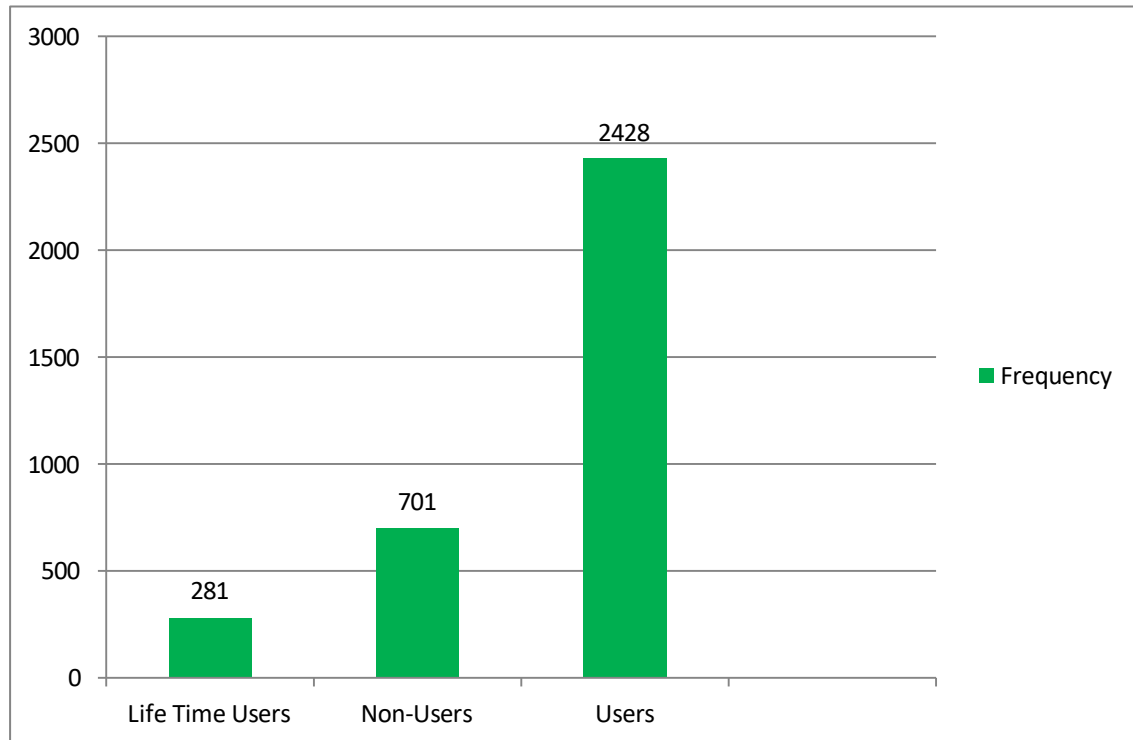
Figure 4. 8: Male Drug Usage

	Frequency	Percent
Life Time Users	281	8.2
Non-Users	701	20.6
Users	2428	71.2
Total	3410	100

Table 4. 8: Male Drug Usage

Among males, drug usage is categorized into three groups: Lifetime Users, Non-Users, and

Users. Lifetime Users, representing 8.2% of male respondents, are individuals who have used

drugs at least once in their lifetime. Non-Users, constituting 20.6% of males, are those who have never used drugs. The majority, comprising 71.2% of male respondents, are Users, indicating individuals who currently use drugs.

Understanding male-specific patterns of drug usage is crucial for developing targeted interventions and support systems tailored to address the unique needs and challenges faced by this demographic. By identifying the prevalence of drug use among males and distinguishing between different categories of usage, policymakers and healthcare professionals can implement strategies to reduce substance abuse, provide appropriate treatment and rehabilitation services, and promote healthy behavior among male populations. This knowledge facilitates the development of effective interventions that aim to improve the overall well-being and quality of life for males affected by drug addiction
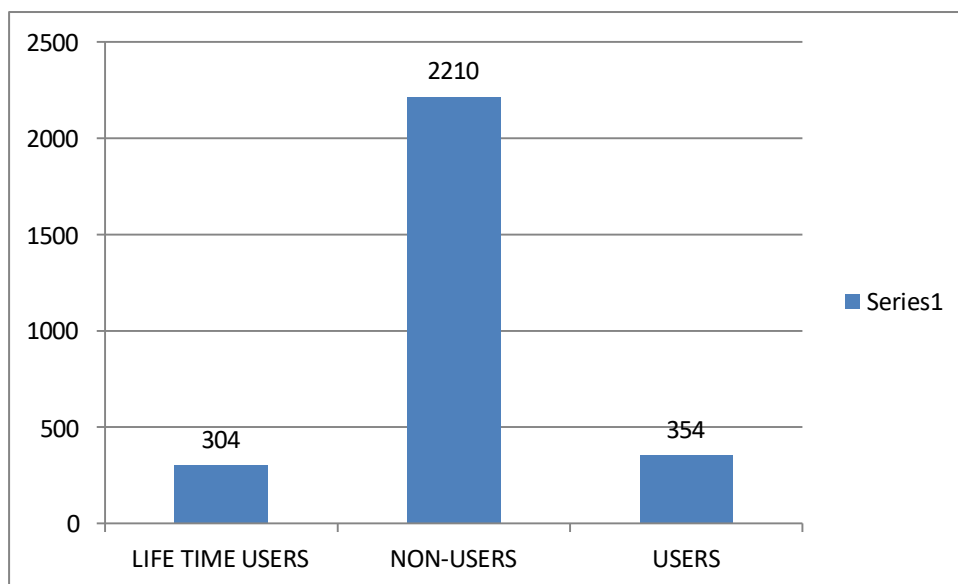
FEMALE DRUG USAGE

Figure 4. 9: Female Drug Usage

	Frequency	Percent
Life Time	304	10.59
Non-Users	2210	77.05
Users	354	12.34
Total	2868	100

Table 4. 9: Female Drug Usage

Female drug usage is delineated into three distinct categories: Lifetime, Non-Users, and Users. Among females, there are 304 individuals classified as Lifetime users, indicating those who have used drugs at least once in their lifetime. Meanwhile, the majority, constituting 2210 individuals, fall into the Non-Users category, denoting those who have never used drugs. Lastly, there are 354 females categorized as Users, representing individuals who currently use drugs.

Understanding the nuances of female drug usage is imperative for tailoring interventions and support systems to address the specific needs and challenges faced by women. By discerning the prevalence of drug use among females and distinguishing between different categories of usage, policymakers and healthcare professionals can implement targeted strategies aimed at mitigating substance abuse, providing appropriate interventions and support services, and fostering healthy behavior among female populations. This knowledge serves as a foundation for developing effective initiatives designed to enhance the overall health and well-being of females affected by drug addiction.

DRUG USAGE - LIFE TIME USERS (One Time Users)

GENDER
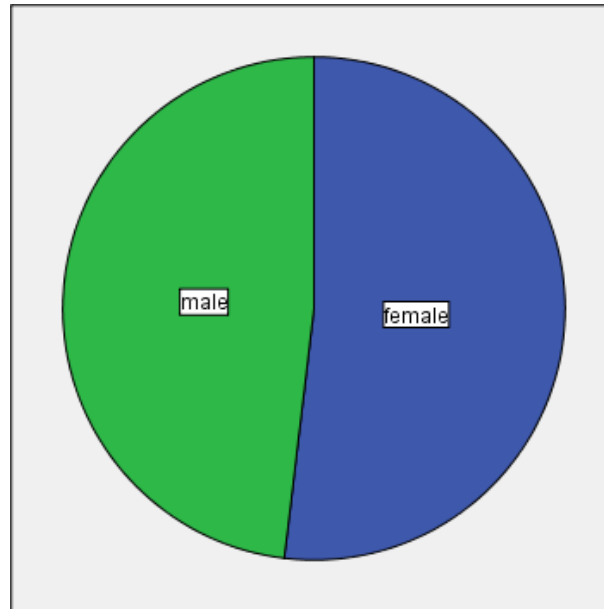
Figure 4. 10 : Gender (life time users)

	Frequency	**Percent**
Female	304	51.9
Male	281	48.1
Total	585	100

Table 4. 10 : Gender (life time users)

Among lifetime drug users, 304 individuals are female, constituting 51.9% of the total, while 281 individuals are male, representing 48.1% of the total. This breakdown illustrates that both genders are represented among lifetime drug users, with females slightly outnumbering males in this category. Understanding the gender distribution among lifetime drug users can inform

targeted interventions and support services tailored to address the specific needs and challenges faced by individuals of different genders grappling with substance abuse.

CLASS - LIFE TIME USERS (One Time Users)

Figure 4. 11: Class (life time users)
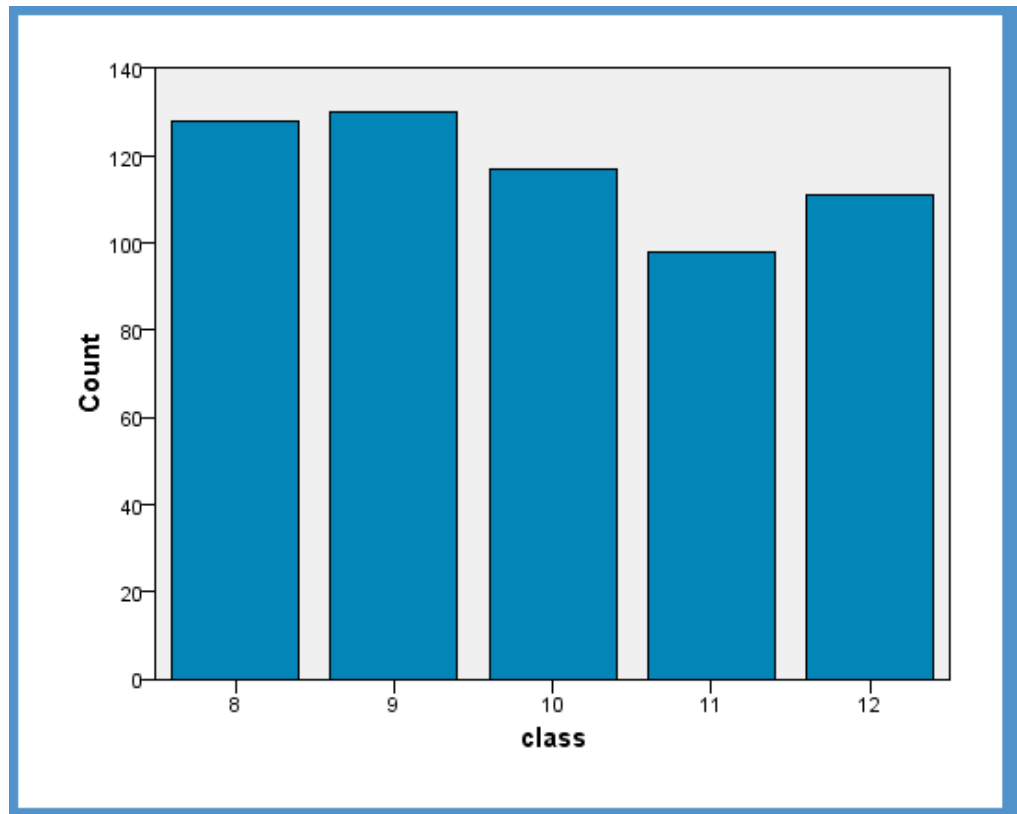
Class	Frequency	Percent
10	117	20.0
11	99	16.8
12	111	19.0
8	128	21.9
9	130	22.3
Total	584	100

Table 4. 11: Class (life time users)

Among the life time users, 117 are in the 10th grade, accounting for 20.0% of the total. Additionally, there are 99 students in the 11th grade, making up 16.8% of the total. Furthermore, 111 students are in the 12th grade, representing 19.0% of the total. Moreover, there are 128 students in the 8th grade, comprising 21.9% of the total. Lastly, 130 students are in the 9th grade, constituting 22.3% of the total. This breakdown provides insight into the distribution of students across different grade levels, highlighting variations in sample representation that may influence the interpretation of research findings and the development of educational interventions tailored to specific grade levels.
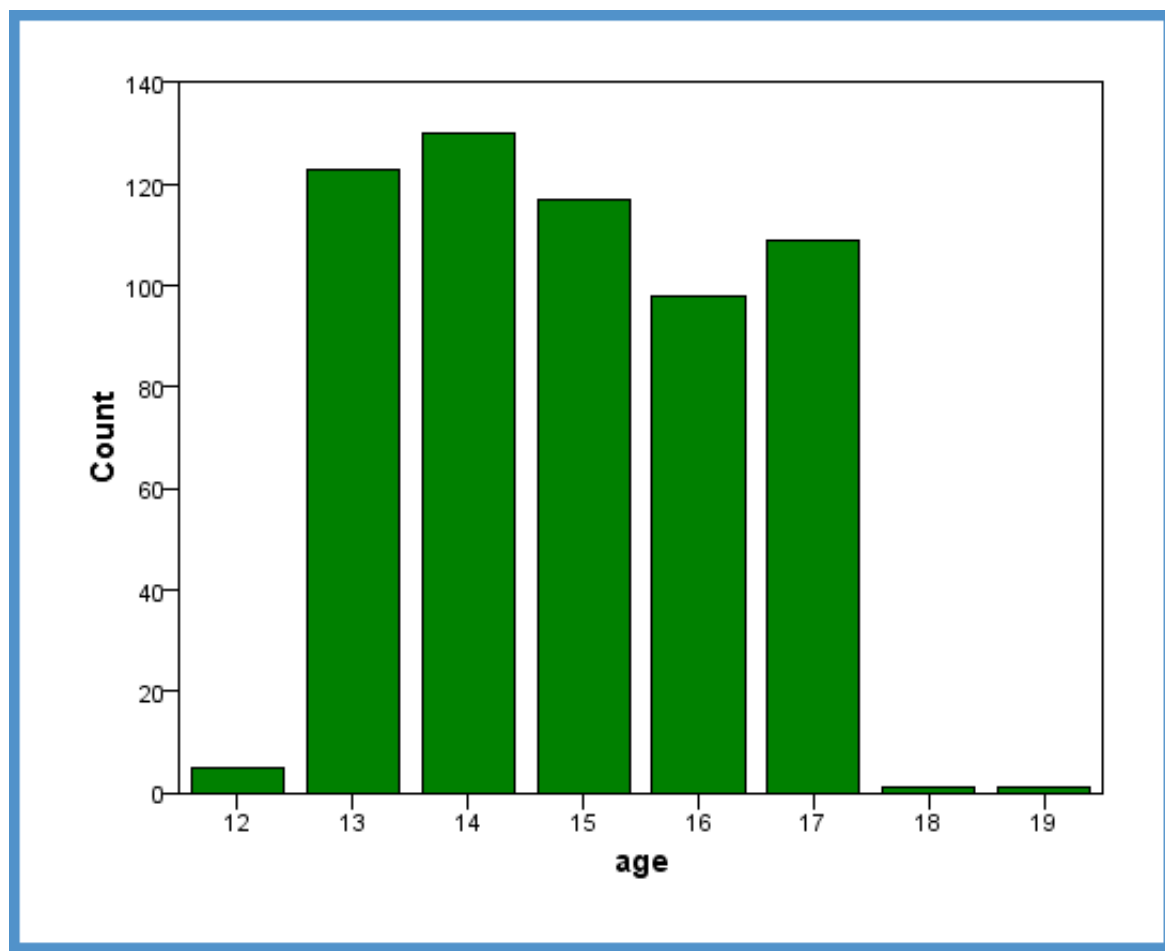
AGE - LIFE TIME USERS (One Time Users)

Figure 4. 12: Age (life time users)

Age	Frequency	Percent
12	5	.9
13	124	21.1
14	130	22.3
15	117	20.0
16	98	16.8
17	109	18.7
18	1	.2
19	1	.2
Total	585	100

Table 4. 12 : Age (life time users)

The age distribution among the surveyed students is as follows: 5 students are 12 years old, representing 0.9% of the total. Additionally, there are 124 students who are 13 years old, making up 21.1% of the total. Furthermore, 130 students are 14 years old, accounting for 22.3% of the total. Moreover, there are 117 students who are 15 years old, constituting 20.0% of the total. Additionally, 98 students are 16 years old, representing 16.8% of the total. Furthermore, 109 students are 17 years old, making up 18.7% of the total. Lastly, there is 1 student each who is 18 and 19 years old, each representing 0.2% of the total. This breakdown illustrates the age distribution within the sample, providing insight into the demographic characteristics of the surveyed population.

TOBACCO - CURRENT USERS
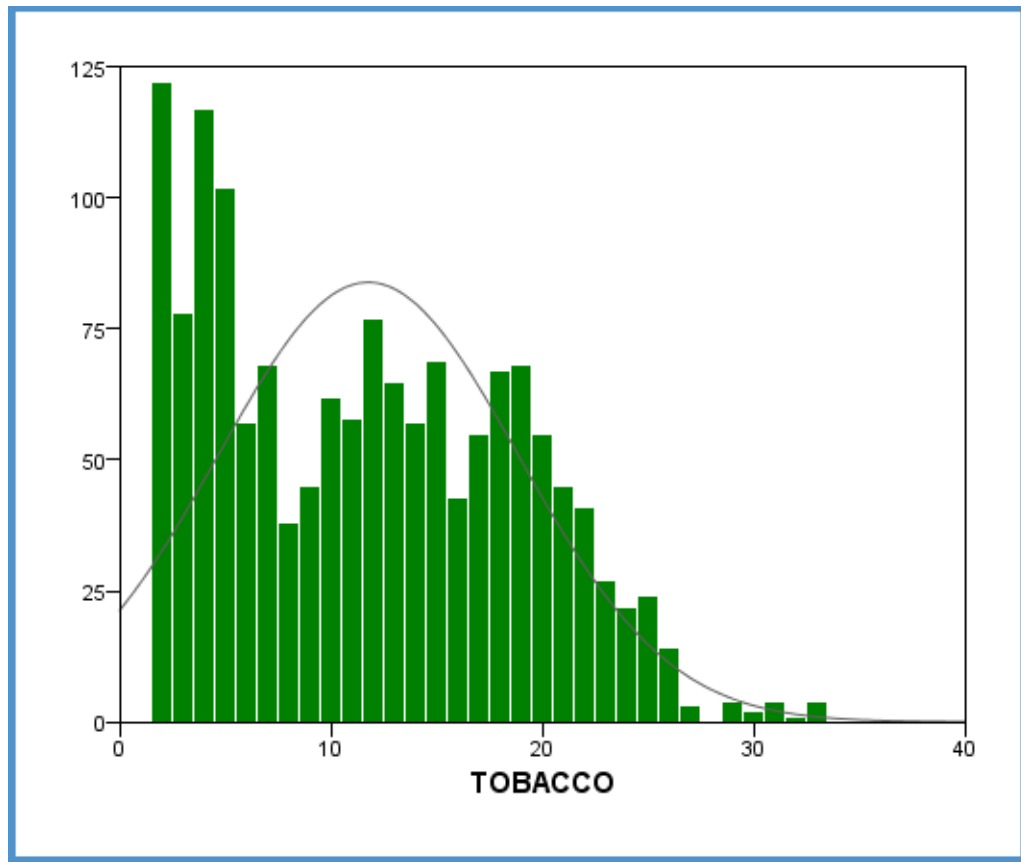
Figure 4. 13: ASSIST Score of Tobacco Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
11.76	11.43	2	7.102	50.433	31

Table 4.13 : ASSIST Score of Tobacco Current Users

The data presents an overview of tobacco usage ASSIST scores among respondents, providing insights into the prevalence and distribution of tobacco consumption behavior. A wide range of scores, from 2 to 33, reflects the diversity in reported tobacco usage levels. The frequency distribution illustrates varying degrees of tobacco usage, with scores clustered around the lower end of the spectrum.

Descriptive statistics offer further insights into the data. The mean tobacco usage score stands at 11.76, indicating the average level of tobacco consumption among respondents. The median score, at 11.43, suggests that half of the respondents reported scores below this value. The mode, which is 2, signifies the most frequently occurring score, highlighting a prevalence of lower tobacco usage among respondents.

The variability in tobacco usage scores is reflected in the standard deviation of 7.102 and the variance of 50.433, indicating the extent of dispersion of scores around the mean. The skewness value of 0.349 suggests a slightly positively skewed distribution, indicating that the distribution has a longer tail on the right side. Additionally, the kurtosis value of -0.837 suggests a platykurtic distribution, implying relatively lighter tails and a flatter peak compared to a normal distribution.

The range of scores, extending from 2 to 33, underscores the wide spectrum of tobacco usage behavior among respondents. The minimum score of 2 and maximum score of 33 further accentuate the diversity in reported tobacco consumption levels.

In summary, the data provides valuable insights into the prevalence and distribution of tobacco usage scores among respondents. These findings contribute to a better understanding of tobacco consumption behavior and can inform public health initiatives aimed at reducing tobacco use and its associated health risks.

TOBACCO LIFE TIME USERS
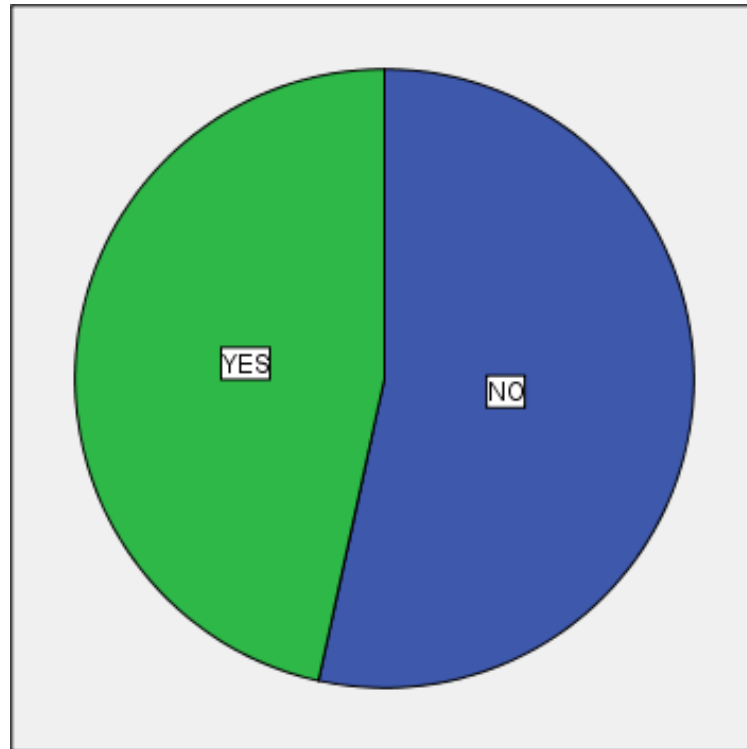
Figure 4. 14: Tobacco Life Time Users

	Frequency	**Percent**
Non-Users	313	53.4
Users	272	46.6
Total	585	100

Table 4. 14: Tobacco Life Time Users

Among the life time users, 313 individuals, constituting 53.4% of the total, reported that they do not use tobacco. On the other hand, 272 students, making up 46.6% of the total, indicated that they are tobacco users. This breakdown provides insight into the prevalence of tobacco use among the surveyed population, highlighting the proportion of individuals who use tobacco compared to those who do not.

TOBACCO

Series1	Life Time Users	Low Risk (Scores 1-3)	Moderate Risk (Scores 4-26)	High Risk (Scores 27-54)
	272	200	1276	18

Figure 4. 15: Overall Tobacco Prevalence

The data on tobacco usage categorizes respondents into different risk categories based on their reported scores. Among the respondents, 272 individuals are identified as lifetime users of tobacco, indicating a substantial prevalence of tobacco consumption within the sample.

Further analysis reveals that 200 respondents fall into the low-risk category, with scores ranging from 1 to 3. This group represents individuals with relatively lower levels of tobacco usage, suggesting a lower likelihood of experiencing adverse health effects associated with tobacco consumption.

The moderate-risk category encompasses 1276 respondents, whose scores range from 4 to 26. These individuals exhibit varying degrees of tobacco usage, representing a significant portion of the sample population. While they may not be classified as high-risk users, their tobacco consumption levels warrant attention and may pose health risks over time.

A smaller subset of respondents, comprising 18 individuals, falls into the high-risk category, with scores ranging from 27 to 54. This group represents individuals with the highest levels of tobacco usage, indicating a heightened risk of experiencing severe health consequences associated with long-term tobacco use.

Overall, the data underscores the importance of understanding and addressing tobacco usage behavior across different risk categories. By identifying individuals at varying levels of risk, interventions and public health initiatives can be tailored to meet the specific needs of each group, aiming to reduce tobacco consumption and mitigate its adverse health effects.
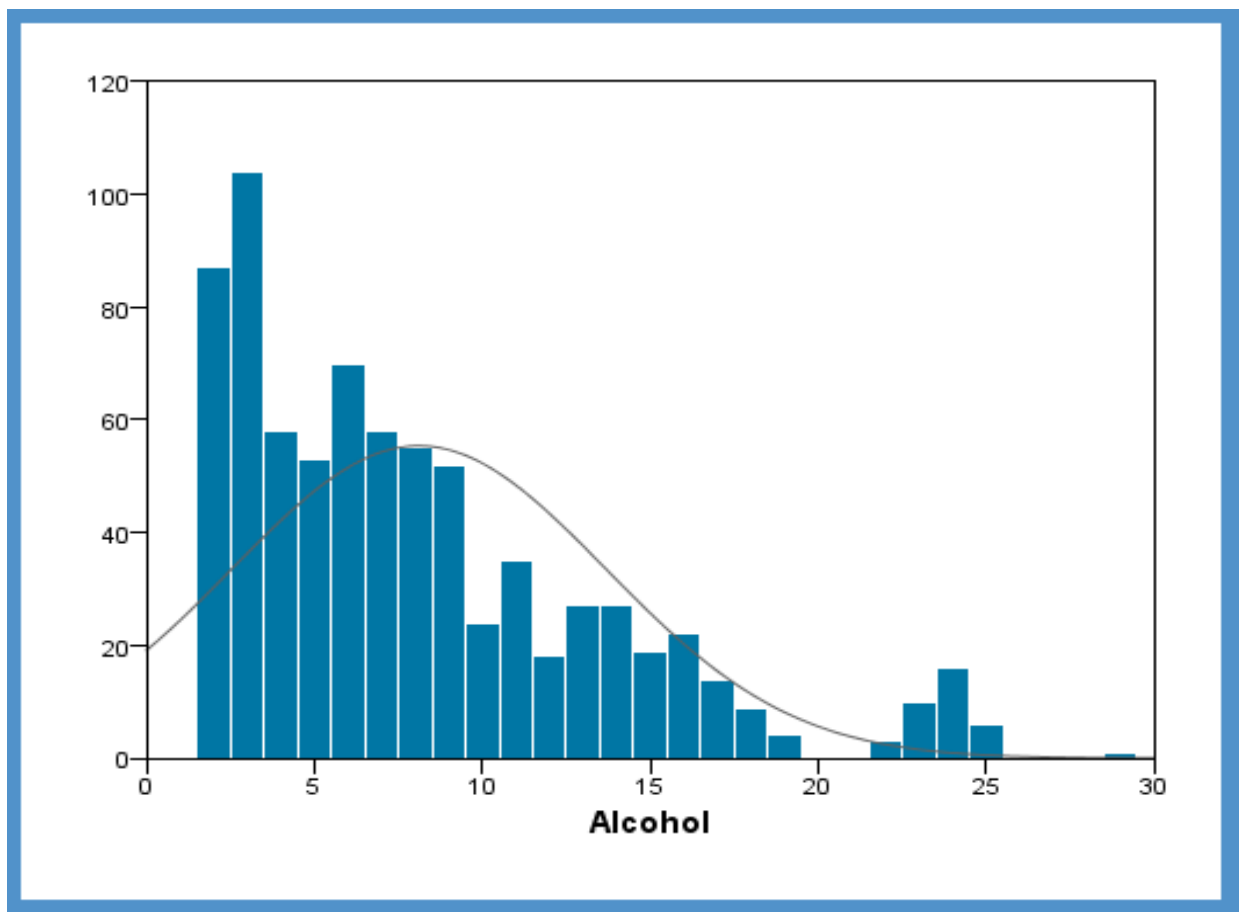
ALCOHOL - CURRENT USERS

Figure 4. 16: ASSIST Score of Alcohol Current User

Mean	Median	Mode	Std. Deviation	Variance	Range
8.11	6.77	3	5.559	30.908	2

Table 4.15 : ASSIST Score of Alcohol Current Users

The data offers a comprehensive view of alcohol usage ASSIST scores among respondents, revealing diverse consumption patterns across the spectrum of scores ranging from 2 to 29. Among these, the most prevalent scores are 3 and 2, reported by 104 and 87 respondents, respectively, comprising 13.5% and 11.3% of valid cases, respectively.

Descriptive statistics provide further insights into the distribution. The mean usage score of 8.11 reflects the average consumption level, while the median of 6.77 indicates that half of the respondents reported scores below this value. The mode of 3 highlights a common trend towards moderate alcohol usage.

Regarding variability, the standard deviation of 5.559 and variance of 30.908 underscore the spread of scores around the mean. Skewness of 1.172 indicates a positively skewed distribution, and kurtosis of 0.999 suggests a leptokurtic distribution with heavy tails.

The range from 2 to 29 in scores showcases the wide diversity in reported alcohol consumption levels, with a minimum score of 2 and maximum score of 29.

ALCOHOL LIFE TIME USERS
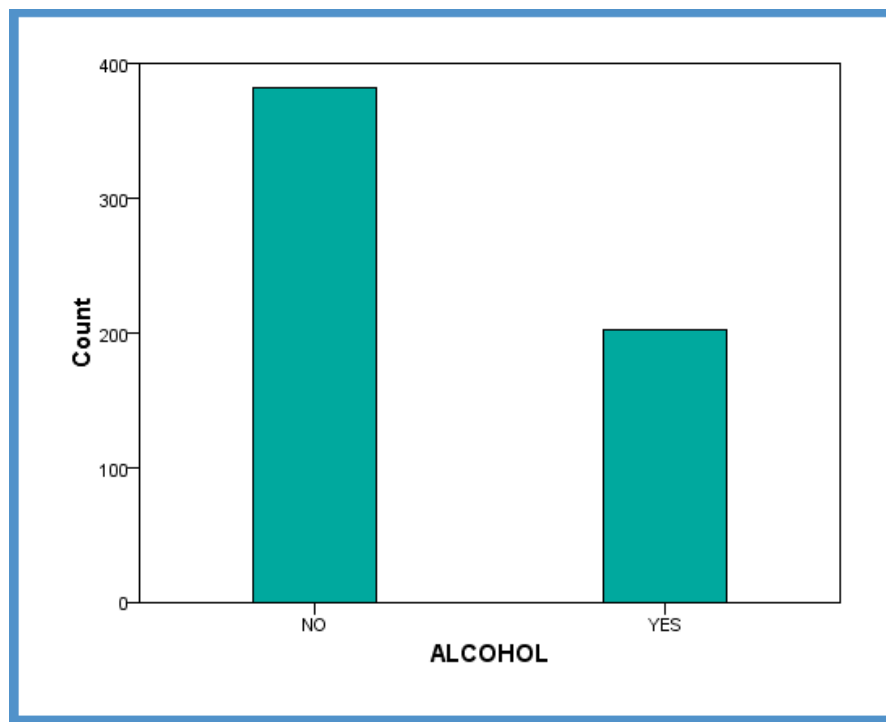
Figure 4. 17: Alcohol Life Time Users

	Frequency	Percent
Non-Users	383	65.4
Users	202	34.6
Total	585	100.0

Table 4.16 : Alcohol Life Time Users

Among the life time users, 383 individuals, comprising 65.4% of the total, reported that they do not consume alcohol. Conversely, 202 students, representing 34.6% of the total, indicated that they are alcohol users. This distribution provides insight into the prevalence of alcohol consumption among the surveyed population, highlighting the proportion of individuals who consume alcohol compared to those who do not.

OVERALL ALCOHOL PREVALENCE
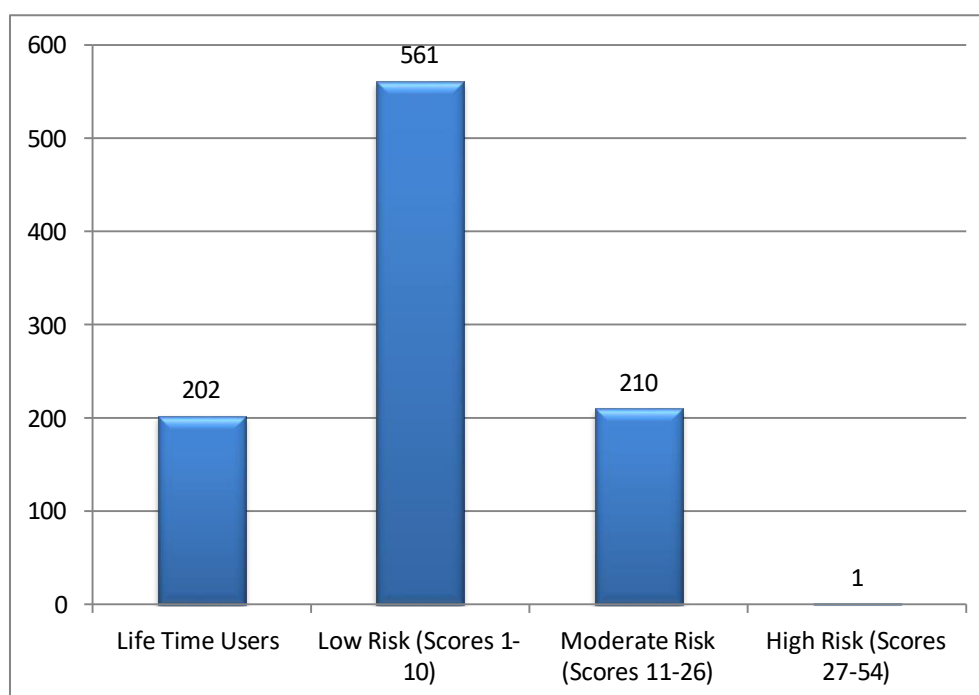
Figure 4.18: Overall Alcohol Prevalence

Among lifetime users of alcohol, the prevalence is reported at 202 individuals. When categorizing respondents based on their alcohol usage scores, 561 individuals fell into the low-risk category, representing scores ranging from 1 to 10. Additionally, 210 individuals were classified as moderate-risk drinkers, with scores falling between 11 and 26. Remarkably, only one individual was identified as being at high risk, with a score falling between 27 and 54.

This categorization allows for a nuanced understanding of alcohol consumption behavior, with the majority of respondents falling within the low-risk category, followed by a notable portion in the moderate-risk category. The presence of only one individual in the high-risk category underscores the rarity of such extreme alcohol usage behavior within the sample population. Overall, these findings highlight the varying levels of risk associated with alcohol consumption among respondents, providing valuable insights for public health interventions and policy development.

