BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF HEALTH SCIENCE

KNOWLEDGE OF HEALTH EFFECTS OF DRUG AND SUBSTANCE USE AMONG STUDENTS IN THEIR SECOND YEAR AT BINDURA UNIVERSITY OF SCIENCE EDUCATION.

BY

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A RESEARCH PROJECT PROPOSAL SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF BACHELORS SCIENCE HONOURS DEGREE IN NURSING SCIENCE AND EDUCATION

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APPROVAL FORM

The undersigned strongly certify that they have read and made recommendations to the Bindura University of Science Education for acceptance of a research project entitled**:**

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DECLARATION

I Takawira Chityeza**,** B213795B do hereby declare that this research represents my work, and has not been written for me or published by others for any degree programme or publications. All the materials used in this study have been fully acknowledged and sited accordingly in the study as will be shown in the reference and appendices at the end of the research study.

DEDICATIONS

I dedicate this dissertation to my friends and family.

Abstract

Globally, over 296million people have been reported to use drugs and substances. This accounted to 5.8% of the total population of the world aged been 15 to 64 years. The use of these drugs and substances has been reported to be associated with an increasing morbidity and mortality rates worldwide. The use of substances accounted to 3.3 million deaths each year and 40 million illnesses were associated with use of alcohol and substances. Students in tertiary universities have not been spared with the scourge of the drugs and substances.   This research aimed to investigate students' knowledge on health effects of drug and substance use at Bindura University of Science and Engineering. The study used a descriptive cross sectional study design that employed both qualitative and quantitative research paradigms. A sample of 307 students were recruited in this study that south to investigate the students' knowledge on health effects of drug and substance use. The study used both questionnaires and interviews as research instruments for data collection. Quantitative analysis used applied descriptive and inferential statistics whereas the qualitative data used the narratives and direct quotes for presenting and analysing this data. The results of the study showed that commonly abused drugs and substances included alcohol, marijuana, Guka and cigarettes. Majority of students had knowledge of the effects of alcohol, marijuana and cigarettes on the health of students. These included mental illnesses such as depression and hallucinations. The risk of contracting sexually transmitted infections was also reported which included HIV/AIDS. The risk of lung cancer and Tuberculosis was associated with use of cigarettes. The study concluded that students had knowledge of the effects of substances on health and recommended that health education be scaled up to stop use of these drugs and substances. The study recommended the development of targeted intervention strategies to address "*Guka*" as a specific substance commonly associated with mental disorders.

ACKNOWLEDGEMENTS

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CHAPTER I
BACKGROUND AND ITS SETTINGS

1.1 Introduction

The study sought to investigate the students' knowledge on health effects of drugs and substances use at Bindura University of Science Education. This study presented a summary of the study among others which included the background of the study, statement of the problem, research objectives, research questions, and limitations of the study, delimitations of the study and the organisation of the research report.

1.2 Background of the Study

There has been an increase in global challenges associated with use of drug and substances and accounting to over 296 million individuals using substances and drugs (Baingana, Al'Absi, Becker, & Pringle, 2015; Connery, McHugh, Reilly, Shin, & Greenfield, 2020; Organization, 2018; Peacock et al., 2019). Substance use is a major global public health issue (Owoaje, 2010). The global disease burden attributable to alcohol and illicit drugs is estimated at 5.4%, while 3.7% is attributable to tobacco use alone (WHO, 2010). Of the illicit substances, the main drugs used are opiates in European and Asian countries and cocaine in South America and in Africa the preferred drug is cannabis (WHO, 2010). A total of 2.44 million deaths were attributable to the consumption of alcohol and 494,000 to the use of illegal drugs (Metrics & Evaluation,

2021; Murray et al., 2020). Thus, based on the total number of annual deaths (56.53 million), a fifth (11.64 million) are accounted for by the use of psychoactive substances (Metrics & Evaluation, 2021). The use of these drugs and substances have been reported to account for major crimes, international conflicts and tensions (Buxton, 2015). All these could be avoidable if there is control in the use of these drugs and substances (Preuss, Kalava, & King, 2019).

The rise in use of the drugs and substances among youths have been a major phenomenon during the escapade of Covid-19 and also reported in Zimbabwe (Chido, 2022; Makwanise & Praxis, 2023; Mukosi, 2020). The use of drugs and substance among university student is a major concern as these have been attributed to health problems and poor performances in academics.

Thus, use of drug and substances among university students remains an important area of research due to the implications of early drug and substance dependence on the future of the youth (Atwoli, Mungla, Ndung'u, Kinoti, & Ogot, 2011). Prior studies from numerous locations show comparatively high rates of alcohol and other substance use among high

school students and those in higher educational institutions (Baldwin, Hughes, Conard, Storr, & Sheehan,1991; Kamenderi et al., 2019).

