Addis Ababa University

College of Social Sciences

School of Social Work

Substance Use Disorder and Its Impact on Academic Performance: A Case Study of Undergraduate Students at Addis Ababa University's Institute of Technology

By

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Approval Sheet

It is to certify that the thesis, conducted by Dawit Ayalew Yeneneh and submitted as part of the requirements for the Award of Master of Social Work, titled: 'Substance Use Disorder and Its Impact on Academic Performance: A Case Study of Undergraduate Students at Addis Ababa University's Institute of Technology,' satisfies the standards for originality and quality, and conforms with Addis Ababa University' regulations.

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Confirmation

I attest that this thesis, 'Substance Use Disorder and Its Impact on Academic Performance: A Case Study of Undergraduate Students at Addis Ababa University's Institute of Technology,' is original and done by me. All information employed for this thesis has been well-acknowledged. I further confirm that the thesis has not been submitted to any University to receive any degree.

Name	**Signature**	**Date**
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Abstract

Introduction: *World drug reports, organizational strategic plans, organizational manuals, books and previous studies, etc. indicated that substance use and its associated harmful consequences have been affecting people globally. It has become a source of socio-economic problems and even has endangered several people to premature death. It has also been highly affecting developing countries, including Ethiopia. Substance use has also become common in the education system in general and in the higher institutions in particular. Early use of substances at lower grades has even become common everywhere. This study primarily focused on assessing the presence of substance use disorder on study participants based on the criteria set by American Psychiatric Association as indicated in its Diagnostic and Statistical Manual 5 developed in 2013 and its impact on undergraduate regular students' academic performance in the Institute of Technology at Addis Ababa University.*

Method: *This study employed a qualitative research approach; and purposive and snow-ball sampling designs/techniques altogether because of the nature of the study to access the hard-to-reach target population (people with substance use disorder) and find out their concealed information from study participants. Taken into account the saturation concept, the sample size of this study was eight in number which was determined by using snow-ball sampling technique.*

Major Findings*: This study revealed that study participants (the undergraduate regular students of AAiT at AAU) have been using different licit and illicit substances. All these study participants also met the DSM 5 criteria set for severe disorder. The study also identified that this substance use disorder has been adversely affecting students' academic performance.*

Conclusion:*, This study confirmed that study participants have been using both licit and illicit substances and hence developed substance use disorder that affected them in various ways, including students' academic performance and students' quality of life which calls for revisiting AAU's existing policy, strengthening its institutional capacity, running intervention programs, and integrating the efforts of all concerned bodies to reduce adverse impacts of substance use disorder on students' academic performance and quality of life.*

Key words: substance use disorder, academic performance, Addis Ababa University Institute of Technology

Acronyms

AAiT	Addis Ababa Institute of Technology
APA	American Psychiatric Association
AUC	African Union Commission
AAU	Addis Ababa University
DSM 5	Diagnostic and Statistical Manual 5
EFMHCA	Ethiopia Food, Medicine and Health Care Control Authority
MoH	Ministry of Health
NDDTC	National Drug Dependence Control Centre
NIDA	National Institute on Drug Abuse
ONDCP	Office of National Drug Control Policy
UNODC	United Nations Office on Drugs and Crime
WHO	World Health organization

CHAPTER ONE

INTODUCTION

1.1 Background of the Study

Substance use refers to the consumption of any psychoactive substances, regardless of their controlled status (WHO, 2023, p. 1). Substance use refers to the non-medical use of illicit drugs or other psychoactive substances, including prescription drugs (WHO, 2023, p. 61). The word *psycho* relates to the mind, and *psychoactive* substances are drugs that alter the mind (Lessa & Scanlon, 2006, p.4). Drugs are chemicals that affect the brain by tapping into the communication system and interfering with the way neurons normally send, receive, and process information (National Institute on Drug Abuse, 2014, p.17).

Global use of alcohol, tobacco, and other controlled substances is growing rapidly (WHO, 2004, p. 8). The United Nations Office on Drug and Crime (2025) stated that drug use has been increasing in the world. The Africa Union Commission (2023) reported that Africa is a major place where illicit drugs are being grown, sold and trafficked. Ethiopia Food, Medicines and Health Care Administration and Control Authority (2017) stated that Khat, tobacco, alcohol, cannabis, and inhalants are common. Illicit and licit substances have been widely practiced in Ethiopia. MoH (2016) also reported that adolescents and youth in Ethiopia mostly consume addictive substances such as khat, tobacco and alcohol.

WHO (2004) stated that substance use has been markedly contributing to be the global burden of disease. Mood-altering substances appear to affect neurotransmission in a particular area of the brain known to be associated with feelings of reward or pleasure (Lessa & Scanlon, 2006, p. 91). AUC (2023) reported that substance use and trafficking have become big

challenges to the public's health and safety in Africa. MoH (2016) also indicated that substance use and its addiction have been affecting individuals' health and psychological well-being in Ethiopia.

Ethiopian Food, Medicines, and Health Care Administration and Control Authority (2017) stated that the Ethiopian population is predominantly composed of a young population, of which those under the age of 15 make 44%, the age between 15-65 years old make up 52%, and those above 65 years old make up 3% of the entire population. The Ministry of Health (2016) also stated that the young population holds 33.8% of Ethiopia's population which can be considered as a key potential, an active segment of the population and a transitional period that exhibits various changes and challenges.

UNODC (2023) stated that young people are the most susceptible section of a society to use substances. MoH (2016) described that khat, tobacco and alcohol are widely practiced by adolescents and youth in Ethiopia. Kassew, Tarekegn, Alemneh, Kassa, Liyew and Terefe (2023) disclosed that the youth in Ethiopia have been practicing at least one substance, of which alcohol, khat and tobacco are the substances widely consumed. Gebremariam, Mruts, and Neway (2018) reported that youth starts using substances in their lower grades, mostly in preparatory classes. The National Institute on Drug Abuse (2014) also reported that the use of drugs at an early age increases the chances of acquiring substance use disorder.

The harmful use of drugs can leads to drug use disorders, and 64 million people worldwide were suffering from drug use disorder in 2022, an increase of 3% compared with 2018 (UNODC, 2024, p. 9). Substance use disorder is a diagnostic term in the 5th edition of the DSM-5 referring to recurrent use of alcohol or other drugs that cause clinically and functionally significant impairment, such as health problems, disability, and failure to meet major

responsibilities at work, school, or home (Volkow, Koob & McLellan, 2016, p. 363). Drug use disorders are harming health, including mental health, safety and well-being (UNODC, 2023, p. 4). However, the growing global burden of substance use disorders cannot be overemphasized (MoH, 2017, p. 2). WHO (2024) also stated that the health impacts of substance use and its associated disorder requires further investigation.

Abate (2018) reported that substance use is prevalent and its adverse impact on the educational performances of university students in Ethiopia. Gebremariam et al (2018) indicated that Ethiopian universities require an in-depth qualitative study to better understand the prevalence of substance use. Shegute & Wassihun (2021) also observed in their study that undergraduate regular students in the Institute of Technology at Addis Ababa University have been using both licit and illicit substances which need further studies to deeply understand the impacts of substance use on students' academic performance.

Previous studies focused on assessing substance use and its impacts, but they failed to assess whether there is substance use disorder and its level of severity based on the criteria set by DSM 5 and its impacts on students' academic performance. Taking previous studies as a benchmark, this study is, therefore, assesses whether there is substance use disorder and its associated impacts on the educational pursuits of undergraduate regular university students in the Institute of Technology at Addis Ababa University to serve as a source of information, raise awareness on substance use disorder and contribute its own share to indicating pertinent intervention strategies.

1.2 Statement of the Problem

Drug use starts innocently enough. A non-user is approached by a user and persuaded to take a drink, smoke a joint, or pop a pill (Office of National Drug Control Policy, 2004, p.14).

National Institute on Drug Abuse (2014 and 2018) reported that people start using substances to have a good feeling; get relief from pain; get energy for better performance; and taste substances. The first decision to use substance (s) may be voluntary-based but it will be compulsive when the drug user fails to control him/her self. WHO (2004) also stated that most people use substances to get pleasure or avoid pain, but repeated substance use results in either short-term or long-term harmful consequences.

WHO (2024) stated that substance use has been serving as a cause for non-communicable diseases that generate health, social, physical, etc risk consequences. UNODC (2023) also reported that drug use disorders have been negatively affecting human health that including mental health, safety and general well-being. Rehman, Mustafa, Faiz, Kanwal, Yasmin &Fatima (2022) also stated that drug addiction leads to mental health problems and emotional disorders. People from all walks of life, classes, and genders have the chance of developing drug addiction and hence millions of people with this addiction die every year. Daley (2013) stated that people with substance use disorder become dependent on society because of failure to properly carry out social responsibility which carries with multiple adverse consequences that could be a burden to society. Lessa and Scanlon (2006) noted that substance use disorder adversely affect people with substance use disorder, their entire family members and loved ones. Stanikzai and Wahidi (2023) also reported that people with substance use disorder were exposed to bio-psycho-social support, which looks for a multi-dimensional support to cure them from the impacts of substance use disorder.

Addicted people seem to be everywhere: in streets, parks, rural & urban areas & even in educational institutions (Mustafa, Areeba & Aslam, 2022, p. 4). In college and university students, issues with alcoholism, drug use, and tobacco use are common (Paul, Ganie & Dar,

2024, p. 23). Drug use can occur on any campus, but it is by no means inevitable. Any amount of drug use can dull the educational experience for all (ONDCP, 2004, p. 14). Substance use among students demands special attention (Firezer, Goljia, Desisa, Gobena, Bulbula, Moti, Dibbisa, Fikadu & Fetensa, 2024, p. 9).

Students who use drugs are statistically more likely than non-users to drop out of college and to be unemployed and unemployable. Classes are challenging and difficult even for the most intelligent students (ONDCP, 2004, p. 19). Substance use can be associated with disruption of learners' education, including truancy, poorer academic performance, drop out and exclusion. It can also contribute to short and long-term difficulties in life, including educational attainment (WHO, 2023, p.2). Likisa (2019) concluded that university students belong to the youth group so they are forced to use substances to withstand the learning new environment. Abate (2018) reported that the use of substances is directly associated with its impact on the educational performance of university students in Ethiopia. Shegute and Wassihun (2021), who studied the prevalence of substance use among students in AAiT at AAU, also concluded that additional studies are required on the impact of substance use on the academic performance of students.

UNDOC (2025) reported in its 'Special Points of Interest Report' that the global data showed that new vulnerable groups who use drugs have been increasing at an alarming rate that resulting in adverse health and social consequences, including substance use disorders with limited health and social services. Wilkens and Foote (2019) stated that people with substance use disorder face stigma that results in social stigmatization for many family members in society. EFMHCA (2017) also described that human capital is an invaluable asset which requires protecting, educating, and nurturing, but substance use has become a major challenge

that has been adversely affecting developmental and socioeconomic affairs. For example, Lessa and Scanlon (2006) stated that a high level of alcohol consumption leads to the stage of intoxication that result in memory loss for either a short or a long period of time.

Roba, Gebremichael, Adem, and Beyene (2021) concluded from their 'Systematic Review and Meta-Analysis' study that substance use is common among students in colleges and universities that substance use has become a common problem among students in Ethiopia. Kalayu, Andualem and Yeshigeta (2009) also confirmed that substance use is at an alarming stage in Jimma University that khat, cigarette and alcohol negatively affected students' academic achievement. Shegute and Wassihun (2021) in their study also confirmed that undergraduate students at AAiT were experiencing substances such as khat, alcohol, cigarette, and illicit drugs in their lifetime and current use, which needs intervention strategies and looks for further studies to assess their adverse impacts on academic performance.

Therefore, this study assessed the presence of substance use disorder and its impacts on students' academic achievement at AAiT at Addis Ababa University. The researcher was motivated to conduct this study due to the prevalence of substance use and its associated impacts in the education system in general and in higher education in particular to fill the research gaps observed from the previous studies conducted at AAiT, AAU.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to assess the impact of substance use disorder on the academic performance of undergraduate regular students of the Institute of Technology at Addis Ababa University.

1.3.2 Specific Objectives

- To assess substance use experiences by undergraduate regular students of AAiT at Addis Ababa University;
- To explore substance use disorder among undergraduate regular students of AAiT as per the criteria indicated in DSM 5;
- To point out the major factors why undergraduate regular students of AAiT develop substance use disorder; and
- To examine how challenges produced from substance use disorder affect undergraduate regular students' academic performance at AAiT, Addis Ababa University.

1.4 Research Questions

- What are the lived experiences of undergraduate regular students of AAiT of Addis Ababa University concerning substance use?
- Is there any substance use disorder among undergraduate regular students of AAiT at Addis Ababa University, as per the criteria indicated in DSM 5?
- Why do undergraduate regular students of AAiT at Addis Ababa University develop substance use disorder?
- How do challenges produced from substance use disorder affect the academic performance of undergraduate regular students of AAiT at Addis Ababa University?

1.5 Scope of the Study

Conceptual: This study focused on assessing substance use disorder and its impact on students' academic performance among undergraduate regular students of AAiT at Addis Ababa University.

Geographical: This study was also confined to the 5 kilo Campus, AAiT at Addis Ababa University. The 5-kilo Campus was selected for this study because there are containers/shops/ that sell substances such as khat, cigarettes, brewed drinks, local drinks, fast foods, etc around the Campus compound which may geographically contribute to ease access to students of AAiT. The researcher also was informed from key informants that some individuals, who were engaged in some businesses in front of the Campus also sell illicit substances in front of the Campus that may contribute its own share for an ease access to such illicit substances by students. Thus, this study was geographically delimited to the 5-kilo Campus at AAU.

1.6 Limitations of the Study

Conceptual: since the scope of this study is confined to the impacts of substance use disorder on students' academic achievement, this study has limitations in that there are other factors that contribute to challenges to students' academic achievement.

Geographical: This study was also confined to the 5 kilo Campus at AAU so it doesn't include other Campuses of the university because the researcher was able to conduct this study in-depth with limited number of study participants on this geographical area due to the researcher's interest to stick on this geographical area to assess the case to explore the reality. Resource limitation is also another factor to confine on this geographical area. It would be good to include other Campuses to have a broader understanding of the topic so it may have its own limitation concerning this issue.

1.7 Significance of the Study

This study is expected to contribute a lot to better understanding of what substance use disorder is all about and its associated impacts on students' academic performance in higher educational institutions. There is plenty of previous research on substance use that focused on

higher educational institutions in Ethiopia, but there is no enough previous research conducted on substance use disorder in university students in general and in AAiT at Addis Ababa University in particular.

Therefore, this study is expected to contribute its own share towards to creating better understanding on substance use disorder and its associated impact on students' academic performance in higher institutions to pay a due attention to it for the future to facilitate pertinent interventions in the education system in general and in the higher education in particular, especially at AAiT because the case for this study was focused on this campus.

Previous research indicated that the magnitude of substance use has been increasing, but little attention has been given to it. This issue may attract researchers, institutions and practitioners, etc to play their role to reduce the burden associated with substance use disorder. This study will, therefore, serve as a source document for interested one (s).

1.8 Organization of the Study

This study is organized into five chapters. Chapter one is the introductory part which holds the background of the study; statement of the problem; research general and specific objectives; research questions; scope of the study; limitation of the study; significance of the study; and organization of the study. Chapter two is the literature part that deals with review of related literature that reflects lights to readers to have awareness to the topic of this study. Chapter three is the methodological part that states the research approach, research design, sampling design, study population sample size, tools of data collection, and ethical procedures to be followed while conducting this study. Chapter four indicates the analysis part which comprises of summary of findings, discussion and interpretation issues. Chapter five holds the last chapter of the study that states the implications of the study for the social work.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Conceptual and Theoretical Frameworks

2.1.1 Conceptual Framework

2.1.1.1 The Concept of Psychoactive Substance

A psychoactive substance is any substance that when taken by a person, modifies perception, mood, cognition, and behavior or motor functions (WHO, 2000, p. 12). Psychoactive or psychotropic substances are any chemical agents affecting the mind or mental processes (i.e. any psychoactive drug). In the context of international drug control, "psychoactive substance" means that any substance, natural or synthetic, or any natural material in Schedule I, II, III, or IV of the 1971 Convention (UNODC, 2016, p. 65).