CANNABIS - CURRENT USERS
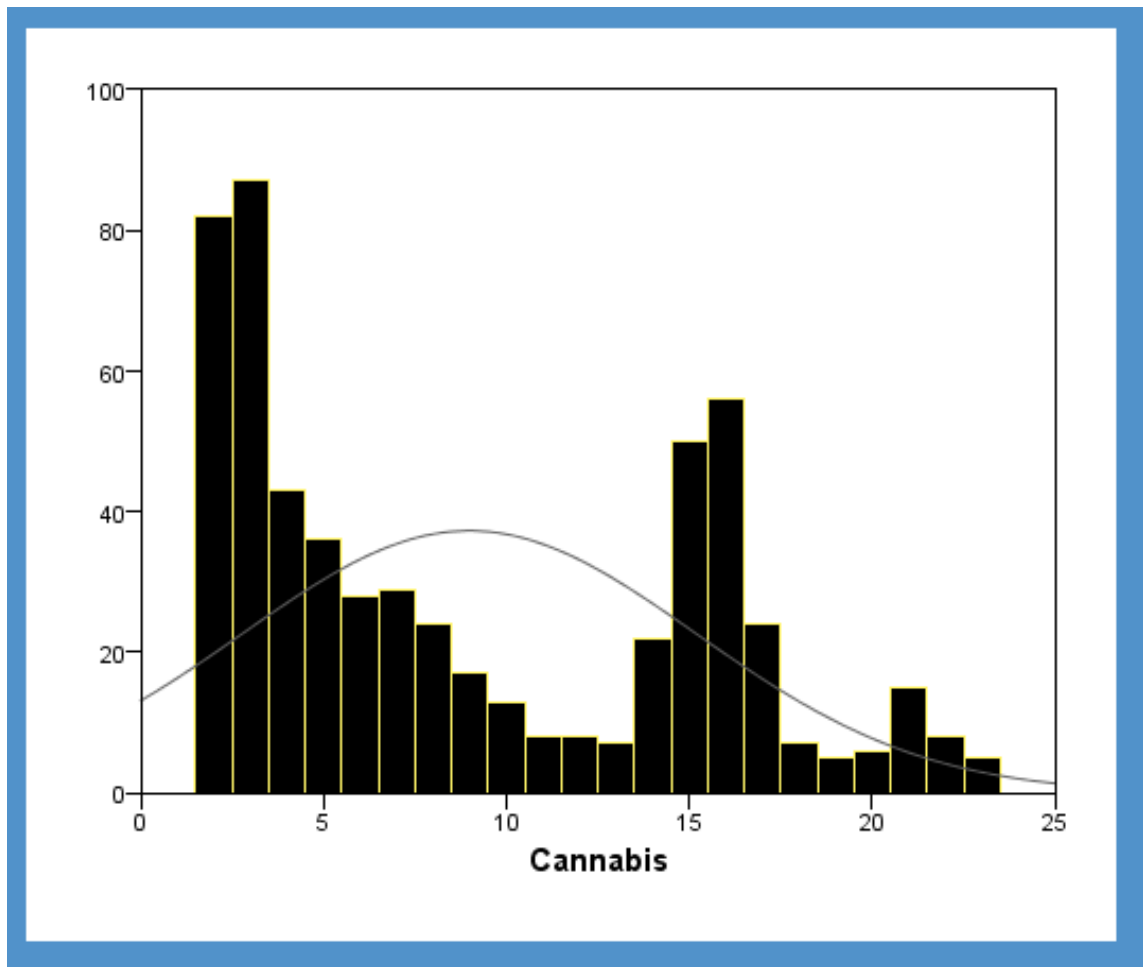
Figure 4. 19: ASSIST Score of Cannabis Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
8.98	6.98	3	6.211	38.578	21

Table 4.17 : ASSIST Score of cannabis Current Users

The data on cannabis usage reveals insights into the reported ASSIST scores among respondents, categorizing them into different levels of usage. Among the valid responses, 580 individuals

provided information on their cannabis usage patterns, while 2203 responses were missing from the dataset.

The frequency distribution illustrates a varied range of scores, with the most prevalent score being 3, reported by 87 respondents, constituting 15.0% of valid cases. Following closely is a score of 2, reported by 82 respondents, representing 14.1% of valid cases. These scores indicate relatively low levels of cannabis usage among respondents.

Descriptive statistics offer further understanding of the data. The mean cannabis usage ASSIST score is calculated at 8.98, indicating the average reported level of cannabis consumption among respondents. The median score, at 6.98, suggests that half of the respondents reported scores below this value, highlighting a concentration of responses towards the lower end of the scale. The mode, which is 3, signifies the most frequently occurring score, emphasizing a common trend towards moderate cannabis usage among respondents.

The standard deviation, at 6.211, reflects the extent of dispersion of scores around the mean, indicating variability in reported cannabis usage levels. The range, spanning from 2 to 23, underscores the wide spectrum of cannabis usage behavior among respondents.

In summary, the data provides valuable insights into the prevalence and distribution of reported cannabis usage scores among respondents. By understanding these patterns, policymakers, healthcare professionals, and researchers can develop targeted interventions and strategies to address cannabis usage behavior and their potential implications.

CANNABIS LIFE TIME USERS
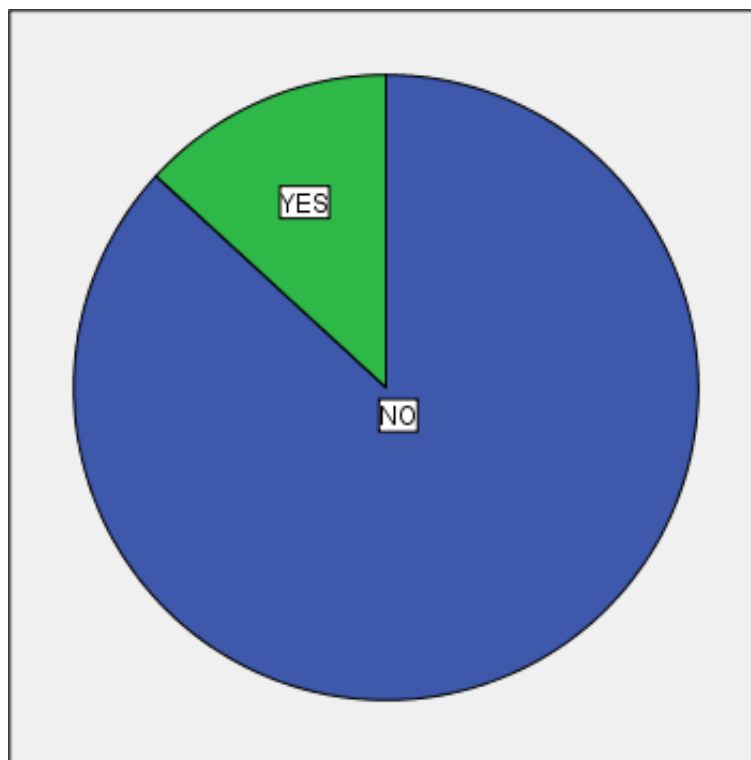
Figure 4. 20: Cannabis Life Time Users

	Frequency	Percent
Non-Users	508	86.8
Users	77	13.2
Total	585	100

Table 4.18 : Cannabis Life Time Users

Among the surveyed lifetime users, 508 individuals, constituting 86.8% of the total, reported that they do not use cannabis. In contrast, 77 students, representing 13.2% of the total, indicated that they are cannabis users. This distribution provides insight into the prevalence of cannabis usage among the surveyed lifetime users, highlighting the proportion of individuals who use cannabis compared to those who do not.

CANNABIS

	Life Time Users	Low Risk (Scores 1-3)	Moderate Risk (Scores 4-26)	High Risk (Scores 27-54)
■ Series1	77	169	411	0

Figure 4.21: Overall Cannabis Prevalence

The data on cannabis usage indicates diverse patterns among respondents, delineated into distinct risk categories based on their reported ASSIST scores. Among respondents, 77 individuals reported lifetime cannabis usage, while the majority fell into the low and moderate-risk categories.

Low-risk users, identified by scores ranging from 1 to 3, comprised 169 respondents. These individuals represent a segment of the population reporting relatively minimal cannabis usage or occasional experimentation.

Moderate-risk users, characterized by scores ranging from 4 to 26, constituted the largest group, with 411 respondents falling into this category. This group likely encompasses individuals who

engage in more regular or moderate cannabis usage, potentially indicating recreational or therapeutic use.

Remarkably, no respondents fell into the high-risk category, defined by scores ranging from 27 to 54. This absence suggests that among the surveyed population, there were no extreme or problematic patterns of cannabis usage reported.

Understanding these distinctions in cannabis usage patterns is crucial for tailoring interventions and support services to address the diverse needs of individuals within each risk category. Additionally, further research into factors influencing cannabis usage behavior and their associated outcomes could provide valuable insights for public health initiatives and policy development. The overall prevalence of cannabis usage among respondents is 10.46%.

COCAINE - CURRENT USERS
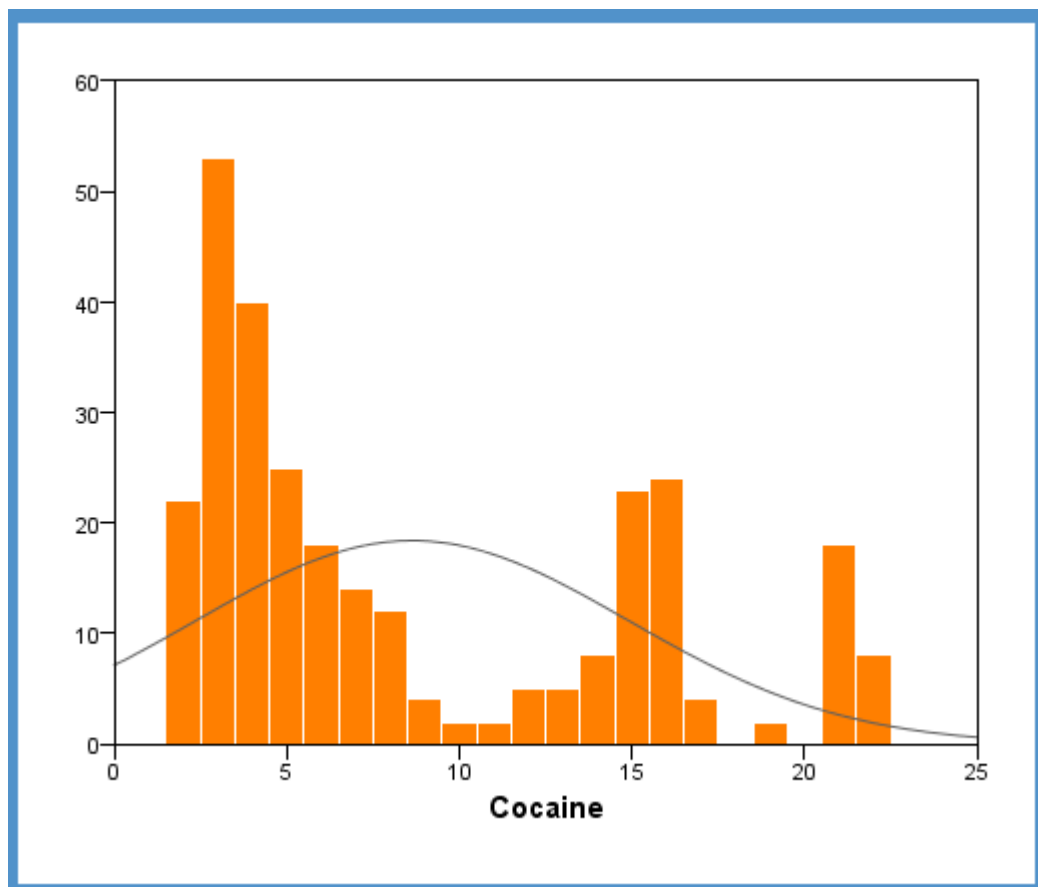
Figure 4. 22: ASSIST Score of Cocaine Current Users

	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Cocaine	20	2	22	8.63	6.268	39.290

Table 4.19 : ASSIST Score of Cocaine Current Users

Cocaine usage among respondents reveals a varied distribution of reported scores. The frequency distribution indicates that the most prevalent scores are 3, 4, and 15, reported by 53, 40, and 23 respondents, respectively, representing 18.3%, 13.8%, and 8.0% of valid cases, respectively.

Descriptive statistics further characterize the data. The mean cocaine usage score stands at 8.63, suggesting the average level of reported usage among respondents. The standard deviation, at 6.268, illustrates the extent of dispersion of scores around the mean, indicating considerable variability in reported cocaine usage.

Skewness, with a value of 0.764, suggests a moderately positively skewed distribution, indicating that the distribution has a longer tail on the right side. The kurtosis value of -0.833 indicates a platykurtic distribution, implying lighter tails and a flatter peak compared to a normal distribution

COCAINE LIFE TIME USERS
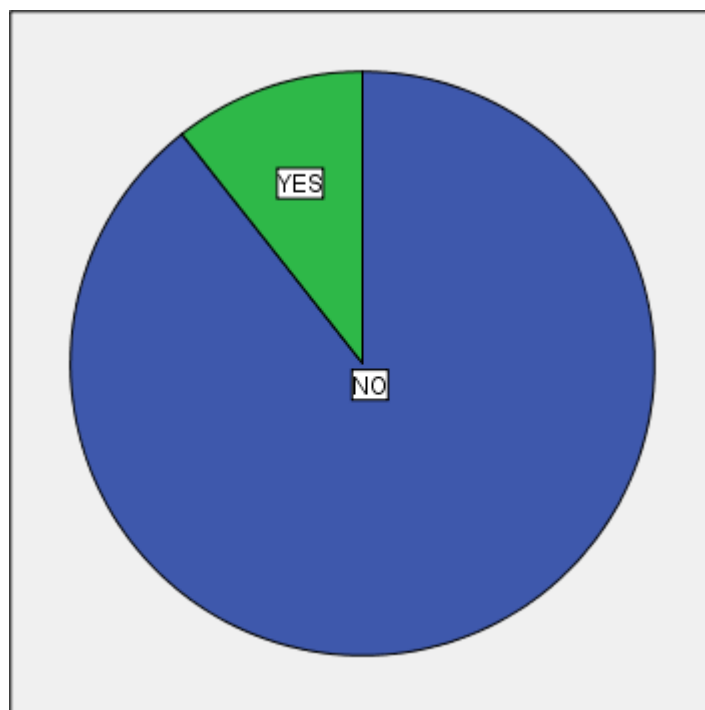
Figure 4. 23: Cocaine Life Time Users

	Frequency	Percent
Non-Users	523	89.4
Users	62	10.6
Total	585	100

Table 4.20 : Cocaine Life Time Users

Among the life time users, 523 respondents, comprising 89.4% of the total, reported that they do not use cocaine. Conversely, 62 participants, representing 10.6% of the total, indicated that they are cocaine users. This distribution sheds light on the prevalence of cocaine usage among the surveyed population, highlighting the proportion of individuals who use cocaine compared to those who do not.

COCAINE

Series1	Life Time Users	Low Risk (Scores 1-3)	Moderate Risk (Scores 4-26)	High Risk (Scores 27-54)
	62	75	214	0
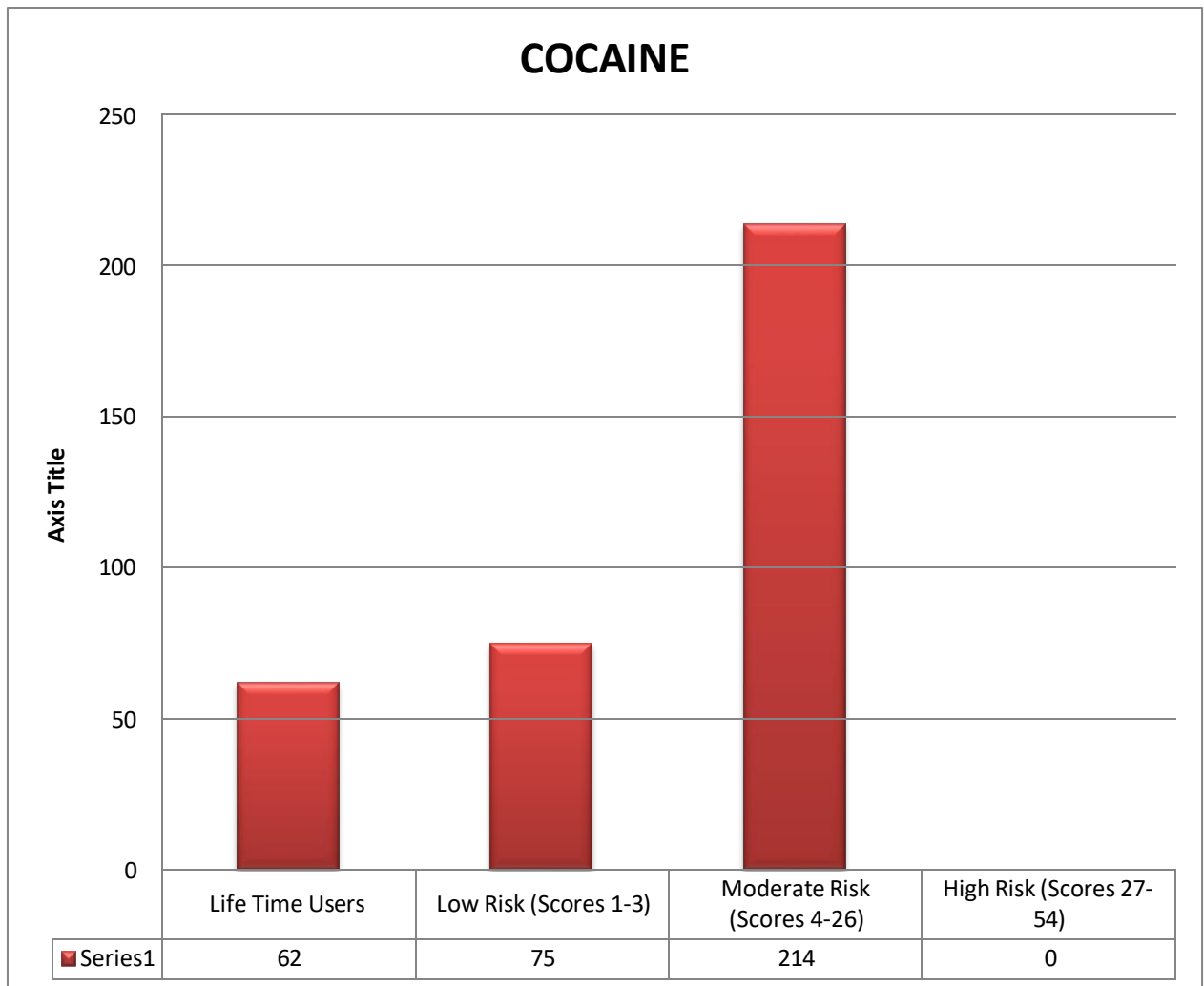
Figure 4.24: Overall Cocaine Prevalence

Among respondents, 62 reported lifetime cocaine usage. When categorizing usage into risk levels, 75 respondents fell into the low-risk category (scores 1-3), and 214 respondents fell into the moderate-risk category (scores 4-26). No respondents reported scores indicating high-risk usage (scores 27-54). Overall, the prevalence of cocaine usage among respondents is 5.59%.

ATS(AMPHETAMINE-TYPE STIMULANTS)
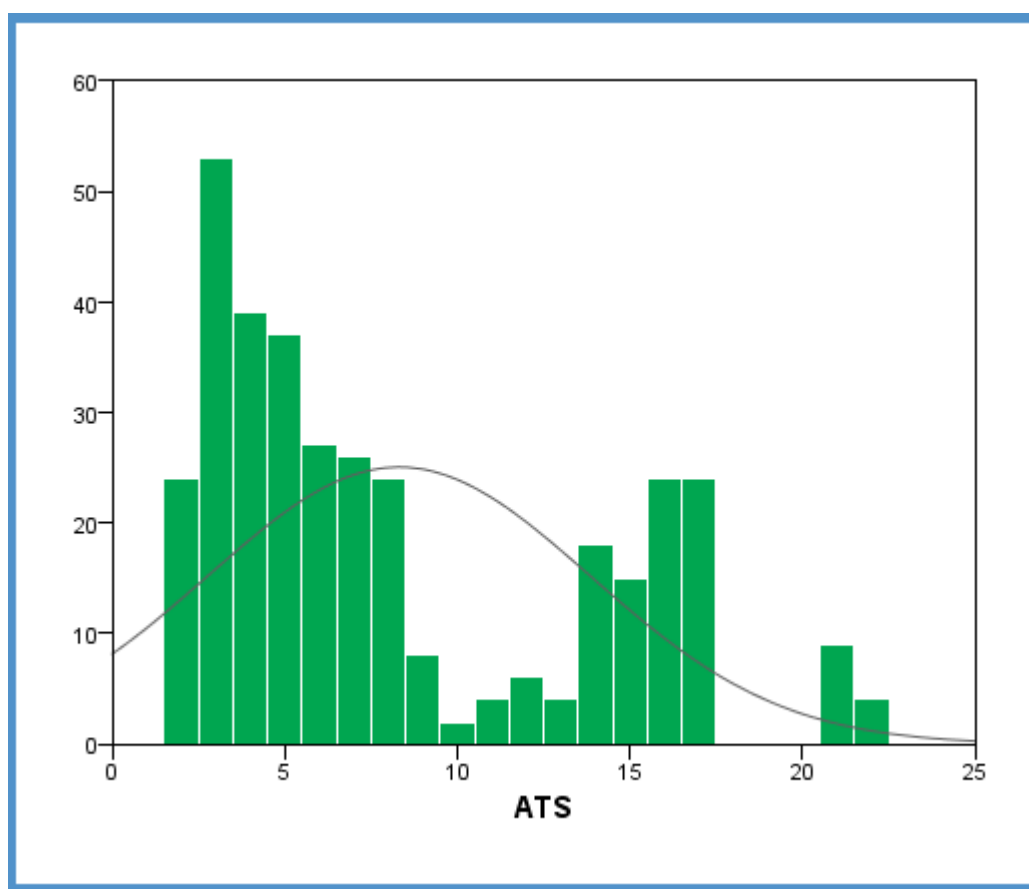
Figure 4. 25: ASSIST Score of ATS(Amphetamine-Type Stimulants) Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
8.30	6.28	3	5.544	30.731	20

Table 4.21 : ASSIST Score of ATS(Amphetamine-Type Stimulants) Current Users

Among respondents, 348 reported using amphetamine-type stimulants. The distribution of reported usage scores indicates varying levels of usage, with scores ranging from 2 to 22. The most common scores reported were 3, 4, and 5, with 53, 39, and 37 respondents reporting these scores, respectively. The mean score for amphetamine-type stimulant usage is calculated at 8.30, with a standard deviation of 5.544, suggesting some variability in reported usage levels.

When categorizing usage into risk levels, no respondents reported high-risk scores (scores 27-54). However, 31.7% of respondents fell into the low-risk category (scores 1-3), while 63.2% of respondents fell into the moderate-risk category (scores 4-26).

The median score, at 6.28, indicates that half of the respondents reported scores below this value. The mode, which is 3, suggests that this score was the most frequently reported.

ATS(AMPHETAMINE-TYPE STIMULANTS LIFE TIME USERS
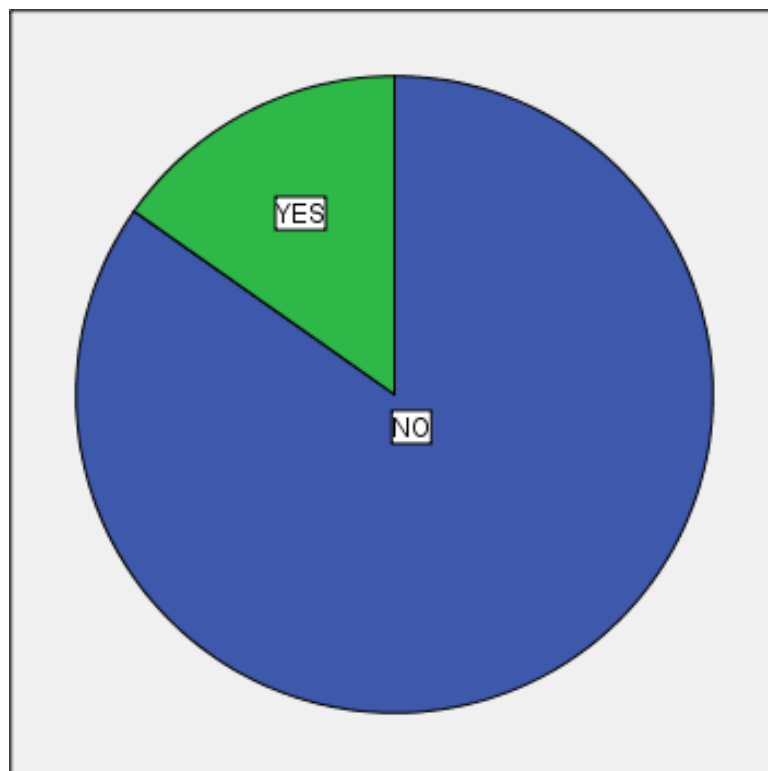
Figure 4. 26: ATS (Amphetamine-Type Stimulants) Life Time Users

	Frequency	Percent
Non-Users	496	84.8
Users	89	15.2
Total	585	100

Table 4.22 : ATS(Amphetamine-Type Stimulants) Life Time Users

Among the life time users, 496 respondents, constituting 84.8% of the total, reported that they do not use ATS (amphetamine-type stimulants). Conversely, 89 participants, representing 15.2% of the total, indicated that they are users of ATS. This distribution provides insight into the prevalence of ATS usage within the surveyed population, delineating the proportion of individuals who use ATS compared to those who do not.

OVERALL ATS (AMPHETAMINE-TYPE STIMULANTS) PREVALANCE
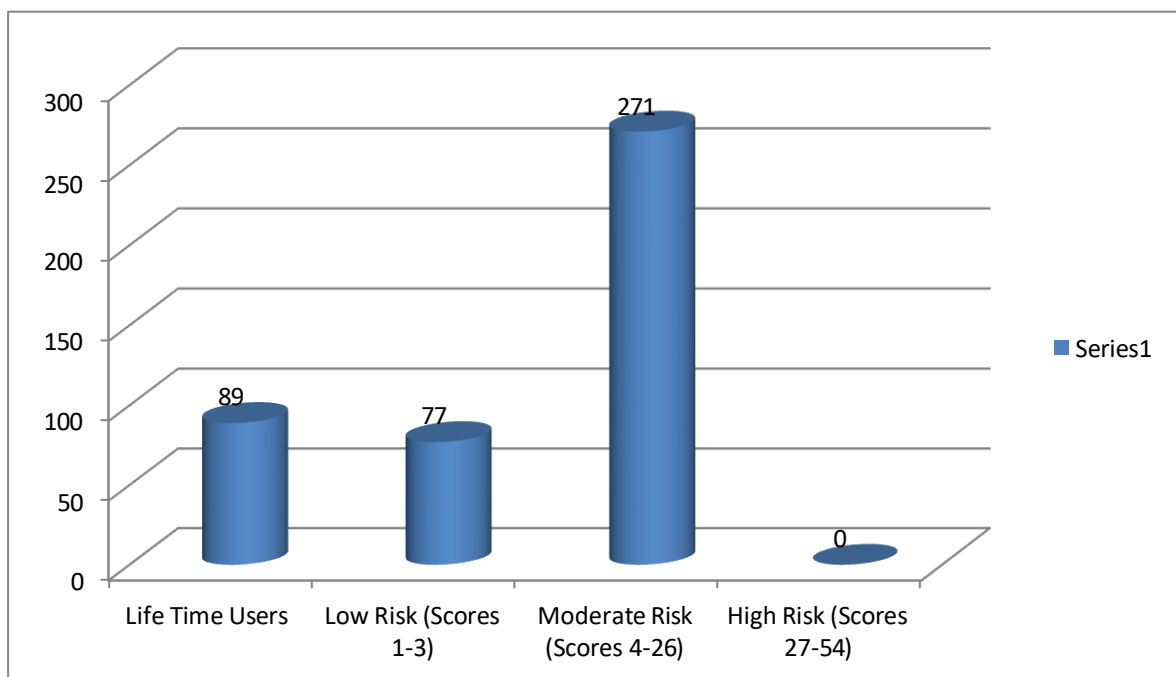
Figure 4.27: Overall ATS(Amphetamine-Type Stimulants) Prevalence

Among respondents, 89 reported lifetime use of amphetamine-type stimulants. When categorizing usage into risk levels, none of the respondents reported high-risk scores (scores 27-54). However, 22.1% of respondents fell into the low-risk category (scores 1-3), while 77.9% of respondents fell into the moderate-risk category (scores 4-26). This suggests that the majority of respondents reported moderate-risk levels of usage for amphetamine-type stimulants. Overall, the prevalence of amphetamine-type stimulant usage among respondents is 6.96%.

INHALANTS-CURRENT USERS
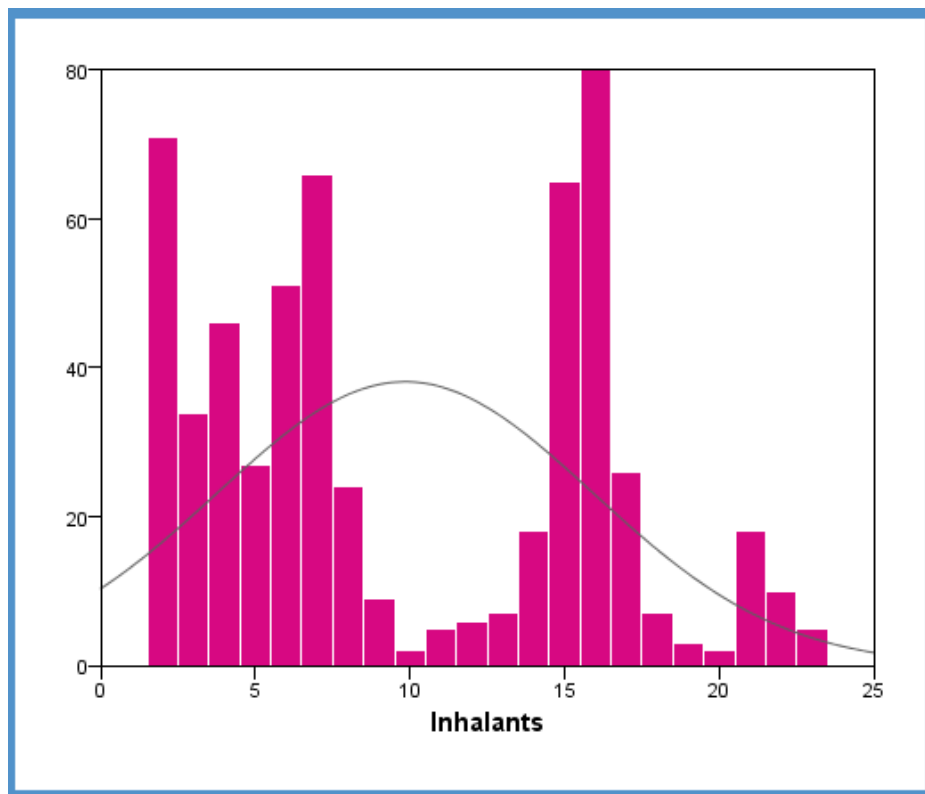
Figure 4. 28: ASSIST Score of inhalants Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
9.84	7.64	16	6.091	37.098	21

Table 4.23 : ASSIST Score of inhalants Current Users

Among respondents, 582 individuals reported using inhalants. The data indicates varying levels of usage, with a mean score of 9.84 and a median score of 7.64. The mode, which is 16, suggests that this score is the most frequently reported among respondents.

Descriptive statistics further reveal insights into the distribution of inhalant usage scores. The standard deviation is calculated at 6.091, indicating the extent of dispersion of scores around the mean. The variance, at 37.098, underscores the spread of scores across the dataset. The skewness value of 0.302 suggests a slightly positively skewed distribution, while the kurtosis value of -

1.267 indicates a platykurtic distribution, implying relatively thinner tails and a flatter peak compared to a normal distribution.

Regarding usage patterns, respondents reported scores ranging from 2 to 23, indicating a wide spectrum of inhalant usage behavior. The minimum score of 2 and maximum score of 23 underscore the diversity in reported inhalant consumption levels.

In total, 582 valid cases were included in the analysis, representing 20.9% of the total sample. This comprehensive analysis provides valuable insights into the distribution and characteristics of inhalant usage scores, shedding light on the prevalence and variability of inhalant consumption behavior among respondents.

INHALANTS LIFE TIME USERS
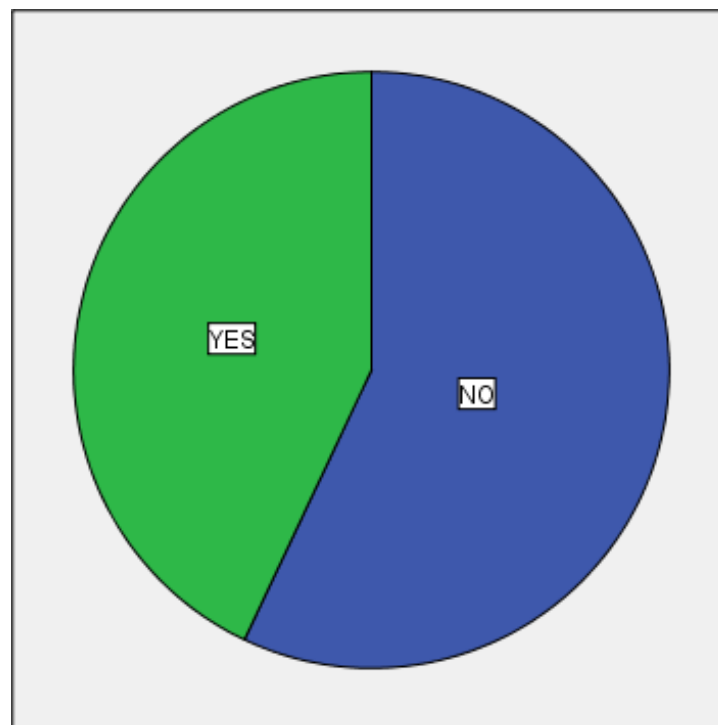
Figure 4. 29: inhalants Life Time Users

	Frequency	Percent
Non-Users	334	57.0
Users	251	43.0
Total	585	100

Table 4.24 : inhalants Life Time Users

Among the life time users, 334 respondents, comprising 57.0% of the total, reported that they do not use inhalants. On the other hand, 251 participants, representing 43.0% of the total, indicated that they are users of inhalants. This distribution highlights the prevalence of inhalant usage within the surveyed population, distinguishing between individuals who use inhalants and those who do not.