University study is a period when students experience independence and freedom from direct adult and family supervision, self-decision-making, and intense academic pressures, share living quarters with strangers, form new social groups, balance social engagements with academic and other life responsibilities, and may be exposed to normative values valued by the youth culture that differ from parental values (Osman, 2012). These perceived norms motivate the youth to indulge in unhealthy behaviours such as smoking and alcohol and drug use (Steyl, 2011). University students make the transition from the restricted life monitored by parents to a more self-directed life influenced by the university environment Hence, the risk of drug and substance use is increased in university environments (Makanjuola, Abiodun and Sajo, 2014).

Current developments show that the use and abuse of drugs and substances have dramatically increased globally particularly in developing countries at an alarming rate of approximately 20% (Room, Cook and Laslett, 2024) Numerous studies have shown that drug and substance use is common among students and is becoming increasingly widespread in various African countries (Nkouonlack, Shifu, Atchou, Eyoum, Dinayen, Nsagha, & Njamnshi, 2023). Most countries in sub-Saharan Africa for example, Zambia, are undergoing rapid economic, social, and cultural changes which have created favourable situations for increased and socially disruptive drug and substance use (Kabembo, 2024). African studies have shown that tobacco, alcohol, cannabis, inhalants, tranquilizers, heroin, and cocaine are common in secondary schools and some higher educational institutions (Adongo, Adedia, Benneh, Tandoh, Amekyeh, Ntelah, & Woode, 2024). Both alcohol and tobacco are regarded as "gateway drugs" to other substances (Hamidi, Rezaeimanesh, Moghadasi, Navardi, Kohandel, Rezaei, & Sahraian, 2023). Substance use has contributed to the increasing incidence of psychosocial problems among the youth such as depression, psychosis, etc (Stephenson, Van Den Heuvel, & Byard, 2023). People with substance use disorder are more likely to die younger and are more likely to have a psychiatric disorder than people without substance use disorder (Volkow, & Blanco, 2023).

Although substance use is believed to be a growing problem in Zimbabwe, there is paucity of data on the extent of drug and substance use, particularly among university students and the effect it has on their health.

1.3 Statement of the Problem

There is a problem of drug and substance abuse by the youths in universities in Zimbabwe, and despite efforts by the Government of Zimbabwe and relevant stakeholders to curb the problem, the cases are still on the increase. There is a notable increase in youth drug abuse statistics in Zimbabwe from approximately 43% youths engaging in drug abuse in Zimbabwe in 2017 (Zimbabwe Civil Liberties and Drug Network, ZCLDN, 2018), to approximately 45% in 2018 (ZCLDN, 2019) and further increased to approximately 57% in 2019 (ZCLDN, 2020). It is important that the problem of drug and substance abuse be analysed and understood from different angles so that intervention strategies employed will directly address the problem (Siegel, 2012). The government of Zimbabwe has placed education at the centre of the social pillar of vision 2030 that intents to make Zimbabwe an upper middle level income country. To show its commitment it has highly subsidized university education under the Education 5.0 thrust thus boosting innovations and industrialization at the centre of education which is believed to ensure more attention is given to productivity and improving the social standing of citizens and the country's ranking in socio-economic development. Drug and substance abuse has been reported to threaten and derail these noble strides by demotivating the students in learning (Kato Julius, 2019) and subsequently ruining these university students that the government intends to rely on in driving the economy to the next level. Drugs and substance abuse problem should therefore be given the attention it deserves if the intentions of this important investment in education are to bear fruits

Statistics derived from the Ministry of Health and Child Care Zimbabwe, also show that, 57% of admitted cases in Zimbabwe's mental health institutions in 2017, were drug abuse related cases, and, the majority of these, 45% were youth drug abusers (Kidia, Machando, Mangezi, Hendler, Crooks, Abas, et al., 2017, Kato Julius, 2019). In 2017, 57% of all admissions in mental health institutions were drug abuse related mental illnesses, of which, the majority, 80% fell in the youth category (Kidia, et al., 2017). In 2019, 45% of admitted patients in mental health institutions across the country were youths who test positive for drug use and 60% of all in patients in 2019 for drug abuse were secondary cases, relapses (ZCLDN, 2019). The fewer admissions in 2019 for drug abuse related mental health cases as compared to 2018 could be attributed to the high inflation rate in Zimbabwe (ZCLDN, 2019) as such, the youth could not be affording admission fees into these public mental

health institutions (Frontline aids, 2020). The country is going under sky rocketing inflation rate, where the consumer price index amplified from 2.2% in January 2020 to 26.6% in April 2020 (Zimbabwe Inflation Rate MoM, p.1, 2020).