Table 1. Types of Psychoactive Substances

Substance Name	Examples
Alcohol	Wine, beer, spirits, home-brew, some medical tonics and syrups(e.g. cough syrups), some toiletries and industrial products (e.g. aftershaves)
Nicotine	Cigarettes, cigars, pipe tobacco, chewed tobacco, snuff
Cannabis	Marijuana, ganja, hashish, bhang
Stimulants	Cocaine, crack, khat and "designer" substances such as amphetamines
Opioids	Codeine, heroin, morphine, opium, buprenorphine, methadone, pethidine
Depressants	Sleeping pills, benzodiazepine, methaqualone, barbiturates, chloral hydrates
Hallucinogens	Lysergic Acid Diethylamide, mescaline, psilocybin, peyote, ayahuasca
Volatile inhalants	Aerosol sprays, butane gas, petrol/gasoline, glue, paint thinners, solvents, nitrites

Source: World Health Organization (2000). Primary Prevention of Substance Abuse: A Workbook for Project Operators

Table 2. Effects of Substances Abused

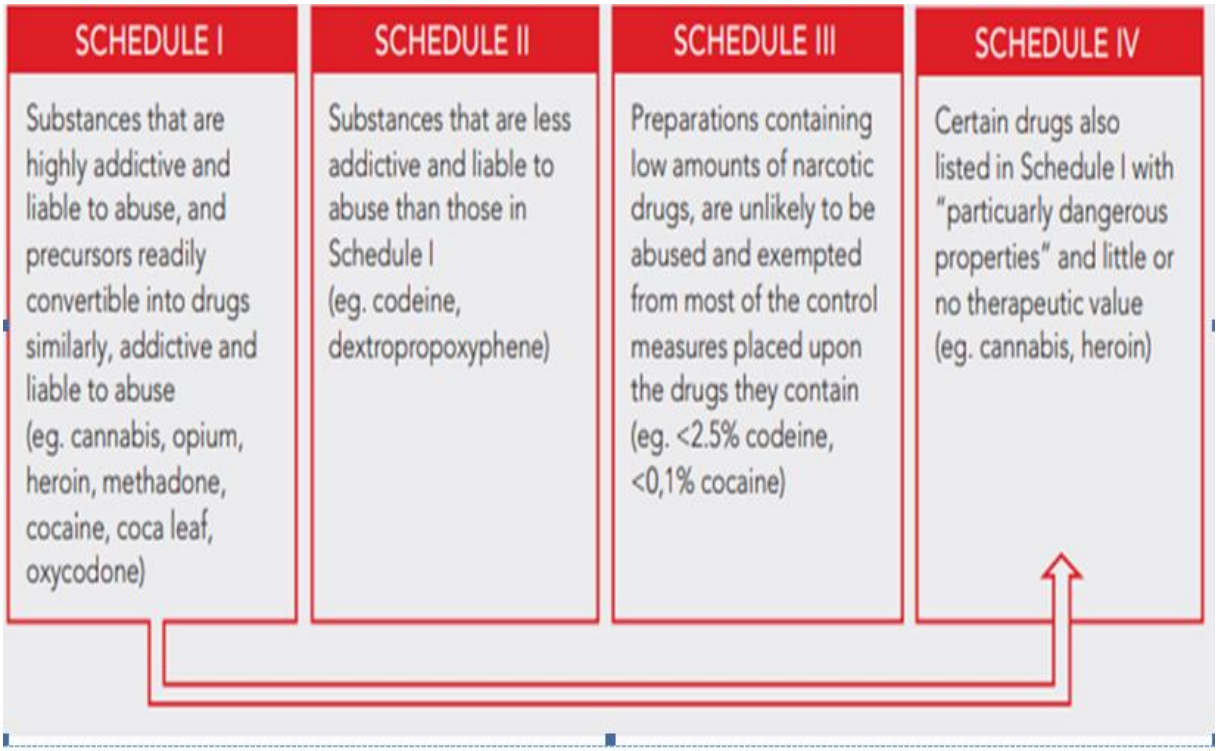
Type of Substance	Examples	Effect
Depressants	hypnotics drowsiness, pleasant relaxation, disinhibition	Drowsiness, pleasant relaxation, disinhibition
Opiates	Morphine, methadone, pethidine	Relief of pain, pleasant, detached, dreamy, euphoria
Stimulants	Cocaine, khat, amphetamines	Exhilaration, reduced fatigue & hunger.
Hallucinogens	Lysergic acid diethylamide (LSD), mescaline, peyote	Other-worldliness, perceptual distortions
Cannabis	Marijuana, hashish	Relaxation & hallucinogenic effects
Nicotine	Tobacco	Sedation & stimulation
Volatile inhalants	Benzene, glues, lacquer, paint thinners, gasoline	Drowsiness, relaxation, perceptual disturbances

Source: Substance Abuse: For the Ethiopian Health Center Team (Kebede, Abula, Ayele, Feleke, Degu, Kifle, Alebachew, Mekonnen & Tessema, 2005, p. 19).

2.1.1.2 Scheduling Substances and Conventions on Drug Control

Global Commission on Drug Policy (2019) stated that substance use prohibition idea was initiated during the late 19th and, the early1920th century because of the dominance of Anglo-American Christian Puritanism and the Anti-Alcohol Movement which also led to racist ideas against Mexican and Chinese immigrants who used opium and cannabis. UNODC (2016) also stated that the main purposes of scheduling are to classify substances for controlling of substances with internationally-agreed standards; to make substances available for medical and scientific objectives; and to prevent substances for illegal purposes.

Figure 1. Single Convention on Narcotic Drugs of 1961



Source: Global Commission on Drug Policy (2019). Classification of Psychoactive Substances: When Science was Left Behind.

Figure 2. Convention on Psychotropic Substances of 1971

Schedule I	Schedule II	Schedule III	Schedule IV
Drugs presenting a high risk of abuse, posing a particular serious threat to public health with little or no therapeutic value (e.g. LSD, MDMA, Cathinone)	Drugs presenting a risk of abuse, posing a serious threat to public health, which are of low or moderate therapeutic value (e.g. dronabinol, amphetamines)	Drugs presenting a risk of abuse, posing a serious threat to public health, which are of moderate or high therapeutic value (e.g. barbiturates, buprenorphine)	Drugs presenting a risk of abuse, posing a minor threat to public health, with a high therapeutic value (e.g. tranquilizers, including diazepam)

Source: UNODC (2016). Terminology and Information on Drugs

Figure 3. The 1988 Convention against Illicit Trafficking on Narcotic and Psychotropic Substances

Table I	Table II
Precarious of psychotropic substances, such as ephedrine, piperonal, safrole, phenylacetic acid, lycergic acid, and a few key regeants such as acetic anhydride used in the conversion of morphine into heroin and potassium permanganate used in the extraction of cocaine	A wide range of regeants and solvents that can be used in the illicit production of narcotic drugs and psychodropic substances, but also have widespread licit industrial uses, including acetone, ethyl either, tonuene and sulphuric acid.

Source: Global Commission on Drug Policy (2019). Classification of Psychoactive Substances: When the Science was Left Behind

2.1.1.3 The Concept of and Myth on Substance Use Disorder or Addiction

Conceptually, substance has been viewed by society from several different perspectives such as moral, legal or cultural. However, when the use of a substance begins to create problem (s) for the user or ceases to be entirely volitional, it becomes a reason for seeking help from medical professionals (National Drug Dependence Treatment Centre, 2013, p,1). Conceptualizing addiction has been a matter of great debate for decades (Griffiths, 2005). Over the years, a remarkable number of definitions have been provided for substance use disorders (Gitlow, 2007, p. 20).

Substance use disorders are chronic, relapsing disorders, which affect various aspects of physical, psychological, and socio-occupational functioning. Substance use disorders are quite prevalent and pose a huge burden on society (NDDTC, 2013, p. 1). Substance use disorders are

recognized as chronic disorders that have different presentations and outcomes and frequently co-occur with other psychiatric and physical disorders (Volkow & Blanco, 2023, p. 221).

Regarding to myth on substance use disorder, NIDA (2014) stated that people, including scientist when they started studying drug abuse in the 1930s, believed for many centauries that drug abuse/addiction is a moral failing rather than considering it as a health problem that affects primarily the brain system (structure and functions) which lead to compulsive behavior to use/abuse substances.

2.1.1. 4 Controversy on the Term to Use: either "Addiction," "Habituation" "Drug Dependence or "Substance Use Disorder"

UNODC (2016) reported that since 1964, the terms "addiction" and "habituation" were not longer used by WHO, in favor of using the term 'drug dependence', but the term 'addiction' has been widely used. The American Psychiatric Association (2013) stated in its 'DSM V' that the term "addiction" have been widely using to express the severe consequences of substance use, but this name has brought negative connotation and led to uncertain definition if it is used so that the Association recommended to use the neutral term "substance use disorder" for diagnostic purposes and hence deliberately omitted the term 'addiction' from its DSM V. In the DSM-5, the term *addiction* is synonymous with the classification of severe substance use disorder (Volkow, Koob & McLellan, 2016, p. 364).

2.1.1.5 Stages of Substance Use Disorder

Lessa and Scanlon (2006) described that substance use disorder has four stages: experimental use, recreational use, abuse, and dependence stages that each of which have its own characteristics. APA (2013) also stated that substance use disorder has three stages such as mild, moderate and severe. Nakken (1996) also categorized addiction stages into three: stage I:

internal change (deep permanent personality change); stage II: behavioral dependency, and stage III: life breakdown.

Table 3. Progression of Substance Use Disorder

Stage	Dynamic	Control of Substance Use by User	Description for the stage
Experimental	Curiosity	Full	Usually occurs in the preteen, ten, and adolescent years
Recreational	Fun	Choice	It doesn't necessarily lead to problematic patterns of use.
Abuse	Denial	Limited	Problematic substance use, represents those who use the criteria set for SUD: substance abuse and dependence
Dependence	Addiction	Impaired	The person exhibits signs of seeking substance for physical or psychological relief.

Source: Lessa & Scanlon (2006). Substance Use Disorder.

2.1.1.6 Criteria Set for Diagnosing Substance Use Disorder

American Psychiatric Association (2013) in its 'Diagnostic and Statistical Manual 5' set criteria for diagnosing substance use disorder to determine its level of severity such as mild, moderate and severe as shown in Fig. 4 below. Ruvins, Brydon, Kayserman and Stem (2024) also outlined that the criteria set by APA are generally categorized into four: impaired control over substances use, physical dependence due to continued use, creating social problems, and risky use.

Table 4. Criteria for Diagnosing Substance Use Disorder

No.	Criteria	Level of severity
1	Using in larger amounts of substances for longer than intended	Mild
2	Wanting to stop using, but unable to do so	
3	Spending a lot of time to get/use/recover from use	
4	Craving/strong desire to get/use	Moderate
5	Inability to manage responsibilities due to substance use	
6	Continuous to use, even when it causes problems in relationships	Severe
7	Giving up important activities because of substance use	
8	Continuing to use, even when it puts user in danger	
9	Continuing to use even when physical or psychological problems may be made worse by substance use	
10	Increased tolerance	
11	Withdrawal symptoms	

Source: American Psychiatric Association (2013). DSM 5 (2013).

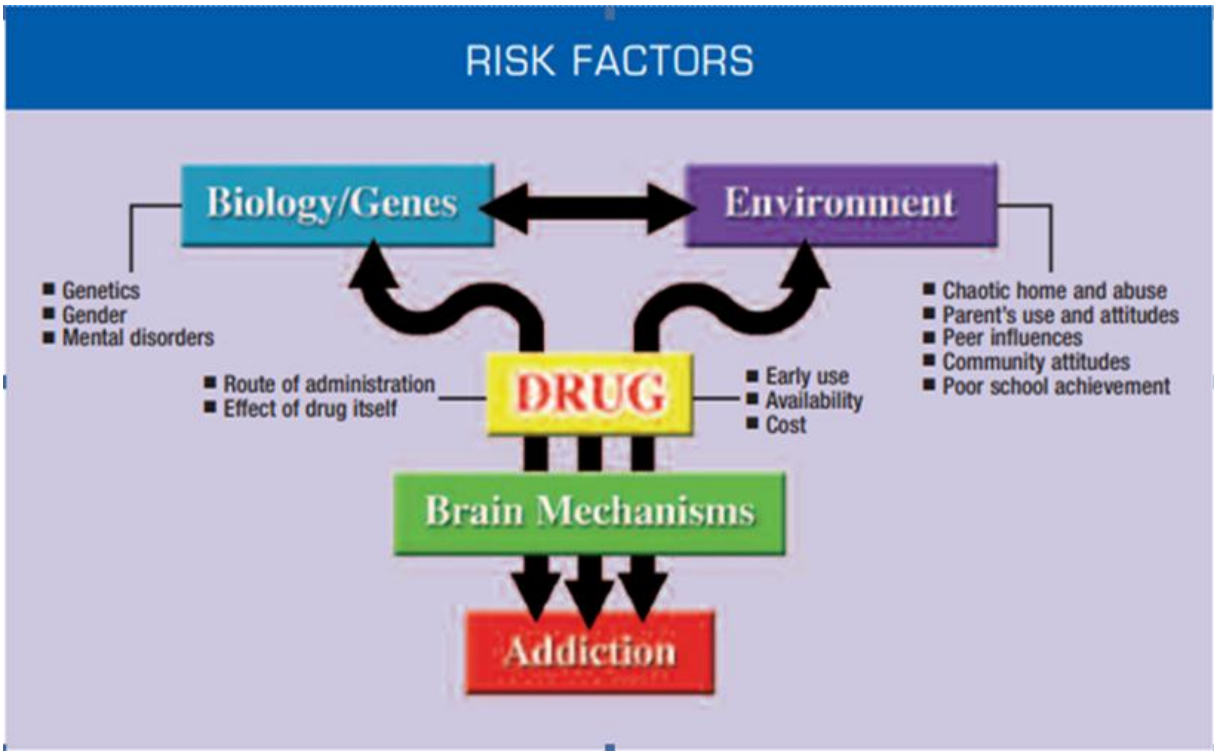
2.1.1.7 Risk Factors to Develop Substance use Disorder

National Institute on Drug Abuse (2014; 2018) stated that susceptibility to addiction varies from one person to another but both biological and environmental factors contribute to substance use and its adverse consequences. One should bear in mind that no single factor is responsible for making a person addicted that takes for multiple supportive factors to treat addicted one (s). Canadian Center on Substance Use and Addiction (2022) also reported that there is an individual difference in developing substance use disorder in people who use substances because a number of factors play roles in developing substance use disorder.

For example, NIDA (2007 and NIDA (2014) stated that the method (route) of drug administration such as smoking a drug or using drugs with injection have prompt potential to

promptly reach at addiction stage because the drug used by injection is a speedy method to reaching the drug into the brain reward system easily and produce prompt pleasure than other means of drug use administration. EFMHACA (2017) stated that drug injection has become a new practice in Addis Ababa that endangers drug users with different diseases such as HIV transmission was recorded as 6%, Hepatitis B was 5.1%, Hepatitis C was 2.9%, and Syphilis was 5.1% among drug users.