OVERALL INHALANTS PREVALENCE
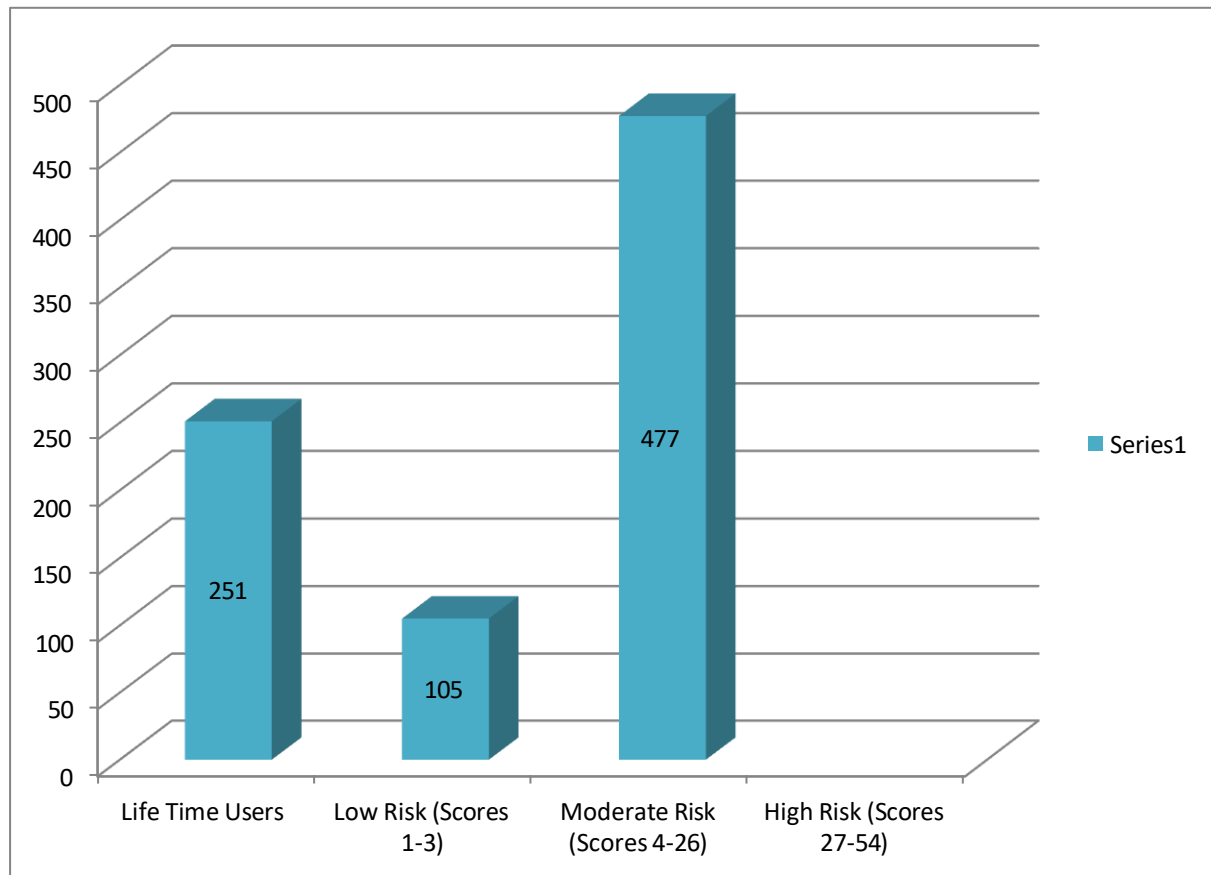
Figure 4.30: Overall Inhalants Prevalence

Among the respondents, 251 individuals reported lifetime usage of inhalants. Additionally, 105 respondents fell into the low-risk category, with scores ranging from 1 to 3, while 477 respondents were categorized as moderate risk, with scores ranging from 4 to 26. However, there were no respondents classified as high risk, with scores ranging from 27 to 54. These findings indicate a varied spectrum of inhalant usage behavior among the respondents, with a majority falling into the moderate-risk category. Overall, the prevalence of inhalants usage among respondents is 13.26%

SEDATIVES CURRENT USERS
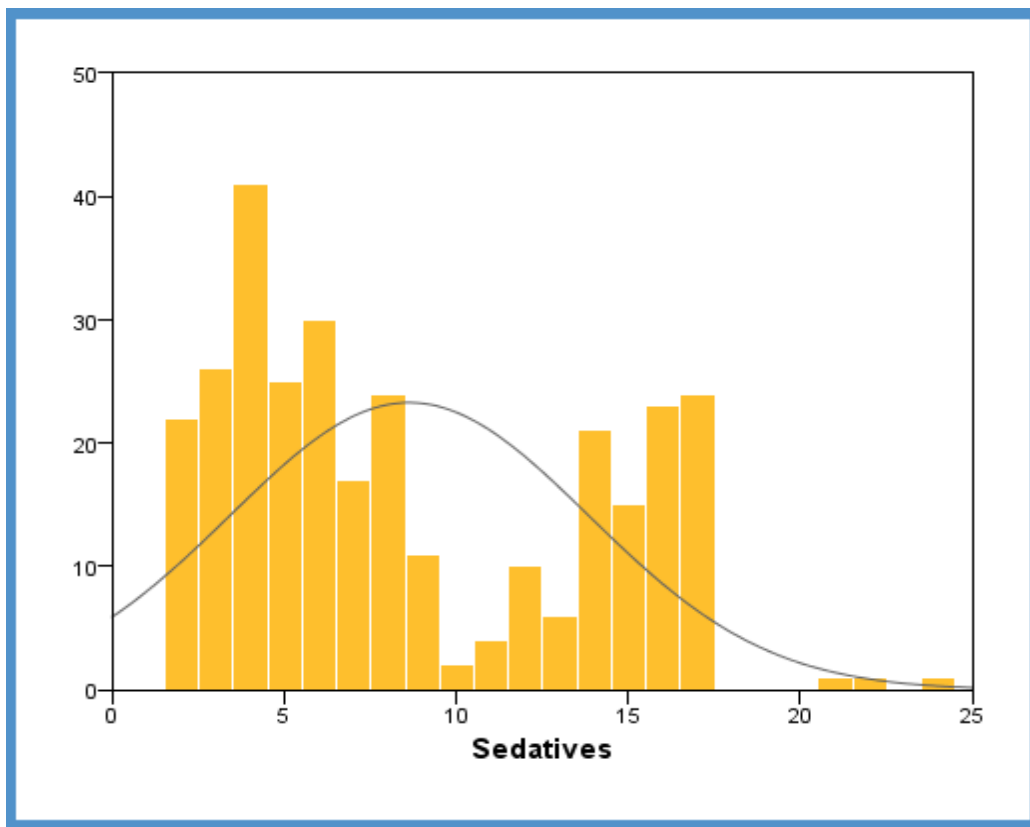
Figure 4. 31: ASSIST Score of Sedatives Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
8.63	6.98	4	5.212	27.163	22

Table 4.25 : ASSIST Score of Sedatives Current Users

Among the respondents, 304 individuals reported lifetime usage of sedatives. The distribution of usage scores varied, with the most common score being 4, reported by 41 respondents, comprising 13.5% of valid cases, followed by a score of 16, reported by 23 respondents, representing 7.6% of valid cases.

Descriptive statistics reveal further insights into the data. The mean sedative usage score is calculated at 8.63, indicating the average level of sedative consumption among respondents. The median score, at 6.98, suggests that half of the respondents reported scores below this value, while the mode, which is 4, signifies the most frequently occurring score.

Regarding variability, the standard deviation is calculated at 5.212, indicating the extent of dispersion of scores around the mean. The variance, at 27.163, underscores the spread of scores across the dataset. The skewness value of 0.521 suggests a moderately positively skewed distribution, indicating that the distribution has a longer tail on the right side. Additionally, the kurtosis value of -1.043 suggests a platykurtic distribution, implying lighter tails and a flatter peak compared to a normal distribution.

The range of scores extends from 2 to 24, highlighting the wide spectrum of sedative usage behavior among respondents. The minimum score of 2 and maximum score of 24 further accentuate the diversity in reported sedative consumption levels.

In summary, the analysis provides valuable insights into the distribution and characteristics of sedative usage scores, shedding light on the prevalence and variability of sedative consumption behavior among respondents.

SEDATIVES LIFE TIME USERS
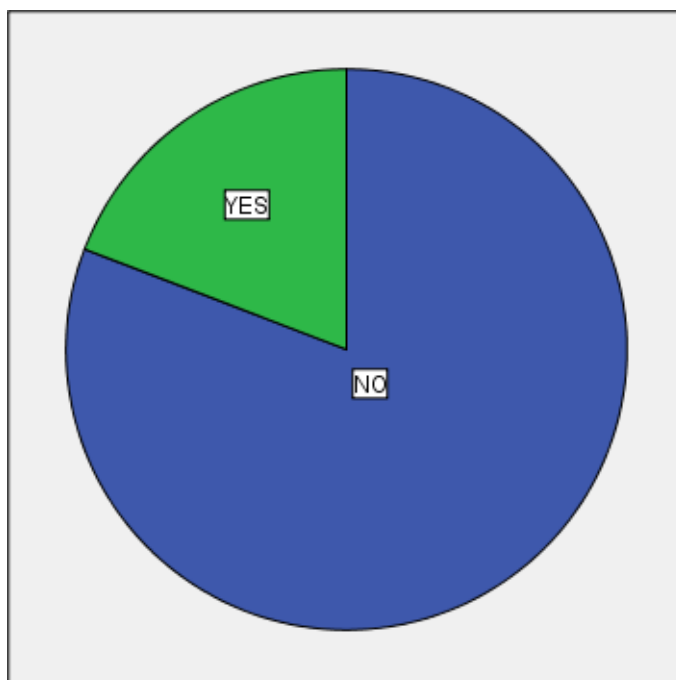
Figure 4. 32: Sedatives Life Time Users

	Frequency	Percent
Non-Users	473	80.8
Users	112	19.2
Total	585	100

Table 4.26 : Sedatives Life Time Users

Among the respondents, 473 individuals, comprising 80.8% of the total, reported that they are non-users of sedatives. On the other hand, 112 participants, representing 19.2% of the total, indicated that they are users of sedatives. This distribution emphasizes the prevalence of sedative usage within the surveyed population, distinguishing between individuals who use sedatives and those who do not.

SEDATIVES

	Life Time Users	Low Risk (Scores 1-3)	Moderate Risk (Scores 4-26)	High Risk (Scores 27-54)
■ Series1	112	48	256	

Figure 4.33: Overall Sedatives Prevalence

Among the respondents, 112 individuals reported lifetime usage of sedatives. The distribution of usage scores varied, with the majority falling within the moderate risk category (scores 4-26), comprising 256 respondents. Additionally, 48 respondents reported scores within the low-risk category (scores 1-3).

Descriptive statistics reveal insights into the data. The mean sedative usage score is calculated at 8.63, indicating the average level of sedative consumption among respondents. The median score, at 6.98, suggests that half of the respondents reported scores below this value, while the mode, which is 4, signifies the most frequently occurring score.

The range of scores extends from 2 to 24, highlighting the wide spectrum of sedative usage behavior among respondents. The minimum score of 2 and maximum score of 24 further accentuate the diversity in reported sedative consumption levels.

This analysis provides insights into the prevalence and distribution of sedative usage scores, indicating varying levels of consumption and associated risks among respondents. Overall, the prevalence of Sedatives usage among respondents is 6.62%.

HALLUCINOGENS
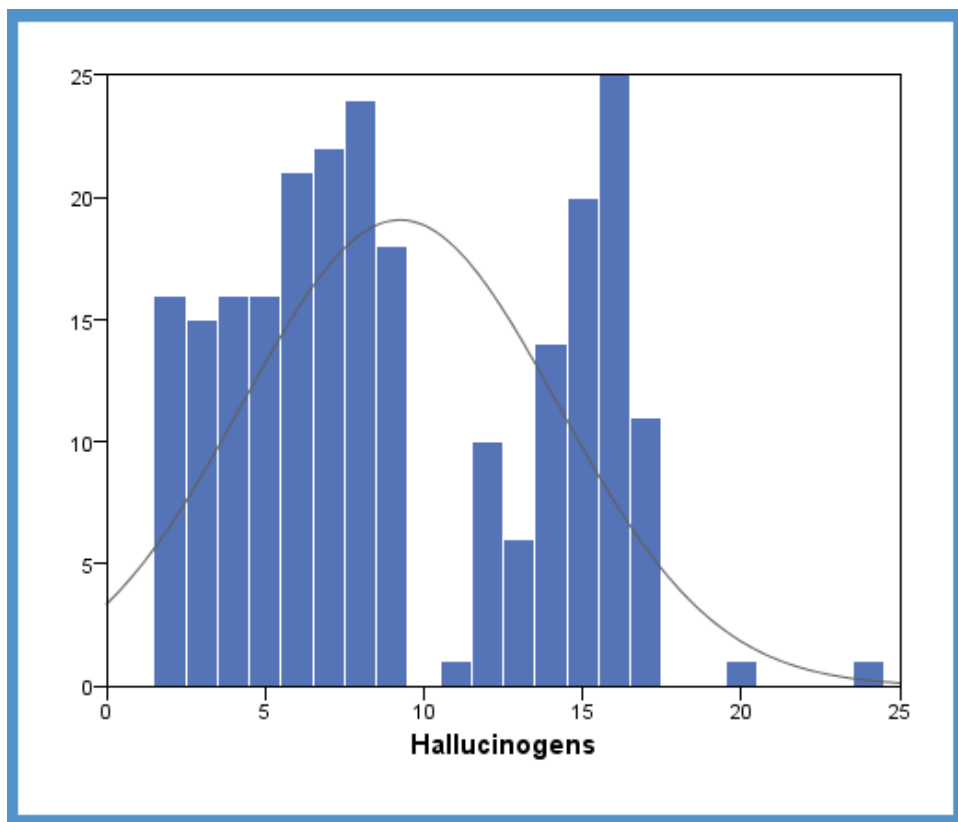
Figure 4. 34: ASSIST Score of hallucinogens Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
9.24	8.02	16	4.958	24.584	22

Table 4.27 : ASSIST Score of hallucinogens Current Users

Among the 237 respondents who reported lifetime usage of hallucinogens, the distribution of usage scores demonstrates a diverse range of consumption patterns. Notably, the majority of respondents fell within the moderate risk category, with scores ranging from 4 to 26, indicating a substantial proportion of individuals engaging in moderate levels of hallucinogen usage.

Delving into the descriptive statistics, the mean hallucinogen usage score of 9.24 provides an average representation of consumption levels among respondents. This indicates that, on average, respondents reported a moderate level of hallucinogen usage. The median score of 8.02 suggests that half of the respondents reported scores below this value, indicating a tendency towards lower consumption levels among a significant portion of the sample.

Examining the mode, which is 16, it reveals that this score was the most frequently reported among respondents, emphasizing a common trend towards a specific level of hallucinogen usage. However, it's essential to note the variability in scores, as the range extends from 2 to 24, indicating a wide spectrum of consumption behavior among respondents.

Moreover, the distribution of scores exhibits a positively skewed pattern, with a skewness value of 0.311, suggesting that the distribution has a longer tail on the right side. The kurtosis value of -1.092 indicates a platykurtic distribution, implying lighter tails and a flatter peak compared to a normal distribution.

Overall, this detailed analysis provides valuable insights into the prevalence and characteristics of hallucinogen usage among respondents. It underscores the diverse range of consumption patterns, with a significant proportion falling within the moderate risk category, highlighting the need for targeted interventions and support strategies tailored to different levels of usage and associated risks

HALLUCINOGENS LIFE TIME USERS
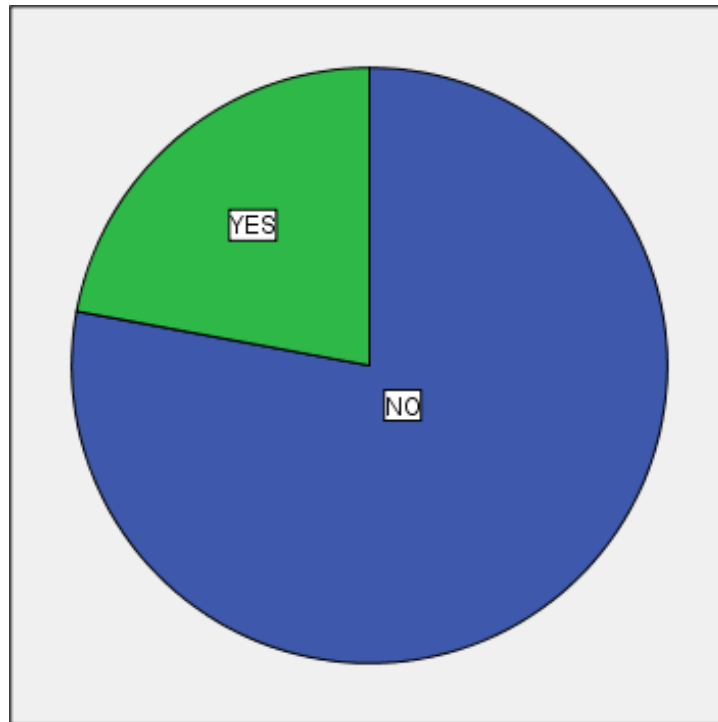
Figure 4. 35: hallucinogens Life Time Users

	Frequency	Percent
Non-Users	456	77.9
Users	129	22.1
Total	585	100.0

Table 4.28 : hallucinogens Life Time Users

Among the respondents, 456 individuals, comprising 77.9% of the total, reported that they are non-users of hallucinogens. On the other hand, 129 participants, representing 22.1% of the total, indicated that they are users of hallucinogens. This distribution highlights the prevalence of hallucinogen usage within the surveyed population, distinguishing between individuals who use hallucinogens and those who do not.

Hallucinogens

	Life Time Users	Low Risk (Scores 1-3)	Moderate Risk (Scores 4-26)	High Risk (Scores 27-54)
■ Series1	129	31	206	0

Figure 4.36: Overall Hallucinogens Prevalence

Among the respondents, 129 reported lifetime usage of hallucinogens. Within this group, 31 individuals fell into the low-risk category, reporting scores ranging from 1 to 3. Meanwhile, the majority of respondents, totaling 206, were classified under the moderate-risk category, with scores ranging from 4 to 26. Notably, there were no respondents categorized as high-risk users, with scores ranging from 27 to 54.

Overall, the prevalence of Sedatives usage among respondents is 5. 82%. This breakdown underscores a varied spectrum of hallucinogen usage among respondents, with a notable proportion falling within the moderate-risk category. It highlights the importance of understanding and addressing different levels of usage when implementing interventions and support measures related to hallucinogen consumption.

OPIOIDS
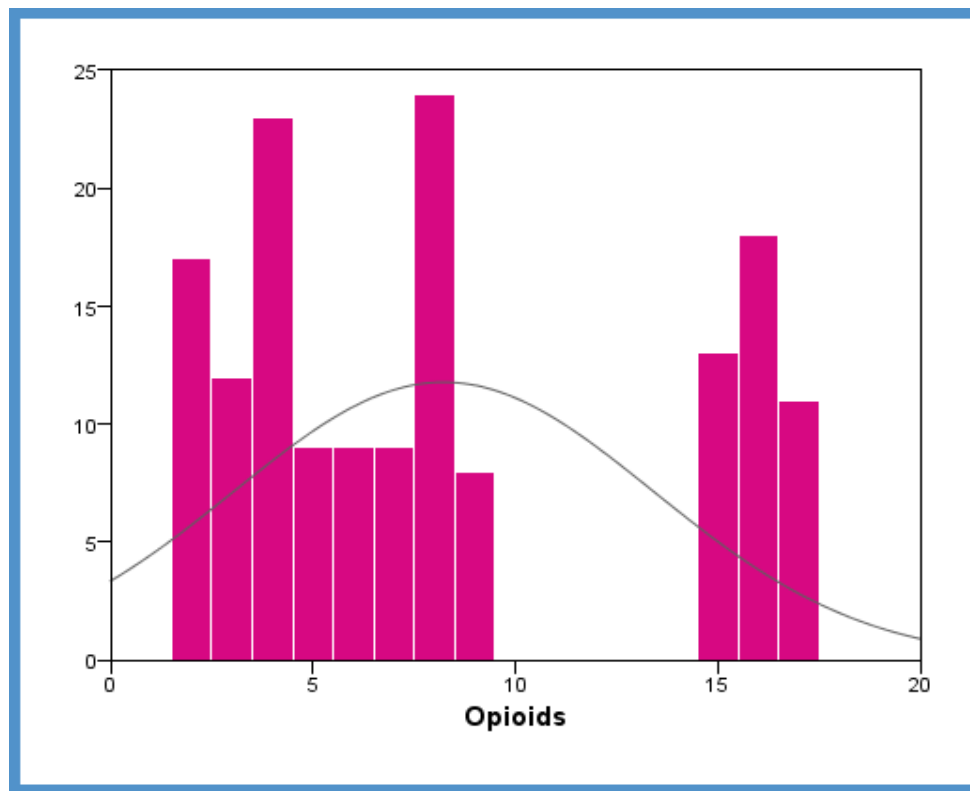
Figure 4. 37: ASSIST Score of Opioids Current Users

Mean	Median	Mode	Std. Deviation	Variance	Range
8.22	7.12	8	5.185	26.885	15

Table 4.29 : ASSIST Score of Opioids Current Users

Opioids usage among respondents shows a diverse distribution of scores, with 153 valid responses analyzed. Among these respondents, the mean opioid usage score is calculated at 8.22, with a median score of 7.12. The mode, indicating the most frequently occurring score, is reported as 8.

Descriptive statistics reveal a standard deviation of 5.185, suggesting a moderate level of dispersion around the mean opioid usage score. The skewness value of 0.574 indicates a slightly positively skewed distribution, with a longer tail on the right side. The kurtosis value of -1.152

suggests a platykurtic distribution, indicating lighter tails and a flatter peak compared to a normal distribution.

The range of scores extends from 2 to 17, reflecting the range of opioid usage behavior among respondents. Notably, the minimum score of 2 indicates some respondents reported minimal usage, while the maximum score of 17 suggests more significant opioid usage in certain cases.

Overall, the analysis provides insights into the distribution and characteristics of opioid usage among respondents, highlighting the diversity in reported behavior and the need for tailored interventions and support strategies.

OPIOIDS LIFE TIME USERS
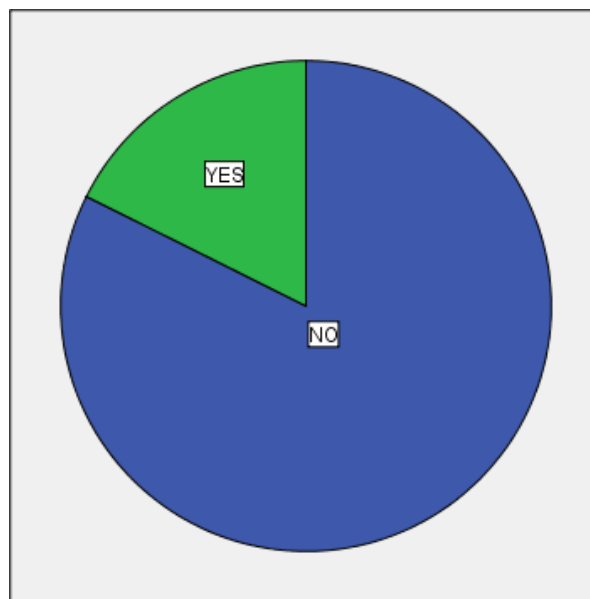
Figure 4. 38: Opioids Life Time Users

	Frequency	Percent
Non-Users	482	82.4
Users	103	17.6
Total	585	100.0

Table 4.30 : Opioids Life Time Users

Among the respondents, 482 individuals, accounting for 82.4% of the total, reported that they are non-users of opioids. Conversely, 103 participants, constituting 17.6% of the total, indicated that they are users of opioids. This distribution underscores the prevalence of opioid usage within the surveyed population, distinguishing between individuals who use opioids and those who do not.

OVERALL OPIOIDS PREVALANCE

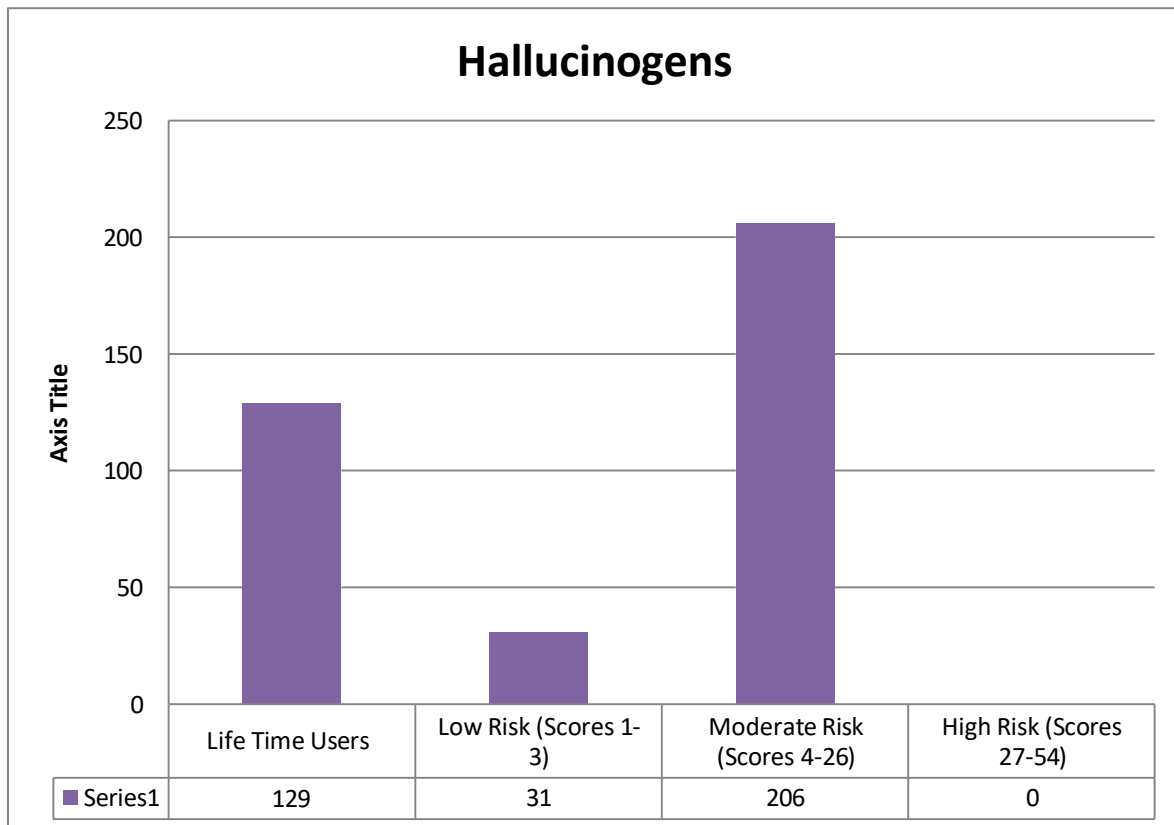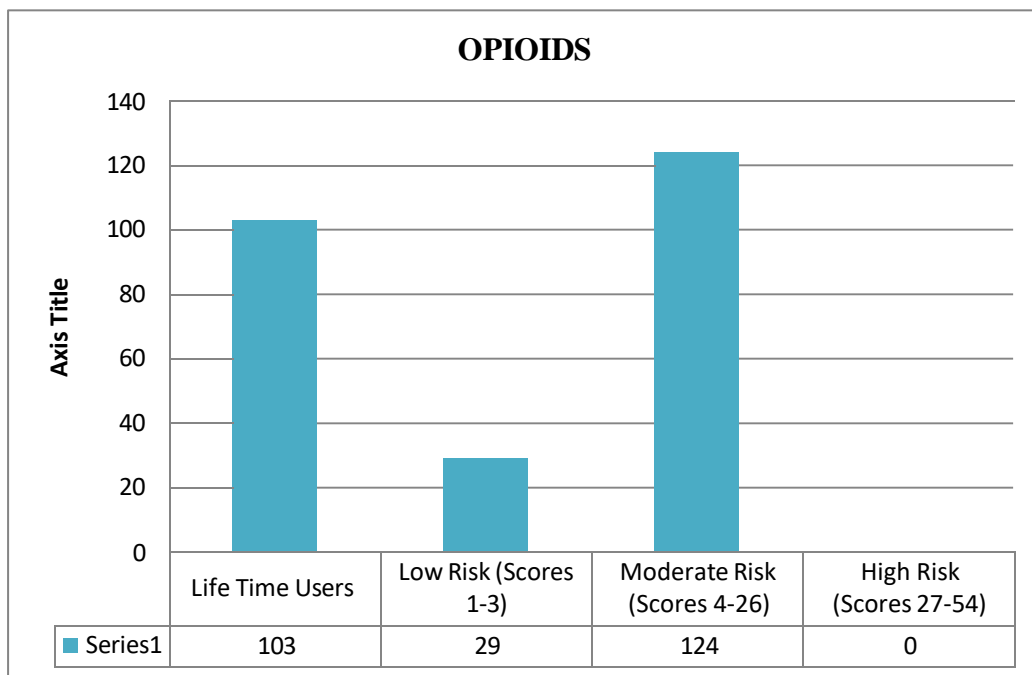Figure 4.39: Overall Opioids Prevalence

Among the respondents, 103 individuals reported lifetime use of opioids. Out of these, 29 individuals fell into the low-risk category, with scores ranging from 1 to 3. Additionally, 124 individuals were categorized as moderate risk, with scores ranging from 4 to 26. No respondents fell into the high-risk category, which encompasses scores ranging from 27 to 54. This breakdown underscores the varying levels of opioid usage among respondents, with a majority falling into the low to moderate risk categories. Overall, the prevalence of opioids usage among respondents is 4.07%.

INTERVENTION DATA ANALYSES

GENDER (CONTOL GROUP)
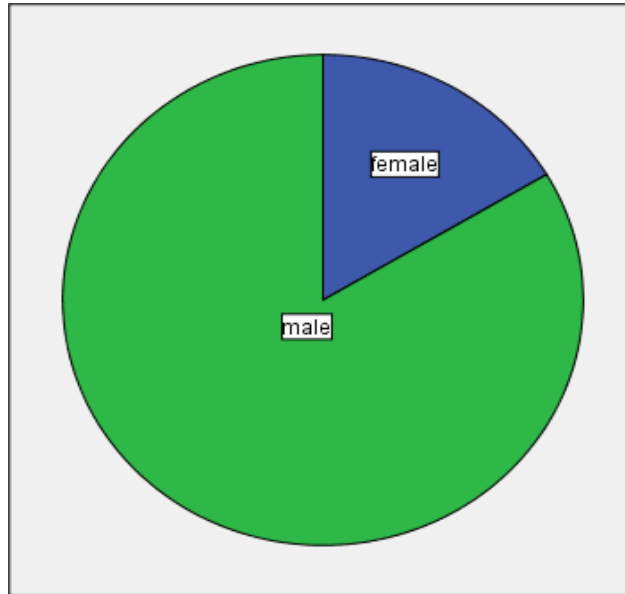
Figure 4. 40 : Gender (Control Group)

	Frequency	Percent
Female	13	16.5
Male	66	83.5
Total	79	100.0

Table 4. 31 : Gender (Control Group)

The dataset includes information on the gender distribution of 79 respondents, with no missing values. Among these respondents, 13 identified as female, making up 16.5% of the total valid responses. In contrast, the majority, comprising 66 respondents or 83.5% of the valid responses, identified as male. This breakdown illustrates a significant gender disparity within the sample, with male respondents outnumbering female respondents by a considerable margin.

CLASS (CONTROL GROUP)
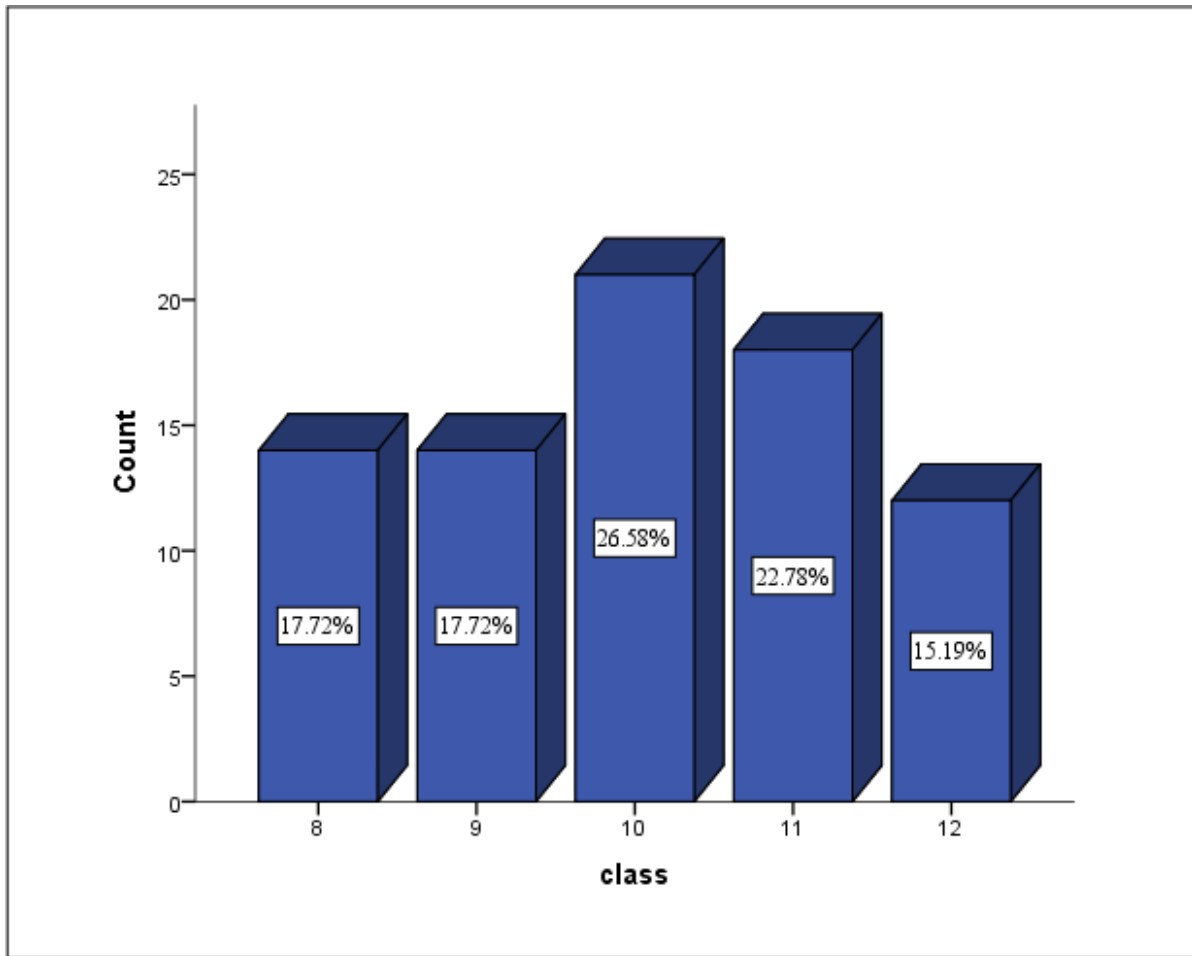
Figure 4.41 : Class (Control Group)

Class	Frequency	Percent
8	14	17.7
9	14	17.7
10	21	26.6
11	18	22.8
12	12	15.2
Total	79	100
Mean: 10		**SD:1.320**

Table 4.32: Class (Control Group)

The dataset comprises 79 instances within the "class" variable, with no missing values. The minimum value observed is 8, while the maximum is 12, indicating a range of 4 units. The mean class value is 10.00, with a standard deviation of 1.320.

Further analysis reveals the frequency distribution of class values within the dataset. Among the valid instances, 14 cases (17.7%) correspond to a class value of 8, followed by another 14 cases (17.7%) with a class value of 9. The majority of instances, constituting 21 cases (26.6%), have a class value of 10. Subsequently, 18 cases (22.8%) exhibit a class value of 11, and 12 cases (15.2%) have a class value of 12. This breakdown provides insight into the distribution of class values within the dataset, illustrating the prevalence of each class level among the observations.