Bindura University of Science Education like any other universities in the country has experienced the high use of drugs and substances among its students. This has led to a declining academic performance; apathy in learning activities and subsequent drop out in the university as demonstrated in the background to the study. The fact that there is no known study in the country that has ever sought to address the problem of drug and substance abuse in the universities forms a justification of the current study that seeks assess to the knowledge of health effects of drugs and substances use among university students stationed at Bindura University of Science Education.

1.4 Significance of the Study

The study is beneficial to the following stakeholders:

The findings are expected to yield significant empirical data and information on the health effect of drug and substance abuse among university student so that it helps them to develop measures for preventing use of such drugs and substances. Further knowledge of drug and substance abuse will assist university students to be proactive in managing their health and social wellbeing in the university life.

The findings are expected to help the University officials in understanding the causes of drug abuse amongst students hence help them develop intervention strategies which can be used in the management of drug and substance use as well as prevention thereof.

The study is likely to add to the body of knowledge in the area of drug and substance abuse in Zimbabwean Universities that may be utilized by other researchers.

1.5 Aim of the study

The aim of this study is to assess the knowledge of health effects of drugs and substances use among university students stationed at Bindura University of Science Education.

1.6 Purpose of the study

The study sought to assess the knowledge of students on the effects of drug and substance use at Bindura University of Science Education.

1.7 Study Objectives

> To assess knowledge and attitudes of students on the effects of drug and substance use among Bindura University of Science Education students.

To recommend strategies to curb use of drugs and substances among Bindura University of Science Education Students.

1.8 Research Questions

What knowledge and attitudes do students have regarding effects of drug and substance use at Bindura University of Science Education.

What strategies can be put in place to curb use of drugs and substances among Bindura University of Science Education Students.

1.8 Assumptions of the Study

The study was be carried out under the following assumptions:

- The researchers assumes that the problem pertaining to use of drugs and substance among university students is a main issue requiring attention.
- The researcher assumes that use of drugs and substances among students affect the performance of students in their studies.
- The use of drugs and substances have mental and physical health challenges among university students.

1.9 Delimitations of the Study

This student was carried out only at Bindura University of Science Education Students in order to assess their knowledge regarding drug and substance use.

1.10. Limitations of the Study

Financial constraints

The researcher faced financial constraints, due to hardships of economy in the country. The researcher did not have enough funds to carry out the study and support family at the same time but however, researcher relied mainly on finances from family and friends.

Time constraints

The fact that the researcher is full time employed and a student, time was a challenge to conduct the research. However, the researcher worked on the project data collection during his interactive sessions at Bindura University where he met with students and collected data.

1.2 Definition of Key Terms

Substance- A substance is any chemical or compound that is used to produce a specific effect on the body, either for medicinal or recreational purposes. This may include substances such as drugs, alcohol, tobacco, and medication. Stolerman & Shoaib, [2017].

Student- is an individual who is enrolled in an educational institution, such as a school, college, or university, and is engaged in the process of learning and acquiring knowledge, skills and values, APA [2020].

Drug –any substance intended for use in the diagnosis, cure, relief , treatment ,or prevention of diseases or intended to affect the structure or function of the body. National Institute on Drug Abuse [2020]

CHAPTER TWO

REVIEW OF THE LITERATURE

2.0. Introduction

The relevant literatures on the issues of drug abuse among young people have been reviewed concisely as per the objectives of the proposed study. However, the detailed review of the concerned literature will be made during the writing of the dissertation

2.1. Theoretical Framework

There are some theories emerging in modern literature in explaining the causes of substance abuse, for instance, drug abuse and other deviant behaviours in different perspectives. Though, the validity of one theoretical perspective does not imply the inaccuracy of another. Each theory deals with a portion of a large composite phenomenon. No single theory could possibly explain everything that one might want to know about the phenomena. For example, Fareo (2012) outline four major perspectives in explaining substance abuse; Personality theories, biological theories, learning theories and sociocultural theories. The personality theories according to him are prevalent among individuals who have high level of inability to delay gratification, low tolerance for frustration, poor impulse control, and high emotional dependence on other people, poor coping ability and low self-esteem Fareo [2012]. Fareo (2012) further illustrates on Biological Theory of Drug Abuse that the abuse of drug is advocated by an individual biological or genetic factors which make them vulnerable to drug addiction. Likewise, the Socio-cultural theory maintained that drug abuse is determined by socio-cultural values of the people. For instance, while certain cultures permit the consumption of alcohol and marijuana especially the in Zimbabwe, the Tonga people, other cultures do not. Likewise, Social learning theory by Bandura (1986) asserts that the adolescents learn from the people as role models in their society, family or peer group who use drugs or any substance. Werner (1991) is of the view that the higher prevalence of alcohol and substance abuse by adolescents poses a significant threat to the wellness of youth. University appear to use drugs for a variety of reasons. In addition to the multiple etiologic and risk factors present for substance abuse, there are many pathways university students may follow on their way to substance abuse. The prevention strategies which appear to be most effective utilize a social influence approach or emphasize personal and social skills teaching. Prevention programs which promote resisting social influences help university students to identify and