Figure 4. Risk Factors to Develop Substance Use Disorder



Source: National Institute on Drug Abuse (2014). Drugs, Brains, and Behavior: The Science of Addiction

2.1.1.8 Protective Factors

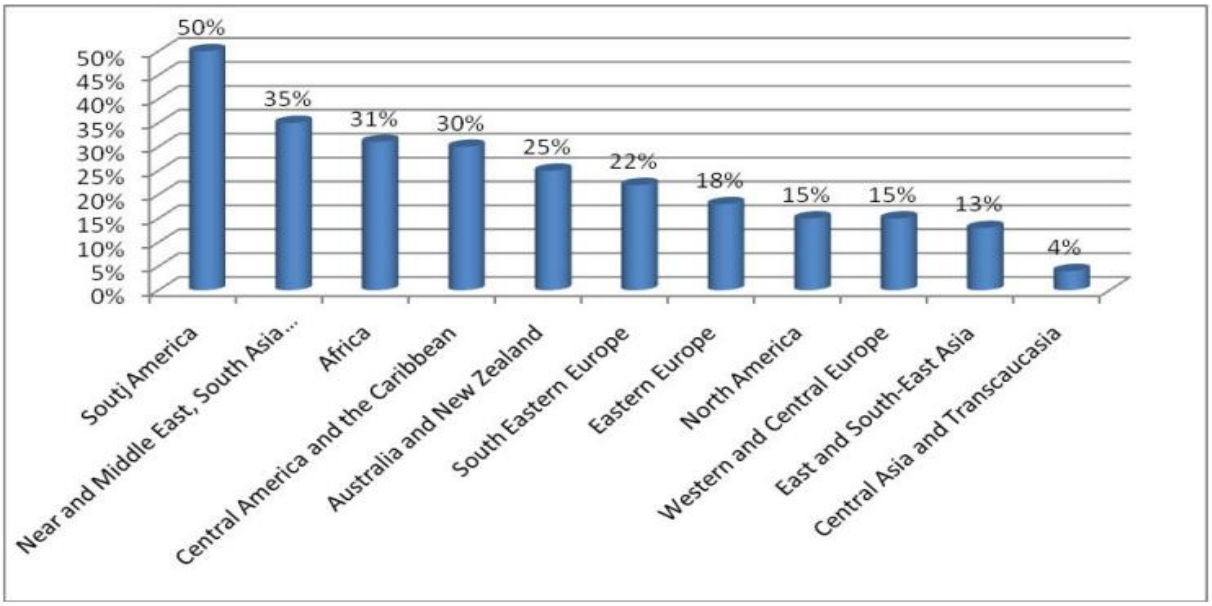
Addiction requires protective factors such as good self-control; parental monitoring, and support; developing positive relationships; having academic competence or good grades; having

school anti-drug policies; and neighborhood pride and resources (NIDA, 2014, p. 7; NIDA, 2018, p. 7).

2.1.1.9 Treatment Services Facilitated for Drug Users in the World

Skews & Gonzalez (2013) stated that addiction requires taking into account genetic/biological, psychological and sociocultural issues for people with substance use disorder or addiction as a preventive measure or to treat them. However, UNODC (2025) reported that vulnerable groups are on the rise but the health and social services are not adequately provided as expected. Wangensteen and Hystad (2022) also reported that treatment for inpatients with substance use disorder is crucial but it was found inadequate. UNODC (2025) stated that the level of treatment services facilitated for drug users under whose age is under 25 is about 31% in 2023, whilst the data presented in Fig.8 below also indicates that the global treatment service facilitated for drug users was below 50% in all regions in the world.

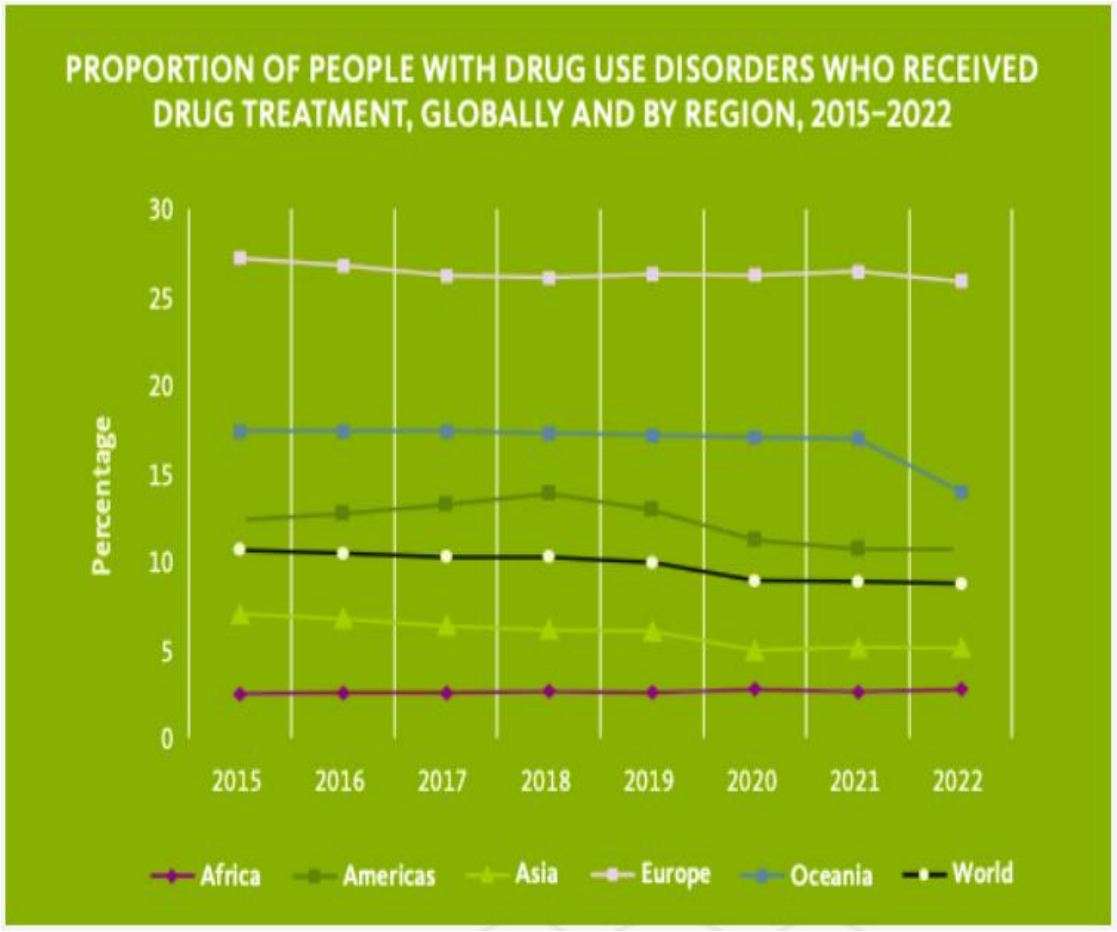
Figure 5. Global Treatment Services for Drug Users under 25 Years of Age in 2023



Source: UNODC (2025). World Drug Report: Special Points of Interest.

UNODC (2024) stated that treatment was given to one to eleven people with substance use disorders in 2022. Global treatment status for people with substance use disorder is shown in fig.9 below.

Figure 6. Global Treatment Services Received by People with Drug Use Disorder



Source: UNODC (2024). World Drug Report for ISSUP

2.1.1.10 The Need for Prevention and Treatment Services in Educational Institutions in Ethiopia

Roba et al (2021) stated that students are exposed to different substances at their early stage before joining university, and such a practice is also observed among university students, especially unattended students so that educational institutions and policymakers need to take

strong control measures to tackle substance-driven problems. Shegute and Wassihun (2021) also concluded that awareness creation and peer educational programs are required to address the prevalence of substance use and its perceived impacts on academic performance.

2.1.1.11 Substance Use and Substance Use Disorder Treatment Mechanisms

Yeshigeta, Kalayu and Andualem (2009) stated that university students are more prone to substance use than the general population. EFMHCA (2017) stated that drug use prevention is the primary solution for Ethiopian people; dissemination of factual information; a due emphasis on the role of families, care givers, and teachers are crucial to save the lives of young segment of the Ethiopian population to protect them from harmful consequences. (ONDCP (2004) stated that conducting a survey is considered to be a recommended method to collect the data and understand drug use status in educational institutions. EFMHCA (2017) also recommended that prevention method is the first choice, and an evidence-based, rights-based, needs-based, non-judgmental and humane method of treatment is required while treating people with substance disorders. American Psychological Association (2012) also recommended that Reinforcement-Based Treatment (RBT) is a promising model that it encourages positive healthy activities and reduces triggering factors to treat people with substance use disorders. Valorose, Adolfson and Serafin (2021) also recommended that Screening, Brief Intervention and Referral is a method that is being used for a variety of treatment settings which can also be applied to treating substance users. Skews and Gonzalez (2013) also recommend that consideration of the biopsychosocial aspects is crucial for prevention and treatment plans for people with substance use to address associated consequences. MoH (2017) also stated that a coordinated, integrated effort and evidence-based strategies of relevant actors are crucial to tackle substance use disorder.

2.1.2 Theories and Models on Substance Use Disorder/Addiction

2.1.2.1 Major Theories on Substance Use Disorder/Addiction

2.1.2.1.1 The Moral/Spiritual Theory of Addiction

Mosher and Akins (2021) indicated that in the 19th and the part of the 20th Century, the moral concept of addiction was becoming dominant while the disease model of addiction was ignored. Lassiter and Spivey (2018) stated that substance use disorder is seen as a moral failing that is considered a wrong behavior which may results in taking punishment measures to tackle the problem. Nakken (1996) also stated that addiction is a spiritual disease which leads to spiritual death because the addict is disconnected to the soul and spirit of oneself and others.

2.1.2.1.2 The Disease/Biomedical Theory of Addiction

NIDA (2014, 2018) stated that addiction or substance use disorder is a chronic relapsing but curable disease which has harmful consequences, which implies that addiction is a disease whose cause is attributed to compulsive use of substances due to a brain disease resulting from continued use substance/abuse.

2.1.2.1.3 The Availability-Proneness Theory of Addiction

Smart (1980) stated that availability and proneness to substances contribute to substance use for either a social or psychological purpose. Skews and Gonzalez (2013) also confirmed that availability of substance is a major contributing environmental factor to substance use and the development of substance use disorder.

2.1.2.1.4 Social Learning Theory of Addiction

Bandura (1971) described that in a social environment, a person can develop a new behavior through direct involvement or observation from others where a person belongs to. Shaw (2002) stated that substance use is a human behavior because of social situations.

UNODC (2017 also stated that the type of substance a person can use is highly influenced by the individual, cultural and community situations. Skews and Gonzalez (2013) also pointed out that social learning can influence one to substance use by observing and modeling a family or another in the social setting where one belongs to.

2.1.2.1.5 Self-Medication Theory of Addiction

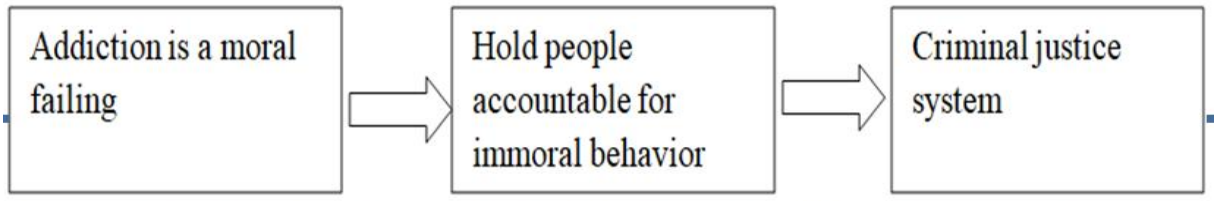
Khantzian (2012) described that the self-medication theory was developed while clinical treatments were being provided for those who were affected by substance use disorder with its main concept is that addiction will develop while taking substances for treatment purposes.

2.1.2.2 Major Models of Substance Use Disorder/Addiction

2.1.2.2.1 Moral/Spiritual Model

Morality refers to the degree to which an action conforms to a standard or norm of human conduct (Gonder University, n.d, p. 11). Swati and Chandra (2023) also stated that the advocates of the moral model of addiction believe that a substance user fails to have moral strength not to use substances and lacks will power to quit using substance, but such an action or behavior is considered a social shame by the society to which the substance user belongs. Nakken (1996) also stated that addiction is a spiritual disease and when addiction stays for longer periods, the addicted will become more isolated spiritually.

Figure 7. Moral Model of Addiction



Source: Richter, Vuolo & Samassi (2019). The Stigma of Addiction Treatment (Book Chapter 7). The Stigma of Addiction: An Essential Guide. Avery and Avery (Eds)

2.1.2.2.2 Disease/Biomedical Model of Addiction

Ruvins, Brydon, Kayserman and Stem (2024) stated that the biomedical model of addiction, which paved the ways to the development of addiction medicine, is considered a brain disease because of biological and neurological causes which resulting in brain structural and functional changes that compel drug users to lose self-control due to continued substance use. NIDA (2014, 2018) stated that addiction is a chronic, relapsing and curable disease that results from continued use of substance (s) and malfunctioning of the brain reward system, particularly the natural dopamine neurotransmitter is highly affected.

2.1.2.2.3 Brain Disease Model of Addiction

Koob and Volkow (2010) concluded that addiction affects large parts of the brain regions and circuits despite different phenotype being observed among people with substance use disorder and its consequences also vary depending on the type of substances taken by these individuals. NIDA (2014, 2018) stated that addiction is a brain disease that can affect the brain circuit system, mainly the reward system or the dopamine neurotransmitter.

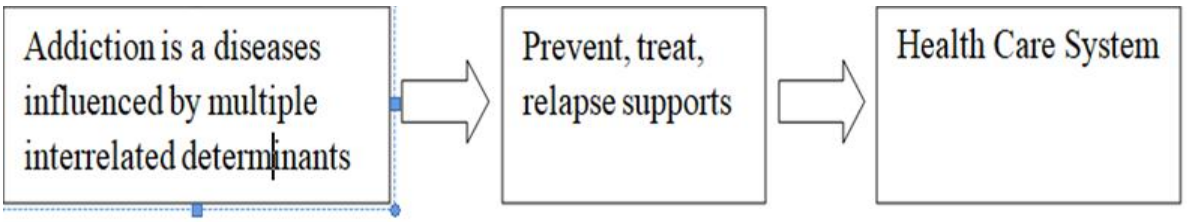
2.1.2.2.4 Psychological Model of Addiction

Skews and Gonzalez (2013) stated that psychological issues such as depression and anxiety psychiatric problems are among the major causes to use substances which will also be the consequences of substance use that calling for a due consideration of this cause while conducting prevention and maintenance efforts to address the issue. Swati and Chandra (2023) stated that the mind and emotions are causes for seeking psychoactive substances. For example, Bethelhem (2023) confirmed that the trauma and stress, among others, were the psychological reasons why the youth were initiated into abusing Tramadol substance.

2.1.2.2.5 Biopsychosocial Model of Addiction

Skews and Gonzalez (2013) described that causes for substance use are biological/ genetic, psychological, and sociocultural factors so that all these basic issues are causes and treatment areas which we need pay a due attention. Belfiore, Galofaro, Cotroneo, Lopis, Tringali, Denaro and Casu (2024) concluded in their study that the biopsychosocial model requires providing a due attention to understand addiction, emphasizing the endocannabinoid and dopaminergic neurotransmitter major role to substance use disorder. Becoña (2018) stated that the biopsychosocial model of addiction, as an alternative to biomedical model of addiction, was introduced by Engle (1977) that biological, psychological and social factors play a major role in substance consumption. Bolton and Gillett (2019) also pointed out that biopsychosocial model help us open our mind to see a range of factors while treating a disease although it cannot be a clinical tool that replaces established clinical guidelines.