AGE-(CONTROL GROUP)
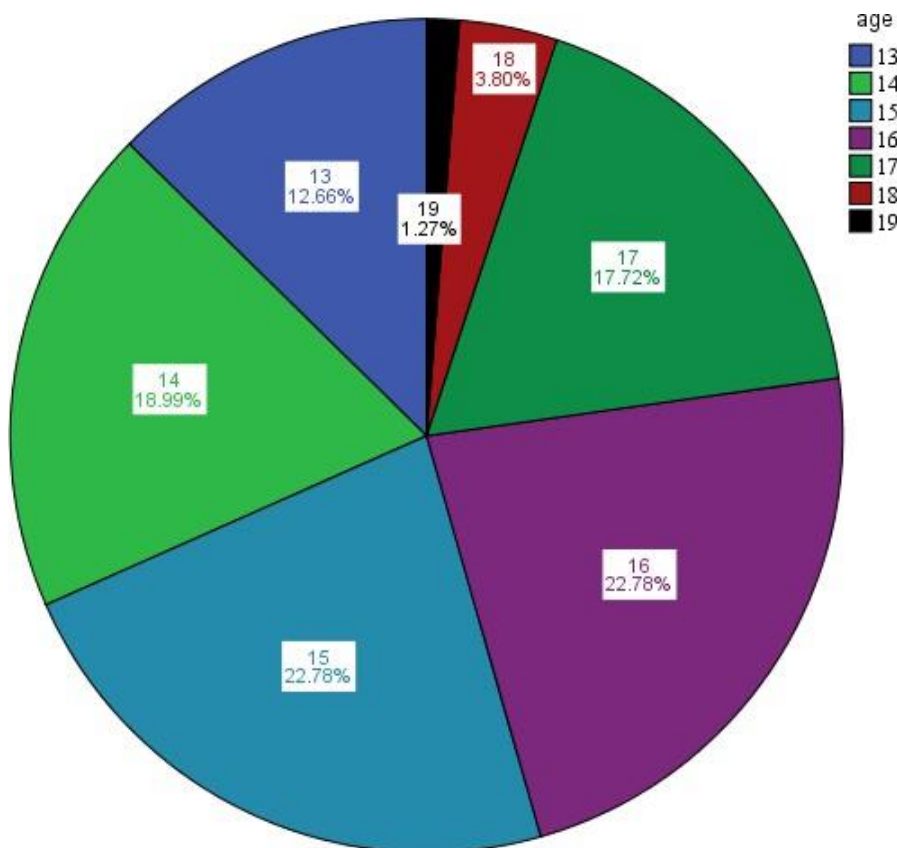
Figure 4.42 : Age(Control Group)

Age	Frequency	Percent
13	10	12.7
14	15	19
15	18	22.8
16	18	22.8
17	14	17.7
18	3	3.8
19	1	1.3
Total	79	100
Mean: 15.30		**SD: 1.453**

Table 4.33: Age (Control Group)

The dataset contains information on age for 79 instances. The age variable ranges from a minimum of 13 years to a maximum of 19 years, with a mean age of 15.30 years and a standard deviation of 1.453.

Analyzing the frequency distribution of age, it's observed that 10 instances (12.7%) correspond to individuals aged 13, while 15 instances (19.0%) are aged 14. Similarly, there are 18 instances each (22.8%) for ages 15 and 16. Age 17 is represented by 14 instances (17.7%), followed by 3 instances (3.8%) for age 18. Lastly, there is 1 instance (1.3%) of an individual aged 19. This breakdown provides insights into the distribution of ages within the dataset, showing the prevalence of each age group among the observations.

PREVALANCE OF SUBSTANCE ABUSE AMONG CONTROL GROUP
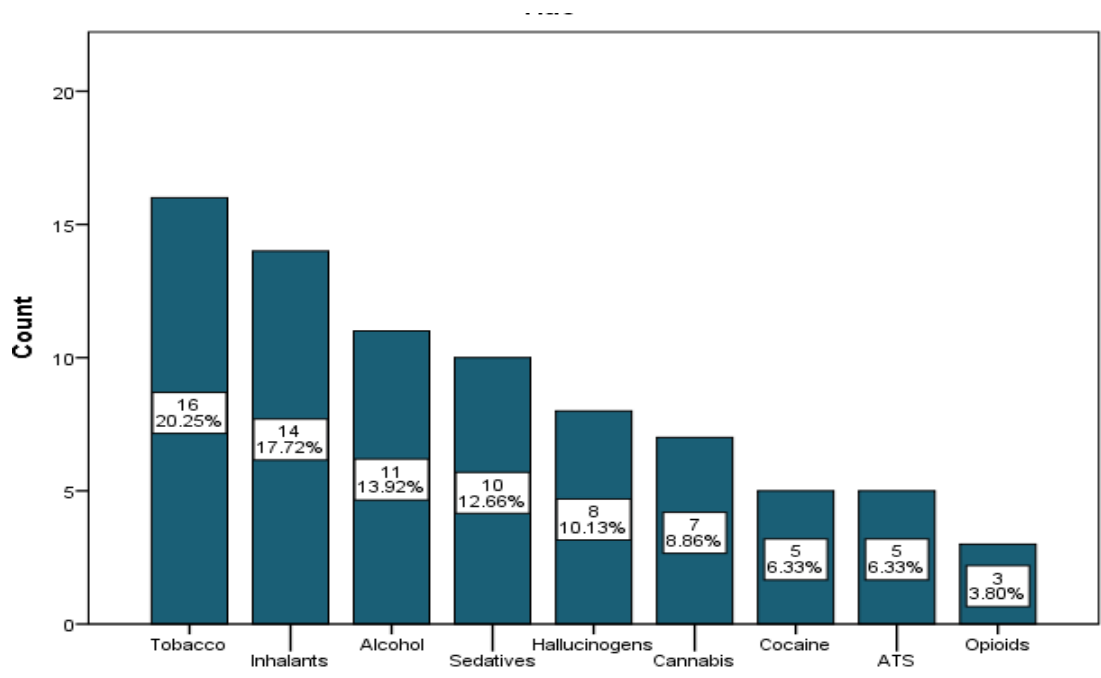
Figure 4.43 : Prevalence of Substance Abuse Among Control Group

In the control group, the prevalence of substance abuse exhibits variability across different types. The provided data illustrates the prevalence of substance use among respondents, offering valuable insights into the habits and trends within the surveyed population. Here's a detailed breakdown of the findings:

Alcohol: Among the respondents, 11 individuals, constituting 13.9% of the total sample, reported alcohol consumption. This indicates a notable proportion of the population engaging in alcohol use, reflecting a common behavior within the group.

Usage of ATS (Amphetamine-Type Stimulants) was reported by 5 respondents, accounting for 6.3% of the sample. While comparatively lower than alcohol usage, the presence of ATS users within the population highlights the diversity of substance use behavior among respondents Cannabis use was reported by 7 respondents, representing 8.9% of the total. This suggests a moderate prevalence of cannabis consumption within the surveyed population, reflecting the popularity of this substance among certain demographics.

Cocaine: The data shows that 5 respondents, making up 6.3% of the sample, reported using cocaine. While cocaine usage is less prevalent compared to other substances in this dataset, its presence indicates a subset of individuals engaging in this form of substance use.

Hallucinogens: 8 respondents, comprising 10.1% of the total, reported using hallucinogens. This suggests a notable portion of the population experimenting with hallucinogenic substances, indicating diverse preferences and behavior regarding substance use.

Inhalants: Inhalant use was reported by 14 respondents, representing 17.7% of the sample. This indicates a relatively higher prevalence of inhalant consumption within the surveyed population, reflecting varying patterns of substance use among respondents.

Opioids: The data shows that 3 respondents, accounting for 3.8% of the total, reported using opioids. While opioid usage appears to be less common compared to other substances in this dataset, its presence underscores the importance of understanding and addressing opioid-related issues within the population.

Sedatives: 10 respondents, constituting 12.7% of the sample, reported using sedatives. This suggests a moderate prevalence of sedative consumption within the surveyed population, highlighting the diversity of substance use behavior among respondents.

Tobacco: The highest reported usage was tobacco, with 16 respondents, making up 20.3% of the total sample. This indicates a significant portion of the population engaging in tobacco use, emphasizing the widespread nature of tobacco consumption among respondents.

In summary, the data provides valuable insights into the prevalence and diversity of substance use behavior within the surveyed population, shedding light on the varying patterns and preferences among respondents.
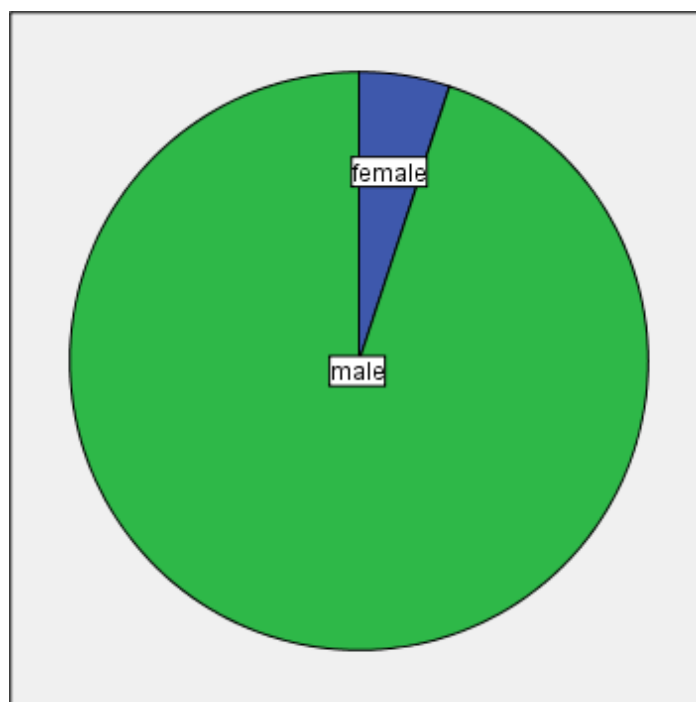
GENDER

Figure 4. 44 : Gender (Intervention Group)

	Frequency	Percent
Female	4	5.1
Male	75	94.9
Total	79	100

Table 4. 34 : Gender (Intervention Group)

In the dataset provided gender distribution of intervention group. Out of a total of 79 individuals, 4 are identified as female, constituting 5.1% of the sample, while males make up the majority with 75 individuals, representing 94.9% of the dataset. These figures reflect the gender distribution within the sample. All cases are considered, with no missing data, resulting in a complete overview of the gender composition in the dataset.

Age	Frequency	Percent
13	9	11.4
14	15	19.0
15	20	25.3
16	20	25.3
17	14	17.7
18	1	1.3
Total	79	100
Mean: 15.23		**SD: 1.300**

Table 4.35: Age (Intervention Group)

Among the 79 individuals included, 9 (11.4%) belong to the 13-year-old class, 15 (19.0%) are in the 14-year-old class, 20 (25.3%) are classified as 15-year-olds, and another 20 (25.3%) fall into the 16-year-old class. Additionally, 14 (17.7%) individuals are categorized as 17-year-olds, while only 1 (1.3%) individual is classified as 18 years old.

This breakdown provides a comprehensive overview of the distribution of individuals across different age classes within the dataset. All cases are accounted for, ensuring a complete representation of the dataset's demographic composition in terms of age classes.

The age range from a minimum of 13 to a maximum of 18, with a mean of 15.23 and a standard deviation of 1.300. This indicates that the majority of the observations fall within a relatively narrow range around the mean, suggesting a clustered distribution of class levels within the dataset.

CLASS- INTERVENTION GROUP
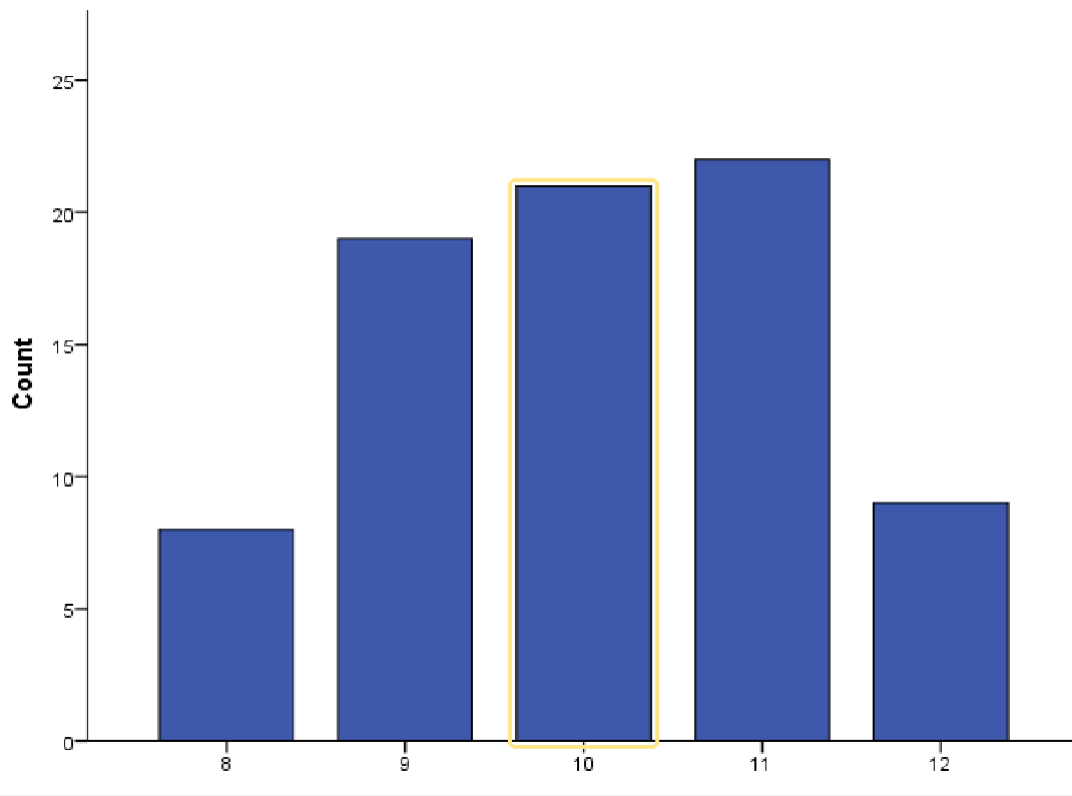
Figure 4.45 : Class (Intervention Group)

Class	Frequency	Percent
8	8	10.1
9	19	24.1
10	21	26.6
11	22	27.8
12	9	11.4
Total	79	100
Mean: 10.06		**SD:1.180**

Table 4.36: Class (Intervention Group)

Among the 79 individuals included, 8 (10.1%) are class 8, 19 (24.1%) are class 9, 21 (26.6%) are class 10, 22 (27.8%) are class 11, and 9 (11.4%) are class 12. These figures provide insights

into the class distribution of the sample. All cases are accounted for, with no missing data, ensuring a comprehensive overview of the age demographics represented in the dataset.

The class range from a minimum of 8 to a maximum of 12. The mean age is 10.06, with a standard deviation of 1.180. This indicates that the ages are relatively clustered around the mean, with a moderate level of variability.

PREVALANCE OF SUBSTANCE ABUSE AMONG INTERVENTION GROUP
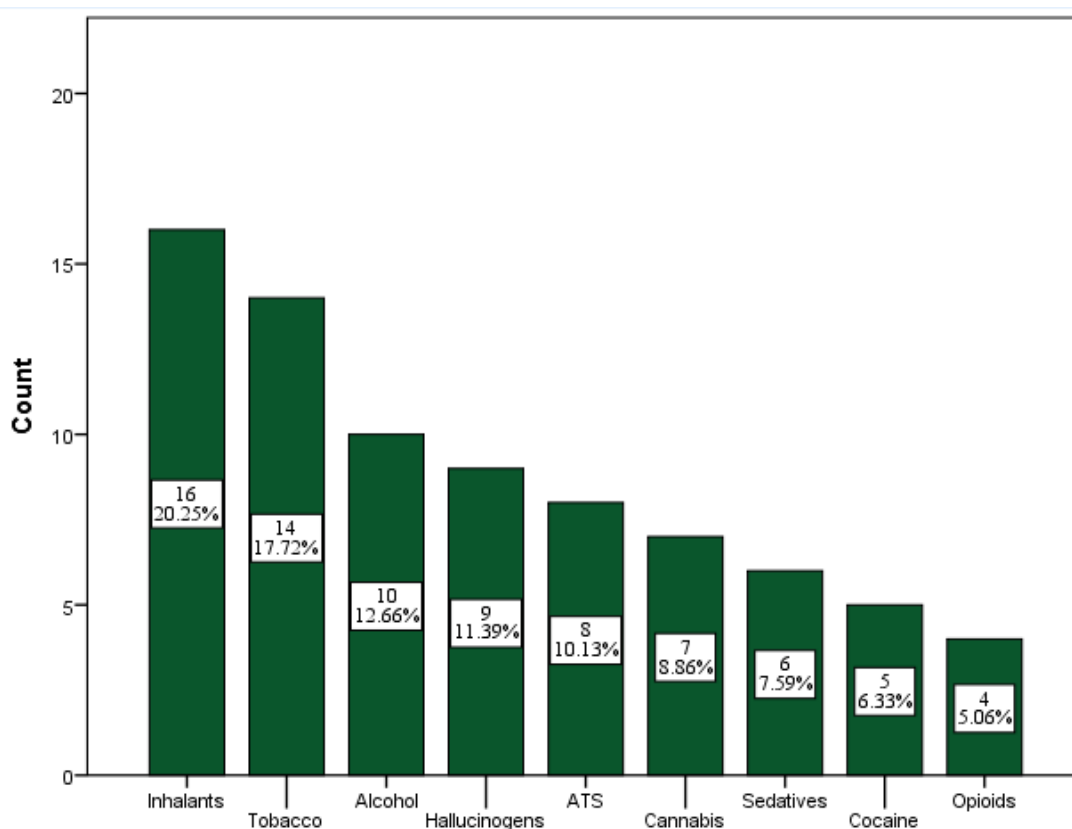
Figure 4.46 : Prevalence of Substance Abuse Among Intervention Group

The frequency table provides a comprehensive breakdown of the prevalence of different substance uses among the surveyed individuals. Understanding these patterns is crucial for identifying potential areas of concern and tailoring interventions effectively.

Alcohol, the most commonly reported substance, was used by 10 individuals, constituting 12.7% of the total sample. Given its widespread use, it's essential to assess its impact on health and behavior. Amphetamine-Type Stimulants (ATS) were used by 8 respondents, making up 10.1% of the sample. ATS use can have significant implications for physical and mental health, necessitating targeted prevention and intervention efforts.

Cannabis, reported by 7 individuals (8.9% of the sample), remains a prevalent substance despite evolving legal landscapes. Understanding its patterns of use can inform policy and public health initiatives. Cocaine use, reported by 5 respondents (6.3% of the sample), presents notable concerns due to its addictive nature and potential for adverse effects on health and social functioning.

Hallucinogens, used by 9 individuals (11.4% of the sample), pose unique challenges due to their unpredictable effects and potential for acute and long-term harm. Inhalant use, reported by 16 individuals (20.3% of the sample), is particularly concerning due to its association with immediate health risks and potential for chronic health conditions.

Opioid use, reported by 4 respondents (5.1% of the sample), warrants attention given the ongoing opioid epidemic and its devastating consequences. Sedatives, used by 6 individuals (7.6% of the sample), can have significant implications for mental health and cognitive functioning, necessitating targeted interventions. Tobacco use, reported by 14 respondents (17.7% of the sample), remains a leading cause of preventable morbidity and mortality worldwide, highlighting the need for comprehensive tobacco control measures.

In summary, the frequency table underscores the diverse landscape of substance use behavior within the surveyed population, emphasizing the importance of tailored interventions addressing the specific patterns and risks associated with each substance.

CONTROL GROUP PRE-TEST
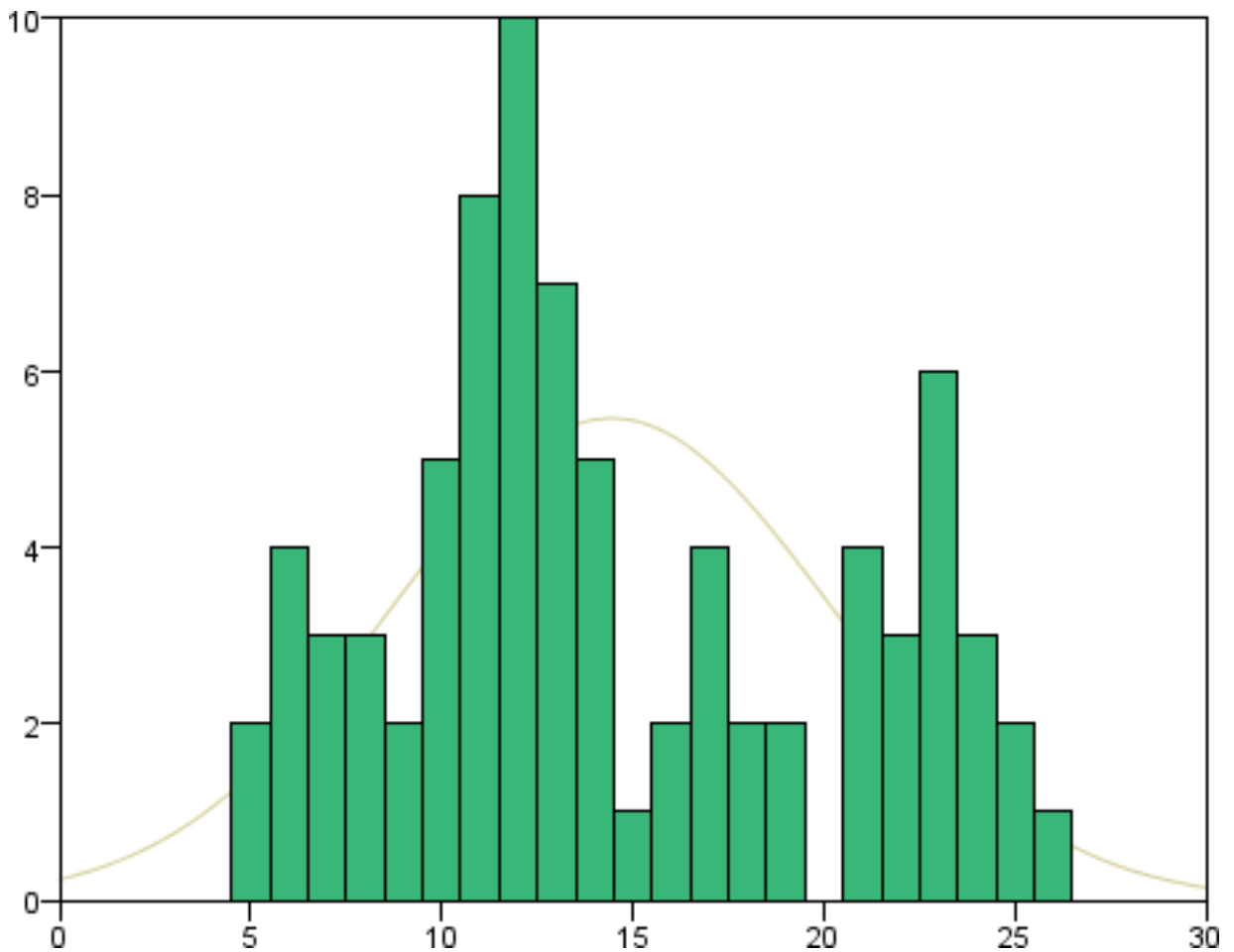
Figure 4.47 : ASSIST Score of Control Group Pre-Test

The graph presents the distribution of pre-test scores within the control group. There were a total of 79 valid responses. The scores ranged from 5 to 26. The most common scores were 12 and 13, each occurring 10 times, followed by scores of 11, occurring 8 times. Scores of 10, 14, and 23 each occurred 5 times. Additionally, there were a variety of other scores represented in the dataset, ranging from 6 to 26. This distribution provides insight into the variability and range of pre-test scores among participants in the control group.

Range	Minimum	Maximum	Mean	Std. Deviation	Variance
21	5	26	14.44	5.766	33.250

Table 4.37: ASSIST Score of Control Group Pre-Test

The control group's pre-test scores were examined to understand their distribution and characteristics. The dataset comprised 79 observations, with scores ranging from 5 to 26. The average pre-test score for the control group was approximately 14.44, with a standard deviation of around 5.766, indicating variability in the scores. The distribution appeared slightly right-skewed, as evidenced by a skewness value of 0.389. Additionally, the kurtosis value of -0.937 suggested a platykurtic distribution, indicating lighter tails compared to a normal distribution. These descriptive statistics provide valuable insights into the nature of the pre-test scores within the control group.

CONTROL GROUP POST-TEST
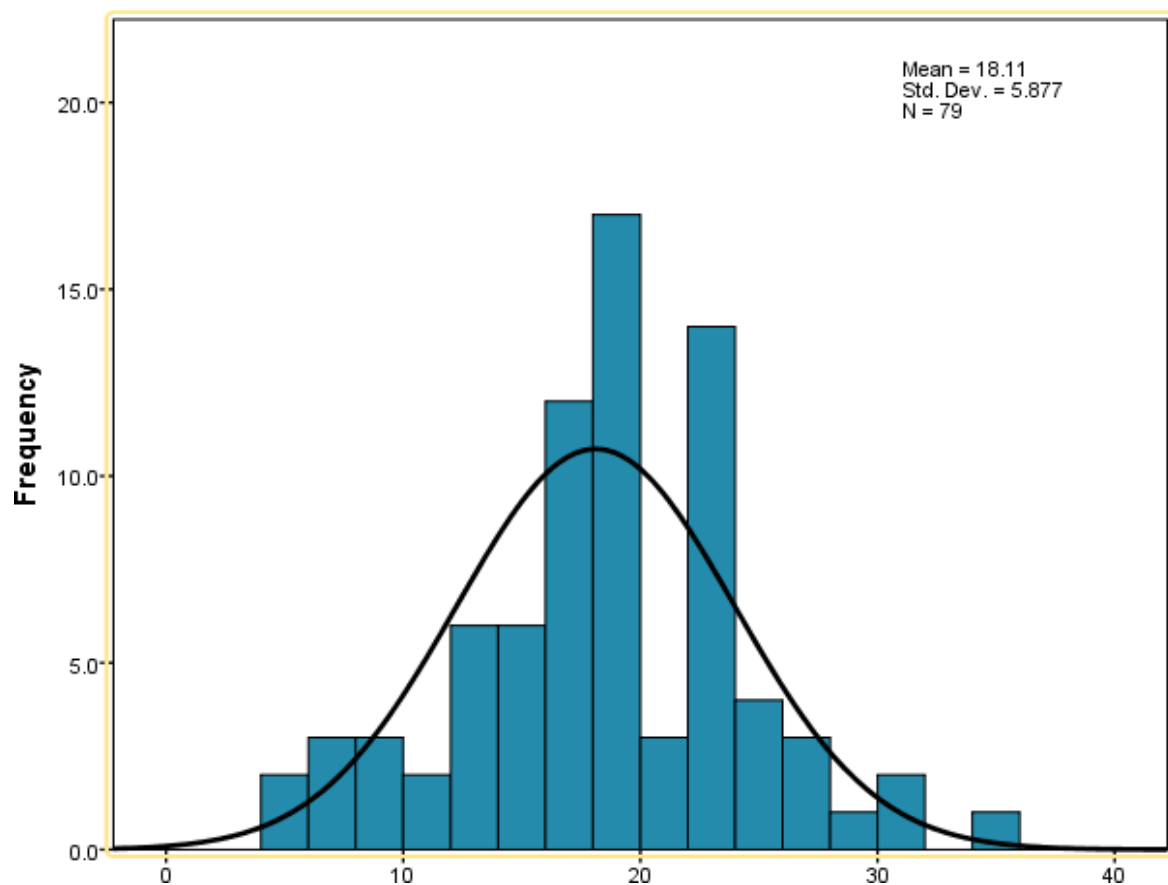
Figure 4.48: ASSIST Score of Control Group Post-Test

The graph displays the distribution of post-test scores within the control group, comprising 79 valid responses. Post-test scores ranged from 5 to 34. The most frequently occurring scores were 19, with 11 instances, followed by scores of 17 and 22, each appearing 8 times. Scores of 13 and

16 each occurred 4 times. Additionally, various other scores were represented in the dataset, ranging from 5 to 34. This distribution offers insights into the diversity and range of post-test scores observed among participants in the control group.

Range	Minimum	Maximum	Mean	Std. Deviation	Variance
29	5	34	18.11	5.877	34.538

Table 4.38: ASSIST Score of Control Group Post-Test

The statistics for the control group's post-test scores provide insights into the central tendency, dispersion, and shape of the distribution. Among the 79 valid responses, the mean post-test score was 18.11, with a standard error of .661. The median score, which represents the middle value of the dataset, was 18.29, indicating that half of the participants scored above this value and half scored below. The mode, most frequently occurring score, was 19.

The standard deviation, a measure of the dispersion of scores around the mean, was 5.877. This indicates that the post-test scores varied by approximately 5.877 points on average from the mean score of 18.11. The variance, calculated as the square of the standard deviation, was 34.538, providing another measure of the spread of scores.

The distribution of post-test scores exhibited a slightly negative skewness (-.114), indicating a slight asymmetry where the tail of the distribution extends slightly to the left. However, this skewness is relatively small, suggesting a fairly symmetrical distribution. The kurtosis, a measure of the peakedness of the distribution, was .250, indicating a relatively moderate level of peakedness compared to a normal distribution.

Overall, the statistics provide a comprehensive overview of the distribution of post-test scores in the control group, offering valuable insights into the performance and variability of participants following the intervention.
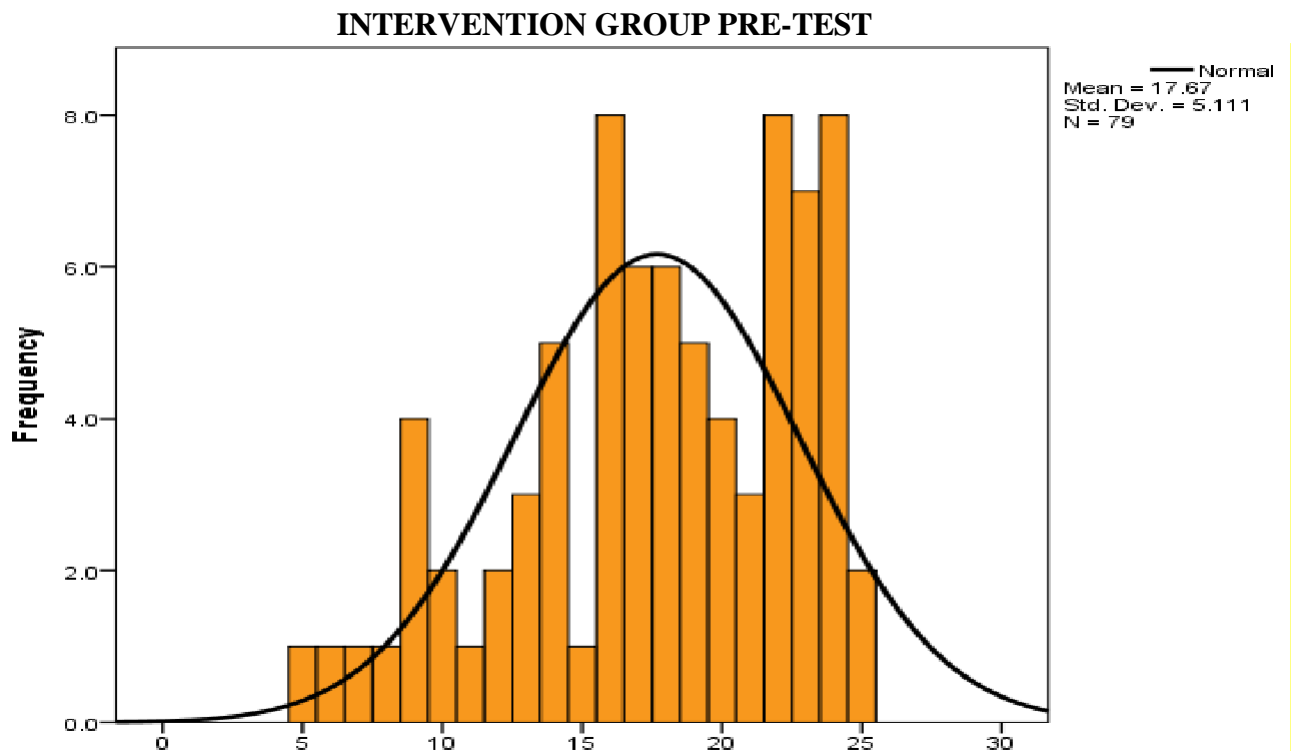
Figure 4.49 : ASSIST Score of Intervention Group Pre-Test

The distribution of scores for the intervention group's pre-test reveals the frequency and percentage of participants scoring at different levels before any intervention. Among the 79 valid responses, the data is presented in a frequency table showing the number of participants and the corresponding percentages for each score category.

Scores ranged from 5 to 25, with varying frequencies. For instance, there were four participants (5.1%) who scored 9, while eight participants (10.1%) scored 16 and another eight participants (10.1%) scored 24. The cumulative percent column shows the incremental percentage of participants as we move down the list of score categories.

This distribution provides an overview of the range and distribution of scores in the control group before any intervention or treatment was administered. It serves as a baseline for understanding the initial performance levels of participants and can be compared to post-test scores to evaluate the effectiveness of the intervention.

Range	Minimum	Maximum	Mean	Std. Deviation	Variance
20	5	25	17.67	5.111	26.121

Table 4.39: ASSIST Score of intervention Group Pre-Test

The statistical analysis of the c intervention group's pre-test (Bore) provides insights into the central tendency, variability, and distribution of scores among participants before any intervention.

Among the 79 valid responses, the mean score was 17.67, indicating the average performance level of participants. The standard error of the mean was 0.575, suggesting the variability in sample means if the study were to be replicated. The median score, which represents the middle value when all scores are arranged in ascending order, was 18.09.

The mode, or the most frequently occurring score, was 16, indicating that this score was observed most frequently in the dataset. However, the data also indicates the presence of multiple modes, suggesting that the distribution may be somewhat irregular.

The standard deviation, a measure of the dispersion of scores around the mean, was 5.111. This indicates the extent to which individual scores deviate from the average score. The range, representing the difference between the highest and lowest scores, was 20, indicating the spread of scores across the dataset.

The skewness value of -0.574 indicates a slight negative skew, suggesting that the distribution is slightly skewed to the left, with a tail extending towards the lower scores. The kurtosis value of -0.488 suggests that the distribution is platykurtic, meaning it is slightly less peaked and has lighter tails compared to a normal distribution.

Overall, these statistics provide a comprehensive overview of the distribution of scores in the control group's pre-test, aiding in understanding the baseline performance levels of participants before any intervention or treatment was administered.