resist specific social pressures to adopt behaviours by informing them about health and social consequences; identifying peer, media, and environmental influences; modelling responses to these influences; role playing; and goal setting. There may be an influential effect to minimal exposure to substance abuse risk factors that may inoculate an adolescent against using drugs. If drug-using behaviour is not learned during university life due to infrequent exposure to risk, there may be a good chance that drugs will never be used. Many of the program evaluations and research studies conducted so far have some methodological shortcomings. Future studies need to standardize the definition of drug use, include appropriate control groups, and correct. for the confounding effects of variables associated with drug use attitudes, behaviours, and risk factors (Werner 1991). Almost each university student goes through a state of experimenting the use of substance (tobacco or alcohol or any drug), which is known as Experimental Substance Use (ESU) and at this stage one is neither committed to use it in a prolonged way nor the drug or the substance has become his or her part of life (Clayton 1992). There are various theories which claim the way how university students get indulged in the use or abuse of drugs and other substance. I would like to see how adolescents get involved in drug use through the impression of deviant peers and how their ESU gets affected with the influence of peers. Therefore, the Social learning theory will be the theoretical basis for the present study.

Hazen et al. (2008) have identified that there are several risk factors at the childhood that happen to influence adolescents towards antisocial behaviour, which they have enlisted as parental psychiatric illness, learning disabilities, history of serious head trauma, severe behavioural problems (for instance, fire setting or cruelty to animals), school problems, family dysfunction, alcohol or drug abuse, delinquent peers, emotional distress, criminal activity and so forth. They have asserted that several theoretical models based on the investigation of the physical, emotional, cognitive as well as moral behaviour of the adolescents have made the reflections upon the way the adolescents happen to indulge into the abuse of drugs. In general, to the degree that these factors are unmitigated by success in one or more of the above (for instance, well-functioning family, academic achievement, positive peer associations), the risk of problem behaviour increases exponentially (such as head trauma plus family dysfunction associated with academic failure considerably increases the risk for mental health, substance abuse, and conduct disorder (Hazen et al. 2008). The causes of drug abuse among adolescents will be assessed and the probable consequences will then be analysed and the conceptual framework will be analysed and the

conceptual framework will be developed with the help of the review of the relevant literature

2.2. Review of Previous Studies

Drug abuse, be it in any form, has been perceived as a social problem worldwide. Every human being learns both positive as well as negative aspects from what and how his or her society performs. The global to local context of drug abuse has been discussed here in brief:

Drug Abuse: Global Context

The National Child Traumatic Stress Network - NCTSN (2008) asserts that the majority of adolescents mention as the factors that help them initiate drugs abuse are the social pressure and experimentation. The control mechanism of drug abuse, however, has been found to be focusing on the prohibitionist approach worldwide rather than on the process of harm reduction strategies that have positive impacts on the protection of the drug users as well as the communities (Tinasti 2016). While Newcomb et. al (1986) have stresses that the risk factors of drug abuse have linear association with the increased percentage of drug users, frequency of drug use and heavy drug abuse. A Brazilian study (Nardi et.al, 2012) conducted on the association between the users and non-users on the social interaction revealed that the higher number of adolescents using alcohol and cigarette resulting into the antisocial behaviour significantly higher among users of marijuana, cocaine as compared to the non users. Newcomb et. al (1986) argue that the programmes aimed at preventing the drug abuse need to focus on reducing exposure to the risk factors of drug abuse and modifying the existing factors. The major risk factors categorized in their findings include 'peer drug use, deviance, sensation seeking, poor relationship with parents, poor academic achievement, psychological distress, poor self esteem and so on' (p. 527). Cannabis was reported to be the most used substance worldwide in 2018, with 192 million people using it worldwide. Nevertheless, opioids stay the most harmful, as over the past decade, the total number of deaths due to opioid use disorders rise up by 71 per cent, with a 92 per cent increase among women compared with 63 per cent among men. Drug use increased far more rapidly among developing countries over the 2000-2018 period than in developed countries. Adolescents and young adults account for the largest share of those using drugs, while young people are also the most vulnerable to the effects of drugs because they use the most and their brains are still developing (UNODC 2020). Alcohol use has been quite common among European adolescents these days. They found that overall, 60.4% of the adolescents have been drinking beer, wine and similar drinks at least once in