Figure 8. Biopsychosocial Model of Addiction



Source: Richter, Vuolo & Salmassi (2019). Stigma and Addiction Treatment (Book Chapter 7). *The Stigma of Addiction: An Essential Guide*. Avery and Avery (Eds)

2.2 Empirical Literature Review

2.2.1 Prevalence of Substance Use and Its Impacts in the World

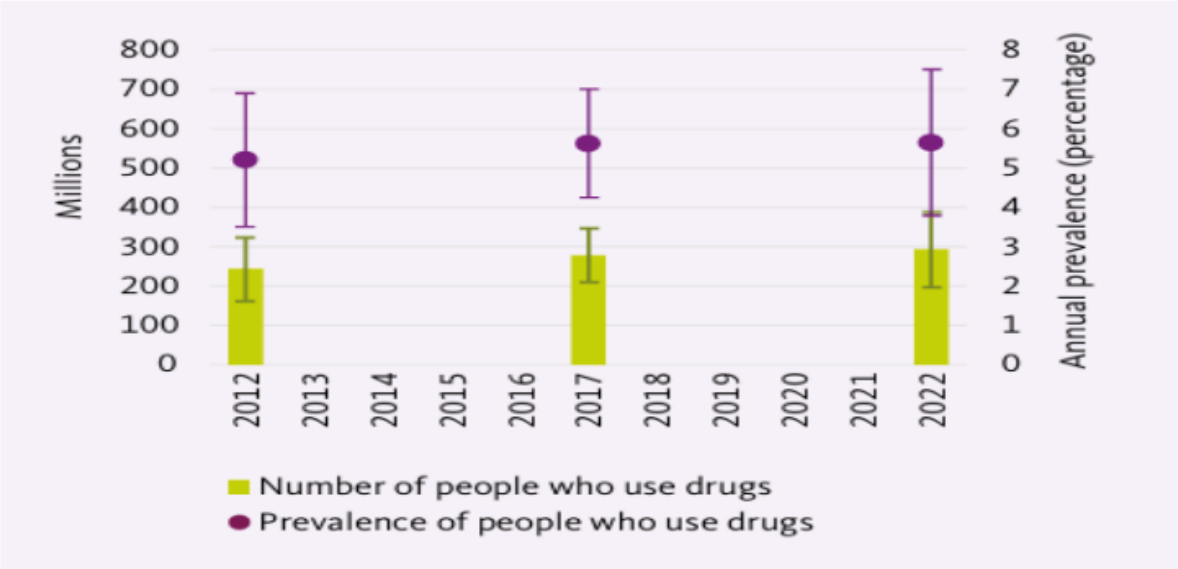
UNODC (2024) stated that drugs, in different forms and with more attractive ways, are illegally produced and trafficked for non-medical purposes. UNODC (2025) also reported that some substances which are commonly used for medical purposes have also been found in the

illegal markets and even produced illegally. Barata, Ferreira and Oliveira (2022) also stated that even in some countries such as Uruguay mixed regime in December 2013; Canada in October 2018; and the United States of America profit-driven commercial regime legalized cannabis that the legalization of such a drug significantly contributes to its prevalence and adverse effects.

UNODC (2024) reported that drug use has been commonplace in the world in that there were 292 million people aged in between 15-64 that accounting for 5.6% that who used different types of drugs in 2022. UNODC (2025) reported that in 2023, people who used drugs were estimated to be 316 million in that these people representing 6% of the age group that ranges in between 15-64 from the entire global population. UNODC (2023; 2024; 2025) in its reports indicated that drug use has been increasing at increasing rate, and that new vulnerable groups are also on the rise with limited health and social treatment services.

The incidence and prevalence of substance use disorders continue to present major costs to individuals, families, and society at large (Ligas & Douaihy, 2014, p. 2). UNODC (2024) reported that misuse of drugs is a cause for developing substance use disorder and hence 64 million people became the victims of such a disorder in 2022, which was increased by 3% as compared to the data recorded in 2018. Bete et al (2022) stated that psychoactive substances have become a source of major socioeconomic and public health challenge globally. For example, the Ethiopian Food and Drug Authority (2024) reported that tobacco is a serious health problem globally that it killing above 8 million people every year, of which 7 million were users and 1.2 million are non-smokers exposed to smoking. Paul et al (2024) also confirmed that substance use has become common at colleges and universities as that such a practice can have adverse effects on students' personal life, health and academic achievements.

Figure 9. Global Prevalence of Drug Use by People Aged 15-64 in 2012, 2017 and 2022.



Source: UNODC (2024). World Drug Report: Key Findings and Conclusions

2.2.2 Prevalence of Substance Use in Africa

African Union Health, Humanitarian, Affairs and Social Development Commission (2023) reported that Africa is a place where substance use is taking place because the continent has been experiencing to cultivation, manufacture and production of different substances.

For example, Global Commission on Drug Policy (2019) stated that opium and cocaine have long history in Africa and people use such socially acceptable drugs for cultural, recreational and treatment purposes. EFMHACA (2017) stated that khat, for instance, is not under control by ratified Conventions and has been widely grown for centuries in Africa that it is predominantly common in East Africa as a stimulant substance with its stimulant effect that is almost equal to the similar effect produced by Cathine, Cathinone and Methcathinone. Ebrahim, Adams and Demant (2024) also stated that young people in the Sub-Saharan countries use different substances at different times between genders, regions and countries.

2.2.3 Prevalence of Substance Use and Its Impacts in Ethiopia

EFMHACA (2017) described that khat, alcohol and tobacco are substances easily available at lower cost everywhere in Ethiopia, while the cultivation of cannabis has long history following the coming of Ras Tafarians around 1940s to Ethiopia, farmers are also producing cannabis instead of food crops, and both licit and illicit drugs have become a significant burden of disease that affect the socio-economic conditions in Ethiopia.

Substance use disorders are characterized by a pattern of continued pathological use of a psychoactive substance that resulted in repeated adverse physiological, behavioral and social consequences in Ethiopia (MoH, 2017, p.1). Based on their Meta-Review study, Abajobir and Kassa (2019) also concluded that almost one-third of youth in Ethiopia were familiar with different substances in their lifetime which calls for school-and community-based interventions to tackle the prevalence of substance use disorder and it demands further studies on the impacts of substance use because its magnitude of impacts is not well-studied.

Table 5. Substances Trafficked and Arrested in Ethiopia

Year	Number of Traffickers	Type of Drug	Amount (Kg)
2011	14	Cannabis	26.000
		Cocaine	1.400
		Heroin	7.200
		Methamphetamine	1.700
2012	12	Cannabis	35.400
		Cocaine	2.400
2013	23	Cannabis	112.500
		Cocaine	30.700
		Heroin	11.000
		Methamphetamine	6.300
2014	66	Cocaine	141.300
		Cannabis	30.300
2015	58	Cannabis	18.300
		Cocaine	138.100
		Heroin	2.100
2016	50	Cannabis	821.050
		Cocaine	36.060
2017 (up to 30th April)	19	Cannabis	14.980
		Cocaine	19.4000

Source: EFMHCACA (2017). Ethiopian National Drug Control Master Plan 2017-2022

2.2.4 Prevalence of Substance Use and Its Impacts in the Ethiopian Education System

2.2.4.1 Prevalence of Substance Use in the Educational Institutions in Ethiopia

Roba et al (2021) in their Meta-Analysis study concluded that substances such as khat, alcohol and smoking are common and widely practiced among students in Ethiopia. Shegute and Wasihun (2021) also indicated that university students were exposed to different overall lifetime and current substances, including illicit drugs at AAiT, AAU that 67.2% of students were alcohol users and 72% of students were illicit drug users before entering to their university education, while 63% of students were khat users and 71% of students were becoming cigarette users after joining university. Roba et al (2021) study indicated that they tried to assess any substance consumed by students but their major focus of analysis and conclusion was on khat, alcohol and cigarette smoking.

2.2.4.2. Impacts of Substances on Students' Academic Performance in the Educational Institutions in Ethiopia

Education is a key determinant factor for individual opportunities, attitudes, as well as socio-economic development and hence it is considered a basic human right (MoH, 2016, 4). However, Abate (2018) concluded that alcohol, tobacco, and Khat are the most prevalent drugs among university students in Ethiopia, of which khat has an impact on students' academic performances, which looks for demand and supply reduction policies and strategies in higher institutions, and hence there is a need for prevention and after care services.

Kalayu, Andualem and Yeshigeta (2009) indicated that substance use is prevalent at Jimma University where khat, smoking and alcohol endanger university students to experience

negative academic performance. Shegute and Wassihun (2021) also concluded that there are students who use drugs in their lifetime, and students who are currently using khat, tobacco, cigarette and illicit drugs among undergraduate regular students of the Institute of Technology at Addis Ababa University, mainly in colleges and universities.

Previous studies on substance use are helpful in creating awareness on the prevalence of substance use in the population in general and in the educational institutions in particular. These studies mainly focused on some substances such as khat, cigarettes, and alcohol and some un specified illegal drugs. Moreover, these studies focused on the prevalence of substance use/abuse, which calls for conducting a comprehensive study with a focus on substance use disorder and its impact on students' academic performance.

2.2.5 Legal and Institutional Frameworks for Combating Substance Use and Substance Use Disorder in Ethiopia

EFMHACA (2017) stated that proclamations, criminal codes, strategic plan, institutional framework, etc measures were taken to make decisions on drug dealers and traffickers to discourage drug trafficking and control its associated adverse consequences on users. EFDA (2014) also pointed out that the FDRE HoPR ratified the World Health Organisation Framework Convention on Tobacco Control by its proclamation no. 822/2022, then the EFDA prepared directive in 2023 to implement its mandate to control tobacco in Ethiopia.

2.2.6 Research Gap Observed from Previous Studies

The researcher reviewed previous studies conducted on substance use at higher educational institutions in Ethiopia. These previous studies mainly focused on the prevalence of substance use in the education sector, in different professions, in different geographical areas

and at the country level. Surely, all such previous research conducted has been contributing to creating awareness, tackling substance use and its associated disorders.

However, they are not as such enough to better understand the issues because most of these studies also recommended that there is a need for additional research and interventions in the educations sectors to reduce the prevalence of substance use and its adverse impacts.

For example, Roba et al (2021) reported there is a need to conduct a comprehensive study that includes all substances being used by college or university students. Shegute and Wasihun (2021) also indicated that their study conducted at AAiT (AAU) was confined to focus mainly on some drugs such as khat, tobacco and cigarette in that they recommended a comprehensive further study on the consumption of drugs by university students to address the impacts associated with substance use. Abajobir and Kassa (2019) also stated that one-third of Ethiopian youth use different substances in their lifetime and further study is required to assess the impacts of substance use and substance use disorder on health, social and economic impacts. Bethlehem (2023) also studied on Tramadol addiction and this study also indicated that there are shortages of previous local studies to include the perspectives of researchers on drug addiction.

Thus, this research is assumed to fill research gaps of previous studies and to contribute a lot reduce the impacts of substance use disorder on students' academic performance because this issue has not been previously studied well.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Meaning and Purpose of A Research

Kothari (2004) defined that research as a scientific and systematic investigation that calls for gaining information from study participants about a topic of a study to be used for study purposes. Pandey and Pandey (2015) also defined that research is a combination of two basic words: "Re" plus "Search" which indicates the overall plan for following scientific procedures to examine a topic of study for acquiring new knowledge about existing facts.

3.2 Researcher's Stance/Reflexivity

Substance use and its associated disorders have become common everywhere in the world. Many studies, reports, strategic plans and books written on this topic show that the prevalence or the magnitude of substance use both licit and illicit has been increasing at an increasing rate. In Ethiopia, there is a publicly-owned tobacco enterprise to generate income for the government despite its adverse health, social, economic and environments consequences. There are laws that prohibit selling some substances such as cigarettes and alcohol to less under 21 age and recent efforts to secure tobacco free at public spaces.

In Ethiopia, substance use and its adverse impacts as a health, social and economic problems are exhibited everywhere due to a number of aggravating or facilitating reasons. The youth population is one of the affected segments of society everywhere, including in Ethiopia. Both licit and illicit substances are heavily consumed in Ethiopia and licit substances such as khat, cigarette and alcohol are licit we see at every corner in Ethiopia, including the surrounding areas at educational institutions, including higher education institutions, like AAiT, AAU. Its

prevalence and associated impacts knock every door of a family despite its prevalence and magnitude varying depending on a number of factors.

The researcher, as part of the society, has observed this problem while he was studying at his university education that many students have been using substances and many shops sell khat, cigarettes and drinks, including local ones such as *areki*, *tella*, etc. The researcher also has been observing in his residential area that many shops sell substances, where the community and the youth widely buy and consume such substances for social gatherings and recreational purposes; even consumption of such substances has become common in some cases as a ceremony just for staying at neighbors' homes with families who have faced death.

The researcher also observed at the back of his residence that many youth in afternoon and at the evening chew khat and smoke cigarettes that endangered them for problems, of which at the evening at dark times, some youngsters quarrel with gangsters that youngsters' mobiles were taken after they heavily bit them which results a burden to their families that the researcher saw many times around and beside his residence. The researcher has also observed that some youth who live with substance use disorder have had their parents come and consult me in neighborhood because of the severe impacts of substance use. In short, substance use and its impacts have been knocking every door and it also has the potential to affect society, especially the youth at educational institutions due to a number of contributing factors. The researcher, therefore, is motivated to assess whether there is substance use disorder at AAiT and its impacts on students' academic performance aiming at contributing to creating awareness and digging out the facts for pertinent interventions to be done by AAiT Campus, AAU at large and mobilizing stakeholders for ensuring better academic achievement. Accordingly, the researcher partly participated in taking some substances such as drinking local (*Areki, tella*, etc.) and

brewed drinks (beer, draft, etc.) during observation and focused group discussion sessions to collect the data and build relationship between the groups and the researcher. The researcher also tried to cover the costs associated with this recreation while collecting data from participants.

3.3 Research Design

Kothari (2004) stated that research design shows the paths to conduct research because it shows the procedures to be followed to conduct a research project. Grey (2004) indicated that case study is a qualitative research design that is useful for deeply investigating a research topic that seeks answers, primarily the "why" and "how" research inquiries. Ary et al (2010) stated that a case study is a qualitative investigation of an individual, a group an event or an institution. Kothari (2004) stated that a case study is a well-known research tool to investigate a case carefully and completely, which focuses on an in-depth exploration rather than focus on breadth. It is useful to study a wide range of cases; it could be a person, a family, an institution, a group or the entire community. Creswell (2014) also described that a case study is a qualitative research design that investigates taking an individual, one or more groups, an event, or a process as a case for deeply studying and understanding of the topic with scientific procedure within a given period of time so as to achieve research objectives.

Accordingly, this study took 'substance use disorder and its impact on students' academic achievement at Addis Ababa Institute of Technology at Addis Ababa University' as the case selected and assessed by this study. The inclusion criteria for selecting the study participants as a case is: being a student at AAiT (AAU) who used substances and developed substance use disorder are the major criteria set in that these criteria could be achieved by employing a purposive design.

Of the four types of case study designs (As per Yin's (1994) types of a case study design, cited in Grey (2004, p. 132), 'a single case, embedded' type of case study design was employed that enabled the researcher conduct this study and analyze units of topics covered under the major case, research topic. In short, this study employed a descriptive case study research design.

3.4 Study Site

Guided by the research questions, the qualitative investigator must select a site in which to observe (Ary et al, 2010, p. 432). Accordingly, the researcher selected and conducted this research among students of the Institute of Technology campus at Addis Ababa University. AAiT Campus currently has four departments: Mechanical Engineering, Civil and Infrastructure Engineering, Electrical and Computer Engineering, and Industrial Systems Engineering. These departments teach students for about five years to cover the courses in the normal schedule that students can have more stay beyond the normal schedule if students come across difficulties for a number of reasons. AAiT Campus is surrounded by small shops where substances such as khat, local drinks, cigarettes, etc are legally being sold and houses ready for fast foods, khat chewing, local drinking and smoking take place. Therefore, the researcher communicated with students by employing students' social networks to find out those students who use substances and have developed substance use disorder for conducting this research.

3.5 Research Approach

Kothari (2004) stated that research approach is classified as qualitative and quantitative research approaches in that the qualitative approach employs non-numeric and numeric data which is flexible, whereas the quantitative approach uses inflexible data as opposed to the

qualitative approach. Creswell (2013) also stated that research approaches are classified into three such as qualitative, quantitative and mixed approaches.

Therefore, this study employed non-numeric data which belong to a qualitative research approach which is suitable to conduct the research topic so that the researcher deliberately selected study respondents by employing purposive sampling and identify the first respondents and others by referrals by employing snow-ball sampling technique, which both techniques belong to qualitative approaches, to collect the required data and achieve the research questions of this study as planned.

3.6 Sampling Design

Obilor (2023) stated that the non-probability sampling technique gives zero chances of equal selection because the decision is made by the preferences of a researcher. Ary et al (2010) stated that purposive sampling is considered to be a good design to provide maximum insight and understanding of the study topic because a researcher uses prior experience and knowledge that helps the researcher conducts an in-depth study.

Thus, this study used a purposive sampling design because those students who use substances and developed substance use disorder were taken as a criterion to take them as cases and deliberately select study participants with this specified criterion by the researcher. Snow-ball sampling was also used for this study to identify the hard-to-reach study target population, find out their social networks and disclose their concealed information. The combination of both purposive sampling and snow-ball sampling techniques helped the researcher reach out to the hard-to-reach study participants, collect the required data and complete conducting this study.