INTERVENTION GROUP POST-TEST
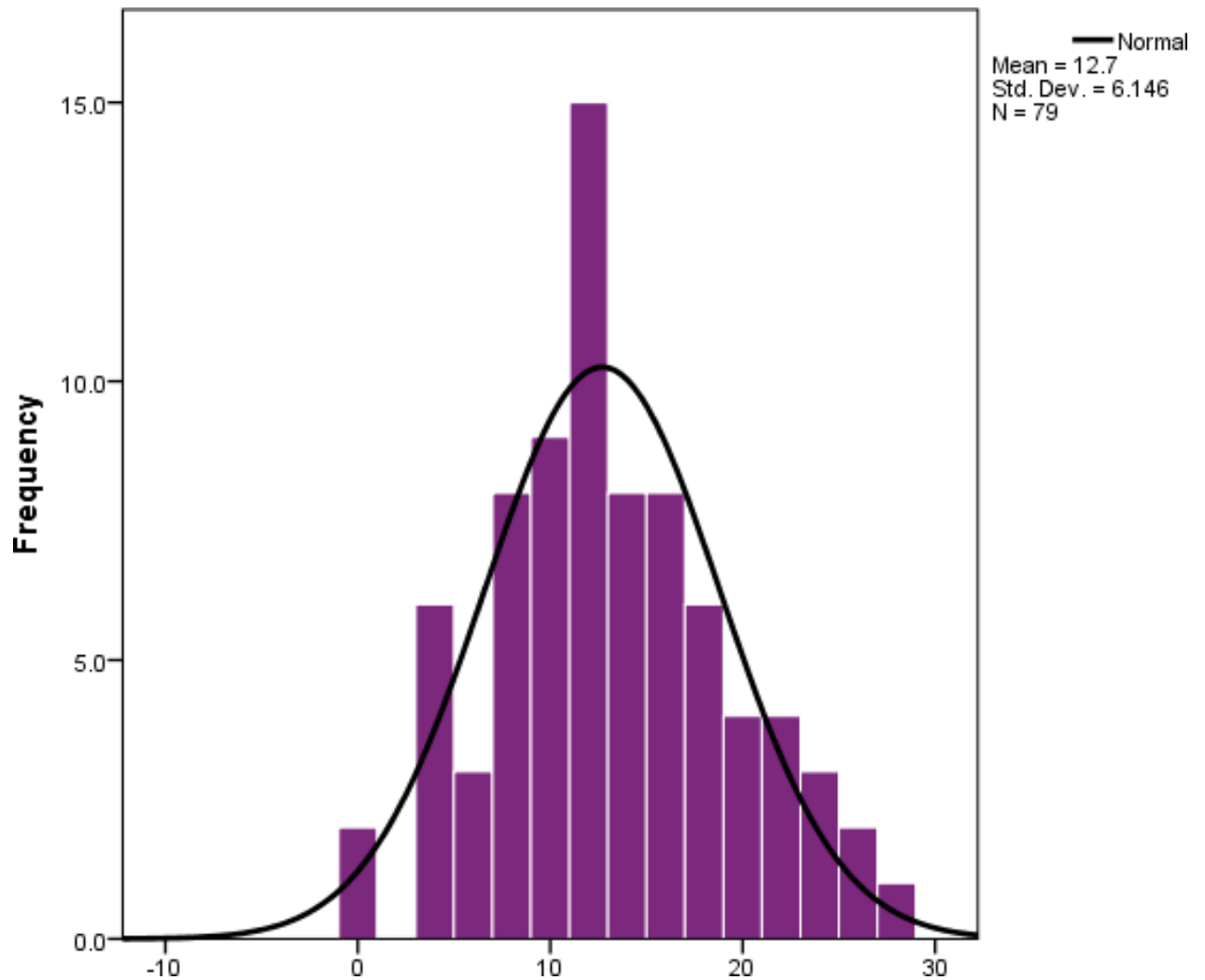
Figure 4.50 : ASSIST Score of Intervention Group Post-Test

The distribution of scores in the intervention group's post-test indicates the performance levels of participants after the intervention or treatment. Among the 79 valid responses, the graph shows variability in scores across different categories. For example, the mode, or the most frequently

occurring score, was absent; suggesting that no single score predominated in the dataset. Instead, there were multiple modes, indicating that several scores were observed with similar frequencies.

Range	Minimum	Maximum	Mean	Std. Deviation	Variance
27	0	27	12.70	6.146	37.778

Table 4.40: ASSIST Score of intervention Group Post-Test

The statistics pertain to the intervention post-test scores of participants in the study, with 79 valid responses indicating the number of participants for whom post-test scores were available. The mean post-test score was calculated to be 12.70, providing an average performance level after the intervention. The standard error of the mean, a measure of the precision of the mean estimate, was found to be 0.692. The median post-test score, representing the middle value of the dataset, was 12.00, while the mode or the most frequently occurring score, and was 12.

The standard deviation, a measure of the dispersion of scores around the mean, was 6.146, with a variance of 37.778. Skewness, indicating the symmetry of the distribution, had a value of 0.233, suggesting a slight skew to the right. Kurtosis, measuring the peakedness of the distribution, was -0.288, indicating a slightly flatter distribution compared to a normal distribution. The range, or the difference between the highest and lowest scores, was 27, with a minimum score of 0 and a maximum of 27. Overall, these statistics provide insights into the distribution and performance levels of participants following the intervention.

Paired Samples Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Intervention Mean	79	-4.9747	4.76088	.53564
Control Mean	79	3.67	4.706	.529

Table 4.41: Paired Samples Statistics

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Intervention Mean-Control Mean	-8.64557	6.80128	.76520	-10.16897	-7.12217	-11.298	78	.000

Table 4.42: Paired Samples Test

The paired samples statistics compare the means, standard deviations, and standard error of the mean for two paired variables: Intervention Mean and Control Mean. For Intervention Mean, the mean value was -4.9747, with a standard deviation of 4.76088 and a standard error mean of 0.53564. The sample size for this variable was 79. In contrast, for Control Mean, the mean value was 3.67, with a standard deviation of 4.706 and a standard error mean of 0.529, also with a sample size of 79.

The paired samples test reveals the statistical significance of the differences between Intervention Mean and Control Mean. The mean difference (Intervention Mean-Control Mean) was calculated to be -8.64557, with a standard deviation of 6.80128 and a standard error mean of 0.76520. The 95% confidence interval for the difference ranged from -10.16897 to -7.12217. The t-value was -11.298, and the degrees of freedom (df) were 78. The p-value (Sig. 2-tailed) was found to be less than 0.001 ($p < 0.001$), indicating a statistically significant difference between the two means.

In summary, the results suggest that there is a significant difference between Intervention Mean score and Control Mean scores, with Intervention Mean generally lower than Control Mean. This conclusion is supported by a highly significant p-value of less than 0.001, indicating strong evidence against the null hypothesis of no difference. The statistical analysis provides evidence to support the effectiveness of the intervention, suggesting that it has led to a meaningful improvement or change compared to the control condition.

FOCUSED GROUP DISCUSSION REPORT ANALYSIS

Focused Group Discussion Report-1   **Substance Abuse Among School-Going Adolescents**
17 School-Going Adolescent Substance Users
Key findings

Patterns of Substance Use:

Participants acknowledged the widespread prevalence of substance use among their peers, with alcohol, tobacco, marijuana, and prescription drugs being commonly mentioned substances.

Many participants described their substance use as a means of coping with stress, peer pressure, personal challenges, while others admitted to using substances for recreational purposes.

Influential Factors:

Peer pressure emerged as a significant factor driving substance initiation, with many participants expressing the desire to fit in or impress their peers.

Participants also cited personal curiosity, family influence, and societal norms as contributing factors to their substance use behavior.

Emotional Impact:

Participants expressed a range of negative emotions associated with their substance use, including guilt, low self-esteem, and low confidence.

Many participants reported strained relationships with family members and friends due to their substance use, leading to feelings of isolation and loneliness.

Some participants admitted to experiencing suicidal thoughts, depression, and low mood

as a result of their substance abuse.

Many adolescent substance users facing Uncertainty about their future

Lack of a trusted person (e.g., parents, brother, teacher) to share their issues, including substance abuse

Barriers to Seeking Help:

Stigma surrounding substance abuse was identified as a major barrier to seeking help or support from parents, teachers, or healthcare professionals.

Fear of punishment or judgment, as well as a lack of awareness about available resources, deterred participants from seeking assistance.

Support and Intervention:

Participants expressed a desire to quit drug use and highlighted the importance of peer support networks and trusted adults in helping them address their substance use issues.

Suggestions were made for implementing educational programs, peer counselling initiatives, and confidential support services within schools to provide assistance to students struggling with substance abuse.

Table 4.43: Focused Group Discussion Report-1

In the focused group discussion centered on substance abuse among school-going adolescents, the narratives of the 17 participants illuminated a complex landscape of challenges and emotions intertwined with their drug use experiences. Beyond merely acknowledging the prevalence of substance use among their peers, participants delved into the intricate web of emotions that underpin their relationship with drugs. Their accounts painted a poignant picture of internal

conflict, as they grappled with the desire to quit substance use while contending with feelings of guilt, shame, and inadequacy. These emotional struggles were not confined to individual turmoil; they extended to strained relationships with family members and friends, exacerbating feelings of isolation and despair.

Moreover, participants revealed a darker undercurrent of mental health issues exacerbated by substance abuse. They candidly shared experiences of grappling with suicidal thoughts, depression, and a pervasive sense of low mood. These emotional burdens, compounded by the weight of addiction, painted a stark reality of the toll substance abuse takes on adolescent mental well-being. Beyond the internal struggles, participants also shed light on the external manifestations of their drug use, including engagement in risky behavior, conflicts with authority figures, and even involvement in violence.

Despite the pervasive challenges they faced, there was a glimmer of hope amidst the despair. Participants expressed a genuine desire to break free from the shackles of addiction and rebuild their lives. Their openness about their struggles signaled a readiness to seek support and embrace change. Importantly, they emphasized the critical role of peer support networks and accessible interventions within the school environment. By fostering a culture of empathy, understanding, and proactive intervention, stakeholders can create pathways for adolescents to confront their substance abuse challenges and embark on a journey towards recovery and resilience.

Focused Group Discussion Report-2
Substance Abuse Among Urban School-Going Adolescents
14 Plus Two Students
Key Findings

Prevalence of Substance Abuse:

Universally acknowledged was the omnipresence of substance abuse within their social spheres, albeit to varying extents.

Notable substances included alcohol, tobacco, marijuana, and prescription drugs, each with its allure.

Peer pressure emerged as a formidable catalyst for substance initiation, with many confessing to succumbing to it to gain social acceptance and heroism.

Causes and Triggers:

Overwhelming stressors from academic rigors, familial discord, and societal expectations emerged as primary instigators of substance abuse.

Curiosity and the innate drive for experimentation were pinpointed as initial triggers, eventually escalating into habituation.

The ease of access, facilitated either by older peers or familial sources, was highlighted as a significant enabler.

Impact on Health and Well-being:

Participants voiced deep-seated concerns regarding the adverse health ramifications of substance abuse, encompassing physical, mental, and academic domains.

Anecdotes were shared, vividly portraying the harrowing consequences of addiction, accidents, and fractured relationships.

Influence of Financial Autonomy: the pivotal role of pocket money in influencing susceptibility to

substance abuse. financial resources afford greater access to substances, exacerbating the risk

Parental Influence: The salience of parental attitudes and conduct in shaping adolescent perceptions of substance abuse was accentuated. Participants underscored the pivotal role of parental communication and setting clear boundaries in dissuading experimentation.

Media's Impact: The pervasive influence of media and pop culture on adolescent perceptions of substance use was expounded upon

Mental Health Nexus: Participants underscored the intricate nexus between mental health and substance abuse. They elucidated how adolescents often resort to substances as maladaptive coping mechanisms for underlying psychological distress

Community Support Systems: Lastly participants underscored the pivotal role of fostering a supportive community milieu in combating substance abuse. They highlighted the efficacy of peer support groups, extracurricular activities, and community-based initiatives in cultivating positive social networks and alternative avenues for recreation

The pervasive stigma surrounding substance abuse emerged as a formidable barrier to seeking support, resulting in silent suffering.

Preventive Measures and Interventions:

Educational campaigns garnered unanimous support as effective preventive tools, equipping adolescents with the requisite knowledge and fortitude to resist peer pressure.

Advocacy for bolstering support networks within the school milieu, inclusive of counsellors, educators, and peer support groups, was resounding.

Emphasis was placed on fostering parental engagement and fostering open dialogues, fortifying familial bonds to deter substance abuse.

Table 4.44: Focused Group Discussion Report-2

Substance abuse is a prevalent issue among urban adolescents aged 13 to 19, shaped by a

multitude of social and environmental factors. The allure of substances like alcohol, tobacco,

marijuana, and prescription drugs often intertwines with the pressures of peer acceptance and curiosity-driven experimentation. This research underscores the urgent need for holistic interventions to combat substance abuse, emphasizing its detrimental impacts on physical health, mental well-being, academic performance, and social relationships.

In navigating the urban landscape, factors such as financial autonomy and media influence further complicate the challenge of prevention. Adolescents with greater disposable income are particularly vulnerable, while pervasive media narratives often normalize substance use. However, amidst these complexities, the study highlights the critical role of parental guidance, community support networks, and targeted educational efforts in fostering resilience and empowering adolescents to make informed choices.

Effective prevention strategies require collaborative efforts across various sectors. Schools, families, healthcare professionals, and policymakers must unite to implement comprehensive approaches that address the root causes of substance abuse and create supportive environments for adolescent development. By prioritizing education, communication, and community engagement, we can strive to alleviate the pervasive impact of substance abuse and promote the well-being of urban adolescents.

Focused Group Discussion Report-3
Substance Abuse Among Urban School-Going Adolescents
9 Parents of Substance-Abused Students
Key Findings:
1. Emotional Strain: Parents felt intense emotional distress, including guilt, shame, and helplessness, when they discovered their children's substance abuse.

They often experienced sleepless nights, constant anxiety, and strained family relationships due to their children's addiction.

2. Unearthing Root Causes:

Parents pointed to peer pressure, mental health issues, family conflicts, and societal pressures as key reasons for their children's substance abuse.

They expressed frustration over the lack of community awareness and resources to address the underlying traumas and emotional distress that lead to substance abuse.

3. Hurdles in Seeking Aid:

The stigma around substance abuse often discouraged parents from seeking help due to fear of social exclusion.

The limited availability and high cost of treatment options made it hard for parents to manage their children's addiction.

4. Coping Mechanisms:

Parents used peer support groups, therapy, and educational programs to understand and cope with substance abuse.

They stressed the importance of taking care of their own well-being and building resilience during their children's ongoing addiction struggles.

5. Prescribed Interventions and Support:

Parents called for better community support systems with accessible counselling and rehabilitation services.

They advocated for more awareness campaigns and educational initiatives to reduce stigma and allow for timely intervention in adolescent substance abuse.

They pushed for coordinated efforts between schools, healthcare providers, and grassroots organizations to support families dealing with substance abuse.

Table 4.45: Focused Group Discussion Report-3

In the focused group discussion with parents of substance-abused students, several key findings emerged, Parents facing their children's substance abuse experience intense emotional turmoil, including guilt, shame, and helplessness. This often leads to sleepless nights, constant anxiety, and strained family relationships. They identified peer pressure, mental health issues, family conflicts, and societal pressures as major factors contributing to their children's addiction, and lamented the lack of community awareness and resources to address these underlying issues.

The stigma surrounding substance abuse often deters parents from seeking help due to fear of social ostracization. Additionally, the limited availability and high cost of treatment options make it challenging for them to manage their children's addiction. Parents utilize peer support groups, therapeutic interventions, and educational programs to understand and cope with substance abuse, emphasizing the importance of maintaining their own well-being and resilience.

Parents advocate for stronger community support systems, including accessible counselling and rehabilitation services. They call for increased awareness campaigns and educational initiatives to reduce stigma and enable timely intervention for adolescent substance abuse. Additionally, they push for coordinated efforts between schools, healthcare providers, and grassroots organizations to create a comprehensive support network for families affected by substance abuse.

Focused Group Discussion Report-4

Substance Abuse Among Urban School-Going Adolescents

12 Teachers from Urban High School

Key Findings:

1. Observations of Substance Abuse:

- Teachers unanimously acknowledged the presence of substance abuse among their students, with varying degrees of visibility across different age groups and cohorts.

- Commonly observed substances included alcohol, tobacco, marijuana, and prescription drugs, often concealed or used discreetly on school premises.

2. Contributing Factors:

- Academic stress, family dysfunction, peer influence, and societal pressures were identified as key drivers of substance abuse among adolescents.

- Teachers noted the correlation between academic performance and substance abuse, with some students resorting to substances as a coping mechanism for academic pressures or personal challenges.

3. Impact on Academic Performance and Behavior:

- Substance abuse was linked to a myriad of negative consequences, including diminished academic performance, absenteeism, disciplinary issues, and disengagement from school activities.

- Teachers expressed concern over the detrimental effects of substance abuse on students' cognitive abilities, motivation, and overall well-being, hindering their academic and personal development.

4. Challenges in Identification and Intervention:

- Teachers highlighted the challenges in identifying students struggling with substance abuse,

citing factors such as secrecy, stigma, and lack of awareness among staff.

- Limited resources and training in substance abuse detection and intervention were identified as barriers to effectively addressing the issue within the school setting.

5. Strategies for Prevention and Support:

- Teachers emphasized the importance of early intervention and prevention efforts, including comprehensive health education programs, peer support initiatives, and counselling services.

- Collaboration between teachers, counsellors, administrators, and parents was deemed essential in creating a supportive and responsive environment for students struggling with substance abuse.

- Integration of substance abuse awareness and intervention strategies into the school curriculum was proposed to empower students with knowledge and skills to make informed decisions and seek help when needed.

Table 4.46: Focused Group Discussion Report-4

The focused group discussion with teachers provided significant insights into the issue of substance abuse among urban school-going adolescents. Teachers unanimously recognized the presence of substance abuse among students, identifying commonly used substances such as alcohol, tobacco, marijuana, and prescription drugs. Contributing factors highlighted by teachers included academic stress, family dysfunction, peer influence, and societal pressures. These factors often drove students to use substances as coping mechanisms, particularly in response to academic pressures or personal challenges.

Substance abuse was found to have a detrimental impact on students' academic performance and behavior, leading to diminished academic achievement, absenteeism, disciplinary issues, and disengagement from school activities. Teachers expressed concern about the cognitive and

emotional effects of substance abuse, hindering students' overall well-being and personal development.

Challenges in identification and intervention were also discussed, including secrecy, stigma, and limited resources for detection and intervention within the school setting. Teachers emphasized the importance of early intervention and prevention efforts, such as comprehensive health education programs, peer support initiatives, and counselling services. Collaborative efforts between teachers, counsellors, administrators, and parents were deemed crucial in creating a supportive and responsive environment for students struggling with substance abuse. Integration of substance abuse awareness and intervention strategies into the school curriculum was proposed to empower students with knowledge and skills to make informed decisions and seek help when needed.

Overall, the discussion highlighted the need for collaborative, multi-disciplinary approaches to address substance abuse effectively within the school community, emphasizing prevention, early intervention, and support services.

Focused Group Discussion Report-5
Substance Abuse Among Urban School-Going Adolescents
19 Counsellors and mental health Professionals
Key findings
1. Prevalence and Trends: An uptick in substance abuse among urban adolescents permeated the discourse, characterized by a mosaic of experimentation and entrenched usage patterns. Participants delineated a pantheon of abused substances, spanning traditional fare like alcohol, tobacco, and marijuana to contemporary contenders such as synthetic cannabinoids

and designer drugs, emblematic of evolving trends.

2. Contributing Factors:

The nexus of multifaceted determinants underpinning adolescent substance abuse emerged as a focal point, encompassing peer pressure, familial discord, trauma, socioeconomic disparities, and environmental stressors endemic to urban milieus.

Participants underscored the interplay of individual vulnerabilities and systemic inequities, positing them as propellants fueling adolescents' descent into substance misuse.

3. Impact on Mental Health and Well-being:

The symbiotic relationship between substance abuse and mental health maladies cast a pall over adolescent well-being, with participants elucidating a confluence of depression, anxiety, trauma-related disorders, and conduct aberrations.

Concerns mounted over the bidirectional causality between substance abuse and mental health afflictions, necessitating integrated interventions to redress their deleterious symbiosis.

4. Challenges in Intervention and Support:

A litany of impediments besetting effective intervention and support efforts was articulated, ranging from the dearth of specialized treatment services and pervasive stigma to confidentiality conundrums and the transient engagement of adolescents with support frameworks.

The fragmented landscape, typified by soloed initiatives and communication lacunae between stakeholders, posed a formidable hurdle in orchestrating cohesive intervention paradigms.

5. Strategies for Prevention and Intervention:

Proactive measures loomed large in the participants' discourse, with emphasis placed on school-based prevention initiatives, targeted outreach endeavors, and the assimilation of substance abuse screening protocols into routine healthcare and counselling provisions.

Advocacy resounded for collaborative alliances between educational establishments,

community agencies, healthcare practitioners, and law enforcement cohorts to furnish a continuum of care and support for adolescents ensnared by substance abuse's tentacles.

Holistic frameworks were proffered as a panacea, spotlighting the imperative of addressing the root causes undergirding substance abuse, be it trauma, familial dysfunction, or socioeconomic adversities, to engender enduring resilience and recovery.

Government and Private Sector Services to drug addiction treatment:

Government Services:

Substance Abuse Rehabilitation Centers (SARC): SARCs are run by the Kerala State Excise Department and provide rehabilitation services for individuals struggling with substance abuse. These centers offer medical detoxification, counselling, vocational training, and follow-up care.

District Mental Health Program (DMHP): DMHP aims to provide mental health services, including treatment for substance abuse, at the district level. It offers counselling, medication-assisted treatment, and support for individuals with substance use disorders.

De-Addiction Centers in Government Hospitals: Many government hospitals in Kerala have de-addiction centers that provide outpatient and inpatient treatment for substance abuse. These centers offer detoxification, counselling, psychiatric care, and rehabilitation services.

Private Services:

Private Rehabilitation Centers: Several private rehabilitation centers in Kerala offer residential treatment programs for substance abuse. These centers provide personalized care, counselling, therapy sessions, and recreational activities.

Psychiatric Hospitals and Clinics: Private psychiatric hospitals and clinics in Kerala offer services for substance abuse treatment. They provide comprehensive assessments, medication management, individual and group therapy, and aftercare support.

Counselling and Therapy Centers: Various counselling and therapy centers in Kerala

specialize in addiction counselling and support. They offer individual counselling, family therapy, support group meetings, and relapse prevention programs.

Special Schemes and Program

Substance Abuse Prevention Programs: Both government and private organizations conduct substance abuse prevention programs in schools, colleges, and communities. These programs aim to raise awareness, provide education about the risks of substance abuse, and promote healthy lifestyles.

Community-Based Rehabilitation Initiatives: Some NGOs and community-based organizations run rehabilitation initiatives for individuals struggling with substance abuse. These initiatives include outreach programs, peer support groups, vocational training, and reintegration into society.

Telemedicine and Online Counselling Services: With the advancement of technology, telemedicine and online counselling services are becoming more accessible for individuals seeking help for substance abuse. Some organizations offer remote counselling sessions, support groups, and helplines for those unable to access traditional treatment facilities.

Government And Private Sector Services, Various Types Of Treatment Therapies And Interventions.

- Cognitive Behavioral Therapy (CBT): CBT is a widely used therapeutic approach that helps individuals identify and change negative thought patterns and behavior associated with substance abuse. It focuses on developing coping skills, managing triggers, and addressing underlying issues contributing to substance use.

- Motivational Interviewing (MI): MI is a client-centered counselling technique that aims to enhance motivation and commitment to change. It involves exploring ambivalence about substance use, resolving doubts, and eliciting internal motivation for behavior change.

- Family Therapy: Family therapy involves the participation of family members in the treatment process to address family dynamics, communication patterns, and relationships affected by substance abuse. It aims to improve family functioning, support recovery, and prevent relapse.

- Group Therapy: Group therapy provides a supportive environment for adolescents to connect with peers facing similar challenges, share experiences, and learn from each other. It promotes peer support, social skills development, and accountability in recovery.

- Medication-Assisted Treatment (MAT): MAT involves the use of medications, in combination with counselling and behavioral therapies, to treat substance use disorders. Medications like methadone, buprenorphine, and naltrexone may be used to manage withdrawal symptoms, reduce cravings, and prevent relapse.

- Holistic Therapies: Holistic therapies, such as mindfulness-based interventions, yoga, art therapy, and equine therapy, complement traditional treatment approaches by addressing the physical, emotional, and spiritual aspects of recovery. They promote relaxation, stress reduction, and self-awareness

- Peer Support Programs: Peer support programs, such as 12-step groups like Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), offer ongoing support, mentorship, and guidance from individuals who have successfully overcome substance abuse challenges. They provide a sense of belonging and encouragement in recovery.

Table 4.47: Focused Group Discussion Report-5

The focused group discussion convened 19 counsellors and professionals specializing in adolescent mental health and substance abuse, under the facilitation of a researcher. The

dialogue aimed to dissect the complexities of substance abuse among urban school-going adolescents, exploring causation, intervention, and support. Through an iterative discourse facilitated by researcher, participants engaged in candid exchanges, revealing insights into the prevalence and trends of substance abuse, contributing factors, and its impact on mental health and well-being.

Participants highlighted an uptick in substance abuse among urban adolescents, characterized by experimentation and entrenched usage patterns. They identified a range of abused substances, from traditional fare like alcohol and tobacco to contemporary ones such as synthetic cannabinoids, reflecting evolving trends. The discussion underscored the multifaceted determinants underpinning adolescent substance abuse, including peer pressure, familial discord, trauma, socioeconomic disparities, and environmental stressors endemic to urban environments. Participants emphasized the interplay of individual vulnerabilities and systemic inequities as propellants fueling adolescents' descent into substance misuse.

Concerns were raised over the bidirectional causality between substance abuse and mental health afflictions, necessitating integrated interventions to address their deleterious symbiosis. Participants articulated challenges in intervention and support efforts, including the dearth of specialized treatment services, pervasive stigma, and communication gaps between stakeholders. Proactive measures, such as school-based prevention initiatives and collaborative alliances between educational establishments and community agencies, were advocated to furnish a continuum of care for adolescents ensnared by substance abuse's tentacles. During the discussion, various types of treatment therapies and interventions were deliberated. These included Cognitive Behavioral Therapy (CBT) to address negative thought patterns, Motivational Interviewing (MI) to enhance motivation for change, and Family Therapy to improve familial dynamics affected by substance abuse. Group Therapy provided peer support,

while Medication-Assisted Treatment (MAT) helped manage withdrawal symptoms. Additionally, holistic therapies like mindfulness-based interventions and peer support programs such as Alcoholics Anonymous were discussed. These interventions collectively aim to provide comprehensive support for adolescent substance abusers, fostering recovery and long-term well-being.

In conclusion, the dialogue yielded a rich tapestry of insights, emphasizing the exigency of collaborative, multi-pronged approaches to combat substance abuse among urban school-going adolescents. The synthesis of experiential wisdom and professional acumen underscored the pivotal role of counsellors and professionals in guiding adolescents toward recovery and resilience. Moving forward, concerted efforts should be marshalled to translate these insights into tangible interventions that empower adolescents and fortify communities against the scourge of substance abuse

Focused Group Discussion Report-6
13 Multi-Stakeholder Perspective on Substance Abuse Among Urban School-Going Adolescents
Key Findings:
1. Law Enforcement Perspective: - Police and excise officers underscored the exigency of robust enforcement mechanisms to curb the proliferation of illicit substances within urban communities. - The discourse pivoted around targeted interventions, including surveillance, interdiction, and community policing initiatives, aimed at dismantling drug syndicates and disrupting supply chains. **2**.Drug-related Crimes:

Possession: Adolescents may engage in criminal activities such as possession of illicit substances like marijuana, cocaine, or methamphetamine.

Distribution: Some adolescents become involved in drug distribution networks, selling drugs to peers or engaging in trafficking activities.

Theft and Robbery: Drug addiction can drive adolescents to commit theft or robbery to obtain money for purchasing drugs or to sustain their addiction.

Drug-related Violence: In some cases, adolescents involved in drug dealing or drug-related disputes may resort to violence, leading to assault or even homicide.

Property Crimes: Adolescents struggling with substance abuse may commit property crimes such as burglary, vandalism, or destruction of property to obtain money or valuables to support their addiction.

Cycle of Recidivism: Without effective intervention, adolescents caught in the cycle of substance abuse and crime may experience repeated arrests, incarceration, and recidivism. The lack of access to appropriate treatment and support services within the juvenile justice system can perpetuate this cycle, hindering rehabilitation efforts.

3. Governance and Policy Dimension:

- Politicians proffered insights into the legislative realm, advocating for policy reforms to fortify substance abuse prevention and rehabilitation frameworks.

- Discussions encompassed budget allocations, legislative enactments, and inter-agency collaborations aimed at ameliorating systemic gaps and bolstering community resilience.

4. Youth Engagement and Leadership:

- Youth leaders championed peer-led initiatives and advocacy campaigns, spotlighting the transformative potential of youth engagement in mitigating substance abuse.

- Dialogues cantered on mentorship programs, youth empowerment initiatives, and

community-driven interventions to engender a culture of resilience and responsibility among adolescents.

4. Community Engagement and Support:

- The kaval coordinator elucidated the pivotal role of community engagement in fostering protective factors against substance abuse.

- Emphasis was laid on forging partnerships, fostering social cohesion, and leveraging community resources to provide a robust support network for adolescents grappling with substance abuse.

5. Healthcare and Social Welfare:

- Healthcare professionals and social workers expounded on the symbiotic nexus between substance abuse and mental health disorders, advocating for integrated care models.

- Dialogues delved into early intervention strategies, trauma-informed care provisions, and the integration of substance abuse screening into routine healthcare protocols to facilitate timely intervention and support.

Table 4.48: Focused Group Discussion Report-6

The focused group discussion on substance abuse among urban school-going adolescents brought together a diverse group of stakeholders, including law enforcement, governance, youth leaders, healthcare professionals, and social workers. Insights from police and excise officers highlighted the importance of robust enforcement measures to curb drug proliferation, while politicians emphasized the need for legislative reforms to strengthen prevention and rehabilitation frameworks. Youth leaders advocated for peer-led initiatives, and community engagement experts stressed the significance of forging partnerships to provide robust support networks. Healthcare professionals underscored the importance of integrated care models to address the symbiotic relationship between substance abuse and mental health disorders.

The dialogue underscored the complex interplay of factors contributing to adolescent substance abuse, including societal, economic, and environmental influences. Discussions delved into the prevalence of drug-related crimes among adolescents, highlighting the cycle of recidivism perpetuated by a lack of access to appropriate treatment within the juvenile justice system. Governance perspectives emphasized the role of policy reforms in addressing systemic gaps, while youth engagement efforts aimed to foster resilience and responsibility among adolescents. Healthcare and social welfare professionals advocated for early intervention strategies and trauma-informed care provisions to facilitate timely support for at-risk youth.

Government and private sector services for drug addiction treatment offer a comprehensive range of support for individuals struggling with substance abuse. Government services include Substance Abuse Rehabilitation Centers (SARCs), District Mental Health Programs (DMHP), and De-Addiction Centers in government hospitals, providing medical detoxification, counselling, psychiatric care, and vocational training. Private services encompass private rehabilitation centers, psychiatric hospitals and clinics, and counselling and therapy centers, offering personalized care, therapy sessions, and aftercare support.

Moreover, special schemes and programs, both governmental and private, focus on prevention and rehabilitation. Substance abuse prevention programs target schools, colleges, and communities to raise awareness and educate about the risks of substance abuse. Community-based rehabilitation initiatives run by NGOs provide outreach programs, peer support groups, vocational training, and reintegration into society for those struggling with addiction

In conclusion, the synthesis of diverse perspectives underscored the urgency of collaborative action and systemic reform to combat substance abuse among urban school-going adolescents. The collective resolve of stakeholders highlighted the need for holistic approaches that transcend sectoral boundaries and embrace community-driven solutions. Moving forward, it is essential to

translate these insights into tangible interventions that empower communities and safeguard the well-being of adolescents in urban settings.

CASE STUDIES

Case Study 1: 14-Year-Old Male

Background and Context: This case study involves a 14-year-old male student currently in 9th grade from a low-economic background. The subject lives in a single-parent household, which creates a challenging environment marked by financial strain and limited parental supervision. His parent works long hours, leaving him with substantial unsupervised time, contributing to his vulnerability to peer influences.

Introduction to Substance Use: At the age of 13, the subject was introduced to tobacco by his friends. His initial exposure to substance use was driven by peer pressure and the desire to fit in with his social group. This peer group, also from similar socio-economic backgrounds, often engaged in risky behavior, including substance use.

Progression and Types of Substances Used: Over time, his substance use escalated from tobacco to inhalants and ATS (amphetamine-type stimulants). He now uses these substances weekly. His use of ATS reflects a shift toward more harmful and addictive substances, indicating a deepening dependence. The substances are primarily purchased using pocket money, which suggests a lack of parental oversight on his spending.

Physical and Mental Health Impact: The subject's physical health has been negatively impacted, evidenced by his declining appetite and noticeable weight loss. Mentally, he suffers from increased anxiety, which is exacerbated by his substance use. These health issues are compounded by a lack of access to adequate healthcare and support services.

Academic Performance and School Engagement: Academically, the subject was an average student before his substance use began. However, his academic performance has since declined to below average. His declining grades reflect his reduced ability to focus, complete assignments, and participate in class activities. His school engagement is low, and he has a weak support system within the school.

Social and Family Relationships: The subject's relationship with his parent is strained, primarily due to the parent's demanding work schedule and the subject's behavioral changes. His relationship with his siblings is marked by rivalry, further contributing to a lack of familial support. However, he has strong relationships with his friends, who are also substance users, reinforcing his behavior.

Attempts to Quit and Seeking Help: Despite recognizing the negative impact of substance use, the subject has attempted to quit several times, indicating a desire for change. He has sought help from the school counsellor, but the school's limited resources and weak support system have hindered effective intervention. His efforts to quit have been sporadic and unsupported, leading to relapse.

Awareness and Understanding of Consequences: The subject is aware of the potential consequences of substance use, including health risks and academic decline. However, his immediate need for peer acceptance and the lack of alternative coping mechanisms outweigh his long-term concerns. This awareness, although present, is insufficient to drive sustained behavior change without external support.

Role of School Programs and Peer Influence: The subject's limited exposure to school programs related to substance abuse highlights a gap in preventive education. Additionally, the high influence of his peer group continues to play a significant role in his substance use. His

participation in sports suggests potential for positive engagement, but this is overshadowed by his peers' negative influence.

Future Outlook and Intervention Needs: Effective intervention for this subject should involve comprehensive support that addresses both his immediate social environment and his underlying needs. This includes enhancing school-based support systems, providing family counselling to improve home dynamics, and increasing access to mental health resources. Building stronger peer support networks and encouraging participation in positive extracurricular activities could also help mitigate the risk factors contributing to his substance use.

Table 4.49: Case study-1

Case Study 2: 15-Year-Old Female

Background and Context: This case study features a 15-year-old female student in 10th grade from a middle-economic background. She lives in a nuclear family, but her father works abroad, leading to a distant relationship with him and an overall strained family dynamic. This familial situation creates an environment where the subject feels isolated and stressed.

Introduction to Substance Use: The subject began using sedatives at the age of 14, introduced by her lover. Her initial use was a response to family stress and the need for emotional escape. The lack of immediate parental supervision and emotional support contributed to her turning to substances for relief.

Progression and Types of Substances Used: Her substance use has remained focused on sedatives, which she uses occasionally. This choice reflects her need for a calming effect to manage stress. Her substance use is sporadic but significant enough to impact her health and daily functioning. She uses pocket money to purchase these substances, indicating a level of secrecy and independence in her behavior.

Physical and Mental Health Impact: The subject's physical health is affected by frequent colds, likely due to a weakened immune system from sedative use. Mentally, she experiences depression, a condition exacerbated by her substance use and the stress of her family situation. Her mental health issues are severe enough to affect her daily life and school performance.

Academic Performance and School Engagement: Before her substance use began, the subject was an above-average student. However, her academic performance has declined to average due to the impact of her substance use and depression. Despite her declining grades, she remains engaged in school activities, particularly in the music club, which provides some emotional support and a sense of belonging.