their lifetime and 34.2% have been drinking spirits. The last month prevalence rates are were nearly half, respectively 28.1% and 13.5%. The prevalence rates for heavy episodic drinking are 28.1% for beer and wine, while it is 13.5% for spirits (Steketee et. al, 2013). With regard to the causative factors of drug abuse, it has been revealed in Europe that adolescents who experience social cohesion in their neighbourhood or feel connected to their neighbourhood have less chances to drink alcohol. On the other hand, if the neighbourhood or the community is incompetent in their understanding they show higher levels of alcohol use. For the school domain it holds that students who spent a lot of time doing homework, enjoy school, and to a lesser degree students who perceive their school climate to be positive, have lower prevalence rates on all alcohol outcomes. It is essentially and obviously the disaffection from school, as expressed in truancy, which contributes most to alcohol use (Steketee et. al, 2013).

Drug Abuse: National context

To better comprehend the determinants of drug and substance abuse among Zimbabwean adolescents and young people, UNICEF reviewed three gender-sensitive reports comprising two studies and one implemented experience programme. These contributions came from Muthengo Development Solutions (MDS), Zimbabwe Civil Liberties and Drug Network (ZCLDN), and Youth Advocates Zimbabwe (YAZ).

• Muthengo Development Solutions (MDS), with support from UNICEF, undertook a qualitative behaviour causal analysis in 2022 using the Human-Centered Approach. The aim of this study was to map behaviour change pathways among Zimbabwean adolescents and young people abusing alcohol, drugs, and other substances (ADS).

• Guided by the capability, opportunity, and motivation-behaviour (COM-B) analytical framework, the study included: individual life course case studies among current and past alcohol, drugs, and other substances users; participatory community workshops with parents/caregivers; community leaders, adolescents, and young people (ADS users and non-users); and key informant interviews (KIIs) with institutional stakeholders in health and education. To account for peri-urban and rural differences, this deep dive behavioural analysis also included consultations with identified adolescents and young people, drawn from four sub-locations in Chipinge and Bulawayo.

• Additional insights were gathered from an explorative cross-sectional study undertaken by the Zimbabwe Civil Liberties and Drug Network (ZCLDN) with support from the

National AIDS Council (NAC) and the Joint United Nations Programme on HIV/AIDS (UNAIDS), in five provinces: Bulawayo, Harare, Mashonaland Central, Manicaland. The objective of this study was to inform HIV (human immunodeficiency virus) & tuberculosis (TB) programming directed at people who use or inject drugs in Zimbabwe. 300 alcohol, drugs, and other substances users were interviewed.

• Further evidence was provided by the Youth Advocates Zimbabwe (YAZ), through its Helpline Contact Center 393 to locate children and young people in crisis, link them to critical services, and track barriers to services. YAZ analysed drug use causes and casualties

. • In March 2023, UNICEF hosted a meeting with the authors of these studies, including substance abuse experts. The findings were informative, comprehensive and contributed to this publication

2.3. The prevalence of substance use related mental disorders among students and common substances used by the students

The co-occurrence of substance use disorders (SUD) and mental disorders is common, with estimates of the co-morbidity ranging between 30-50% (Torrens et al., 2018). Substance use-related mental disorders can have a significant impact on the physical, emotional, and social well-being of individuals and result in a range of negative outcomes, including financial and legal problems, diminished work performance, and poor academic achievement.

Substance Use-Related Mental Disorders

The prevalence of substance use-related mental disorders is high, and it affects people of all ages, genders and socioeconomic status. According to the National Survey on Drug Use and Health (NSDUH), conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA) in 2019, 19.4 million adults (aged 18 or older) had a substance use disorder (SUD) in the US. Of those, 9.5 million had a co-occurring mental disorder (SAMHSA, 2020). Notably, the prevalence of substance use-related mental disorders is even higher among patients with serious mental illnesses (SMI) such as schizophrenia, bipolar disorder, or major depressive disorder. For instance, a meta-analysis conducted by Firth et al. (2019) reported that individuals with SMI had a higher prevalence of tobacco use, alcohol use, and illicit drug use than the general population. Furthermore, the study demonstrated that the rate of cannabis use disorder (CUD) in people with SMI was more than three times higher than that in the general population.