3.7 Study Population

Population is the larger group to which a researcher wishes to generalize; it includes all members of a defined class of people, events, or objects (Ary et al, p. 647). On the one hand, the study population of this study is impossible to reach and quantify because of its sufficient data. On another, because this research employs a non-probability qualitative research approach, the number of study participants is determined by the complete judgment of the researcher and the data saturation concept. Creswell (2015) stated that saturation is the concept that no new value is added as an input to the research when new data is collected from additional study participants.

Therefore, the study population of this study is all those students with substance use disorder, which is eight in number, as identified by this research by employing purposive and snow-ball sampling technical procedures and taking the data saturation concept into account.

3.8 Sample Size (Target Population)

Abiy, Alemayehu, Daniel, Melese, and Yilma (2009) stated that there is no fixed rule for sample size in qualitative research but saturation determines the size of the sample. Ary et al (2010) described that sample size is part of the entire study population that qualitative researchers deliberately select the number of study participants until the data is saturated or sufficient data is collected. Kumar (2011) also stated that in qualitative research, the concept of saturation is an indicator of collecting enough sample size.

Accordingly, the sample size of this study is eight in number, which is equal to the study population of this study since the data collected from study participants is enough and there is no need to collect extra data as it adds no value since data saturation concept is applied to this study. These eight study participants, who were from 3rd year (2 in number), 4th year (3 in

number) and 5th year (3 in number), were taken as sample size by employing snow-ball sampling technique.

Procedurally, each study participant was interviewed based on the interview questions of this study until each participant could provide extra and sufficient data. However, it is impossible to generalize the findings of this study obtained from this sample size to the entire population because a qualitative research by its very nature has its own limitation concerning this issue.

3.9 Methods of Data Collection

Kabir (2016) stated that data collection is one of the stages in a research study that indicates the means how to collect data to enable answering research questions, hypotheses, and evaluating outcomes. Ary et al (2010) also listed out that the most commonly used data collection methods are observation, in-depth interviews and document analysis.

3.10 Types and Sources of Data

3.10.1 Types of data

Data is a collection of facts, such as numbers, words, measurements, observations, figures or descriptions of things (Deribsa, 2020, p. 68). Kothari (2004) stated that primary and secondary data are the commonly known two types of data in research where primary data is considered as original and new but secondary data is the data that was already collected and analyzed by some other person or organization which is not fresh.

3.10.2 Sources of data

Primary source refers to original documents, relics, remains, or the records of an eyewitness used in historical research. Secondary source is second-hand information such as a description of a historical event written by someone other than an eyewitness (Ary et al, 2010,

p. 648-650). Workineh (2021) stated that, generally, information is obtained from the primary and secondary sources which mean that study participants who gave their primary data, organizational reports, and published materials are considered as a primary source. On the other hand, data collected from other similar studies are considered as secondary sources of data.

Thus, this study employed both primary and secondary sources. Primary data obtained from observation, an in-depth interview, and focused group discussions were collected and used as inputs for this study. Secondary data obtained from the secondary sources such as research, article reviews, relevant books, organizational plans, organizational reports, etc. were also collected and employed as inputs for this study.

3.11 Tools of Data Collection

Qualitative researchers also have a number of data-gathering tools available for their investigations. The most widely used as tools in qualitative research are interviews, document analysis, and observation (Ary et al, 2010, p. 220). Qualitative research is characterized by flexible, naturalistic methods of data collection and does not use formal instruments to record data. Qualitative data are often gathered in the form of words, pictures, or both (Lodico, Spaulding & Voegtle, 2006, p. 116). Hence, this study employed observation, document review, in-depth interview and focus group discussion tools of data collection because these tools helped the researcher collect relevant data about the case investigated.

3.11.1 Observation method

Structured observation is considered as an appropriate in descriptive studies (Kothari, 2004, p. 96). In contrast, unstructured observation is loosely organized and the process of observation is largely left up to the observer. It may not be mandatory for the observer to set strict criteria against which the observation is to be made (Egne, 2022, p. 154). In unstructured

observation, the researcher monitors all aspects of the phenomenon that seem relevant (Workineh, 2021, p. 250).

Accordingly, unstructured observation method of data collection was selected and employed just to collect all relevant data for this study. The researcher together with the key informant at the AAiT Campus visited dormitory toilet rooms, shower rooms, dormitory corridors, garbage baskets, etc to check if remnants are there or not at AAiT campus. The researcher with key informants explored major areas on all floors at the dormitory so the researcher and the key informant obtained Winston cigarette packets from garbage baskets, in the shower rooms and toilet rooms. Leaves of khat and other substances such as dried marijuana, dried khat leaves were also found at shower and toilet areas as evidences. This unstructured observation method was helpful to verify if substances are taken by students in the AAiT Campus at Addis Ababa University.

3.11.2 Document review method

Qualitative researchers may use written documents or other artefacts to gain an understanding of the phenomenon under study (Ary et al, 2010, p. 442). Accordingly, the researcher reviewed some records from relevant bodies found at AAiT to better understand issues, and confirm the data obtained from other sources and data collection tools. This method of data collection helped the researcher triangulate the data collected to have an in-depth understanding of the life situations of study participants.

Accordingly, the researcher communicated with Campus Registrar Office with the written permission of the Campus, and hence collected lists of students who are admitted to AAiT Campus, some sample disciplinary records of students from key informants, and clinical data recorded on the admission and treatment of study participants in the AAiT Campus. This

document review method helped the researcher better understand the case and challenging life situations of study participants that they have been experiencing which in turn affecting them to achieve academic performance properly.

3.11.3 Interview method

Abiy, Alemayehu, Daniel, Melese & Yilma (2009) stated that a qualitative interview is conducted between an interviewer and respondents in a facet-to-face platform where unstructured questions are forwarded and replied openly and flexibly. Ary et al (2010) described that **a** focused group discussion is conducted in a face-to-face platform between a researcher and group members who share common characteristics that group members ranging from 6-12 persons. Kumar (2011) also stated that focused group discussion helps a researcher examine group members' perceptions, experiences and deeply understand a topic under investigation.

Accordingly, interview session were arranged for all study participants individually to respond to the interview questions. The procedure was that the researcher asked the respondent and then the respondent replied to the questions flexibly. During this procedure, the researcher took notes and recorded all 8 interview sessions conducted individually with study participants to retrieve the data and ensure reliability. Interview method with each study participant continued until sufficient data was collected on each research question from each respondent until the data saturation point was reached at its maximum level.

3.11.4 Focus Group Discussion

Abiy, Alemayehu, Daniel, Melese & Yilma (2009) stated a qualitative interview is conducted between an interviewer and respondents in a facet-to-face platform. Ary et al (2010) described that focused group discussion is conducted in a face-to-face platform between a researcher and group members who share common characteristics that group members range

from 6-12 persons. Kumar (2011) also stated that focused group discussion helps a researcher examine group members' perceptions, experiences and deeply understand a topic under investigation.

Study participants of this study were eight in number. They are not only use/abuse substances individually but they also do them in group because they share with many things. Some of them share with same dormitories, learn in the same departments, learn in the same classes, and all study participants live in the same Campus compound. They also share with substances, experiences, behaviors, risks, etc each other. Therefore, study participants, as a group, were oriented about the objective of the focus group discussion so data were collected from this focus group discussion platform because substance use/abuse issues are also done in group to satisfy group interests. Taking data from the focused group discussion also helped the researcher triangulate the data obtained from the other tools of data collection methods.

3.12 Method of Data Analysis

Qualitative researchers seek to understand a phenomenon by focusing on the total picture rather than breaking it down into variables. The goal is a holistic picture and depth of understanding rather than a numeric analysis of data. The researcher must organize and categorize or code the large mass of data so that they can be described and interpreted (Ary et al, 2010. p. 29-32). Coding is a significant procedure in data analysis. It consists of naming and categorizing of data (Stratus & Corbin, 1990, cited in Deribsa, 2020, p. 246). Kothari (2004) also stated that coding is significant for data analysis such that the coding process, which creates classes of data collected, should be linked with a research problem**.** Creswell (2013) also stated that themes are broad categories of information or data that comprises many codes which support the theme.

Accordingly, the data collected from study participants were manually transcribed and coded. Major themes, which agreed with the research questions of this study, were also developed from the findings of this study. Having similar concept is the major criteria to develop the themes. Accordingly, all findings of this study were grouped under the themes developed to facilitate data analysis so this study employed the thematic analysis method that was done manually. Braun and Clarke (2006) supported this idea and stated that a theme is a representation of patterned comprehensive responses useful for linking it with research questions.

3.13 Validity and Reliability Analysis

3.13.1 Validity analysis

Validity refers to the extent to which a measure actually taps the underlying concept that it purports to measure (Ary et al, 2010, p. 652). Kothari (2004) also stated that validity is a measurement tool that checks the appropriateness of an instrument used in research if the tool actually measures what it should measure.

Thus, this study employed data collection tools such as observation, document review, focused group discussion, and in-depth interview methods which are pertinent to collect qualitative data to answer research questions.

3.13.2 Reliability analysis

Reliability refers to the extent to which a measure yields consistent results (Ary et al, 2010, p. 649). Creswell (2007); Creswell 2013) also stated that the quality of reliability will increase if a researcher takes notes in the field, records the data electronically, and transcribes electronically recorded data into words.

Accordingly, this study is a qualitative research so that data collected by observation, focused group discussion, and in-depth interview methods were recorded, transcribed and coded so as to generate similar results when it is checked at different times that show the reliability of this study. This study also employed triangulation, members' checking and auditing techniques/procedures to ensure reliability/accuracy.

3.14 Ethical Consideration

Creswell (2014) stated that ethical consideration has been given a due attention in research activities. Creswell (2013) also stated that researcher requires giving a due attention to include the ethical procedures ahead in the research proposal because qualitative researchers face diverse challenges during data collection, data analysis and dissemination of study results.

This study, therefore, passed the processes with regard to ethical issues. Written permission from the School of Social Work, AAU was obtained and dispatched to selected concerned bodies at AAiT. After getting permission from these concerned bodies at AAiT, data was collected respecting ethical issues such as dignity, confidentiality, anonymity, non-traceability (pseudonym), and free of harm, etc ethical procedures accordingly. The data collected from study participants have been kept in a confidential manner during the entire stages of this study. Some key data also omitted and pseudo names were also given in the demographic characteristic part of this study to safeguard the well-being of study participants.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This section of the study deals with summary of major findings obtained from the study, followed by the discussion part and interpretation of the major study findings with respect to the major theories, models, and other literatures reviewed. Summary of major findings, discussions and interpretation sections of this study also have been connected with respect to the research questions so as to achieve the general and specific objectives of this study.

4.2 Demographic Characteristics of Study Participants

Respecting points indicated on the 'ethical consideration' part of this study, only some characteristics of study participants are disclosed in this demographic characteristics as stated in the Table 6 below to avoid traceability and keep confidentiality. It was deliberately omitted some key demographic characteristics such as departments, students' level of years they are attending, etc of the study participants to avoid traceability. Pseudo names were also given to each study participant to avoid traceability because the case is sensitive which will result in social stigma and other harmful consequences if the data is once disclosed.

Table 6. Demographic Characteristics of Study Participants

No.	Pseudo Name	Sex	Age	Pseudo Year	Religion	Marital status
1	Alemu	Male	23	3rd	Orthodox	Single
2	Getu	Male	26	4th	Not disclosed	Single
3	Tilahun	Male	25	3rd	Not disclosed	Single
4	Daniel	Male	26	5th	Protestant	Single
5	Jemal	Male	25	4th	Muslim	Single
6	Robel	Male	26	4th	Orthodox/protestant	Single
7	Hagos	Male	28	5th	Orthodox	Single
8	Hassen	Male	29	5th	Muslim	Single
	Average age		**26**			

Source: Author's study, 2025.

4.3 Themes Developed from the Data Collected

Qualitative research involves developing codes, patterns, and themes from the data collected which will be the main sources of conducting data analysis. Themes were developed in line with the research questions so as to summarize multiple responses of study participants to make data analysis. Accordingly, four themes were developed as indicated in the Table 7 below. The lived experiences of substance use; substance use disorder; factors contributing to developing substance use disorder; and impacts of substance use disorder are the major themes were developed taken as a basis for conducting thematic analysis.

This research followed a series of steps to develop themes. The following detailed steps were employed. Familiarization with the data collected to have a better understanding of the data collected; categorization of the data in a way that it gives meanings; grouping of similar categories (codes) into a similar patterns; organizing theses codes into major topics that align with the research questions; and review of the themes developed to ensure that these themes represent the data collected procedures were done.

The major themes developed are substance use practices/experiences of study participants, substance use disorder, the major factors to develop substance use disorder, and impact of substance use disorder on students' academic performance. The sub-themes are:

- experiences on licit and illicit substances;
- complications such as physical, psychological, mental, social, functional, etc.
- Individual, familial exposure to substances, group, social, environmental, availability, cost, method of drug administration, effect of substances, comorbidity (psychological and mental) factors, lack of socio-economic support, academic failure, etc.;

- physical, psychological, mental, social, functional, academic, etc complications.

and minor themes are also identified as described in the Table 7 below.

Table 7. Themes Developed from Multiple Responses of Study Participants

No.	Major Themes	Sub-Themes	Minor Themes
1	Substance use practices/experiences	Experiences on licit and illicit substances	**Licit substances:** khat, nicotine (cigarettes), bottled drinks, local drinks, soft drinks like sofi malt, negus malt, v-bull, etc. Medicines such as Tramadol and the like legally permitted medicines, coffee, etc. Illicit substances: cannabis such as marijuana, hashish, etc; stimulants such as cocaine, etc. opioids; depressants; hallucinogens, misuse of inhalants such petrol; misuse of Tramadol and other over-the-counter drugs, etc.
2	Substance use disorder	Complications such as physical, psychological, mental, social, functional, etc.	**Physical:** craving for substances, body injury, illness ranges from mild to severe; nausea; vomiting; abdominal pains; loss of appetite; weight loss; decreased physical coordination, dependency, etc. **Psychological:** anxiety, depression, unable to self-control drives (emotions), instability, insecurity, fear, hesitation, dependency on substances, etc. **Mental:** problems related to cognitive, information processing, rational decision-making, temporary memory loss (amnesia), etc. **Social:** self-stigma, social-stigma, intra-and-inter-personal conflicts, etc. **Functional:** failure to carryout duties and responsibilities, including academic performance, etc.

No.	Major Themes	Sub-Themes	Minor Themes
3	Factors to develop substance use disorder	Individual, familial exposure to substances, group, social, environmental, availability, cost, method of drug administration, effect of substances, Comorbidity (psychological and mental) factors, lack of socio-economic support, Academic failure, etc.	**Individual:** An early use of substances, curiosity to taste, self-medication to treat self-drives, recreations use, impacts of peer influence and other factors, etc **Familial:** Family use of substances, lack of adequate follow up and support, etc **Group**: Peer influence, shared behavior, dependency, abuse of substances, etc. **Socio-economic:** sharing of bad experiences (social learning), lack of socio-economic support to addicts, social disorganization, self-stigma, social stigma, culture to use substances for several purposes, etc. **Environmental:** suitability to produce abundant substances, response to harsh environment, place of origin where participants grow up, availability of substances, etc. **Cost:** substance availability with affordable costs, etc **Methods of drug administration**: injection, heavy use, repeated/prolonged use, etc, **Academic failure:** academic failure in some courses aggravate students' conditions to tend to substance use for self-medication and recreational purposes, etc.
4	Impacts of substance use disorder	Physical, psychological, mental, social, functional, academic, etc complications	**Physical**: craving for substances, body injury, illness ranges from mild to severe; nausea; vomiting; abdominal pains; loss of appetite; weight loss; decreased physical coordination, dependency, etc. **Psychological :** depression, anxiety, unable to self-control drives (emotions) , instability, insecurity, fear, hesitation, dependency on substances, etc **Mental :** problems related to cognitive, information processing, rational decision-making, temporary memory loss (amnesia), etc **Social:** self-stigma, social stigma, intra-and-inter personal conflicts, etc. **Functional:** unable to carry out duties and responsibilities, including academic achievement

Source: Author's study, 2025.