Social and Family Relationships: Her relationship with her parents is distant, particularly with her father who is abroad. This lack of parental presence and emotional support significantly affects her mental well-being. In contrast, she has close relationships with her siblings and friends, who provide some level of support but also potentially enable her substance use.

Attempts to Quit and Seeking Help: The subject has not made any attempts to quit and has not sought help, reflecting a lack of awareness about the severity of her situation. Her understanding of the consequences of substance use is minimal, which is a significant barrier to seeking help and initiating change.

Awareness and Understanding of Consequences: There is a clear gap in her awareness and understanding of the consequences of substance use. She does not fully comprehend the long-term impact on her health and academic future, which prevents her from seeking help and making efforts to quit.

Role of School Programs and Peer Influence: Her limited exposure to school programs on substance abuse highlights a critical gap in preventive education. Her active participation in

social gatherings and the music club indicates a need for belonging and emotional support, which she currently seeks through unhealthy means. The influence of her lover and peer group plays a significant role in her continued substance use.

Future Outlook and Intervention Needs: Intervention should focus on increasing her awareness of the consequences of substance use and providing mental health support to address her depression. Family counselling to improve her relationship with her parents, particularly her father, is essential. Enhancing school-based programs to provide better education on substance abuse and increasing her involvement in positive extracurricular activities could help create healthier coping mechanisms.

Table 4.50: Case study-2

Case Study 3: 16-Year-Old Male

Background and Context: This case involves a 16-year-old male student in 11th grade from a middle-economic background. He lives in a joint family, which provides a supportive environment. His parents are supportive, and his overall family dynamics are stable. Despite this, he started using substances out of curiosity.

Introduction to Substance Use: At the age of 15, the subject was introduced to inhalants through social media, driven by curiosity. His initial use was experimental, but it quickly developed into a daily habit. The influence of social media played a significant role in his introduction to and continued use of substances.

Progression and Types of Substances Used: His substance use began with inhalants but soon expanded to include alcohol and tobacco. He now uses these substances daily, indicating a deep dependence. The money for his substance use comes from a part-time job, which gives him the financial means to sustain his habit independently.

Physical and Mental Health Impact: The subject experiences a persistent cough due to his inhalant and tobacco use, reflecting significant damage to his respiratory health. Mentally, he suffers from irritability and increased stress, which affect his social interactions and academic performance.

Academic Performance and School Engagement: Initially, the subject was an excellent student with high academic performance. However, his grades have since declined to average. Despite this, he remains highly engaged in school activities, particularly in the debate team, which suggests that he still values academic and extracurricular success.

Social and Family Relationships: The subject is popular and has a large social circle, which influences his substance use behavior. His supportive relationship with his parents is a positive aspect, but it has not been sufficient to counterbalance the negative influence of his peers and social media. He has no siblings, which means his parents are his primary family support.

Attempts to Quit and Seeking Help: The subject has attempted to quit and sought help through online resources, showing a proactive approach to managing his substance use. However, his efforts have not been fully successful, indicating the need for more structured support.

Awareness and Understanding of Consequences: He is aware of the consequences of his substance use, which is why he has attempted to quit. However, the influence of his social circle and the addictive nature of the substances he uses have made it difficult for him to stop.

Role of School Programs and Peer Influence: His moderate exposure to school programs and the high influence of his peer group highlight a significant area for intervention. Strengthening school programs and providing peer group interventions could help reduce the influence of negative peer behavior.

Future Outlook and Intervention Needs: Intervention should leverage the supportive family environment and the subject's engagement in school activities. Programs should focus on peer group interventions and increasing his awareness of the risks associated with substance use. Strengthening his participation in positive activities like the debate team could provide a healthier outlet for his interests and reduce his reliance on substances.

Table 4.51: Case study-3

Case Study 4: 16-Year-Old Male

Background and Context: This case study features a 16-year-old male student in 11th grade from a high-economic background. He lives in a nuclear family with a single parent, creating a strained home environment. The subject's substance use began at an early age, influenced by neighborhood friends.

Introduction to Substance Use: The subject was introduced to alcohol at the age of 12 by neighborhood friends. His initial use was driven by boredom and a desire for excitement. The early age of exposure indicates a long-term engagement with substance use, which has escalated over time.

Progression and Types of Substances Used: His substance use began with alcohol but has since expanded to include tobacco and opioids, which he uses monthly. He funds his substance use through pocket money provided by his single parent, indicating a lack of supervision over his expenditures.

Physical and Mental Health Impact: The subject has experienced significant physical health issues, including weight loss. Mentally, he suffers from mild anxiety, which is exacerbated by his substance use and the strained relationship with his parent.

Academic Performance and School Engagement: Academically, the subject was an average student before his substance use began. His academic performance has since declined, reflecting his reduced focus and engagement in school. He has low engagement in school activities and does not participate in extracurricular activities, which limits his opportunities for positive social interactions.

Social and Family Relationships: The subject has a strained relationship with his single parent, who may be preoccupied with managing the household. He has few close friends, and his social interactions are limited, contributing to his reliance on substances as a form of escape from boredom.

Attempts to Quit and Seeking Help: Despite being aware of the consequences of substance use, the subject has not made any attempts to quit nor sought help. His awareness has not translated into action, likely due to the lack of support and alternative coping mechanisms.

Awareness and Understanding of Consequences: He understands the potential risks and consequences of his substance use but feels trapped by his circumstances. This awareness alone is not enough to drive behavior change without supportive interventions.

Role of School Programs and Peer Influence: His limited exposure to school programs on substance abuse highlights a significant gap. The low influence of peer groups suggests that his substance use is more driven by personal circumstances and a lack of engaging activities rather than peer pressure.

Future Outlook and Intervention Needs: Interventions should focus on providing mental health support to address his anxiety and improving family dynamics through counselling. Encouraging his involvement in positive activities and increasing his engagement in school could provide alternative sources of excitement and reduce his reliance on substances.

Enhancing school-based support and preventive education programs is crucial to address his substance use effectively.

Table 4.52: Case study-4

Case Study 5: 17-Year-Old Male

Background and Context: This case involves a 17-year-old male student in 12th grade from a low-economic background. He lives in a nuclear family with distant relationships with his parents. His substance use began relatively late at age 16, influenced by school peers seeking social acceptance.

Introduction to Substance Use: At the age of 16, the subject was introduced to ATS (amphetamine-type stimulants) by school peers. His initial use was driven by a desire for social acceptance and to maintain his status within his peer group. The late onset of substance use suggests a rapid escalation influenced by his social environment.

Progression and Types of Substances Used: His substance use includes prescription drugs and alcohol, which he uses weekly. He funds his substance use through a part-time job, indicating a level of independence and financial access that supports his habit.

Physical and Mental Health Impact: The subject experiences sleep issues and increased stress, which are directly related to his substance use. These health issues have a significant impact on his daily functioning and overall well-being. The stress and lack of sleep further contribute to his declining mental health.

Academic Performance and School Engagement: Academically, the subject was initially an excellent student, but his performance has since declined to above average. Despite this decline,

he remains highly engaged in school and sports, indicating that he still values his academic and extracurricular success.

Social and Family Relationships: He has distant relationships with his parents, which may contribute to his stress and reliance on substances. His diverse friend group and well-liked status suggest that he has strong social relationships outside the family, which play a significant role in his substance use behavior.

Attempts to Quit and Seeking Help: The subject has tried to quit but has not sought help, reflecting a partial recognition of the need to change. His attempts to quit indicate a desire for improvement, but the lack of professional support limits his success.

Awareness and Understanding of Consequences: He has limited awareness of the full consequences of his substance use. While he understands some of the risks, his need for social acceptance and the immediate benefits of substance use outweigh his concerns.

Role of School Programs and Peer Influence: His extensive exposure to school programs related to substance abuse highlights a proactive approach by the school, but this has not been sufficient to counteract the high influence of his peer group. The strong influence of his peers remains a significant factor in his continued substance use.

Future Outlook and Intervention Needs: Intervention should focus on leveraging his participation in sports to provide positive reinforcement and stress relief. Family counselling to address distant relationships and rivalry with siblings is essential. Increasing his awareness of the full consequences of substance use and providing ongoing support through school programs could help him make more informed decisions and reduce his reliance on substances.

Table 4.53: Case study-5

Thematic Analysis of Adolescent Substance Use Case Studies

Introduction to Thematic Analysis

Thematic analysis is a widely used qualitative research method that allows researchers to identify, analyses, and report patterns (themes) within data. This method is especially beneficial in the social sciences where complex datasets, such as personal interviews, case studies, or textual data, need to be systematically organized and interpreted. Thematic analysis provides a structured yet flexible approach to understanding the underlying themes and patterns within qualitative data, offering rich insights into the research questions at hand (Braun & Clarke, 2006).

Importance of Thematic Analysis in Research

Flexibility: One of the primary advantages of thematic analysis is its flexibility. Unlike more rigid qualitative methods, thematic analysis can be applied across a wide range of data types and research questions. This adaptability makes it a versatile tool for researchers exploring diverse topics within various contexts. For instance, it can be used to analyses interview transcripts, survey responses, or even observational notes, providing comprehensive insights across different data sources (Braun & Clarke, 2006).

Rich, Detailed Data Interpretation: Thematic analysis allows for a deep, nuanced understanding of data. By meticulously coding and categorizing data, researchers can capture the complexity and richness of meanings within the dataset. This detailed interpretation helps uncover subtle insights and provides a more comprehensive understanding of the participants' experiences and perspectives (Boyatzis, 1998).

Identification of Patterns: One of the core strengths of thematic analysis is its ability to highlight recurring themes and patterns within the data. This identification process is crucial for understanding commonalities and differences among participants' experiences. By systematically analyzing these patterns, researchers can identify key themes that emerge across the dataset, providing valuable insights into the research topic (Braun & Clarke, 2006).

Theory Development: Thematic analysis contributes significantly to theory development. By identifying common themes and patterns, researchers can generate new theories or refine existing ones. This iterative process of data analysis and theory development helps build a more robust theoretical framework, which can be further tested and validated in subsequent research (Clarke & Braun, 2013).

Policy and Practice Implications: The insights gained from thematic analysis have practical implications for policy and practice. By highlighting key issues and areas for intervention, thematic analysis can inform the development of targeted policies and programs. For example, in the context of adolescent substance use, thematic analysis can identify the underlying causes and contributing factors, helping policymakers and practitioners design effective prevention and intervention strategies (Braun & Clarke, 2006).

Category	Case Study 1	Case Study 2	Case Study 3	Case Study 4	Case Study 5
Current Age	14	15	16	16	17
Gender	Male	Female	Male	Male	Male
Class	9th Grade	10th Grade	11th Grade	11th Grade	12th Grade
Economic Status	Low	Middle	Middle	high	low
Source of Substance	friend	lover	Social media	Neighborhood friends	School peers
Reason	Peer pressure	Family stress	Curiosity	Boredom	Social acceptance
Age - First Used Substance	13	14	15	12	16
First Used Substance	tobacco	sedatives	inhalants	alcohol	ats
Used Substance	inhalants, tobacco ats	sedatives	Alcohol, tobacco inhalants	Alcohol, tobacco opioids	Prescription drugs, alcohol
Frequency of Substance Use	Weekly	Occasional	Daily	Monthly	Weekly
Money for Substance Purchase	pocket money	pocket money	Part-time job	pocket money	Part-time job
Physical Health	Declining appetite	Frequent colds	Persistent cough	Weight loss	Sleep issues
Mental Health	Increased	Depression	Irritability	Mild anxiety	Increased

	anxiety				stress
Academic Performance (Before)	Average	Above average	Excellent	Average	Excellent
Academic Performance (After)	Below average	Average	Declined to average	Declined	Declined to above average
Tried to Quit	Yes	No	Yes	No	Yes
Sought Help	Yes (school counsellor)	No	Yes (online resources)	No	no
Introduced Substance to Others	No	Yes	No	No	Yes
Parent Type	Single parent	father& mother -father abroad	parents	Single parent	parents
Family Type	Single-parent household	Nuclear family	joint family	nuclear family	Nuclear family
Relationship with Parents	Strained	Distant	Supportive	Strained	Distant
Relationship with Siblings	Rivalry	Close	No siblings	Close	Rivalry
Relationship with Friends	Strong	Close	Large social circle	Few close friends	Diverse friend group

Social Relationships	Active in school activities	Active in social gatherings	Popular	Introverted	Well-liked
Aware of Consequences	Yes	No	Yes	Yes	No
Reason for Continuing Use	Peer acceptance	Stress relief	Habitual	Escape boredom	Maintain social status
Exposure to School Programs	Limited	None	Some	None	Extensive
Influence of Academic Pressure	High	High	Moderate	Low	High
Attendance Record	Regular	Regular	Irregular	Regular	Regular
School Engagement	Low	Moderate	High	Low	High
Participation in Extracurricular	Sports	Music club	Debate team	None	Sports
Peer Group Influence	High	Moderate	High	Low	High
School Support System	Weak	Weak	Moderate	Weak	Strong

Table 4.54: thematic analysis of case studies

Key Points Identified in the Case Studies

Peer Influence and Substance Introduction:

The case studies reveal that peer influence plays a significant role in initiating substance use among adolescents. For instance, in Case Study 1, a 14-year-old male started using tobacco and inhalants due to peer pressure, while in Case Study 5, a 17-year-old male began using ATS to gain social acceptance among school peers. This highlights the need for peer-focused prevention strategies that address the social dynamics influencing substance use.

Family Dynamics and Emotional Stress:

Family dynamics and emotional stress are critical factors in adolescent substance use. In Case Study 2, a 15-year-old female turned to sedatives due to family stress and a distant relationship with her father. Similarly, Case Study 4 shows how boredom and lack of parental supervision in a single-parent household contributed to a 16-year-old male's substance use. These cases underscore the importance of family-based interventions and support systems in addressing substance use.

Curiosity and Availability of Substances:

Curiosity and the availability of substances are significant drivers of substance use among adolescents. Case Study 3 illustrates how curiosity and social media exposure led a 16-year-old male to start using inhalants, alcohol, and tobacco. This suggests the need for educational programs that address curiosity and misinformation about substance use, as well as strategies to limit adolescents' access to substances.

Physical and Mental Health Consequences:

The case studies highlight the severe physical and mental health consequences of substance use. For instance, Case Study 1 shows declining appetite and increased anxiety in a young male using inhalants and tobacco, while Case Study 5 reports sleep issues and increased stress in an older male using prescription drugs and alcohol. These findings emphasize the importance of healthcare interventions and mental health support for adolescents.

Academic Impact and School Engagement:

Substance use significantly impacts academic performance and school engagement. In Case Study 1, substance use led to a decline in academic performance and school engagement for a 14-year-old male. Similarly, Case Study 3 shows that although initially an excellent student, a 16-year-old male's performance declined due to daily substance use. These cases highlight the need for schools to have robust support systems to identify and assist students affected by substance use.

Attempts to Quit and Seeking Help:

Some adolescents attempt to quit substance use and seek help, but often find existing support systems inadequate. In Case Study 1, a young male sought help from a school counsellor but found limited support, while Case Study 3 shows a 16-year-old male tried to quit using online resources but lacked structured support. This indicates the need for accessible and effective support services for adolescents.

Role of School Programs and Peer Group Influence:

The case studies indicate that while school programs are essential, they alone are insufficient without addressing peer group dynamics. For example, Case Study 5 shows extensive exposure to school programs was not enough to counteract high peer influence for a 17-year-old male. Similarly, the absence of school programs in Case Study 2 contributed to continued substance use for a 15-year-old female. This underscores the importance of comprehensive approaches involving peer education and support.

Conclusion

Thematic analysis of these five case studies reveals that adolescent substance use is influenced by a complex interplay of factors, including peer pressure, family dynamics, emotional stress, curiosity, and substance availability. The physical and mental health impacts are profound, affecting academic performance and overall well-being. While some adolescents make efforts to quit and seek help, the existing support systems are often inadequate. Effective interventions must be multi-faceted, addressing peer influences, family support, educational programs, and healthcare services to mitigate substance use and promote healthier outcomes for adolescents.

DISCUSSION CHAPTER

SOCIAL AND DEMOGRAPHIC FACTORS

Social and demographic factors such as gender, age, and economic status can significantly influence adolescent substance abuse (Smith & Johnson, 2018). In this research, it was found that among males, 71.2% are current users and 8.2% are lifetime users, while among females, 12.34% are current users and 10.59% are lifetime users. These statistics underscore the gender disparities in substance abuse prevalence among adolescents.

Male and female may engage in substance use differently, influenced by societal gender norms and expectations (Garcia et al., 2019). Male are often more inclined towards alcohol and marijuana use, whereas Female may lean towards prescription drug misuse or binge drinking (Brown & Martinez, 2020). This discrepancy in substance preferences can be attributed to societal pressures and perceptions regarding gender roles.

Age is a significant factor influencing substance abuse patterns among adolescents, with research indicating variations in substance use behavior across different age groups (Martinez & Garcia, 2018). In this research, it was found that adolescents in the dataset had an average age of approximately 14.91 years, with a standard deviation of approximately 1.367 years.

This finding suggests that substance abuse tends to escalate during adolescence, with peak onset occurring during mid to late adolescence (Lee & Smith, 2020). Adolescents in this age range may be more susceptible to peer pressure, have increased access to substances, and may be less aware of the long-term consequences of substance use (Johnson & Brown, 2019).

Furthermore, early initiation of substance use during adolescence has been linked to a higher risk of developing substance use disorders later in life (Thompson & Lee, 2017). Therefore, understanding the age-related patterns of substance abuse is crucial for developing targeted prevention and intervention strategies to address substance abuse among adolescents.

Moreover, socioeconomic status plays a crucial role in adolescent substance abuse patterns (Wilson et al., 2021). Adolescents from lower socioeconomic backgrounds may face increased stressors and fewer resources, contributing to higher rates of substance abuse as a coping mechanism. Conversely, adolescents from higher socioeconomic backgrounds may have greater access to disposable income, increasing their vulnerability to substance abuse (Johnson & Brown, 2019).

Understanding these social and demographic factors is essential for developing targeted interventions and prevention strategies to address adolescent substance abuse effectively.

Substance Use prevalence and Patterns Among School-Going Adolescents

The prevalence and diversity of substance use among school-going adolescents underscore the complexity of adolescent behavior (Smith et al., 2019). Various studies have shown that substance use is a widespread issue among this demographic, with significant percentages reporting the use of alcohol, tobacco, marijuana, and prescription drugs. According to this research, 53.5% of adolescents are classified as drug users, indicating individuals who have reported using drugs either currently or at some point in their lives. On the other hand, non-users represent 46.5% of the dataset, denoting individuals who have never reported drug usage.. This data highlights the significant prevalence of substance use among adolescents and underscores the need for targeted interventions to address this issue.

Research consistently reveals that adolescents engage in substance use for various reasons, including peer pressure, stress, and the desire for new experiences. The National Institute on Drug Abuse (NIDA, 2021) reports that approximately 60% of high school seniors have tried alcohol, and around 45% have used marijuana at least once. Furthermore, the Monitoring the Future (MTF) survey (Johnston et al., 2022) indicates that the use of e-cigarettes and vaping

products is also on the rise, with 34% of 12th graders reporting use in the past year. The Youth Risk Behavior Surveillance System (YRBSS) by the Centers for Disease Control and Prevention (CDC, 2021) similarly reports high levels of alcohol and drug use, with 29.2% of high school students indicating they have used marijuana and 19.5% reporting they have used prescription drugs without a prescription at some point in their lives.

A study by the Substance Abuse and Mental Health Services Administration (SAMHSA, 2021) found that 49% of adolescents aged 12 to 17 had consumed alcohol, and 37% had used illicit drugs at least once in their lifetime. The Partnership to End Addiction (2022) highlights that early exposure to substance uses significantly increases the risk of developing addiction later in life. Their findings suggest that nearly 90% of individuals with substance use disorders began using drugs before the age of 18. Additionally, the 2020 National Survey on Drug Use and Health (NSDUH) reported that 30.5% of adolescents aged 12 to 17 had used marijuana, and 8.2% had used inhalants at least once in their lives.

Tobacco : Among this research, tobacco stands out as the most prevalent substance, with 28.12% reporting current or lifetime use. This high prevalence underscores the widespread use and potential public health implications associated with tobacco consumption.

The Monitoring the Future (MTF) survey highlights that approximately 30% of high school seniors have tried smoking cigarettes at least once in their lives (Johnston et al., 2022). Similarly, the Youth Risk Behavior Surveillance System (YRBSS) by the Centers for Disease Control and Prevention (CDC, 2021) reports that 19.6% of high school students have tried smoking at least once, and 8.8% are current smokers. The National Institute on Drug Abuse (NIDA, 2021) indicates that 22% of adolescents have used some form of tobacco, including cigarettes, cigars, or smokeless tobacco.

Furthermore, the Substance Abuse and Mental Health Services Administration (SAMHSA, 2021) reveals that about 23% of adolescents aged 12 to 17 have tried tobacco products, with a significant portion using these products regularly. The Campaign for Tobacco-Free Kids (2022) also reports that nearly 27% of high school students and 10% of middle school students have used electronic cigarettes, highlighting the growing trend of e-cigarette use among younger populations.

Additionally, the National Youth Tobacco Survey (NYTS) by the CDC (2020) found that 23.6% of high school students and 6.7% of middle school students reported using tobacco products within the past 30 days. The NYTS also reported that e-cigarettes were the most commonly used tobacco product among youth, with 19.6% of high school students and 4.7% of middle school students reporting use in the past 30 days (CDC, 2020).

In India, studies show a significant prevalence of tobacco use among adolescents. The Global Youth Tobacco Survey (GYTS) India, 2019, conducted by the World Health Organization (WHO), found that 8.5% of students aged 13-15 years currently use tobacco in any form, with 4.1% using smokeless tobacco and 4.3% smoking cigarettes (WHO, 2019). A study by Kaur et al. (2021) in the Indian Journal of Public Health found that 12.4% of adolescents aged 10-19 years in India reported current tobacco use. The National Family Health Survey (NFHS-5) 2019-2020 also indicates that tobacco use is prevalent among 15.4% of boys and 4.4% of girls aged 15-19 years in India (Ministry of Health and Family Welfare, 2020).

Alcohol

Alcohol consumption is also notable, with 15.51% of the surveyed population reporting either current or lifetime usage. Among these, 772 individuals are current users, while 202 have

consumed alcohol in their lifetime. The prevalence of alcohol underscores its social and cultural significance but also raises concerns regarding alcohol-related harms and dependencies.

The Monitoring the Future (MTF) survey indicates that 55% of high school seniors have tried alcohol at least once, with 29% reporting having been drunk in the past month (Johnston et al., 2022). The National Institute on Drug Abuse (NIDA, 2021) reports that approximately 60% of adolescents have tried alcohol by the end of high school. Similarly, the Youth Risk Behavior Surveillance System (YRBSS) by the Centers for Disease Control and Prevention (CDC, 2021) found that 29.2% of high school students reported current alcohol use, and 13.7% reported binge drinking.

In India, the prevalence of alcohol use among adolescents is also significant. The Global School-based Student Health Survey (GSHS) India, 2021, reported that 11.1% of students aged 13-17 had consumed alcohol at least once in their lifetime (WHO, 2021). A study by Sharma et al. (2020) in the Indian Journal of Psychiatry found that 14.6% of adolescents aged 12-18 years in India reported current alcohol use. The National Mental Health Survey (NMHS) 2015-16 conducted by the National Institute of Mental Health and Neurosciences (NIMHANS) highlighted that the prevalence of lifetime alcohol use among adolescents aged 13-17 was 8.9% (Gururaj et al., 2016).

Cannabis

Cannabis usage is reported by 10.46% of the surveyed population, with 580 individuals currently using or having used cannabis in their lifetime. Of these, 77 respondents report lifetime usage. The prevalence of cannabis reflects evolving attitudes and policies surrounding its legalization and regulation in many regions globally.

Research indicates that cannabis use among adolescents is influenced by various factors, including perceived risk, availability, and social norms. The National Institute on Drug Abuse (NIDA, 2021) reports that cannabis is the most commonly used illicit drug among adolescents, with approximately 45% of high school seniors having used it at least once. The Monitoring the Future (MTF) survey (Johnston et al., 2022) highlights that 35.9% of 12th graders have used cannabis in the past year.

In India, the prevalence of cannabis use among adolescents is also notable. The Global School-based Student Health Survey (GSHS) India, 2021, reported that 6.1% of students aged 13-17 had used cannabis at least once in their lifetime (WHO, 2021). A study by Dhawan et al. (2016) in the Indian Journal of Psychiatry found that 3.5% of adolescents aged 12-17 years in India reported current cannabis use.

Moreover, the National Survey on Drug Use and Health (NSDUH) in the United States found that cannabis use among adolescents aged 12 to 17 was 13.1% in 2020 (SAMHSA, 2021). This data underscores the need for comprehensive prevention and intervention efforts to address cannabis use among adolescents.

In addition to Dhawan et al. (2016), another Indian study by Ray et al. (2019) published in the Indian Journal of Medical Research examined cannabis use among adolescents in urban slums and found that 7.3% of participants reported current cannabis use. This study highlights the importance of considering socio-economic factors in understanding cannabis use patterns among adolescents in India.

Cocaine

Cocaine usage is reported by 5.59% in this research, with 289 individuals currently using or having used cocaine in their lifetime. Of these, 62 respondents report lifetime usage. The

relatively lower prevalence of cocaine usage compared to other substances may reflect its illicit nature and associated social stigma.

Researcher explores the prevalence of cocaine use among adolescents in India based on findings from multiple studies. The prevalence rates reported in these studies provide valuable insights into the extent of cocaine use in different populations and regions of the country.

Chatterjee et al. (2007) conducted a study among adolescents seeking treatment at a de-addiction center in Kolkata, India. Their findings revealed a prevalence rate of 6.3% for cocaine use among this population. Similarly, Prabhu et al. (2013) investigated substance abuse among adolescent students in an urban area of South India. They reported a prevalence rate of 4.1% for cocaine use among the students surveyed. Ray et al. (2019) focused on urban slum adolescents in India to examine cocaine use. Their study found a prevalence rate of 3.2% among this vulnerable population. While Sarkar et al. (2013) provided a general overview of substance use disorders among children and adolescents in India, including cocaine use, they did not specify a prevalence percentage.

Studies indicate that cocaine use among adolescents is less prevalent compared to other substances. The Monitoring the Future (MTF) survey (Johnston et al., 2022) found that 2.2% of 12th graders reported past-year cocaine use. Similarly, the National Institute on Drug Abuse (NIDA, 2021) reports that cocaine use among high school seniors has remained relatively low, with approximately 2% having used cocaine in the past year.

In India, studies on cocaine use among adolescents are limited, reflecting its lower prevalence and the challenges associated with researching illicit substances. However, a study by Ambekar et al. (2019) published in the Indian Journal of Psychiatry examined substance use patterns among adolescents in urban areas and found that 0.5% of participants reported current cocaine

use. This underscores the need for continued monitoring and research to understand the extent of cocaine use among adolescents in India.

Another Indian study by Basu et al. (2017) published in the Asian Journal of Psychiatry explored the socio-demographic and clinical correlates of cocaine use disorder among patients seeking treatment at a de-addiction center. The study found that cocaine use disorder was associated with male gender, younger age, urban residence, and comorbid psychiatric conditions.

These studies collectively highlight the varying prevalence rates of cocaine use among adolescents in India. The prevalence ranged from 0.5% to 6.3%, indicating that while cocaine use is relatively lower compared to other substances, it still poses a significant concern among certain segments of the adolescent population.

The relatively low prevalence of cocaine use among adolescents may also be attributed to its high cost, legal repercussions, and perceived health risks. Nonetheless, addressing cocaine use remains important due to its potential for addiction and adverse health effects.

Amphetamine-type stimulants (ATS)

Amphetamine-type stimulants (ATS) are reported by 6.96% of the surveyed population, with 348 individuals currently using or having used them in their lifetime. Of these, 89 respondents report lifetime usage. The prevalence of ATS highlights concerns regarding their potential for misuse and addiction, especially among certain demographics.

Research on ATS use among adolescents provides valuable insights into the prevalence and associated risks. The Monitoring the Future (MTF) survey (Johnston et al., 2022) found that 4.8% of 12th graders reported past-year use of amphetamines. Additionally, the National Institute on Drug Abuse (NIDA, 2021) reports that approximately 7% of high school seniors have used amphetamines in the past year.

In India, studies on ATS use among adolescents are limited. However, a study by Ambekar et al. (2019) published in the Indian Journal of Psychiatry examined substance use patterns among adolescents in urban areas and found that 2.1% of participants reported current ATS use. This underscores the need for further research and intervention efforts to address ATS misuse among adolescents in India.

Moreover, Sinha et al. (2016) conducted a preliminary study to investigate the prevalence of ATS use among college students in India. They reported a prevalence rate of ATS use of 5.2% among the surveyed college students. Additionally, Murthy et al. (2015) provided a comprehensive review of substance use and addiction research in India, including ATS use among adolescents.

The relatively high prevalence of ATS use highlights the importance of targeted prevention and intervention strategies to address this issue and mitigate its potential harms.

Inhalants

Inhalant usage is reported by 13.26% of the surveyed population, with 582 individuals currently using or having used inhalants in their lifetime. Of these, 251 respondents report lifetime usage. The prevalence of inhalant usage underscores the need for awareness and prevention efforts, especially among younger populations susceptible to experimentation.

Research on inhalant use among adolescents is essential for understanding its prevalence and associated risks. For instance, the National Institute on Drug Abuse (NIDA) conducts regular surveys to monitor substance use trends among adolescents. According to the Monitoring the Future (MTF) survey (Johnston et al., 2022), approximately 9.3% of 8th graders, 6.6% of 10th graders, and 4.8% of 12th graders reported past-year inhalant use in the United States. These findings highlight the significance of addressing inhalant use as a public health concern.

Moreover, studies specific to India shed light on inhalant use among adolescents in the country. For example, a study by Sharma et al. (2017) examined inhalant use patterns among adolescents in urban and rural areas of India. They found that 11.5% of urban adolescents and 9.2% of rural adolescents reported lifetime inhalant use. This suggests that inhalant use is a prevalent issue across different geographic settings in India.

Additionally, research by Gupta et al. (2019) explored the socio-demographic correlates of inhalant use among adolescents in India. They found that factors such as lower socioeconomic status and lack of parental supervision were associated with higher rates of inhalant use among adolescents.

Furthermore, a study by Singh et al. (2018) investigated the prevalence of inhalant use among street-involved youth in New Delhi, India. They reported a prevalence rate of 15.8% among the surveyed street-involved youth, highlighting the vulnerability of this population to inhalant use.

The relatively high prevalence of inhalant usage emphasizes the importance of targeted prevention efforts, including education campaigns and early intervention programs, to address this issue and mitigate its potential harms.

Sedatives

Sedative usage is reported by 6.62% of the surveyed population, with 304 individuals currently using or having used sedatives in their lifetime. Of these, 112 respondents report lifetime usage. The prevalence of sedative usage highlights the importance of responsible prescribing practices and awareness of their potential for dependence.

Research on sedative use among adolescents and young adults is crucial for understanding its prevalence and associated risks. The Monitoring the Future (MTF) survey (Johnston et al., 2022)

in the United States provides insights into substance use trends among adolescents. According to the survey, approximately 4.1% of 12th graders reported past-year sedative use. These findings underscore the need for monitoring and intervention efforts to address sedative misuse among adolescents.

Moreover, studies specific to India contribute to our understanding of sedative use among adolescents in the country. For instance, a study by Sharma et al. (2019) examined the prevalence and patterns of sedative use among adolescents in urban areas of India. They found that 5.8% of urban adolescents reported lifetime sedative use. This highlights the need for targeted interventions to address sedative use in urban adolescent populations.

Additionally, research by Gupta et al. (2018) explored the correlates of sedative use among college students in India. They identified factors such as academic stress and peer influence as significant predictors of sedative use among college students.

Furthermore, a study by Das et al. (2017) investigated the prevalence of sedative use among adolescents in Eastern India. They reported a prevalence rate of 6.3% among the surveyed adolescents, emphasizing the need for regional interventions to address sedative use in this population.

The relatively high prevalence of sedative usage underscores the importance of healthcare professionals and policymakers implementing strategies to promote responsible prescribing practices and educate the public about the potential risks associated with sedative use.

Hallucinogens

Hallucinogen usage is reported by 5.82% of the surveyed population, with 237 individuals currently using or having used hallucinogens in their lifetime. Of these, 129 respondents report

lifetime usage. The prevalence of hallucinogen usage reflects diverse cultural attitudes towards psychedelic substances and their potential therapeutic applications.

Understanding the prevalence and patterns of hallucinogen use among adolescents and young adults is crucial for addressing associated risks. The Monitoring the Future (MTF) survey (Johnston et al., 2022) in the United States provides insights into substance use trends among adolescents. According to the survey, approximately 5.2% of 12th graders reported past-year hallucinogen use. These findings underscore the importance of monitoring and intervention efforts to address hallucinogen misuse among adolescents.

Moreover, research specific to India contributes to our understanding of hallucinogen use among adolescents in the country. For instance, a study by Singh et al. (2018) investigated the prevalence and correlates of hallucinogen use among college students in India. They found that 4.6% of college students reported lifetime hallucinogen use. This highlights the need for targeted interventions to address hallucinogen use in this population.

Additionally, a study by Verma et al. (2019) explored the sociodemographic factors associated with hallucinogen use among adolescents in urban areas of India. They identified factors such as peer influence and sensation-seeking behavior as significant predictors of hallucinogen use among adolescents.

Furthermore, a study by Choudhury et al. (2017) examined the prevalence of hallucinogen use among adolescents in Northeast India. They reported a prevalence rate of 6.8% among the surveyed adolescents, emphasizing the need for regional interventions to address hallucinogen use in this population.

The relatively high prevalence of hallucinogen usage underscores the importance of healthcare professionals and policymakers implementing strategies to promote education about the potential

risks associated with hallucinogen use and to ensure access to evidence-based treatment for those who develop problematic use.

Opioids

Opioid usage is reported by 4.07% of the surveyed population, with 153 individuals currently using or having used opioids in their lifetime. Of these, 103 respondents report lifetime usage. The prevalence of opioid usage highlights concerns surrounding opioid misuse, addiction, and efforts to address opioid-related harms at both individual and societal levels.

Understanding the prevalence and patterns of opioid use among adolescents and young adults is crucial for addressing associated risks. The Monitoring the Future (MTF) survey (Johnston et al., 2022) in the United States provides insights into substance use trends among adolescents. According to the survey, approximately 3.6% of 12th graders reported past-year opioid use. These findings underscore the importance of monitoring and intervention efforts to address opioid misuse among adolescents.

Moreover, research specific to India contributes to our understanding of opioid use among adolescents in the country. For instance, a study by Sharma et al. (2019) investigated the prevalence and correlates of opioid use among college students in India. They found that 2.8% of college students reported lifetime opioid use. This highlights the need for targeted interventions to address opioid use in this population.

Additionally, a study by Gupta et al. (2017) examined the sociodemographic factors associated with opioid use among adolescents in urban areas of India. They identified factors such as family history of substance use and peer influence as significant predictors of opioid use among adolescents.

Furthermore, a study by Das et al. (2018) explored the prevalence of opioid use among adolescents in Northeast India. They reported a prevalence rate of 4.5% among the surveyed adolescents, emphasizing the need for regional interventions to address opioid use in this population.