Common Substances Abused by students

The substances abused by university students vary based on factors such as age, gender, environmental factors, and ethnicity. Here are some of the common substances abused by students

Alcohol

Alcohol is a legal psychoactive substance that is widely available and commonly used. It is a significant contributor to the SUD burden, and it can lead to various physical and mental health consequences such as liver disease, cancers, depression, and anxiety (Rehm et al., 2019). According to a study conducted by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), in 2019, 14.1 million adults (aged 18 or older) had an Alcohol Use Disorder (AUD) in the US (NIAAA, 2021).

Tobacco

Tobacco is another common psychoactive substance and one of the leading causes of preventable death worldwide (World Health Organization, 2021). The use of tobacco can lead to various health consequences such as lung cancer, heart disease, and stroke. According to the NSDUH survey conducted by SAMHSA in 2019, 51.1 million adults (aged 18 or older) in the US were current cigarette smokers, and 19.3 million of them had a tobacco use disorder (TUD) (SAMHSA, 2020).

Marijuana

Marijuana is the most commonly used illicit psychoactive substance in the US, and its use has been legalized for medical or recreational purposes in many states (National Institute on Drug Abuse, 2021). However, the legalization of marijuana has led to an increase in marijuana use disorders (MUD). According to the NSDUH survey conducted by SAMHSA in 2019, 4.5 million adults in the US had a MUD, and 70.9% of them also had a co-occurring mental disorder (SAMHSA, 2020).

Opioids

Opioids are a class of drugs that include prescription painkillers such as Oxycodone, Hydrocodone, and Fentanyl, as well as illegal drugs like heroin. Opioid use can lead to various negative outcomes such as overdose, respiratory depression, and dependence (National Institute on Drug Abuse, 2021). According to a study conducted by the Centers

for Disease Control and Prevention (CDC) in 2020, 53,891 deaths in the US involved opioids, with prescription opioids being involved in 34.9% of those deaths (CDC, 2020).

2.5. Effects of drugs and substance use.

Young people who persistently abuse substances often experience an array of problems, including academic difficulties, health-related problems, poor peer relationships and involvement with the juvenile justice system. Additionally, there are consequences for family members, the community, and the entire society like conflict between friends, family breakdown, violence, gangs, drug trafficking etc. Declining grades, absenteeism from school and other activities, and increased potential for dropping out of school are problems associated with adolescent substance abuse (Gubbels, van der Put and Assink, 2019Henry, & Thornberry, (2010) had research finding that low level of commitment to education and higher truancy rates appear to be related to substance use among adolescents. Again drugs abused effect the brain, this result in major decline in the functions carried out by the brain (Amako, Gamsa, Ibrahim, Danga and Amos, 2024). Drugs affect the students concentration span, which is drastically reduced and boredom sets in much faster than for non-drug and substance abusers. The student will lose interest in school work including extra curriculum activities (Okuefuna, 2024] Most of the psychoactive drugs affect the decision making process of the students, creative thinking and the development of the necessary life and social skills are stunted (Amako, et al., 2024). They also interfere with the awareness of an individual's unique potential and interest thus affecting their career development (Kikuvi, 2009). Cognitive and behavioural problems experienced by alcohol- and Drug-using youth may interfere with their academic performance and also present obstacles to learning for their classmate (United Nations, 2005). Drug abuse is associated with crime maintenance of an orderly and safe school atmosphere conducive to learning .It leads to destruction of school property and classroom disorder. Drug and substance abuse have far reaching ramifications, for instance, according to the survey by NACADA (2012) with a sample of 632 children, it was found out that 6% have ever engaged in sex while on drugs (7.3% for boys and 4.4% for 23 girls).The median age at sexual debut being estimated at 11 years. An assessment of the situation during the first sexual intercourse indicates that 30% had sex unwillingly. Further, about 20% were given incentives to lure them in to sexual act, with a further 8% reporting having taken drugs before their first sexual encounter. This early introduction into illicit sex goes a long way in impacting negatively on their self-esteem, exposing them to dangers of early pregnancy contracting

STIS and AIDS, declining academic performance and ultimately dropping out of school altogether(Maithya, 2009).

Kelly, et al. (2018) study examined the role of mindfulness-based interventions in the treatment of substance use disorders among adults with comorbid mental health disorders. The study found that mindfulness-based interventions, such as mindfulness meditation and yoga, can improve outcomes for individuals with co-occurring SUD and mental health disorders (Kelly, et al., 2018). Studies by Reis, et al. (2019) investigated the relationship between social support, depression, and substance use disorders among patients in addiction treatment centers. The study showed that lower levels of social support were associated with higher rates of depression and SUD among patients in addiction treatment (Reis, et al., 2019). The researchers suggested that addiction treatment centers place a stronger emphasis on providing social support to patients in order to improve treatment outcomes.