4.4 Research Findings from an In-Depth Interview

4.4.1 Substance Use/Abuse Experiences by Study Participants

This research was conducted on undergraduate regular students of the Institute of Technology Campus at Addis Ababa University. AAiT Campus is situated at the road side where medium and petty trades have been taking place around the Campus compound where several substances are of the goods legally and easily accessible for sale, even at lower costs that take into account the affordability of students, the nearby residents and anyone who is price sensitive.

The study participants of this study were 8 in number whose age ranged between 23 and 29 with an average age of 26. All study participants were composed of male. No female study participants were involved despite efforts being made. Key informants told the researcher that there are female students who use substances heavily but the number of students is small in these batches. The researcher found difficulties to find out female study participants who are assumed to be a person with substance use disorder because finding out the hard-to-reach population is time-taking and difficult in general since it requires longer times to access them by employing snow-ball technique as compared to accessing the male who are living with substance use disorder.

Thus, anyone who is interested on substance use/abuse and its associated impacts can conduct his/her research focusing on female students by employing snow-ball sampling technique because the researcher believe that accessing female students may be difficult because female students may feel it shame, lack courage to share their socially un acceptable experiences and fear social stigma which may affect their lives than the male ones.

Some study participants were admitted to AAiT at Addis Ababa University in the same batch, whereas some others were admitted at different years. Some of the study participants were attending the same class with the same department, whereas others were not sharing the same classes and departments, but there are cases where some took common courses together because of batch similarity.

Study participants were familiar with each other and established a strong friendship due to a number of socio-economic bonding factors. Their relationship feeling has been growing as a family from one to the other. Dependency among group members was highly reflected that paving ways to share many things in common whether it is useful or harmful for individuals within the group or the entire group members.

Study participants are heavily familiar with and consuming both licit and illicit substances. Licit substances are substances which are not controlled whereas illicit substances are substances which are controlled. Of the most common licit substances, study participants mostly consumed any available substances such as khat, cigarette, alcohol (both local such as *areki, tella*, etc., and brewed/bottled ones, including energetic soft drinks such as *sofi malt, negus malt, v-bull (red bull)l*, etc, and non-medical use of other over-the-counter drugs such as Tramadol, other pain killers, etc,). On the other hand, illicit substances which are not legally allowed to possess, use, and trade are substances consumed by study participants because of the availability and the severe demand of study participants to use these illicit drugs.

Study participants told the researcher that they are well-experienced in using both licit and illicit substances on the Campus and outside, nearby houses and other far-reaching places, including bed rooms and other houses suitable to gather and enjoy together while using substances. Some study participants expressed that they were familiar with some substance

before joining their university education. They also told the researcher that some students were caught at the Campus gate and at dormitories while holding substances that exposed them to disciplinary measures taken by the university administration and police. In conclusion, both legal and illegal substances were heavily consumed by all study participants at different places they assumed were suitable for them despite harmful consequences at AAiT Campus and outside. Study participants responded to the research question of whether they have any experience of substance use/abuse or not.

For example, Alemu, aged 23, shared his experience about substance use as follows:

> *Okay, my name is…..I was born in…..area. When I talk about substances, it is amazing even for me and for everyone because you know I am very young, but I have accumulated a rich experience in using substances since soon after completing my high school education because my friends and I had ample time to enjoy between the completion of high school and till we joined university education. Khat, cigarettes, and local drinks such as areki, tella, bukri, korefe, etc are easily available. My friends and I enjoyed ourselves a lot with these substances. Some people who had experience also invited us to hard substances such as hashish, marijuana, methamphetamines, Tramadol, etc. I learnt such experiences from my friends who had solid exposures to substance use and abuse and other people that met at recreational houses where substances were sold and consumed in mass together. You know you can get a lot from the lived experiences of others. Weekend is the funniest day we widely use substances with several friends who shared common interests. I have been using substances after joining my university education because such and other substances are also available nearby the AAiT Campus compound and I also met friends who came from similar and other departments. This relationship and prior exposures helped us fly together to do everything together like a proverb: 'same feather, fly together.' I know people from the same place of origin who are currently living in Addis Ababa who financially support me to cover my costs, including costs for substance use. I also enjoy being with them, especially at weekends while they were chewing khat, smoking cigarettes, and taking other hard drugs and talking about familial and other socio-economic issues of our similar place of origin because there is a severe conflict in our birth places. All these practices with prior exposures changed my life to consume*

> *more substances than before because substances gave me energy to quarrel than tolerate. I am always consuming substances despite producing challenges.*

Getu, whose age is 26, also expressed about his long time exposure to substances as follows:

> *My name is….. I came from…area. By now, I am a …year student at AAiT Campus. I am good at my education in my lower grades and even at AAiT. What challenged me is that I have been using several substances for many years in my short life. My age is 26. I used substances for testing, studying, recreational and other social purposes. When you have friends, you share many things you have both negative and positive ones. These are the characteristics of friendship because here we don't have families; we share and support each other in many ways. We may do assignments together; we may share dormitory rooms, floors, eat meals at the café, invite each other outside the Campus, share money, share resources, including substances, etc. Here, chewing khat, smoking cigarettes and drinking alcohol are common everywhere since you can afford it to buy. People may sometimes cover such costs if you have a strong friendship relationship and enjoy together because of 'give and take' principles. I used some substances in my early grades, especially, cigarettes. Cigarette has been my friend that live with me long years. I smoke cigarettes even when I get breaks before or after class because it gives me energy and gets rid of stress. I use many substances together with my friends from AAiT and other students from the 6-kilo main Campuses. I live not only with people, but with my substances also.*

Tilahun, whose age is 25, also shared his opinion on his substance use experiences as follows:

> *My name is….. I am from…area. My birthplace produces khat and other local substances. My parents and neighbours consume such substances together for several purposes, including for recreational, funeral, birth celebrations, etc. Our culture gives respect to this ceremony. I saw at my early age while my parents chewed khat, drank coffee, and took local drinks. I was curious about testing khat. When I was 11 or 12 years of age, I tasted some khat leaves at home. That time, it was meaningless for me, but I learned from my family that khat chewing is common. When I grow up, I tested it with my friends because I was mostly raised by a single-parent. When I joined at university, my dorm mates used it in dark times, even sometimes in the afternoon on Campus and outside. Smoking in corridors and toilet areas at the dormitory is common, when proctors don't visit*

these areas. I use both available substances with my friends and other people outside campus, and I sometimes do it alone to enjoy, get energy to study, or stay calm, get relief at Campus when no one is present at the dormitory.

Daniel, aged 26, also shared his exposure to substance/abuse that:

Substance use is almost common everywhere. Mostly it is used for recreation, social, pain relief, sexual arousal, fulfilling addictive behaviour, etc purposes. Many youth and students use khat, cigarettes, shisha, marijuana, cocaine, cannabis, alcohol and local drinks. I am the one who is taking all of these and others. My friends also use it in our group because we share what we have. I exert all maximum efforts to fulfill my interest in using at least some. I am really unable to pass days and nights if I can't get khat and cigarettes daily because they are complement for each another. I use at least one or some substance (s) almost daily just to relax, reduce depression, study purposes, self-stigma and social stigma, etc. because people doesn't respect me and I also feel shame because I use substances which produces an odd smell for those who do not use substances like cigarette because it has smells if one repeatedly use it, even it produces a cigarette smell if one use it once. Khat, shisha, cigarette, marijuana, cocaine, alcohols, and methamphetamines, Tramadol, etc. are some substances that my friends and I mostly consume when we find them. We dare to taste even new substances because we have some experiences doing it. I also take substances by injection method when I get it just to generate an immediate and enhanced impact from substances.

Jemal is a 25-year old student who shared his habitual use of substances as he stated as follows:

I am ….. I am studying……at the AAiT department. I say that substances are medicines and foods. I have habitually used substances since my early age because khat and some other hard substances are being grown. They yield more cash than other agricultural products. It is even available at our farms. You can take and test easily. Those who have exposures also guide you to do it. There are also medicinal plants, and we consider such substances as traditional medicines, an energetic plant while plaguing farms, herding cows, and just for passing the times. I belong to this culture that my family, my neighbors, and the larger community share such practice. In Muslim culture, you know khat is used for spiritual purposes, among others, and I also easily shared some parts of this culture, but I use substances for other purposes. Shortly, I have long-term exposure to several substances to see

> *from the community since my childhood even though I started using substance when I became old enough.*

Robel, aged 26, expressed his opinion as follows:

> *To tell you the truth, I have no any experience before joining this Campus but the social network and campus life facilitated me in this new life. Substance use helps us communicate with each other to exchange ideas, share life experiences, do assignments, share pains, share feelings, share interests, life challenges, etc. Living conditions, such as Campus new life forced me and my friends to use new and previously consumed substances together and sometimes alone. No one supports me, except my friends so the option I have is just to search for people and friends to face life challenges, share feelings, take drugs, to enjoy, self-medication, and get relief so I habitually use substances and consider them as shelter.*

Hagos, aged 28, is another study participant from AAiT Campus who shared a lot about his substance use experience, as stated below:

> *I am a Christian, but the area is dominated by a Muslim community where Khat is widely grown, local drinks are produced, and substances are being consumed for socio-economic purposes, etc. I saw that our neighbours that on Saturday, there are a khat chewing ceremonies and on Friday, there is a salat (a religious activity). After this salat, our family neighbors chew khat for praying, spiritual (dua), purposes that we as children also have the chance to look at these home ceremonies. My family also took part in chewing khat, cigarettes, shisha, etc. habitually. Thus, I belong to this family and community, so I had the chance to test such substances at home before joining university education, but their frequency and the types of substances have been increasing after joining university because I enjoy being with more experienced friends and other people together. I sometimes cut classes and use substances if someone invites me. If I didn't do assignments, I would have to leave the class and use substances. Some instructors are also lacks patience to understand our life challenges so they take measures not to attend their classes if we fail to fulfill some of our duties, which pave ways for us to spend more time at khat and shisha houses. I usually take khat, cigarettes, shisha, marijuana, cocaine, Tramadol, other anti-pain medications, and other over-the-counter drugs for recreational, self-medication, etc purposes.*

Hassen is a 29-year old student at AAiT who had more exposures to coffee than other substances but he shared experiences from others to use many other substances, as he stated below.

> *My name is…… I joined this Campus some years back. I have long-term exposure to using coffee. I never used other substance before joining this Campus. My door mates, some classmates and people who use substances have contributed to introducing me to substances; you know the social network, difficulty of some courses, campus life conditions, forced me to use substances. I almost use most of the substances used by my campus friends. My friends also support me in some courses while studying together, which also facilitated for me to share substances. I used khat and cigarettes at the Campus shower and corridor areas when the area kept silent, and sometimes in the dormitory at weekends. I am addicted to substances and use them despite harmful consequences.*

Study participants have prior experiences of substance use/abuse and they also shared with each other several substances during their stay at the Campus. Besides, they are also living with the substance use disorder resulted from taking many substances. Prior experience and gaining of new experiences of substance use/abuse resulted in taking several substances. As a result, study participants have accumulated experiences of taking:

- Stimulant substances such as khat, cigarettes, Marijuana (cannabis), shisha (cannabis), hashish (cannabis), cocaine, and Methamphetamines.
- Depressant substances such as home brewed *areki*, etc., bottled brewed drinks such as beer, *draft*, bottled *areki, and etc. substances.*
- Marijuana, heroin (which slows down brain function), and Tramadol (used for pain killer and sexual arousal).
- Other over-the-counter drugs for different purposes.

The researcher assessed the surrounding areas of AAiT Campus through an observation tool of data collection to check whether substances are available or not because the availability of substances indicates that there are customers, of which campus students are considered as one of the customers.

Moreover, the researcher also visited dormitory toilet rooms, shower rooms, dormitory corridors, garbage baskets, etc to check if remnants are there or not at AAiT campus. Accordingly, the researcher with key informants explored each area and then obtained cigarette packets such as Winston from garbage baskets, shower rooms, and toilet rooms. Leaves of khat and other substances such as dried marijuana, dried leaves were also found at shower and toilet areas as evidence.

This evidence showed that undergraduate regular students of the AAiT campus have exposure to substance use. The key informants also confirmed to the researcher that there are students who developed substance use disorder at AAiT campus so they were referred to campus administration, the nearby police stations, health institutions for treatment, and the Students' Dean Office for disciplinary measures amid these students have been experiencing challenging life situations at the campus and outside the campus. Overall, the triangulated data showed that undergraduate regular students of AAiT at Addis Ababa University have experiences with several substances. This finding is supported by previous studies that there are practices of substance use/abuse by students in the Ethiopian higher educational institutions.

4.4.2 Substance Use Disorder Developed by Study Participants

The procedure to collect the data from the in-depth interview was that study participants were oriented about the criteria set by the American Psychiatric Association in its DSM 5 and

then study participants could judge themselves whether they had developed a disorder or not. Opinions of study participants are presented below.

Alemu, aged 23, shared his opinion on whether he developed substance use disorder or not as follows:

> *Okay, I have clearly understood the criteria. As I told you before, I have rich experience since my early age after completing my high school education. I have a strong desire to get such substances daily. I am habitually using several substances that I am highly dependent on these substances so that I strongly believe that I fulfill all the criteria set by APA in its DSM 5. I think the criteria are tailored to suit just for me. Substance use/abuse has highly affected me, so I feel I have clearly developed addiction.*

Getu, aged 26, also shared his opinions below:

> *I have long experience with substance use, which I use it almost daily if possible, because I can't be out of the group interest, and I also have a great interest and I can't live without it. I even smoke cigarettes after and before class during breaks, just it has become mandatory for me to use them despite the harmful consequences on my health, social, and academic performance, etc. I know the impact, but substances have a habit-forming impact for those who repeatedly use of them; once you taste substances, you will get something enhanced mood. When repeatedly use them, you will be in this cycle that you may not be able to have pleasure unless you take them. I share all such conditions. Some substances have greater impacts than others that make you dependent because they have great power and pleasure. Being addicted to such substances is a result of repeated use of substances. Thus, I am addicted to such substances, and I believe I am living with substance use disorder.*

Tilahun, whose age is 25, reported that he is developing substance use disorder as follows:

> *Substances like khat, cigarettes, etc are common that I see such practices at my birthplace, including at my family and neighbors when they used them because our local culture respects such practices. I also tested and consumed for long years that it has become habitual for me that such a practice is also being supported in our friends, even though they are legally sold around the Campus and everywhere so I am using these and*

> *other new substances because I have lived with them long time. I am not in a good position because substance use has become compulsory, so I can't manage in my mind as I need to think or to do. This shows that I am addicted and fulfill almost all 11 criteria you mentioned.*

Daniel, aged 26, disclosed his concealed information as follows:

> *It may be difficult to evaluate my level of substance use disorder by myself but as long as I understand from your expression about the criteria, I fulfill all the 11 criteria, despite the criteria starting from 6 and above to be in a severe stage. Fulfilling 2-3 or 4-5 criteria is very simple for those who have rich in experience and addicted persons. Thus, I am sure that I belong to the severe stage of substance use disorder.*

Jemal, whose age is 25, told the researcher that he is undoubtedly experiencing substance use disorder and narrated as follows:

> *I told you before that I look at substances as medicines and foods that helped me survive. In our culture, it is also taken as medicine; of course yes it is because it gives me pleasure, treats stress and also gives us energy. It is also a source of cash that also yields more money than others besides consumption. I grew up in gardens, eating some leaves at and at home it is also common when one wants to take it. I served my family while such a ceremony was taking place. It is near to me psychologically to think it, even familiar to all in my residential place there. This familiarity, together with new exposure to substances, contributed a lot to usually consuming as far as I can afford. To cope with life challenges, I have to do so. Thus, it has been gradually elevated to a high level to develop disorder. I think I fully meet the 11 criteria due to accumulated experience, proven through the years.*

Robel is a 26-year-old student and he expressed that he is strongly experiencing substance use disorder as he described as:

> *I am a new substance user as compared to my friends but I believe that I have accumulated a lot of experience on substance use/abuse that can be shared with new, even with some experienced ones. Substance use facilitated my establishment friends, along with making pleasurable and treatment roles it plays. Campus life even forced us to do so. I am addicted because I never wake up actively without it. I calmly listen to myself and live*

> *as a family. The 11criteria reflect the position that I am regarding the disorder. In short, I am living with the disorder.*

Hagos is a 28-year-old student that he shared with his part as follows:

> *The area where I grew up and its culture have a great influence on me to do and not to do many things because it sets frameworks. I took some that I could, including familiarity with some substances. With such long experience I have accumulated, I still strengthened using them for several reasons despite affecting my quality of life. I consider, for example cigarette as my sole friend, among others. This habitual action results me to stay for in the same path which has led me to develop the disorder so that I almost fulfill the above 6 criteria listed in the DSM 5 as described.*

Hassen is a 29-years-old student who reported as follows:

> *The criteria are good for stating a person with substance use disorder because all are exhibited in such persons. I am undoubtedly in a disorder because I fulfill all criteria listed out in the DSM V. I think, I deserve to fulfill all criteria indicated at DSM V.*

As stated in the Diagnostic and Statistical Manual of the American Psychiatric Association, the levels of substance use disorder are classified into three categories such as mild, moderate and severe. If 2-3 criteria are met, the level of substance use disorder is categorized under the mild stage. If the criteria between 4 and 5 are fulfilled, the disorder stage belongs to the moderate stage. If 6 or above criteria are fulfilled, the disorder stage will fall into severe stage. Having considered these criteria in mind, the researcher triangulated all the data collected from study participants and confirmed that they developed substance use because all study participants filled the 11 criteria set by DSM V.