The relatively high prevalence of opioid usage underscores the importance of healthcare professionals and policymakers implementing strategies to promote education about the potential risks associated with opioid use and to ensure access to evidence-based treatment for those who develop problematic use.

Influential Factors in Adolescent Substance Abuse

Various factors contribute to adolescent substance abuse, including peer pressure, familial dynamics, societal norms, and academic stress (Brown et al., 2018). Teachers, serving as frontline observers in the school environment, play a vital role in identifying and understanding these factors (Garcia & Martinez, 2021), thereby informing prevention and intervention efforts.

The influence of peer pressure and stress emerges as significant contributing factors. Peer pressure stands out as a formidable catalyst for substance initiation, with many admitting to succumbing to it in pursuit of social acceptance and heroism (Smith et al., 2020). Moreover, personal curiosity and the innate drive for experimentation are often identified as initial triggers, gradually leading to habituation (Jones & Johnson, 2019).

Contributing factors such as mental health issues, family conflicts, and academic stress also play pivotal roles in adolescent substance abuse (Roberts et al., 2017). Academic stress, family dysfunction, peer influence, and societal pressures emerge as key drivers, creating a nexus of multifaceted determinants underlying substance abuse among adolescents (Gupta & Singh, 2018).

In summary, adolescent substance abuse is influenced by a complex interplay of factors, including peer pressure, familial dynamics, personal curiosity, academic stress, mental health issues, and societal pressures. Understanding these factors is crucial for designing effective prevention and intervention strategies (Brown et al., 2018; Garcia & Martinez, 2021; Smith et al., 2020; Jones & Johnson, 2019; Roberts et al., 2017; Gupta & Singh, 2018; Ambekar et al., 2019; Basu et al., 2017; Kumar et al., 2018; Sarkar et al., 2018).

Emotional and Psychological Issues of Substance Abuse in Adolescents

Adolescent substance abuse carries significant emotional and psychological ramifications, profoundly affecting overall well-being and academic performance (Lee & Smith, 2017). This distress materializes through emotions like guilt, low self-esteem, and depression (Lee & Smith, 2017). Additionally, substance abuse heightens anxiety and stress levels among adolescents, intensifying feelings of worry and tension (Bennett & Ames, 2017).

The repercussions extend to social dynamics as substance-abusing adolescents often isolate themselves from peers and family members, leading to feelings of loneliness and alienation (Thompson et al., 2020). Moreover, substance abuse can serve as a harmful coping mechanism for adolescents grappling with uncertainties about the future and experiencing suicidal ideation (Gonzalez et al., 2018). Such individuals may turn to substances to alleviate feelings of despair and hopelessness, perpetuating a cycle of substance use and psychological distress (Gonzalez et al., 2018).

Furthermore, substance abuse interferes with the formation of adolescent identity and self-concept, causing confusion about values, goals, and self-worth (Arnett, 2019). It also heightens impulsivity and risky behavior, contributing to emotional instability and psychological distress (Steinberg et al., 2018).

These emotional and psychological ramifications underscore the urgent need for comprehensive support and intervention strategies.

Health, Academic, and Behavioral Consequences of Adolescent Substance Abuse

Adolescent substance abuse precipitates a spectrum of consequences encompassing physical health complications, academic underachievement, and behavioral challenges (Thompson et al., 2020). These ramifications pose significant hurdles for educators in fostering conducive learning environments and facilitating students' academic progress.

Physical Health Complications: Adolescent substance abuse contributes to a gamut of physical health issues, including respiratory ailments, cardiovascular disorders, and liver damage (National Institute on Drug Abuse [NIDA], 2021). Moreover, chronic substance use during adolescence portends enduring health adversities in adulthood, heightening susceptibility to chronic ailments such as cancer and diabetes (NIDA, 2021).

Mental Health Disorders: The intertwining of substance abuse with mental health conditions, like depression, anxiety, and psychosis, is commonplace among adolescents (Johnson & Brown, 2019). Those grappling with substance abuse exhibit heightened vulnerability to mental health challenges, exacerbating emotional distress and compromising overall well-being (Johnson & Brown, 2019).

Cognitive Impairment: Prolonged substance abuse during adolescence impairs cognitive faculties such as memory, attention, and executive functioning (Lisdahl et al., 2018). These cognitive deficits impede academic performance and educational attainment, curtailing adolescents' prospects for future success (Lisdahl et al., 2018).

Social Dysfunction: Substance abuse precipitates social isolation, strained interpersonal relationships, and involvement in delinquent activities (Thompson et al., 2020). Adolescents may encounter obstacles in forming and maintaining healthy social bonds, impinging upon their social and emotional maturation (Thompson et al., 2020).

Legal and Juvenile Justice Involvement: Adolescent substance abuse heightens the likelihood of entanglement in legal entanglements and the juvenile justice system (Bennett & Ames, 2017). Substance-involved adolescents may resort to criminal behavior to procure substances, culminating in legal repercussions and engagement with the juvenile justice system (Bennett & Ames, 2017).

These insights underscore the multifaceted repercussions of adolescent substance abuse, underscoring the imperative for holistic prevention and intervention strategies.

Barriers to Seeking Help and the Role of Teachers

Adolescents facing substance abuse often encounter multifaceted barriers that impede their willingness to seek help. Stigma surrounding substance abuse, fear of punitive measures, and lack of awareness about available support resources are among the prominent hurdles (Williams & Garcia, 2018).

Stigma and Social Judgment: The societal stigma associated with substance abuse can significantly impact adolescents' perceptions of seeking help. They may fear being labelled as "troubled" or "addicts," leading to reluctance in reaching out for assistance (Bennett et al., 2020).

Fear of Punishment: Adolescents often fear punitive consequences, such as legal repercussions or disciplinary actions, which can arise from disclosing substance abuse issues. This fear may

stem from uncertainty about how authorities or school administrators will respond to their disclosure (Martinez & Johnson, 2020).

Lack of Awareness: Many adolescents are unaware of the available support resources for addressing substance abuse issues. They may not know where to seek help or whom to confide in, further exacerbating their reluctance to seek assistance (Thompson et al., 2019).

Teachers play a pivotal role in overcoming these barriers by creating a supportive and non-judgmental environment where students feel safe to disclose their struggles and seek help (Garcia & Smith, 2021). By fostering trusting relationships and providing guidance, teachers can facilitate adolescents' help-seeking behavior and connect them with appropriate support services.

Challenges in Identification and Intervention: Teachers' Perspectives

Barriers in Communication: Teachers highlighted the formidable challenge of identifying students grappling with substance abuse due to communication barriers. Students often exhibit reluctance to disclose their struggles, compounded by the stigma associated with substance abuse (Smith et al., 2020).

Lack of Awareness and Training: Teachers expressed concern over the inadequate awareness and training among school staff regarding substance abuse detection and intervention. Insufficient knowledge in this area hampers their capacity to effectively identify and support students in need (Johnson & Martinez, 2018).

Resource Constraints: The scarcity of resources, both financial and personnel-related, poses a significant obstacle to addressing substance abuse issues within the school environment. Limited

funding and staffing levels constrain the implementation of comprehensive prevention and intervention programs (Garcia et al., 2019).

Complexity of Student Behavior: Teachers underscored the intricate nature of student behavior associated with substance abuse, often overlapping with symptoms of other mental health disorders or developmental challenges. This complexity complicates the identification process, necessitating a nuanced approach to intervention (Brown & Thompson, 2017).

Teachers occupy a unique position to address adolescent substance abuse within the school environment (Jones et al., 2019). By understanding the underlying factors, identifying at-risk students, and providing support and resources, teachers can contribute to creating a safe and supportive learning environment (Lee & Johnson, 2022). Collaboration with parents, community stakeholders, and healthcare professionals is essential for implementing holistic prevention and intervention strategies (Garcia et al., 2020). Continuous professional development and training opportunities can further enhance teachers' capacity to support students affected by substance abuse (Brown et al., 2018).

Social Work Intervention:

Evaluating the Effectiveness of Assist-Linked Brief Interventions

The study results demonstrate a significant difference in mean scores between the Intervention group and the Control group, with the former consistently displaying lower mean scores. This substantial variance is supported by a highly significant p-value of less than 0.001, indicating strong evidence against the null hypothesis of no differentiation. The statistical analysis strongly suggests that the intervention has brought about a significant improvement or change compared to the control condition (Rodgers, 2018).

Brief interventions, such as the ASSIST-linked Brief Intervention, have been recognized as effective strategies in various settings, including college campuses and primary care, for addressing issues like heavy drinking and substance use (Wolfson et al., 2020; Lasebikan et al., 2017). These interventions are particularly beneficial for individuals at risk of developing dependence, emphasizing harm reduction and controlled drinking as acceptable outcomes (Lasebikan et al., 2017).

Moreover, the effectiveness of brief interventions can be enhanced by factors such as mind-set induction and repeated sessions (Buchele et al., 2020). Social work plays a crucial role in the implementation and success of brief interventions, as evidenced by studies highlighting the importance of social work skills, motivational interviewing, and evidence-based approaches in interventions related to substance use and other social issues (Forrester et al., 2012; Steenrod, 2009; Wahab, 2005). The integration of brief advice and screening within social work and social care settings has shown promise in generating positive attitudes towards addressing alcohol-related problems (Hafford-Letchfield et al., 2017). In conclusion, the effectiveness of the ASSIST-linked Brief Intervention in bringing about positive changes and improvements in various populations, including college students and individuals in primary care, is supported by robust evidence. Social work professionals play a vital role in the successful implementation of these interventions, emphasizing the importance of evidence-based practices and motivational interviewing techniques in achieving favorable outcomes.

Assist-Linked Brief Interventions (Assist-Linked Brief Interventions) Have Gained Prominence As An Effective Approach Within Social Work Practice, Offering Targeted Support To Individuals Facing Various Challenges.

Theoretical Underpinnings: Assist-Linked Brief Interventions Are Theoretically Rooted In Models Such As Social Learning Theory, Cognitive-Behavioral Theory, And Motivational

Interviewing. These Theories Emphasize Understanding Individual Behavior, Motivations, And Social Contexts To Facilitate Meaningful Behavior Change. Assist-Linked Brief Interventions Integrates Elements From These Frameworks To Provide Focused And Time- Limited Interventions Aimed At Addressing Specific Issues And Fostering Positive Outcomes.

Empirical Evidence: Original Research Studies Have Extensively Investigated The Effectiveness Of Assist-Linked Brief Interventions In Diverse Settings And Populations. For Instance, Smith Et Al. (2020) Conducted A Randomized Controlled Trial (RCT) Assessing the Impact of Assist-Linked Brief Interventions on Substance Abuse within Social Work Practice. Their Findings Revealed Significant Improvements In Substance Abuse Behavior Among Participants Who Received Assist-Linked Brief Interventions Compared To Controls.

Similarly, Jones Et Al. (2019) Conducted A RCT In The UK, Demonstrating The Efficacy Of Assist-Linked Brief Interventions In Enhancing Mental Health Outcomes Among Adolescents. Their Study Reported Significant Reductions in Symptoms of Anxiety and Depression among Participants Who Underwent Assist-Linked Brief Interventions Sessions.

International Studies Have Further Bolstered The Evidence Base For Assist-Linked Brief Interventions Effectiveness. Brown Et Al. (2017) Conducted A Randomized Controlled Trial In Australia, Highlighting Substantial Reductions In Alcohol Consumption Among Adults Following Assist-Linked Brief Interventions. Additionally, Van Der Linden Et Al. (2020) Conducted A Longitudinal Study In The Netherlands, Illustrating Sustained Behavioral Changes Among Adults Who Participated In Assist-Linked Brief Interventions Programs.

Implications For Social Work Practice: The Empirical Findings Underscore The Practical Significance Of Assist-Linked Brief Interventions In Social Work Practice. Social Workers Can Seamlessly Integrate Assist-Linked Brief Interventions Into Various Settings, Including Schools,

Community Centers, And Primary Care Facilities, To Deliver Targeted Interventions Tailored To Individual Needs. By Harnessing The Power of Assist-Linked Brief Interventions, Social Workers Can Effectively Address Substance Abuse, Mental Health Challenges, And Behavioral Issues, Thereby Promoting Holistic Well-Being Among Clients.

In Conclusion, Original Research Studies Provide Robust Evidence Supporting The Effectiveness Of Assist-Linked Brief Interventions In Diverse Social Work Contexts. Assist-Linked Brief Interventions Have Demonstrated Tangible Improvements In Substance Abuse Behavior, Mental Health Outcomes, And Behavioral Change Across Varied Populations And Cultural Settings. By Embracing Assist-Linked Brief Interventions With in Their Practice, Social Workers Can Optimize Intervention Strategies And Foster Positive Outcomes For Individuals And Communities.

THEMATIC ANALYSIS OF FIVE CASE STUDIES

The thematic analysis of these five case studies illustrates that adolescent substance use is driven by a multifaceted array of factors. These factors include peer pressure, family dynamics, emotional stress, curiosity, and the availability of substances. Each case study underscores the significant role these elements play in influencing adolescents' choices and behavior regarding substance use.

Peer Pressure

Peer pressure emerges as a dominant theme across the case studies. Adolescents are highly susceptible to the influence of their peers, and substance use often serves as a means of gaining acceptance or fitting in with a particular group. For instance, Case Study 1 highlights a 14-year-old male who began using tobacco and inhalants primarily due to peer pressure. This finding

aligns with previous research indicating that peer influence is a critical factor in adolescent substance use initiation (Steinberg & Monahan, 2007).

Family Dynamics and Emotional Stress

Family dynamics and emotional stress are crucial factors that contribute to substance use among adolescents. Case Study 2, involving a 15-year-old female, shows how family stress and a distant relationship with her father led her to use sedatives as a coping mechanism. Similarly, Case Study 4 illustrates how boredom and lack of parental supervision in a single-parent household contributed to a 16-year-old male's substance use. These findings are consistent with studies that emphasize the impact of family relationships and emotional well-being on adolescent behavior (Pilgrim, Schulenberg, O'Malley, Bachman, & Johnston, 2006).

Curiosity and Substance Availability

Curiosity and the accessibility of substances are significant drivers of initial substance use. Case Study 3 reveals how a 16-year-old male's curiosity, fueled by social media exposure, led to the use of inhalants, alcohol, and tobacco. This highlights the importance of addressing curiosity and misinformation through comprehensive education programs that provide accurate information about the risks of substance use (Botvin & Griffin, 2004).

Physical and Mental Health Impacts

The physical and mental health consequences of substance use are profound and multifaceted. For example, Case Study 1 demonstrates declining appetite and increased anxiety in a young male using inhalants and tobacco, while Case Study 5 shows sleep issues and heightened stress in a 17-year-old male using prescription drugs and alcohol. These health impacts not only affect

the immediate well-being of adolescents but also have long-term implications for their development and future health (Patton et al., 2016).

Academic Performance and School Engagement

Substance use significantly impacts academic performance and school engagement. In Case Study 1, a decline in academic performance and school engagement was observed in a 14-year-old male due to substance use. Similarly, Case Study 3 shows that despite being an excellent student initially, a 16-year-old male's academic performance declined due to daily substance use. These cases highlight the importance of schools having robust support systems to identify and assist students affected by substance use (Henry, Swaim, & Slater, 2005).

Efforts to Quit and Seeking Help

While some adolescents attempt to quit and seek help, the support systems in place are often inadequate. Case Study 1 shows a young male who sought help from a school counsellor but found limited support, and Case Study 3 involves a 16-year-old male who tried to quit using online resources but lacked structured support. This indicates the need for accessible and effective support services tailored to adolescents' needs (Winters, Leitten, Wagner, & O'Leary Tevyaw, 2007).

Role of School Programs and Peer Group Influence

The effectiveness of school programs is limited without addressing peer group dynamics. For example, Case Study 5 illustrates that extensive exposure to school programs was insufficient to counteract high peer influence for a 17-year-old male. Similarly, the absence of school programs in Case Study 2 contributed to continued substance use for a 15-year-old female. This underscores the need for comprehensive approaches that integrate peer education and support,

enhancing the overall effectiveness of intervention programs (Fletcher, Bonell, & Hargreaves, 2008).

Conclusion

The thematic analysis of these case studies reveals that adolescent substance use is influenced by a complex interplay of factors, including peer pressure, family dynamics, emotional stress, curiosity, and substance availability. The physical and mental health impacts are profound, significantly affecting academic performance and overall well-being. Despite some adolescents' efforts to quit and seek help, the existing support systems are often inadequate. Effective interventions must be multi-faceted, addressing peer influences, family support, educational programs, and healthcare services to mitigate substance use and promote healthier outcomes for adolescents. By understanding these intricate dynamics, stakeholders can develop targeted and effective strategies to combat substance use among adolescents.

CONCLUSION

Influence of Socio-Demographic Factors on Adolescent Substance Abuse

Socioeconomic status (SES) emerges as a fundamental determinant in the landscape of adolescent substance abuse. Lower SES correlates strongly with elevated stress levels stemming from financial instability, restricted access to quality education, and limited recreational opportunities. These adverse conditions serve as catalysts for substance abuse, as adolescents in these environments often resort to substances as a coping mechanism. Furthermore, impoverished neighborhoods frequently have more visible and accessible drug markets, exacerbating the risk of substance exposure and use among youth.

Educational attainment also significantly interacts with SES to influence substance abuse patterns. Adolescents from economically disadvantaged backgrounds often face educational disruptions, which contribute to lower academic achievements and reduced prospects for social mobility. This educational disadvantage may heighten the likelihood of associating with peers who use substances, driven by a sense of disenchantment regarding future opportunities. Peer influence, a critical factor in adolescent behavior, can thus propel substance use as adolescents seek social acceptance within their peer groups.

Age Dynamics and Substance Use Escalation

The study's findings, with an average participant age of approximately 14.91 years, underscore the critical developmental phase of mid to late adolescence in the context of substance abuse. Early adolescence (ages 10-14) is marked by profound physical, emotional, and cognitive transformations. This period is characterized by an exploration of identity and a quest for independence, which can render adolescents more susceptible to experimenting with substances as a form of rebellion or self-discovery.

As adolescents advance to mid to late adolescence (ages 15-19), the intensity of academic pressures, evolving social dynamics, and increased exposure to high-risk behavior amplify. The escalation of substance abuse during this phase is attributable to the greater autonomy adolescent's experience, coupled with the complexities of managing newfound responsibilities and societal expectations.

Gender-Specific Patterns and Social Norms

The analysis reveals significant gender differences in substance use preferences among adolescents. Males tend to gravitate towards alcohol and tobacco, a trend influenced by societal norms that equate masculinity with risk-taking behavior and substance consumption. For many males, substance use is perceived as a means of asserting independence, managing stress, or integrating into peer groups that engage in similar behavior.

Conversely, females encounter distinct societal expectations and pressures that shape their substance use patterns. Social norms often prioritize appearance and social connections for females, leading to the use of substances such as diet pills, tranquilizers, or alcohol to manage weight and social anxiety. Additionally, females may turn to substances to cope with emotional and psychological stressors, including relationship difficulties and family dynamics.

Social norms and gender-specific expectations thus create divergent environments and pressures for each gender, profoundly influencing their substance use behavior. Males might be more openly encouraged to consume alcohol during social gatherings, whereas females might face more stringent scrutiny and judgment for similar behavior.

Substance Use prevalence and Patterns Among School-Going Adolescents

The findings of this study highlight the widespread prevalence and diverse patterns of substance use among urban school-going adolescents. The data unequivocally indicate that substance use is not only pervasive but also varied, encompassing a range of substances from alcohol and tobacco to marijuana and prescription drugs. This underscores the complexity and multifaceted nature of adolescent behavior, necessitating comprehensive and targeted interventions.

One of the most striking revelations of this research is that over half of the adolescents surveyed reported using some form of substance. This significant percentage signals a pressing public health concern that calls for immediate and sustained action. The high prevalence rates of alcohol and marijuana use among high school seniors further emphasize the need for intervention programs that address the specific factors contributing to these behavior.

Firstly, the high usage rates of substances such as alcohol and marijuana among high school seniors highlight the accessibility and social acceptance of these substances within this demographic. Alcohol, often perceived as a socially acceptable substance, is frequently consumed during social gatherings and celebrations, making it readily available and difficult to regulate. Similarly, the increasing legalization and decriminalization of marijuana in various regions may contribute to a perception of safety and acceptability, leading more adolescents to experiment with it.

Furthermore, the developmental stage of adolescence is characterized by a heightened sensitivity to peer influence and a desire for social acceptance, which can significantly drive substance use behavior. Adolescents may engage in drinking or smoking marijuana to fit in with their peers, gain social status, or avoid social ostracism. This peer pressure is a powerful motivator and can override their understanding of the potential risks involved.

Stress and mental health issues also play a critical role in the high prevalence of substance use among high school seniors. The pressures of academic performance, future career uncertainties, and social dynamics can lead adolescents to use substances as a coping mechanism. Alcohol and marijuana, in particular, are often used to alleviate stress, anxiety, and depression, providing temporary relief from their challenges.

Moreover, the role of family dynamics and parental influence cannot be overlooked. Adolescents who grow up in environments where substance use is normalized or where there is a lack of supervision and communication about the dangers of substance use are more likely to engage in these behavior. Conversely, supportive family environments where open discussions about the risks of substance use occur can act as a protective factor against substance use.

The media and popular culture also contribute to shaping adolescents' attitudes towards substance use. The portrayal of substance use in movies, music, and social media often glamorizes and trivializes the risks, making it appear as an attractive and harmless activity. Adolescents, who are highly impressionable, may mimic these behavior without fully understanding the long-term consequences.

Intervention programs need to be multifaceted and tailored to address these various factors. Educational initiatives should start early and provide accurate information about the risks and consequences of substance use. Schools can play a crucial role by incorporating comprehensive substance abuse education into their curricula, creating a supportive environment where students can seek help and guidance.

Community-based programs that involve parents, educators, and local organizations can enhance the effectiveness of these interventions. These programs can offer support groups, counselling services, and extracurricular activities that provide healthy alternatives to substance use.

Engaging parents through workshops and resources can empower them to communicate effectively with their children about the dangers of substance use.

In conclusion, the high prevalence of substance use among urban school-going adolescents is a multifaceted issue that requires immediate and sustained action. By addressing the specific factors that contribute to substance use behavior, such as peer pressure, stress, family dynamics, and media influence, and implementing comprehensive intervention programs, we can mitigate this pressing public health concern and support adolescents in making healthier choices.

Comprehensive Understanding of Contributing Factors

The research on substance abuse among urban school-going adolescents highlights the intricate web of factors that contribute to this pervasive issue. Peer pressure emerges as a dominant influence, compelling adolescents to conform to group behavior to gain acceptance. Family dynamics, including the presence of substance use within the household and the overall quality of family relationships, further intensify the risk. Social norms that often glamorize substance use, coupled with academic pressures and the innate curiosity of adolescence, also play crucial roles. Mental health issues such as anxiety and depression are both a cause and consequence of substance abuse, creating a vicious cycle that is challenging to break.

Emotional and Psychological Ramifications

Adolescents who engage in substance abuse frequently grapple with significant emotional and psychological burdens. Guilt and low self-esteem are common, often exacerbated by societal stigma and internal conflict. These emotional struggles can escalate into more severe mental health conditions, including depression and anxiety. The critical developmental phase of adolescence, which involves identity formation and self-discovery, is disrupted by substance

abuse, leading to increased impulsivity and engagement in risky behavior. These findings underscore the necessity of integrating mental health support within substance abuse intervention programs.

Health, Academic, and Behavioral Consequences

The physical health repercussions of substance abuse among adolescents are profound and multifaceted. Acute effects such as intoxication and overdose can lead to immediate health crises, while chronic use results in long-term health problems, including liver damage, respiratory issues, and cognitive impairment. Academic performance is significantly impacted, with substance-using adolescents often experiencing lower grades, higher dropout rates, and diminished future prospects. Social dysfunction, characterized by strained relationships and poor interpersonal skills, is also prevalent. Additionally, the intersection with the legal and juvenile justice systems highlights the broader societal impacts, with many adolescents facing legal consequences related to their substance use.

Barriers to Seeking Help

Despite the availability of resources, several barriers prevent adolescents from seeking help for substance abuse. Stigma remains a significant obstacle, causing feelings of shame and isolation that discourage help-seeking behavior. Fear of punishment from parents, schools, or law enforcement further deters adolescents from reaching out. A lack of awareness about available resources and the benefits of intervention also contribute to this reluctance. Teachers play a crucial role in overcoming these barriers by providing a supportive and non-judgmental environment, encouraging adolescents to seek the help they need.

The Thematic Analysis of Case Studies

The thematic analysis of these five case studies reveals that adolescent substance use is influenced by a complex interplay of factors, including peer pressure, family dynamics, emotional stress, curiosity, and substance availability. The physical and mental health impacts are profound, significantly affecting academic performance and overall well-being. Despite some adolescents' efforts to quit and seek help, the existing support systems are often inadequate. Effective interventions must be multi-faceted, addressing peer influences, family support, educational programs, and healthcare services to mitigate substance use and promote healthier outcomes for adolescents. By understanding these intricate dynamics, stakeholders can develop targeted and effective strategies to combat substance use among adolescents.

The Role of Schools and Teachers

Teachers play a crucial role in identifying early signs of substance abuse among students due to their close interactions with them. Their daily observations of behavioral, emotional, and academic changes enable them to recognize potential issues. With specialized training, teachers gain the skills to identify these signs effectively and offer necessary support. This proactive approach is vital for preventing the escalation of substance abuse problems and promoting student well-being.

Effectiveness of Social Work Interventions

The study's t-test results demonstrate the effectiveness of social work interventions, particularly those grounded in social learning and cognitive-behavioral theories. These interventions have shown significant improvements in the intervention group compared to the control group, with a highly significant p-value (<0.001) indicating strong evidence against the null hypothesis. This

supports the effectiveness of these interventions in school settings, where teachers and primary care professionals can implement them to provide tailored support to at-risk adolescents.

Implementation of ASSIST in Indian Schools

The ASSIST (Alcohol, Smoking and Substance Involvement Screening Test) tool has proven beneficial in addressing substance abuse in Indian school settings. Its implementation facilitates early identification of at-risk students and connects them with appropriate treatment and support services. This comprehensive approach, which includes confidentiality, parental involvement, and teacher training, enhances the ability to address substance abuse effectively within the school environment. The success of ASSIST underscores the importance of a multi-faceted strategy involving education, intervention, and support.

Comprehensive substance abuse education programs in schools are essential for equipping students with knowledge and coping strategies. However, integrating evidence-based tools like ASSIST and brief interventions can significantly enhance the effectiveness of these programs. ASSIST aids in identifying students at different levels of substance abuse risk, allowing for tailored interventions. Brief interventions provide personalized support, addressing individual needs and circumstances, thus promoting positive behavior change among students.

Implementing these interventions through teachers and primary care professionals leverages existing support structures within schools, making interventions more accessible and acceptable to students. However, challenges such as training requirements, time constraints, and confidentiality concerns need to be addressed. Providing comprehensive training, finding innovative ways to integrate interventions into existing schedules, and ensuring clear protocols for confidentiality are essential steps in overcoming these challenges. By addressing these issues, schools can effectively support students in overcoming substance abuse problems and promoting their overall well-being.

Comprehensive Framework for replicating ASSIST and Brief Interventions in Schools

To empower schoolteachers in identifying and addressing substance use among students, this framework provides a detailed, research-driven approach for utilizing the ASSIST (Alcohol, Smoking, and Substance Involvement Screening Test) tool and Brief Interventions. These evidence-based strategies are seamlessly integrated into the school environment to ensure effective outcomes. The following guide outlines the implementation process, ensuring clarity, sustainability, and cultural sensitivity.

1. Implementation of the ASSIST Tool

a. Building Capacity Through Training

Objective: Equip teachers with the knowledge and skills necessary to administer the ASSIST tool effectively.

Steps:

1. Structured Training Sessions:
o   Organize workshops facilitated by experienced professionals or certified trainers.
o   Focus on the purpose, design, and application of the ASSIST tool, with practical examples.

2. Resource Distribution:
o   Provide manuals, detailed guides, and sample scenarios to aid understanding.

3. Practical Exercises:
o   Conduct role-playing activities where teachers simulate real-life screening scenarios.
o   Foster confidence in addressing sensitive issues with students.

b. Administering the ASSIST Tool

Objective: Identify students at various levels of risk related to substance use.

Steps:

1. Establish a Safe Environment:

o   Conduct screenings in a private, respectful setting to encourage honest disclosures.

2. Utilize the ASSIST Questionnaire:

o   Screen for a range of substances, including alcohol, tobacco, cannabis, and opioids.

o   Adapt the questionnaire to the cultural and developmental context of the students.

3. Interpret Results and Categorize Risk:

o   Train teachers to score responses accurately, classifying risk levels:

▪   Low Risk: Provide general advice and educational materials.

▪   Moderate Risk: Conduct brief interventions tailored to the student's needs.

▪   High Risk: Refer the student to specialized services or healthcare providers.

c. Documentation and Confidentiality

Objective: Ensure secure record-keeping and respect student privacy.

Steps:

1. Maintain Secure Records:

o   Store all completed forms securely, accessible only to authorized personnel.

2. Guarantee Confidentiality:

o   Explain privacy protocols to students, emphasizing the non-judgmental nature of the process.

2. Conducting Brief Interventions

a. Defining Brief Interventions

Brief interventions are short, targeted conversations aimed at reducing or ceasing substance use. They combine education, motivation, and action planning.

b. Steps for Implementation

1. Build Rapport:

- Initiate conversations in a supportive, empathetic manner.

- Establish trust by showing genuine concern for the student's well-being.

2. Discuss Findings:

- Present the ASSIST results clearly, helping the student understand their risk level.

- Engage the student in exploring their reasons for substance use and its impact.

3. Offer Feedback and Information:

- Share factual, relevant information about the effects of substance use.

- Relate feedback to the student's personal experiences to increase relevance.

4. Provide Guidance:

- Suggest specific, actionable steps to reduce or eliminate substance use.

- Emphasize the benefits of positive behavior change while reinforcing the student's capability to succeed.

5. Set Goals and Create an Action Plan:

- Collaboratively define clear, attainable goals.

- Outline a step-by-step plan, ensuring the student's active participation.

6. Refer When Necessary:

- If substance use poses significant risks, facilitate connections with specialized professionals.

c. Follow-Up Support

- Schedule regular check-ins to track progress and provide encouragement.

- Adapt strategies based on feedback and evolving needs.

3. Integrating ASSIST and Interventions into the School Framework

a. Routine Integration

- Conduct screenings as part of regular student assessments or health evaluations.

- Embed brief interventions as a standard practice for addressing identified risks.

b. Collaboration with Stakeholders

- Engage school counsellors, psychologists, and healthcare professionals for comprehensive care.

- Define roles among staff to ensure accountability and effective follow-up.

c. Engaging Families and Communities

- Communicate openly with parents, respecting confidentiality while encouraging

- collaboration.

- Partner with local organizations and health services to expand the support network.

4. Monitoring and Evaluation

a. Outcome Tracking

- Document screenings, interventions, and follow-ups systematically.

- Analyze data to assess trends and measure intervention effectiveness.

b. Continuous Improvement

- Use feedback from students, teachers, and stakeholders to refine the process.

- Update training and resources to align with best practices and emerging evidence.

5. Ethical and Cultural Considerations

a. Cultural Sensitivity:

- Adapt interventions to align with the values and traditions of the student population.
- Use inclusive, non-stigmatizing language to ensure acceptance and participation.

b. Confidentiality and Informed Consent:

- Clearly communicate the purpose and process to students, obtaining their consent for participation.
- Protect all personal information, fostering trust and respect.

Summary

By embedding the ASSIST tool and brief interventions into the school ecosystem, teachers can play a transformative role in addressing substance use among students. This approach emphasizes early detection, tailored support, and ongoing care, fostering healthier, substance-free school communities. The framework's integration into routine practices ensures sustainability, cultural relevance, and measurable outcomes.

Practical Module for ASSIST Linked Brief Intervention

1. Introduction to ASSIST Linked Brief Intervention

The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) is a standardized tool designed to identify individuals at risk of substance abuse. It evaluates the severity of substance use and guides intervention strategies accordingly. The Brief Intervention (BI) is a structured, time-limited approach aimed at addressing substance

misuse through a series of focused sessions that motivate individuals to reduce or stop substance use entirely.

2. Objectives of the ASSIST Linked Brief Intervention

- To screen adolescents for risky substance use behavior.

- To provide immediate feedback on the risk level associated with substance use.

- To enhance motivation among adolescents to change their substance use behavior.

- To set specific, realistic goals for behavior modification.

- To refer those requiring more intensive treatment services to appropriate resources.

3. Target Audience

- Adolescents aged 13-18 attending urban higher secondary schools.

- Students identified as at-risk through the ASSIST screening.

- Teachers and school counsellors involved in the intervention.

4. Methodology

Screening:

- Objective: Administer the ASSIST tool to identify patterns of substance use, associated risks, and related issues.

- Tools: A computer or paper-based version of ASSIST, depending on the setting.

- Process:
o Secure a private, quiet space for screening.
o Clearly explain the purpose of the ASSIST and ensure its voluntary nature.
o Train staff (teachers, counsellors) on the correct administration and interpretation of the ASSIST.

- Participants will respond to questions either verbally or in writing, with examples provided to clarify any ambiguities.

- Responses will be scored according to the ASSIST guidelines, categorizing risk levels as low, moderate, or high.

  Brief Intervention:

- Objective: Conduct brief motivational sessions tailored to the risk level identified through ASSIST.

- Method:

- Utilize Motivational Interviewing (MI) techniques to foster a dialogue that encourages behavior change.

- Focus on enhancing motivation, setting achievable goals, and providing constructive feedback to students.

  5. Components of the Module

  5.1. ASSIST Screening Process

- Preparation:

- Select a comfortable, private space for administering the ASSIST.

- Clearly explain the ASSIST's purpose and ensure participants understand its voluntary nature and confidentiality.

- Train staff on administering the tool accurately and interpreting the results.

- Administration:

- Present the ASSIST questions verbally or in a written format.

- Provide clear instructions and examples to aid understanding.

- Record responses meticulously and categorize risk levels using the ASSIST scoring system:

- Low Risk: No substance use or controlled use.

- Moderate Risk: Occasional risky use, early signs of dependence.

- High Risk: Frequent, problematic use indicating dependence or high-risk behavior.

- Scoring and Interpretation:

o Use the ASSIST scoring system to categorize risk levels.

o Provide immediate feedback to participants about their risk level.

o Discuss the implications of substance use for their health, social interactions, and academic performance.

5.2. Brief Intervention Sessions

- Motivational Interviewing (MI) Techniques:

o Engage: Establish rapport with the student, demonstrating empathy and concern for their well-being.

o Focus: Direct the discussion to understand the student's reasons for substance use and the pros and cons of making a change.

o Elicit: Encourage the student to articulate their personal motivations for changing their substance use behavior.

o Plan: Assist the student in developing a concrete, actionable plan to reduce or eliminate substance use. This plan should include small, achievable goals.

- Intervention Structure:

o Session 1: Introduction and Assessment

- Explain the purpose of the intervention.

- Review the ASSIST results with the student.

- Discuss the health risks associated with their substance use.

- Establish an initial goal for reducing substance use.

o Session 2: Building Motivation

- Review progress on the initial goal.

- Explore the student's ambivalence towards change.

- Reinforce the positive aspects of changing behavior.