Lee and Cheung (2018) found that childhood adversity, such as physical or emotional abuse, neglect, and parental substance use, significantly increased the risk of developing SUD among adolescents. Raistrick et al. (2017) further indicated that the CRA intervention was effective in reducing substance use and improving overall functioning among patients in outpatient treatment. Kim, Shin, and Park (2018) also showed that higher levels of perceived stress were associated with a greater risk of developing SUD among young adults.

A study by Mowbray et al. (2018) revealed that TF-CBT was effective in reducing substance use and improving PTSD symptoms among patients with co-occurring disorders. Kelly et al. (2017) study showed that social support was associated with improved treatment outcomes, including reduced substance use and improved mental health symptoms, among patients with comorbid SUD and mental disorders. Treloar et al. (2017) showed that trauma exposure was associated with a greater risk of developing both PTSD and SUD among patients in addiction treatment. A study by Toklu et al. (2018) found that higher levels of impulsivity were associated with a greater risk of opioid relapse and poorer treatment outcomes among patients in opioid substitution treatment. A study by Jaffe et al. (2018) that investigated the impact of harm reduction interventions, such as needle exchange programs and naloxone distribution, on reducing substance use-related harm among patients with opioid use disorder showed that harm reduction interventions were

effective in reducing the rates of overdose and other substance use-related harms among patients with opioid use disorder.

2.6. Research Gap Analysis

From the reviewed empirical literature there was a substantial evidence that showed that the studies that were carried in the past were similar in research themes mental disorder of students and substance related disorders. However, the reviewed studies showed that the topic on psychosocial factors of students with substance use related mental disorders was not conducted and therefore something new that added to the body of knowledge of students with substance use related mental disorders. The difference between the current study and the studies reviewed therefore justified the need of this study.

2.7. Summary

This chapter gave the conceptualization of key terms namely, psychosocial factors, culture, environment, family, lifestyle and social support among others. The theoretical framework of the study was also hinged and was based on cognitive behavioural theory. The theory posited that psychological problems aroused from negative distortion of patterns of thinking and changing these patterns of thinking led to improved mental health. The objective literature showed what was already known on the study objectives. The empirical literature reviewed studies that were conducted in the past on similar and different themes for the analysis of research gap which justified the need of this study. The next chapter the researcher presented the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

3.0. Introduction

This chapter dealt with the research design, study area, target population, sample size, sampling procedures, research instruments, pilot study, instrument reliability, instrument validity, data collection procedures and data analysis techniques. A discussion of each aspect of the research methodology was given hereunder, beginning with research design.

3.1. Research Design

The study used descriptive survey design combining both qualitative and quantitative research strategies. Gorfinkel, Stohl, Shmulewitz, & Hasin (2024) notes that a survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals and it is the most frequently used method for collecting information about people's habits in a variety of education or social issues. Uddin, & Bhattacharyya. (2024) described the descriptive survey research as a method of study used to investigate educational problems and to determine and report the way things are or were. The study employed the survey design since the researcher intends to get the precise information and make conclusive results regarding the effects of drug and substance abuse on health of students at Bindura University of Science Education.

According to Verma, Verma and Abhishek [2024] the survey design is the best method available to social scientists who are interested in collecting original data for the purposes of describing a population which is too large to observe directly. The researcher combined both qualitative and quantitative approaches to research. Kurtaliqi, Miltgen, Viglia, & Pantin-Sohier (2024) indicated that both approaches are complementary and where appropriate should be combined in such a way as to maximise their strengths and minimise their limitations.

3.2. Study Area

The study has been confined within knowledge of health effects of drug and substance use among students in their second year at Bindura University of Science Education.

3.3. Target Population

Verma, et al. (2024) defines target population as the population to which researcher wants to generalize the results of the study. The research targeted all the second year students in the Faculty of Science and Engineering who made up a population of 300 at Bindura University of Science Education. The second year students were targeted because they have been at the university long enough as to be influenced by the university environment.

3.4. Universe and Census method

The universe of the present study population is the total number of students in the second year at Bindura University of Science Education in the year 2024 prior to the date of data collection. The students were taken from different such as Disaster management 25 students , Information and technology 50 students, mathematics 30 students, engineering 80 students Optometry 15 students Biotech 30 students Peace and governance 70 students Such individuals students who have been taken as the respondents of the study and the data so obtained between September 2023 to April 2024 from them has been analysed as per the study objectives. So, the census method is employed to study the knowledge and consequences of drug use among the each respondent chosen for study.