Table 8. Levels of Substance Use Disorder Developed by Study Participants

No.	Criteria indicated in DSM 5	Levels of Disorder	Study participants who developed severe level of SUD							
			Alemu	Getu	Tilahun	Daniel	Jemal	Robel	Hagos	Hassen
1	Using in larger amounts of substances for longer than intended	Mild	√	√	√	√	√	√	√	√
2	Wanting to stop using, but unable to do so		√	√	√	√	√	√	√	√
3	Spending a lot of time to get/use/recover from use		√	√	√	√	√	√	√	√
4	Craving/strong desire to get/use	Moderate	√	√	√	√	√	√	√	√
5	Inability to manage responsibilities due to substance use		√	√	√	√	√	√	√	√
6	Continuous to use, even when it causes problems in relationships	Severe	√	√	√	√	√	√	√	√
7	Giving up important activities because of substance use		√	√	√	√	√	√	√	√
8	Continuing to use, even when it puts user in danger		√	√	√	√	√	√	√	√
9	Continuing to use even when physical or psychological problems may be made worse by substance use		√	√	√	√	√	√	√	√
10	Increased tolerance		√	√	√	√	√	√	√	√
11	Withdrawal symptoms		√	√	√	√	√	√	√	√

Source: Author's study, 2025.

Accordingly, all study participants have been experiencing several complications as a result of the disorder, which means that they belong to the severe level of substance use disorder because they all met all the criteria set by DSM 5 that these criteria are easily attainable and exhibited by well-experienced people living with substance use disorder.

4.4.3 Factors that Affected Study Participants to Develop Substance Use Disorder

Study participants disclosed the major factors that are responsible for affecting them to use substances that led them to develop substance use disorder. Below are the opinions that they disclosed their concealed information as follows.

Alemu, aged 23, shared the major factors that affected him below:

> *After I completed my high school education, I had ample time to enjoy freely with my friends and others whom my friend knew that became an eye-opener for me to test substances. As you know the friends you establish matter because they highly influence you positively and negatively. What we did was just to enjoy it. I think peer influence is the major factor. Availability, my conditions, cost to cover, coping with new environment, pleasure produced from substances, socio-economic conditions, to gain energy for better performance, compulsive nature of substances, to get reduced pains, my long-stayed behavior, etc are some of the factors; I think these are some of as are as I know.*

Getu, aged 26, reported about the major factors that affected him in developing substance use disorder as follows:

> *Use of substances for long years since early grades, curiosity to test substances; availability of substances, sharing of harmful but pleasurable things from friends; far from parental supervision and support; coverage of costs by others for buying substances; to produce better performance; lack of self-control, treat pains, etc are some factors that affect me to use/abuse substances and develop SUD.*

Tilahun, whose age is 25, also told to the researcher that major factors those affected him to substance use/abuse and develop SUD as follows:

> *I think, there are factors that I may consider them as factors. Primarily, my birthplace is khat-growing area where availability is a factor. Others are: cultural influence; family practices to substance use; social learning from place of origin, family, and friends; lack of parental supervision; social learning; lack of self-control; self-medication; lack of moral to stop using substances; for study purpose; for social purposes; stress coping strategies, classroom in adequate treatment; etc are some factors affected me.*

Daniel, aged 26, shared with the researcher about the major factors as follows:

> *Substance use is common everywhere that every youth can easily learn about so that I belong to such age group to share with this common practice; substance use for gaining pleasurable effect from the substances; repeatedly use of even hard substances; availability; substance abuse; compulsory nature of substances; stress; depression; stigma; sexual arousal; acquiring new behaviors from substances and friends; having common interest among friends; learning in the same department as it helped us establish friendship; lack of moral capacity; inappropriate and irrational choice behavior that gives weight to substances; treatment for pains; failure good results for some courses; inadequate classroom treatment, etc are some factors affected me to experience substances and endangered harmful consequences, including SUD.*

Hassen, aged 29, also shared major factors to his experiences of substance use and he developed substance use disorder problems as follows:

> *As I told you before, I have been addicted to coffee since my early age before joining this university. I, together with my classmates, dorm mates, etc take this on the Campus and outside, it may be after breakfast, at lunch or during dinner breaks. Gradually, my friends introduced me to them just for gaining energy and recreational purposes at the Campus and outside. Being a member of a social network is a major problem. My best friend helped me in some courses to study together because we have different*

> *capacities for different subjects. This shared behavior, gradual substance effect, and continued practice have changed my behavior just to be dependent on substances although I was previously addicted to coffee use. I lost my natural control to stop using. Besides, lack of classroom treatment, stigma, low academic score, friendship influence, stressful environment, self-medication, etc. are major factors that affected me to develop addiction.*

Generally, an early exposure to substance use/abuse; familial exposure to substances; peer /group members' influence; curiosity to test new substances; taking experiences of others from the social learning environment; to enhance study performance; to withstand some course difficulties; to withstand new environments impacts; availability of both licit and illicit substances; low cost of some substances; some costs covered by some others to buy substances when shortage of money encountered; method of drug administration; use/abuse of some drugs for sexual arousal purposes; taking substances for self-medication purposes; being out of family supervision, follow up and support; poor living conditions; difficulty of some courses resulted using/abusing substances to reduce anxiety and depression; lack of adequate treatment at class; low academic exam result in some courses taken; self-stigma; social stigma; in adequate services provided for study participants who experience SUD; place of origin where study participants grew up; supra cultural influence to one grew up; social disorganization; insecurity and conflicts at regions; lack of socio-economic support; lack of treatment by some instructors; and psychological and mental health disorders are some stated factors contributed to develop substance use disorder by study participants.

The above-stated factors to substance use/abuse are also supported by the major theoretical frameworks reviewed. For example, study participants were unable to carry out moral obligations to stop using substances so the concept of the moral/spiritual theory is

practically applied by study participants. The study participants are also endangered to experience diseases resulted from substance use/abuse which also agree with the concept of the disease/biomedical theory of addiction. The study participants are also taking experiences among themselves or from others on substance use/abuse which agree with the concept of social earning theory. Availability of substances also affected study participants which also agree with the concepts of the availability-proneness theory of addiction. Study participants are also exposures to take substances to treat themselves when they feel anxiety, depression, crave for substances, etc just to treat themselves so this issue is also agree with the concept of self-medication theory of addiction.

The findings of study participants were also linked with the major models of addiction reviewed. For example, study participants lacked moral strength to stop using substances that this finding is supported by moral/spiritual concept of addiction. The findings obtained from study participants also agree with the concepts of biomedical/disease model of addiction because study participants are endangered to chronic illness due to the effect of taking substances. The findings obtained from study participants also agree with the concepts of brain disease model of addiction because study participants have been experiencing lack of attention, temporary loss of memory, find difficulties to function with the natural reward system due to substance abuse (as stated by NIDA (2014, 2018), etc. The findings obtained from study participants also agree with the concepts of psychological model of addiction because study participants have been experiencing psychological complications such as anxiety, depression, etc that affected study participants as factors and consequences of substance use. The findings obtained from study participants also agree with the concepts of biopsychosocial model of addiction because study participants have been affecting by the

biological, psychological and social factors which also require intervention strategies on these issues to address this problem.

4.4.4 Challenges That Affected Academic Performance of Study Participants

Study participants admitted that they have faced different challenges that affected their academic performance.

For example, Alemu, aged 23, stated as follows:

> *It is obvious that substance and its associated disorder have highly impacted not only on my education, but its impact is reflected on several aspects, of which physical problem (loss of appetite, disease, etc.); stress; depression; emotional disturbances; mental problems; social stigma problems; compulsive need of substances; dependency; drowsiness with lose of attention, etc, including its impact on my education. For example, I became addicted to substances so I cut classes. I find difficulties in establish smooth relationships with classes, with dorm mates, and with administrative staff at the Campus which endangered me to score low grades in some courses; and this situation forced me to take such courses again, experience withdrawal, be forced to disciplinary measures, repeat classes, and moral failing, etc.*

Getu, aged 26, expressed the impacts of the substance use disorder as follows:

> *As I told you I was cleaver at my early grades and even during my stay at AAiT; however, substance use has been completely changing my life including my education. Previously, I was addicted to cigarettes before joining this university but I have been experiencing new substances repeatedly with a substance abuse habit that affected my personal life and my university education as well. Truancy, alertness with lack of attention, inability to do assignments timely, inability to secure smooth relationship with instructors, scoring low grades, inability to respect rules of the campus/instructors/ administrative staffs, becoming out of batches, registering again for some courses, moral failing, etc. are the major impacts associated with the disorder, including its adverse impacts on my education.*

Tilahun, whose age is 25, disclosed the impacts of the disorder as follows:

> *Substances have pleasurable effects than the natural ones, but they highly affect my life. I tried to stop but I am unable because I have morally failed and in fact, I am unable to stop it because of its compulsory nature, dependency and effects on me as shown in most substance users. In short, I am the one who is greatly affected by substance use that clearly seen in my education to experience class cut, inability to carry out functions, drowsiness with lack of attention, score low grades that I must score high, failing to adhere to Campus directions, even experiencing lack of attention mentally, and developing psychological problems affects to achieve better academic performance, etc.*

Daniel, aged 26, also shared the impacts of SUD on his academic pursuit as follows:

> *Substance use has many impacts on users, including its impact on the educational journey. If you are physically, psychologically, socially, or economically affected by substances, it is obvious that its impact will also be reflected on educational performance. Psychoactive substances creates alertness, emotional disturbances, drowsiness with lack of attention, lack of memory, feeling of over confidence, courage to do all beyond capacity, engage in violent activities, breach of Campus rules, class cut, etc are some impacts which greatly affected my educational achievements, including to delay from my batch, score low results for some courses, take withdrawal, receive disciplinary measure from the Campus, etc. In general, I am highly affected by substance use and its associated disorder.*

Jemal, aged 25, reported that substance use has been affecting him in various issues, including his education as he narrated as follows:

> *Substance greatly impacted my education and I am unable to carry out my responsibilities. Substance not only affect health issues but its cumulative effects also impact educational achievement, of which truancy, alertness, dizziness (because of taking alcohol, anti-biotic, other depressants use/abuse, etc), loss of attention,*

> *inability to do tasks timely, violence, scoring low results, delay from batch, etc are some impacts I have been experiencing as a result of repeated substance consumption.*

Robel, aged 26, also has his academic situations as follows:

> *I have confirmed that I am not in my position that I had before joining this Campus because I started taking substances after joining this Campus that resulted in a change in behavior which endangered me to loss my ability to succeed in my education as planned. I cut classes and take substances to enjoy with my friends, which brought negative impacts on my education. In these conditions, I am not quite sure how to complete my university education. In general, substances are "viruses" that have been transmitted among the young population these days unless they are taken.*

Hagos, aged 28, narrated the impacts of substance use disorder as follows:

> *Substance use endangered me to experience the inability to achieve my academic pursuit. I cut classes without reason just to enjoy with Muslim friends even outside Campus, developed drowsiness, developed alertness, lack of attention, unable to do tasks timely, engage in stealing, violent Campus rules, moral failing, etc, that directly and indirectly affected my university education.*

Hassen, aged 29, narrated his challenges resulting from SUD as follows:

> *You know I have faced somewhat challenges in some course because of negligence, inability to do tasks as required, high attention to enjoy substances that affected me in various ways, which affected my quality of life, my paths, my objectives, my grades, etc. I delayed from my batch because of the cumulative effects of substance use/abuse that also affected my education in various ways.*

As a summary of this section, keeping in mind that study participants have faced different challenges, all study participants have experienced the following challenges in common. Inability to carryout daily tasks as required, lack of attention, drowsiness, dizziness, class cut, temporary loss of memory, engage in violent activities, inability to maintain smooth

relationships with dorm mates, class mates, some instructors, score low grades to some courses they took (for example scoring low grade may include getting grade “C” or “D” or “F”), repeat some course to which they scored low grades for some courses they took, lag from batches, etc. are some of the challenges that affected academic performance of study participants.

4.5 Research Findings Obtained from Focus Group Discussion

Substance /abuse is not only done individually but it is also done in group because substance users/abusers share many things in group. Group influence serves as a risk and a protective factor to conduct assessment and make interventions on substance use disorder. Thus, conducting focus group is significant for the study.

Study participants were eight in number. Theoretically, a focus group comprises of members that range from divided 6-12 persons as Ary et al (2010) indicated. Procedurally, the group members were oriented about the objective of the focus group interview before conducting it. Accordingly, group interviews are presented below.

The group members gave their opinions to the four research questions of this study as follows:

> *We, members of the group, are strongly connected to each other. We have almost similar interests. We share many things together. Some of us are from the same department. While some members share the same dormitory. What makes our bond strong is that we have similar interests and share them among ourselves. We use substances together for years during our stay on the Campus. Unfortunately, we are being affected by harmful consequences of the substances we consume. The major factors to use substances may vary individually. Most of us have prior experience but having such exposure, peer influence, substance abuse, and habit-forming nature of substances may take a lion’s share. We, therefore, have been experiencing life difficulties, including their effect*

> *is clearly seen on our academic achievement. Almost most of us have fallen behind in our classes, faced challenges in achieving our education as intended, and also been exposed to several harmful consequences. As you know, substances are used mostly in informal groups for several reasons, of which for recreational, academic, self-medication, etc purposes. We will be satisfied more while enjoying together because we share a lot. Sometimes, one may be able to cover the cost for substances, but if a group member is able to afford, he will cover that. We, as a group, are best friends. The glue for this friendship is having similar interests and sharing of all what we have, including substances. We are from different departments, but some of us came from the same place of origin. There may be students came from the same place, but their relationship is not as strong as we are. We use substances together sometimes on the Campus and mostly outside although substance consumption has greatly affected all of us. Because of this, we all have become addicted to substances. As a group, having years' experience, group influence, etc. can be taken as major factors. Some of our group members were admitted to hospitals. Substance use has been affecting our lives and education as well.*

In general, previous studies lacks to investigate the presence of substance use disorder, rather they mainly focused on the prevalence of substance use/abuse issues. This study attempted to fill previous research gaps, contribute its own share to tackle the disorder. Therefore, this study revealed that study participants have been experiencing substance use disorder when evaluated as per the eleven criteria developed, by American Psychiatric Association, for substance use disorder that affected students' academic performance, among others. Previous studies mostly focus on investigating on some substances such as khat, cigarettes, and alcohol, which lacked to study substance use comprehensively. This study, therefore, revealed that study participants have experiences of using both licit and illicit substances.