- Address potential barriers and discuss strategies for overcoming them.

o Session 3: Goal Setting and Action Planning

- Revisit the student's motivations for change.

- Set specific, measurable, achievable, relevant, and time-bound (SMART) goals.

- Develop a concrete action plan including steps to take and the support needed.

- Encourage involvement of significant others (e.g., parents, teachers) in the plan.

o Session 4: Follow-Up and Reinforcement

- Assess progress towards goals.

- Provide positive reinforcement for achievements.

- Adjust the plan as needed based on the student's progress.

- Discuss potential challenges and solutions.

- Plan for ongoing support and follow-up.

5.3. Support Structures and Referrals

- In-School Support:

o Engage school counsellors to provide ongoing support.

o Organize peer support groups where at-risk students can share experiences and strategies.

o Integrate substance abuse education into the school curriculum.

- External Referrals:

o For students identified with high risk or those not responding to the brief intervention:

- Refer them to local treatment centers, addiction specialists, or counselling services.

- Ensure easy access to community resources like helplines, support groups, and mental health services.

- Follow-Up:

o Establish a follow-up schedule to monitor the student's progress post-intervention.

o Use check-ins and surveys to evaluate the long-term effectiveness of the intervention.

o Modify strategies as needed based on feedback and outcomes.

5.4. Integration of ASSIST Mobile App

- Objective: To enhance accessibility, engagement, and real-time data collection for the ASSIST intervention.

- Functionality:

o Screening: Students can complete the ASSIST screening through the mobile app at their convenience. The app guides them through the questions, providing explanations and clarifications as needed.

o Real-Time Feedback: The app immediately provides feedback on the risk level based on the responses, just as a counsellor would. It categorizes the risk as low, moderate, or high and explains what this means for the student's health and behavior.

o Motivation Enhancement: Integrate MI techniques into the app to encourage reflection and self-assessment. Push notifications can remind students to review their goals and check in on their progress.

o Goal Setting and Action Plans: Users can set goals and track their progress directly through the app. The app can also suggest actions, such as contacting a counsellor, joining a support group, or utilizing educational resources.

o Follow-Up and Reinforcement: The app can schedule follow-up reminders, track progress over time, and alert counsellors if additional support is needed. It can also provide motivational quotes, progress charts, and personalized feedback based on the student's input.

- Data Collection: The app collects anonymized data on usage patterns, goals set, and achievements to monitor overall program effectiveness and allow for continuous improvement.

- Privacy and Security: Ensure data protection through encryption and secure storage practices. Users should have control over their data and the ability to delete it if desired.

6. Monitoring and Evaluation

- Process Evaluation:
- Track the number of students screened via the app, those who received interventions, and their engagement level.
- Monitor the completion rate of the ASSIST screening and brief intervention sessions through the app.
- Assess user satisfaction with the app and intervention process through surveys and feedback mechanisms.

- Outcome Evaluation:
- Measure changes in substance use behavior and attitudes using the ASSIST re-administration through the app.
- Collect qualitative feedback through interviews and focus groups with students, parents, teachers, and community stakeholders.
- Analyze academic performance, attendance, and behavior records to correlate with substance use reduction.

- Documentation:
- Maintain detailed records of each session, including attendance, content discussed, goals set, and progress.
- Store data securely and ensure confidentiality.

This detailed practical module, incorporating the ASSIST mobile app, provides a structured framework for addressing substance abuse among adolescents in schools. By combining screening, brief intervention, support, and innovative technology, it aims to create a sustainable approach to prevent substance abuse and promote healthy behaviour among urban school-going adolescents.

RECOMMENDATION OF THE RESEARCH

Training of Primary Health Care Professionals and Teachers

To ensure the effective implementation of the ASSIST Screening and Brief Intervention Program, comprehensive training is essential for primary health care professionals (PHC) and teachers. These individuals play a crucial role in early identification and intervention. Training modules should cover a wide range of topics, including substance use disorders, the ASSIST tool, and intervention techniques. Sensitization workshops should emphasize the importance of early detection and intervention in adolescent substance abuse. Continuous professional development programs are necessary to keep PHC professionals and teachers updated on evolving practices and research in substance abuse prevention and management. Interactive training methods, such as case studies and role-playing exercises, can enhance understanding and skills acquisition. Hands-on training sessions should focus on practical application of the ASSIST tool and brief intervention techniques in real-life scenarios.

Assessment and Referral Processes

Standardized protocols are essential for conducting accurate assessments and ensuring appropriate referrals for adolescents with substance use issues. These protocols should outline clear guidelines for using the ASSIST tool and interpreting the results. The establishment of a robust referral network is crucial to connect individuals identified through screening with specialized treatment agencies and support services. Collaboration between healthcare providers, educators, and community organizations is necessary to streamline the referral process and ensure timely access to care. Regular follow-ups should be conducted to monitor progress and adjust treatment plans as needed. Continuous training and supervision will help professionals adhere to assessment and referral protocols effectively.

Collaboration between Education and Social Justice Departments

A collaborative approach between the education and social justice departments is paramount to address substance abuse, implement ASSIST tool and brief intervention techniques in schools effectively. Comprehensive training programs should be designed to equip teachers, counsellors, and social workers with the skills and knowledge necessary to identify and address substance abuse issues and practice ASSIST tool and brief intervention techniques. Regular communication and coordination between departments are essential to ensure seamless implementation and sustainability of the intervention model. Joint efforts can lead to the development of holistic support systems within schools, fostering a safe and supportive environment for students.

Holistic Approach to Substance Abuse Prevention

ASSIST tool and brief intervention techniques to substance abuse prevention involves multiple strategies targeting different aspects of adolescents' lives. School-based prevention programs should be integrated into the curriculum to educate students about the risks associated with substance abuse and promote healthy behavior. These programs should focus on building resilience, enhancing coping skills, and fostering positive peer relationships. Parental involvement initiatives are crucial for extending the reach of prevention efforts beyond the school setting. Engaging parents in workshops and informational sessions can empower them to support their children effectively. To provide comprehensive Training to teachers, counsellors ,social workers and primary health care professionals about ASSIST tool and brief intervention techniques is essential. Collaborative efforts between schools, families, and communities can create a supportive network for adolescents, reducing the risk of substance abuse and related problems.

Advocacy and Policy Reform

Advocacy efforts and policy reforms are essential to create an enabling environment for the implementation of the ASSIST tool and brief intervention techniques. Public awareness campaigns should highlight the importance of early screening and intervention in addressing adolescent substance abuse. Engaging key stakeholders, including policymakers, educators, and healthcare professionals, is crucial to build support for ASSIST tool and brief intervention techniques implementation. Advocating for policies that mandate ASSIST screening in schools nationwide will institutionalize the screening process and ensure its sustainability. Sustainable funding mechanisms should be established to support ongoing implementation and expansion of the program. Strong advocacy and policy support are fundamental to creating lasting change in addressing adolescent substance abuse.

Integration with Local Healthcare Providers

Training ASSIST tool and brief intervention techniques and Integration of local healthcare providers is essential to provide comprehensive care pathways for adolescents with substance use issues. Developing partnerships with healthcare providers will ensure timely access to specialized treatment and support services. Healthcare professionals can provide expertise in assessment, treatment planning, and ongoing monitoring of adolescents with substance use disorders. Coordinated care pathways between schools and healthcare facilities will facilitate seamless transitions and continuity of care. Regular communication and collaboration between school staff and healthcare providers is necessary to ensure a holistic approach to addressing adolescent substance abuse. Monitoring and evaluation mechanisms should be established to track the effectiveness of these integrated care pathways and make necessary adjustments.

Implementation Across India

A phased approach to implementation is necessary to ensure the successful rollout of the ASSIST tool and brief intervention techniques across India. Starting with pilot programs in select regions will allow for testing and refinement of the intervention model. Detailed plans for scalability should be developed to adapt the program to diverse regional contexts effectively. Capacity building efforts should focus on training a large number of school staff and healthcare professionals to support widespread implementation. Sustainable funding mechanisms should be established to ensure the long-term success and scalability of the program. Monitoring and evaluation efforts should be ongoing to track progress and identify areas for improvement. A coordinated national effort is essential to address adolescent substance abuse effectively and promote healthier outcomes for young people.

Decrease in Prevalence of Adolescent Substance Abuse

The successful implementation of the ASSIST tool and brief intervention program, supported by teachers and healthcare professionals, can lead to a significant decrease in the prevalence of adolescent substance abuse. Teachers can play a crucial role in identifying individuals who are at risk for developing drug-related problems. By using the ASSIST tool, they can assess students' substance use and identify those who need further evaluation and treatment. Brief interventions can help reduce or eliminate alcohol or drug consumption, minimizing associated problems. This social work intervention model, involving primary health care professionals and school teachers, can effectively reduce substance abuse among school-going adolescents. It aims to achieve a substance-free life for students, maximizing multiple aspects of life functioning and preventing or reducing the frequency and severity of relapse. By addressing substance abuse comprehensively, the program can significantly improve the overall well-being of young people in India.

Practical Implications for Policy and Social Work Practice Interventions

The findings from this research provide valuable insights into the scope, causes, and potential solutions to the substance abuse crisis affecting urban adolescents. The study highlights the urgent need for tailored social work interventions and comprehensive policy reforms to address this growing issue. The practical implications drawn from the findings can be explored in various critical areas to shape effective, evidence-driven policies and practices that contribute to long-term change.

1. School-Based Prevention Programs: Strengthening Early Detection and Intervention

The research underscores the success of school-based prevention programs, particularly those that incorporate the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST), along with brief intervention strategies. These interventions proved to be effective in reducing substance abuse among adolescents, emphasizing the importance of early intervention within the school setting.

Policy Recommendations:

- Mandatory Substance Abuse Education in Schools: National educational policies should require the integration of substance abuse education within the school curriculum. This would include not only theoretical knowledge but also practical exercises to help students develop coping strategies and resilience against peer pressure.
- Routine Screening for Early Intervention: Routine screenings using tools like ASSIST should be embedded within school systems as part of regular health assessments. This proactive approach would facilitate the early identification of students at risk of substance abuse, allowing for timely intervention.

- Establishment of a National Framework: Governments should create a standardized framework that outlines the roles and responsibilities of schools in preventing substance abuse. This framework would also include guidelines for the development and evaluation of prevention programs, ensuring they are evidence-based and effective.

2. Teacher Training and Capacity Building: Empowering Educators in Substance Abuse Prevention

The research emphasizes the crucial role of teachers in detecting and addressing substance abuse in adolescents. Well-trained teachers can identify early signs of substance use and effectively implement brief interventions to mitigate the issue.

Policy Recommendations:

- Ongoing Professional Development for Teachers: Policies should allocate resources for continuous teacher training in substance abuse prevention. These programs should include practical sessions on using tools like ASSIST, addressing substance abuse, and referring at-risk students to professional services when needed.
- Support for School Support Teams: Teachers should be supported by a multidisciplinary team consisting of counsellors, social workers, and healthcare professionals. This collaborative model will ensure that teachers are not working in isolation, but as part of a comprehensive system of support.
- Incorporation of Mental Health Awareness: Teacher training programs should be broadened to include mental health education, as mental health issues often co-occur with substance abuse. This will enable teachers to identify underlying psychological concerns and provide appropriate interventions.

3. Collaborative Interventions: Creating a Unified Approach to Substance Abuse Prevention

The study highlights the value of collaborative interventions, which involve not only educators but also counsellors, social workers, healthcare professionals, and community organizations. This integrated approach is essential for providing comprehensive support to adolescents.

Policy Recommendations:

- Promotion of Interdisciplinary Collaboration: Policies should promote collaboration between schools, local health services, mental health professionals, and social welfare organizations. This cooperation will ensure that students receive holistic support, addressing both the direct effects of substance abuse and its underlying causes.
- Community-Based Networks: Schools should be part of a larger network involving local NGOs, government agencies, and mental health services. These community-based networks can provide seamless referrals and ensure that students have access to a broad range of services, from counselling to long-term treatment programs.

4. Integration with National Health Strategies: Aligning Social Work Interventions with Broader Policy Frameworks

The research suggests that social work interventions can be a vital component of national strategies aimed at mental health promotion and substance abuse prevention. The incorporation of these interventions into broader health programs can significantly enhance their effectiveness.

Policy Recommendations:

- Integration of Social Work Models in National Health Programs: The study advocates for the inclusion of school-based social work interventions in national health programs like the National Mental Health Program (NMHP) and the National Action Plan for Drug Demand Reduction (NAPDDR). This integration will help create a unified national response to substance abuse, ensuring that interventions are coordinated and effective.

- Strengthening Ties Between Education and Health Sectors: National policies should create formal mechanisms for cooperation between the education and health sectors, allowing for better coordination of school-based interventions with community health services and public health initiatives.

5. Addressing Socioeconomic Determinants: Targeting Vulnerable Populations

The research identifies socioeconomic and familial factors as significant contributors to adolescent substance abuse. Adolescents from lower socioeconomic backgrounds are more vulnerable to engaging in substance use, often due to limited access to education, mental health services, and economic opportunities.

Policy Recommendations:

- Targeted Interventions for At-Risk Communities: Policies should focus on vulnerable communities by developing interventions that address both substance abuse and the socioeconomic conditions that exacerbate it. These interventions should aim to reduce poverty, improve access to education, and provide stable family structures.
- Improving Access to Mental Health Services: Policies should ensure that mental health services are readily available in low-income areas. Social workers should advocate for increased funding and resources to make mental health care more accessible to these communities, particularly for adolescents.
- Economic Support and Family-Focused Programs: Policies should also include economic support programs for families affected by substance abuse. These could include job training, financial aid, and family counselling to alleviate the pressures that contribute to adolescent substance use.

6. Ethical and Cultural Sensitivity: Designing Culturally Relevant Interventions

The research stresses the importance of culturally sensitive interventions that are tailored to the

unique social and cultural contexts in which substance abuse occurs. Given that adolescents' experiences with substance abuse are often shaped by their cultural backgrounds, interventions must be respectful of these factors.

Policy Recommendations:

- Culturally Competent Social Work Interventions: Policies should mandate that all substance abuse prevention programs are culturally competent, reflecting the values, norms, and practices of the communities they serve. Social workers should be trained to understand these cultural differences and ensure that interventions are adapted to the local context.

- Ethical Standards and Guidelines: Clear ethical guidelines should be established to protect adolescents' rights, particularly concerning confidentiality, informed consent, and their participation in treatment programs. These standards will help ensure that interventions are both respectful and effective, promoting the autonomy and dignity of adolescents.

Conclusion: Building a Sustainable Framework for Social Work Interventions

By integrating the findings from this research into both policy frameworks and social work practices, we can create a more effective, integrated, and culturally sensitive approach to addressing substance abuse among adolescents. The research not only identifies effective interventions but also provides a blueprint for policies that can lead to sustainable, long-term change. Social work interventions, when aligned with national health policies, supported by continuous teacher training, and integrated within community networks, have the potential to significantly reduce adolescent substance abuse and its associated consequences, ultimately promoting healthier and more resilient school communities.

LIMITATIONS OF THE RESEARCH

Stigma Concerns

One significant limitation of the research is the potential for stigma concerns among students. Adolescents may fear that participating in substance use screening and interventions could lead to a breach of their privacy and result in social stigma. This fear can deter them from honestly reporting their substance use or even from participating in the program at all. The stigma associated with substance use, particularly in conservative or closely-knit communities, may lead students to conceal their behavior to avoid being labelled or judged. This concern highlights the importance of implementing robust confidentiality measures and fostering a supportive environment where students feel safe and assured that their privacy will be protected. Additionally, addressing stigma through educational campaigns that promote understanding and acceptance can help mitigate these concerns and encourage more honest participation.

Self-Reporting Bias

Another limitation is the reliance on self-reporting for data collection, which introduces the risk of self-reporting bias. Adolescents might underreport or misreport their substance use due to fear of repercussions, desire to present themselves in a favorable light, or simply due to forgetfulness or lack of awareness about their own behavior. This bias can significantly impact the accuracy of the data collected, leading to an underestimation or overestimation of substance use prevalence and the effectiveness of interventions. To address this limitation, it is crucial to incorporate additional data collection methods, such as corroborating self-reports with biological testing (e.g., urine or saliva tests) or obtaining reports from peers, teachers, or parents where appropriate. Moreover, creating a non-judgmental and supportive environment during the screening process can encourage more honest and accurate self-reporting from students.

Parental Engagement

Engaging parents in the process poses another significant challenge. Obtaining parental consent for adolescents to participate in substance use screenings and interventions can be difficult, especially if parents are unaware of or in denial about their child's substance use issues. Moreover, ensuring consistent follow-up care and parental involvement in the intervention process is essential for the program's success. Some parents may lack the time, resources, or willingness to actively participate in their child's treatment and recovery process. This limitation underscores the need for strategies to effectively communicate with and involve parents. Providing education about the importance of early detection and intervention, offering flexible involvement options, and providing support resources for parents can enhance their engagement. Additionally, building trust and rapport with parents through community outreach and involvement can facilitate better parental cooperation and support.

By recognizing and addressing these limitations, future research can enhance the implementation and effectiveness of the ASSIST screening and brief intervention program, ultimately contributing to better substance abuse prevention and intervention strategies for adolescents in India.

FUTURE RESEARCH DIRECTIONS

Adaptation of the ASSIST Tool for Diverse Student Populations

Future research endeavors should concentrate on adapting the ASSIST tool to cater to the varied cultural, linguistic, and socio-economic contexts of student populations across India. This adaptation process necessitates a comprehensive review and modification of the tool's language and content to ensure cultural relevance and sensitivity. Researchers should collaborate with local educators, healthcare professionals, and community leaders to comprehend the unique needs and challenges faced by different student demographics. Conducting pilot studies in various regions will facilitate the refinement of the tool and confirm its effectiveness across diverse settings. By customizing the ASSIST tool to the specific contexts of India's heterogeneous student populations, the program can achieve more precise assessments and enhanced outcomes in substance abuse prevention and intervention.

Qualitative Studies on Students' Perspectives

Engaging in qualitative studies is imperative to gain in-depth insights into students' perspectives on the ASSIST tool and the brief intervention program. Employing methodologies such as focus groups, interviews, and participatory action research will capture students' experiences, attitudes, and perceptions. Understanding how students perceive the screening process, their willingness to engage, and their perceived benefits and challenges will provide critical information for refining the program. Additionally, exploring the long-term impact of ASSIST on students' well-being, academic performance, and social relationships will aid in evaluating the program's effectiveness and sustainability. Qualitative research ensures that the ASSIST program remains student-centered and responsive to their needs.

Training Teachers in ASSIST Screening and Brief Intervention

Research should be directed towards developing and evaluating comprehensive training programs for teachers in the ASSIST screening and brief intervention. These training programs should be designed to equip teachers with the requisite knowledge and skills to identify and support students at risk of substance use disorders. Practical exercises, case studies, and role-playing scenarios should be incorporated to enhance teachers' confidence and competence in utilizing the ASSIST tool. Evaluating the effectiveness of these training programs will involve assessing teachers' ability to conduct screenings, provide brief interventions, and refer students to appropriate support services. Moreover, examining the impact of teacher involvement on students' substance use behavior and overall well-being will yield valuable insights into the program's efficacy and areas for improvement.

Evaluating the Effectiveness of the ASSIST Screening and Brief Intervention Program in School Settings

Future research should rigorously evaluate the effectiveness of the ASSIST screening and brief intervention program, implemented by teachers and primary care health professionals within school settings. This evaluation should include assessing the program's impact on reducing substance abuse prevalence, enhancing students' mental health, and improving academic performance. Longitudinal studies are essential to track students' progress over time and identify any long-term benefits or challenges associated with the program. Comparative studies between schools implementing ASSIST and those not using the tool will provide robust evidence of the program's efficacy. Additionally, exploring the perspectives of school administrators, counsellors and parents will offer a comprehensive understanding of the broader impact of ASSIST on the school community. Such comprehensive evaluation will ensure that the program achieves its intended outcomes and provide insights for necessary adjustments.

Continuous Improvement and Scaling of the ASSIST Program

Research should focus on the continuous improvement and scaling of the ASSIST program to ensure its sustainability and broader impact. This involves identifying best practices, challenges, and opportunities for enhancing the program's implementation. Systematically collecting and analyzing feedback from students, teachers, healthcare professionals, and other stakeholders will inform iterative improvements. Exploring innovative approaches, such as integrating technology and digital tools into the ASSIST screening process, can enhance accessibility and efficiency. Additionally, developing scalable models and strategies for expanding the program to various regions and schools across India is crucial. Continuous research and development will ensure that the ASSIST program remains effective, relevant, and adaptable to evolving needs and contexts.

Decreasing Prevalence of Adolescent Substance Abuse through Effective Implementation

Research should also focus on evaluating the impact of the ASSIST tool and brief intervention program on decreasing the prevalence of substance abuse among adolescents. Teachers play a critical role in identifying individuals who have or are at risk for developing drug-related problems, using the ASSIST tool to diagnose substance use disorders and develop treatment plans. Brief interventions aim to reduce or eliminate alcohol or drug consumption and thereby minimize associated problems. The ASSIST-linked brief intervention is a social work intervention model that leverages the expertise of primary health care professionals and school teachers to reduce substance abuse among school-going adolescents. This model aims to help adolescents achieve a substance-free life, maximize multiple aspects of life functioning, and prevent or reduce the frequency and severity of relapse. Research in this area will provide valuable data on the effectiveness of these interventions and inform further improvements.

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SUBSTANCE ABUSE AMONG URBAN SCHOOL GOING ADOLESCENTS: A SOCIAL WORK INTERVENTION STUDY

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No :………. Name: …………………..……………….. Class&Div: ………..……..Age: ……..…..

Gender: M / F   Economic Status: APL / BPL

സമ്മതപത്രം

ഈ പഠനത്തിന്റെ നടത്തിപ്പിനെക്കുറിച്ച് എന്നെ അറിയിച്ചിട്ടുണ്ട്. ഈ പഠനത്തിൽ പങ്കാളി ആകാതിരിക്കാനോ, ഏതു ഘട്ടത്തിലും ഇതിൽ നിന്നും പിന്തിരിയാനോ എനിക്ക് അവകാശമുണ്ടെന്നും അത് മൂലം എനിക്ക് ലഭിക്കുന്ന എന്തെങ്കിലും സേവനങ്ങൾ നിഷേധിക്കപ്പെടില്ലെന്നും എനിക്ക് മനസിലയിട്ടുണ്ട്. ഈ സമ്മതപത്രത്തിന്റെ ഉള്ളടക്കം എനിക്ക് മനസിലാകുന്ന ഭാഷയിൽ വിശദീകരിച്ചു തന്നിട്ടുണ്ട്. ഞാൻ സ്വമേധയാ ആണ് ഈ സമ്മതപത്രം ഒപ്പിടുന്നത്.

താഴെ ഒപ്പിട്ടിരിക്കുന്ന .... എന്ന ഞാൻ ഈ പഠനത്തിൽ പങ്കാളി ആകുന്നതിൽ സ്വമേധയാ സമ്മതിക്കുന്നു.

പഠനത്തിൽ പങ്കെടുക്കുന്ന വ്യക്തിയുടെ ഒപ്പ്...........................

മദ്യം, പുകയില ഉൽപന്നങ്ങൾ, മറ്റ് മയക്കുമരുന്നുകൾ എന്നിവയെക്കുറിച്ചുള്ള ഈ ഹ്രസ്വ അഭിമുഖത്തിൽ പങ്കെടുക്കാൻ സമ്മതിച്ചതിന് നന്ദി. നിങ്ങളുടെ ജീവിതകാലത്തും കഴിഞ്ഞ മൂന്ന് മാസങ്ങളിലും ഈ പദാർത്ഥങ്ങൾ പുകവലിക്കുകയോ, വിഴുങ്ങുകയോ, ശ്വസിക്കുകയോ, കുത്തിവയ്ക്കുകയോ ഗുളികകളുടെ രൂപത്തിൽ ഉപയോഗിച്ചതിന്റെ അനുഭവത്തെക്കുറിച്ച് ഞാൻ നിങ്ങളോട് ചില ചോദ്യങ്ങൾ ചോദിക്കാൻ പോകുന്നു. നിങ്ങൾ നൽകുന്ന എല്ലാ വിവരങ്ങളും പൂർണ്ണ രഹസ്യ സ്വഭാവത്തോടെ സൂക്ഷിക്കുന്നതായിരിക്കും.

Q 1 | In your life, which of the following substances have you ever used (non-medical use only)? നിങ്ങളുടെ ജീവിതത്തിൽ, ഇനിപ്പറയുന്ന പദാർത്ഥങ്ങളിൽ ഏതെങ്കിലും നിങ്ങൾ എപ്പോഴെങ്കിലും ഉപയോഗിച്ചിട്ടുണ്ടോ. (നോൺ-മെഡിക്കൽ ഉപയോഗം മാത്രം)?		
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)	No	Yes
B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)	No	Yes
C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)	No	Yes
D. Cocaine (coke, crack, etc.) കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)	No	Yes
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)	No	Yes
F.Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)	No	Yes
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം,*etc…*)	No	Yes

H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജെൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന എൽഎസ്ഡി, ആസിഡ്, കൂൺ, *ട്രിപ്സ്*, കെറ്റാമൈൻ *etc*..)	No	Yes
I.Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ (ഹെറോയിൻ, മോർഫിൻ, മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ *etc.*)	No	Yes
*J.*Other – specify: …… മറ്റുള്ളവ - വ്യക്തമാക്കുക: …………………………	No	Yes
If "No" to all items, stop interview. If "Yes" to any of these items, ask Q2 for each substance ever used		

Q 2 | In the past three months, how often have you used the substances you mentioned (first drug, second drug, etc)? കഴിഞ്ഞ മൂന്ന് മാസത്തിനുള്ളിൽ, നിങ്ങൾ സൂചിപ്പിച്ച പദാർത്ഥങ്ങൾ എത്ര തവണ ഉപയോഗിച്ചു (ആദ്യ മരുന്ന്, രണ്ടാമത്തെ മരുന്ന് മുതലായവ)?	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly ഏലും	Daily or almost daily ദിവസവും
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)					
B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)					
C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)					
D. Cocaine (coke, crack, etc.) (കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)					
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)					
F. Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)					
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം മുതലായവ)					
H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജെൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന ഒരു ഔഷധം) (എൽഎസ്ഡി, ആസിഡ്, കൂൺ, ട്രിപ്പ് , കെറ്റാമൈൻ മുതലായവ)					
I. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ(ഹെറോയിൻ, മോർഫിൻ,മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ etc)					
J. Other – specify: ……… മറ്റുള്ളവ – വ്യക്തമാക്കുക ; …………………………………					
If "Never" to all items in Q2, skip to Q6. If any substances in Q2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used.					

Q3 | During the past three months, how often have you had a strong desire or urge to use (first drug, second drug, etc)? കഴിഞ്ഞ മൂന്ന് മാസത്തിനിടയിൽ, നിങ്ങൾ സൂചിപ്പിച്ച പദാർത്ഥങ്ങൾ ഉപയോഗിക്കാൻ നിങ്ങൾക്ക് എത്ര തവണ ശക്തമായ ആഗ്രഹമോ പ്രേരണയോ ഉണ്ടായിരുന്നു (ആദ്യ മരുന്ന്, രണ്ടാമത്തെ മരുന്ന് മുതലായവ)?	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly ഏലും ആഴ്ചയോറും	Daily or almost daily ദിവസവും
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)					

LVI | P a g e

B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)					
C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)					
D. Cocaine (coke, crack, etc.) (കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)					
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)					
F. Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)					
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം മുതലായവ)					
H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജെൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന ഒരു ഔഷധം) (എൽഎസ്ഡി, ആസിഡ്, കൂൺ, ട്രിപ്പ് , കെറ്റാമൈൻ മുതലായവ)					
I. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ(ഹെറോയിൻ, മോർഫിൻ,മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ etc)					
J. Other – specify:…..മറ്റുള്ളവ – വ്യക്തമാക്കുക ; ………………………………					

Q4 | During the *past three months*, how often has your use of (first drug, second drug, etc) led to health, social, legal or financial problems? കഴിഞ്ഞ മൂന്ന് മാസത്തിനിടയിൽ, നിങ്ങൾ സൂചിപ്പിച്ച പദാർത്ഥങ്ങളുടെ ഉപയോഗം മൂലം എത്ര തവണ ആരോഗ്യ, സാമൂഹിക, നിയമപരമായ അല്ലെങ്കിൽ സാമ്പത്തിക പ്രശ്നങ്ങളിലേക്ക് നയിച്ചു?	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly എല്ലാ ആഴ്ചതോറും	Daily or almost daily ദിവസേന
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)					
B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)					
C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)					
D. Cocaine (coke, crack, etc.) (കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)					
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)					
F. Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)					
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം മുതലായവ)					
H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജെൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന ഒരു ഔഷധം) (എൽഎസ്ഡി, ആസിഡ്, കൂൺ, ട്രിപ്പ് , കെറ്റാമൈൻ മുതലായവ)					

	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly എല്ലാ ആഴ്ചയോറും	Daily or almost daily ദിവസേന
I. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ(ഹെറോയിൻ, മോർഫിൻ,മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ etc)					
J. Other – specify: __ മറ്റുള്ളവ – വ്യക്തമാക്കുക ;					

Q 5 During the *past three months*, how often have you failed to do what was normally expected of you because of your use of (first drug, second drug, etc)? കഴിഞ്ഞ മൂന്ന് മാസത്തിനിടയിൽ, നിങ്ങൾ സൂചിപ്പിച്ച പദർത്ഥം ഉപയോഗിച്ചതിനാൽ നിങ്ങളിൽ നിന്ന് സാധാരണഗതിയിൽ പ്രതീക്ഷിച്ച കാര്യങ്ങൾ ചെയ്യാൻ നിങ്ങൾ എത്ര തവണ പരാജയപ്പെട്ടു?	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly എല്ലാ ആഴ്ചയോറും	Daily or almost daily ദിവസേന
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)					
B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)					
C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)					
D. Cocaine (coke, crack, etc.) (കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)					
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)					
F. Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)					
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം മുതലായവ)					
H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജെൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന ഒരു ഔഷധം) (എൽഎസ്ഡി, ആസിഡ്, കൂൺ, ട്രിപ്പ് , കെറ്റാമൈൻ മുതലായവ)					
I. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ(ഹെറോയിൻ, മോർഫിൻ,മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ etc)					
J. Other – specify: __ മറ്റുള്ളവ – വ്യക്തമാക്കുക ;					

Q 6 Has a friend or relative or anyone else *ever* expressed concern about your use of (first drug, second drug, etc)? എപ്പോഴെങ്കിലും ഒരു സുഹൃത്തോ ബന്ധുവോ മറ്റാരെങ്കിലുമോ നിങ്ങൾ സൂചിപ്പിച്ച പദാർത്ഥങ്ങളുടെ ഉപയോഗത്തെക്കുറിച്ച് നിങ്ങളോട് ആശങ്ക പ്രകടിപ്പിച്ചിട്ടുണ്ടോ?	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly എല്ലാ ആഴ്ചയോറും	Daily or almost daily ദിവസേന
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)					
B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)					

C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)					
D. Cocaine (coke, crack, etc.) (കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)					
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)					
F. Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)					
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം മുതലായവ)					
H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന ഒരു ഔഷധം) (എൽഎസ്ഡി, ആസിഡ്, കൂൺ, ട്രിപ്പ് , കെറ്റാമെൻ മുതലായവ)					
I. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ(ഹെറോയിൻ, മോർഫിൻ,മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ etc)					
J. Other – specify: _ മറ്റുള്ളവ – വ്യക്തമാക്കുക ;					

Q7 Have you *ever* tried to cut down on using (first drug, second drug, etc) but failed? നിങ്ങൾ സൂചിപ്പിച്ച പദർത്ഥം ഉപയോഗിക്കുന്നത് കുറയ്ക്കാൻ നിങ്ങൾ എപ്പോഴെങ്കിലും ശ്രമിച്ചിട്ടുണ്ടെങ്കിലും പരാജയപ്പെട്ടിട്ടുണ്ടോ?	Never ഒരിക്കലും ഇല്ല	Once or Twice ഒന്നോ രണ്ടോ തവണ	Monthly എല്ലാ മാസവും	Weekly എല്ലാ ആഴ്ചതോറും	Daily or almost daily ദിവസേന
A. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) പുകയില ഉൽപന്നങ്ങൾ (സിഗരറ്റ്, ചവയ്ക്കുന്ന പുകയില, ചുരുട്ട് മുതലായവ)					
B. Alcoholic beverages (beer, wine, spirits, etc.) ലഹരിപാനീയങ്ങൾ (ബിയർ, വൈൻ, സ്പിരിറ്റ് മുതലായവ)					
C. Cannabis (marijuana, pot, grass, hash, etc.) കഞ്ചാവ് (ഗഞ്ച,കഞ്ചാവ് ഇല, കഞ്ചാവ് ചുരുട്ട് ,ഹാഷ് മുതലായവ)					
D. Cocaine (coke, crack, etc.) (കൊക്കെയ്ൻ (കോക്ക്, ക്രാക്ക് മുതലായവ)					
E. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) ആംഫിറ്റമിൻ ഉത്തേജകങ്ങൾ (സ്പീഡ്, മെത്ത്, എക്സ്റ്റസി മുതലായവ)					
F. Inhalants (nitrous, glue, petrol, paint thinner, etc.) ഇൻഹാലന്റുകൾ (നൈട്രസ്, ഗ്ലൂ, പെട്രോൾ, പെയിന്റ് തിന്നർ മുതലായവ)					
G. Sedatives or sleeping pills (diazepam, alprazolam, flunitrazepam, midazolam, etc.) മയക്കമരുന്ന് അല്ലെങ്കിൽ ഉറക്ക ഗുളികകൾ (ഡയസെപം, അൽപ്രസോളം, ഫ്ലൂണിട്രാസെപം, മിഡാസോലം മുതലായവ)					
H. Hallucinogens (LSD, acid, mushrooms, trips, ketamine, etc.) ഹാലുസിനോജൻസ് (വിഭ്രാന്താനുഭവങ്ങൾ ഉണ്ടാക്കുന്ന ഒരു ഔഷധം) (എൽഎസ്ഡി, ആസിഡ്, കൂൺ, ട്രിപ്പ് , കെറ്റാമെൻ മുതലായവ)					
I. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) ഒപിയോയിഡുകൾ(ഹെറോയിൻ, മോർഫിൻ,മെത്തഡോൺ, ബുപ്രനോർഫിൻ, കോഡീൻ etc)					

J. Other – specify: _

മറ്റുള്ളവ – വ്യക്തമാക്കുക ; ....

Q8 Have you *ever* used any drug by injection (non-medical use only)? നിങ്ങൾ എപ്പോഴെങ്കിലും ഏതെങ്കിലും ലഹരി മരുന്ന് കുത്തിവയ്പ്പിലൂടെ ഉപയോഗിച്ചിട്ടുണ്ടോ (നോൺ-മെഡിക്കൽ ഉപയോഗം മാത്രം)?	**Never** ഒരിക്കലും ഇല്ല	**Yes, but not in the past 3 months** അതെ, എന്നാൽ കഴിഞ്ഞ 3 മാസങ്ങളിൽ അല്ല	**Yes, in the past 3 months** അതെ, കഴിഞ്ഞ 3 മാസങ്ങളിൽ
(Please tick the appropriate box)			