4.5 Discussion

4.5.1 Substance Use/Abuse Experiences of Study Participants

Researches, organisational reports, organisational plans, and relevant books written on substance use, etc stated that substance use has become common everywhere, in the general population, among youth and in the education system in the world. Substance has become common in Africa. Several substances have been trafficked in the African continent. Substances are widely grown in the sub-Saharan African countries, of which East Africa is known for its khat-growing region. In Ethiopia, several substances are illegally trafficked. The prevalence rate of substance use is increasing.

Studies showed that there is a high rate of prevalence of substance use in the educational systems, and at higher institutions in Ethiopia. There are also some studies conducted at different universities in Ethiopia, including at Tikur Anbassa Medical and AAiT Campuses. Previous studies such as Shegute and Wassihun (2021); Roba et al (2021); Abate (2018); and other relevant studies conducted in Ethiopia indicated that substance use has become prevalent at higher institutions.

This study also confirmed that undergraduate regular students of AAiT at Addis Ababa University have experiences of using various licit and illicit substances at the Campus compound and outside of the Campus. Several previous studies conducted in Ethiopia also confirmed that students at universities have experiences of substances use/abuse. The findings of this study also conform to the findings of Shegute and Wassihun (2021) in that students at AAiT have experiences of using substances. Substance use experience is a major theme, and licit and illicit substances are also the sub-themes developed. Study participants have

experiences of using both licit and illicit substances so this finding also agrees with the major theme developed for this study.

4.5.2 Substance Use Disorder Development by Study Participants

Substance use disorder is a brain disease that highly affects those people who repeatedly use substances and experience the harmful consequences of substance use disorder. This disorder is a major problem in the world, in Africa and in Ethiopia because the disorder entails adverse consequences on physical, psychological, mental, social, and economical, social, students' academic performance, etc.

The previous studies conducted in Ethiopia mainly focused on the prevalence of substance use in the Education system, including higher institutions. As far as the knowledge and efforts of this researcher, there is a not enough studies conducted on substance use disorder in Ethiopia in general and in the higher institutions in particular. Here, it shows that there is a research gap in studying substance use disorder at higher institutions and at country levels as per the criteria developed by the American Psychiatric Association, as indicated in its DSM V. Therefore, this study is considered a pioneer to assess whether there is substance use disorder at AAiT Campus or not. The findings of this study agreed with MoH (2016) strategic plan, which stated how substance use and its addiction have been affecting the health and psychological well-being of adolescents and youth in Ethiopia.

Accordingly, this study was conducted on 8 undergraduate regular students of AAiT Campus at Addis Ababa University. Study participants gave their opinions whether they have developed substance use disorder or not, and their levels of substance use disorder if they once developed it. The 11 criteria developed by APA as indicated in its DSM 5 were used as a

criterion to determine if study participants are experiencing the disorder and at what levels they belong to.

Therefore, the triangulated data collected from observation, in-depth interviews, and group discussions showed that all study participants are living with substance use disorder. Substance use disorder is the major theme developed for this study. Complications such as physical, psychological, mental, social, functional, etc are the sub-themes identified as the major manifestations exhibited on study participants due to the disorder that they developed.

4.5.3 The Major Factors to Develop Substance Use Disorder by Study Participants

There are major factors to develop substance use disorder. Both biological and environmental factors, as stated by NIDA (2014), are the major contributing factors to developing substance use disorder, which agrees with the major factors to develop substance use disorder identified for study participants. In this regard, the major factors identified for study participants also agree with the biopsychosocial model developed by Skews and Gonzalez (2013). The major factors identified for study participants also agree with the concepts discussed in the major theoretical frameworks reviewed, such as moral/spiritual, biomedical, brain disease, self-medication, availability-proneness, and social learning because study participants lost their moral capacity to stop using substances. They are also in a disease as stated by the disease (biomedical) theory of addiction. It is also a brain disease. Study participants took substances to treat their illness which also agrees with the self-medication theory of addiction. Availability-proneness of substances is also a major factor to substance use. Study participants shared many things among them, including ideas, feelings, substances, etc. which is a major factor in using substances, as such experiences are produced by social learning concepts.

Study participants have listed major factors that affected them to substance use/abuse and the development of the disorder. The triangulated data collected from study participants and key informants showed that an early use of substances; familial exposure to substances; availability of both licit and illicit substances; cost of substances; method of drug administration; curiosity to experiment; out of family supervision, in adequate/lack of parental follow up and support; peer influence; poor living conditions; difficulty of some courses; lack of adequate treatment at class; low academic exam result in some courses taken; self-stigma; social stigma; in adequate services provided for people with substance use study participants who experience SUD; place of origin where study participants grew up; cultural influence; social disorganization; insecurity and conflicts at regions; lack of socio-economic support; lack of treatment by some instructors; and psychological and mental health disorders are some stated factors contributed to develop substance use disorder by study participants.

The findings of this study also conform to the major theme, sub-theme and minor themes developed for this study as the major factors to develop substance use disorder by study participants.

4.5.4 Challenges That Affected Academic Performance of Study Participants

Substance use disorder has adverse impacts on students' academic performance. This is revealed in some studies conducted previously. For example, Abate (2018) concluded from his Meta-Analysis that khat is a major factor that affects students' academic performance at higher institutions. Kalayu et al (2009) also stated that Medical students at Jimma University were affected by substance use.

Accordingly, the triangulated data collected from data collection tools (observation, interviews, focus group discussion, and document review) showed that study participants

living with substance use disorder were highly affected by the disorder, which endangered them to experience: scoring low grades for some courses they took (for example, they may forced to score "C" or "D" grades, etc., class cut, truancy, repeating courses, drowsiness, dizziness, withdrawal, delay from their batches, lack of concentration, etc.

In general, the triangulated data showed that substance use disorder, among other contributing factors, has been recorded as a major contributing factor that greatly affected study participants to experience challenges in their academic performance. Moreover, study participants were experiencing physical, psychological, mental, social, and stigma, etc. complications, which in turn affected students' academic performance.

4.6 Potential Biases or Limitations in Self-Reporting Data

Study participants tried to provide information that they can during the in-depth-interviews and focus-group discussions. The researcher has tried to triangulate the data while identifying, analyzing, interpreting, concluding and recommending research findings of this study. The researcher also tried to involve study participants to cross check the findings to ensure reliability. However, there may be unforeseen potential biases or limitations that study participants may provide some inaccurate information, may miss some key issues due to memory lapse (recall bias), may reflect some social desirability bias behaviors (faking good), or behave a tendency to agree (acquiescence bias), etc., which may produce potential biases by study participants in self-reporting data, which may also affect to some extent in concluding and interpreting of study findings.

CHAPTER FIVE

CONCLUSION AND IMPLICATIONS FOR SOCIAL WORK

5.1 Conclusion

Substance use/abuse experiences; substance use disorder; factors to develop substance use disorder; and challenges produced from substance use disorder that affect student's academic performance are the major research questions of this study.

Accordingly, the triangulated data showed that undergraduate regular students of AAiT at AAU who participated in this study had accumulated substance use experiences. Study participants have accumulated experiences of using both licit and illicit substances in their lives. Prior experiences before joining AAiT Campus and current experiences they gained from the social learning environment after joining the Campus have contributed a lot to live with substance use/abuse.

Regarding to developing substance use disorder, study participants' rich experience coupled with several aggravating factors have led study participants to develop severe substance use disorder because all study participants met the criteria set by DSM 5.

There are a number of factors that affect study participants to experience substance use disorder. The triangulated data collected from study participants and key informants showed that an early use of substances; familial exposure to substances; availability of both licit and illicit substances; cost of substances; method of drug administration; curiosity to experiment; out of family supervision, in adequate/lack of parental follow up and support; peer influence; poor living conditions; difficulty of some courses; lack of adequate treatment at class; low academic exam result in some courses taken; self-stigma; social stigma; in adequate services provided for people with substance use study participants who experience

SUD; place of origin where study participants grew up; cultural influence; social disorganization; insecurity and conflicts at regions; lack of socio-economic support; lack of treatment by some instructors; and psychological and mental health disorders.

Concerning to the impact of substance use disorder on students' academic performance, the disorder highly affected students' quality of life and academic achievement. In particular, students have been experiencing class cut, truancy, drowsiness, dizziness, anxiety, depression, sleep disorder, lack of attention, scoring low grades for some courses, forced academic withdrawal, repeat some courses they scored low grades, delay from their batches, engage in violent activities, self-stigma, social stigma, etc are some impacts shown that directly or indirectly affected students' academic performance.

Overall, the findings of this study will contribute own share to have a better understanding of the prevalence of substance use/abuse, the current status of substance use disorder among study participants, the major factors to develop substance use disorder, and its impact on students' academic performance.

Therefore, this study concluded that AAiT Campus in particular and AAU in general require revisiting existing policies; facilitating coordinated prevention and treatment intervention plans; encouraging students to right-based testing/screening; strengthening of existing services with qualified professionals and equipment; and establishing a center that will support prevention and treatment services for those who are living with substance use disorder because MoH (2017) recommends that substance use disorder requires coordinated efforts of all to tackle such a social problem.

5.2. Implications for Social Work

5.2.1 Implication for the Social Work Profession

The findings of this study will help social work professionals better understand the cases such as substance use/abuse, substance use disorder and its impacts on academic achievement to engage in designing and implementing pertinent prevention and treatment programs to tackle substance use/abuse, substance use disorder, and its associated problems. It also pave ways for professionals to conduct further studies which were not covered by other previous studies or to further investigate what was already done. Social Work professionals can also play major roles in tackling this social problem in educational institutions in Ethiopia, including higher institutions, like AAiT at AAU and other Campuses to save lives, contribute to ensuring students' quality of life, and contribute to the smooth-functioning of academic pursuits. Professionals are the main actors to the development of a profession so that the findings, conclusion and recommendations of this study will significantly contribute a lot to the Social Work profession to grow better while professionals contribute their own share.

5.2.2 Implication for Students

The finding of this study indicated that students have developed substance use/abuse experiences before joining to higher institution. They also gained new behaviors that may contribute to positively or negatively affecting students' academic performance and quality of life. Students have to evaluate their behaviors timely using by checklist either to avoid those unnecessary ones or strengthen those acceptable behaviors. Students are expected to choose those acceptable behaviors despite some substances having a habit-forming and compulsive potential that challenge students to make rational and beneficial choices. Rationally selecting friendships that add to some positive behaviour helps ensure quality of life and better

academic performance. Students also have to increase their understanding on the short-term and long-term impacts of substances use/abuse and substance use disorder. This study, therefore, suggest that students have to protect themselves from harmful substance use/abuse practices, taking into account their adverse impacts on life and on their education as well.

5.2.3 Implications for AAiT and AAU

It is envisaged that Addis Ababa University will provide both theoretical and practical knowledge to its students. Academic knowledge alone is insufficient; courses offered by the university must also include life skills because students come to universities together with their past experiences that may affect academic journey. Students also pick up new behaviors that could either positively or negatively impact their academic performance also. Thus, a coordinated is needed to address the problem of substance use and related disorders. In particular, the institution must take the initiative to create productive citizens while students are on campuses. AAiT and other campuses must implement prevention and treatment intervention programs to tackle the problem.

AAU can also revisit its existing policies and check whether its institutional capacity is ready for providing the preventive and treatment services or not. In particular, it requires fulfilling manpower with varied professions, necessary equipment and facilities to provide prevention and treatment services. Continued awareness creation programs, provision of courses on substance use issues for all students, facilitation of right-based voluntary testing programs at Campuses, invitation of professionals at Campuses, experience-sharing programs, and establishment of prevention and treatment center that supports efforts, etc are prominent measures which need to be introduced/strengthened at the university to reduce the prevalence

of substance use/abuse at Campuses, tackle substance use disorder and at least to reduce its harmful impacts on students' quality of life and their academic achievement.

5.2.4 Implications for Stakeholders

Substance use disorder is a disorder that requires coordinated efforts of all concerned bodies. Stakeholders play major roles in many ways. They can contribute to working closely to tackle the problem by carrying out their defined roles in the prevention and treatment interventions. Relevant government organisations, for example, the Ethiopian Food and Drug Control Authority, the police, Air Port, the Customs Authority, the Ministry of Health, the community at large, etc can contribute their own share to regulating, revisiting existing policies, and controlling substance use trafficking. Civil society organisations can also take part in supporting programs to tackle this multifaceted social problem.

5.3 Limitations of the Study

This study has limitations in that its study site was confined to the AAiT Campus only which calls for including other Campuses to have a better understanding of the prevalence of the case and its associated impact on students' academic performance so that it is impossible to generalize to the entire population with such a sample size employed for this study. This study also has limitation because it only employed a qualitative research approach. It may be good at using mixed method to have a comprehensive understanding of the case.

5.4 Suggested Areas for Future Study

This study assessed substance use disorder and its impact on study participants' academic performance in AAiT at AAU. The study participants were all male students. Key informants informed the researcher that there are also some female students who are in this

problem but they were not included in this study due to hard-to-reach factor. Therefore, researchers who are interested in this topic can conduct their study on female students to explore and have a better understanding of the prevalence of substance use/abuse experiences of female students and its impact on their quality of life and academic performance.

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Appendix 1. Consent of Agreement Form

My name is……., a student in the department of ……in the Institute of Technology at Addis Ababa University. The researcher have informed me that the information that I will provide to the researcher is to be employed for academic purposes only to conduct a research to partially fulfill the requirements of Master of Arts in Social Work. Thus, I am willing to give relevant information to the researcher, considering that the information provided to the researcher is to be kept confidential and will not generate any harmful potential consequences on me and my education. I have also recognized that I am able to withdraw any time from the start and in the middle of the research when I feel it to do so. Therefore, I gave my full consent to the researcher to take a piece of relevant information from me to help him conduct his research.

Name…….

Signature……

Date……

Appendix 2. In-depth Interview Questions for study participants

I. Introduction

This is interview questions prepared for undergraduate regular students to collect data for the research, titled: *Substance Use Disorder and Its Impacts on Academic Performance: The Case of Undergraduate Regular Students at Addis Ababa University's Institute of Technology*.' to partial fulfill the requirements for the award of Master of Arts in Social Work at Addis Ababa University. Your response to these in-depth interview questions is significant. Therefore, you are kindly requested to respond to these interview questions. The data to be collected will be employed for academic use only. All ethical issues such as confidentiality, non-traceability, free of harm, etc will be duly respected. Thank you in advance for your cooperation and your time you will exert for this interview questions.

II. Interview Questions

2.1 How do you describe your practice/experience to substance use/abuse?

2.2 How do you describe your level of substance use and do you feel that you developed substance use disorder as per the criteria indicated at DSM V?

2.3 How do you describe the major factors to contributing to developing substance use disorder if you feel that you have developed substance use disorder?

2.4 How do you describe the impacts of substance use disorder in your academic performance?

Thank you for your cooperation!

Appendix 3. Interview Questions for Focused-Group Discussion

I. Introduction

This is the interview questions prepared for undergraduate regular students to collect data for the research, titled: *Substance Use Disorder and Its Impacts on Academic Performance: The Case of Undergraduate Regular Students at Addis Ababa University's Institute of Technology*.' to partial fulfill the requirements for the award of Master of Arts in Social Work at Addis Ababa University. Your response to the interview question is significant. Therefore, you are kindly requested to respond to these interview questions in group. The data to be collected will be employed for academic use only. All ethical issues such as confidentiality, non-traceability, free of harm, etc will be duly respected. Thank you in advance for your cooperation and your time you will exert for this interview questions.

II. Interview Questions

2.1 How do you describe your practices to substance use as a group?

2.2 Do you believe that you have developed substance use disorder and how do you describe it as a group?

2.3 How do you describe the major factors to contributing to developing substance use disorder if you feel that you have all have developed substance use disorder?

2.4 How do you describe the impacts of substance use disorder in your academic performance?

Thank you for your cooperation!

Recommended citation in APA Style:

Yeneneh, D.A. (2025). Substance Use Disorder and Its Impact on Academic Performance: A Case Study of Undergraduate Students at Addis Ababa University's Institute of Technology.

Substance Use Disorder and Its Impacts on Academic Achievement: The Case of Undergraduate Regular Students in the Institute of Technology at Addis Ababa University

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