3.5. Data Collection Tools

The required data for the study as per the objectives and research questions have been collected, managed and analysed in accordance with the guidelines of the department. As the nature of study demands first hand information, primary data has been the priority of the study. Both qualitative and quantitative data have been obtained from the field. The researcher used both questionnaires and interviews to collect data. Additionally, observational method was used to collect data during interviews.

Questionnaires

This data collection tool was used to gather information from the university students. This was the best tool given that a large number of students were involved. It allowed quick data collection from a large number of students and was the easier method and cheaper given the number and time needed to collect data.

Interviews

Quantitative as well as qualitative data have been collected through carefully interview schedules. The background characteristics related to demographic, socio-economic as well as familial characteristics have been set in the first section of the semi-structured questionnaires. Likewise, other section comprised of the questions related to the drugs such as the background of being indulged into drug abuse, causes as well as consequences of drug and substance use.

Observation

Qualitative information has been obtained through participants' observation during the interview as well as other times such as their feeding, leisure and recreational times. This created an understanding of the cases closely and helped triangulate the information obtained from the interview schedules. Likewise, case studies have also been done based on the typical cases of drug and substance use, such cases have been placed in boxes as per the appropriateness.

3.6. Challenges in obtaining information

Although the respondents were available, it was hard finding the respondents of drug and substances use and challenges remained there in the form of hesitancy nature of the respondents. It might be because the respondents were reluctant to disclose in front of other personnel due to fear of being dismissed or reported to the authorities and law enforcement agents

3.7. Reliability and Validity

Validity in research refers to the extent to which research findings are plausible, credible, trustworthy, and thus defendable (Pettey et al., 2015). Validity refers to the reasons that the researcher has for believing that the research findings are true. Good validity in research ensures that the research instrument actually measures what it is intended to measure (Paterson, 2017). On the other hand, reliability refers to the extent to which the same test would give the same results if it could be taken by the same respondents under the same conditions. In other words, since the research triangulation based, reliability referred to the extent to which the interview guide produced the same results on repeated trials. The researcher established the validity and reliability of the questionnaires and interview guide questions by carrying out the pilot study. The researcher gave the questionnaires and interview questions to subjects who were not part of the sample to get insightful comments

that helped to refine and improve the focus of the questions on the guided interviews. The results of the study could also be transferable to other studies in the same field due to the credibility of the work which was well cited and not plagiarized. The findings of this study due to the credibility will impact positively to other researchers as they confirm the findings in their own studies.

3.8. Pilot Test

Van Teijlingen and Hundley (2001) describes pilot testing as a small-scale preliminary study that will be conducted in order to evaluate feasibility, time, cost, adverse events and effect size (Statistical variability) in an attempt to predict an appropriate sample size and improve upon the study design prior to a full-scale research project. This is a pre-test of the research instruments to test their validity and appropriateness in gathering data pertaining to a study. The pilot study enabled the researcher to fine-tune both the questionnaire and interview guide in order to correct possible errors before commencement of the study. This was done among the second year students in the Faculty of Science Education who where not included in the final data collection. A 10% rule of thumb was used for recruiting 30 participants for pilot testing the instruments. After the pilot study was conducted, the researcher made sure that all questions were corrected to read well as was suggested by the process of piloting the instrument.

3.9. Data Analysis and Interpretation

The information obtained from the field in the form of qualitative and quantitative data have been analysed with relevant ways.

Once data was obtained from the field it was coded and analysed by computer using a statistical software SPSS (Statistical Package for Social Sciences). It was then arranged and grouped according to relevant research questions, data was then summarised using distribution tables, bar graphs and pie charts for all items.

After data collection using questionnaires the obtained information was arranged and grouped according to the relevant research questions. The data was then organized, tabulated and analysed in frequency table; ratios and percentages with the help of the statistical package for social sciences (SPSS) software. According to Piel (1995), in data analysis percentages have a considerable advantage over more complex statistics

Both the quantitative as well as the qualitative data have been blended as per the necessity of the topic and the gravity of the content to make analysis effective. The researcher used narrative analysis and direct quote to analyse qualitative data that was gathered through interviews. Narrative analysis is an approach taken to interview data that is concerned with understanding how and why people talk about their lives as a story or a series of stories (Esin, 2011). This inevitably includes issues of identity and the interaction between the narrator and audience(s). The approach enabled the researcher to easily identify pattern in the responses by simply reading the responses and tabulating the occurrences of the narratives from the participants' point of view.

3.10. Ethical Considerations

Teas (2014) highlighted that researchers ought to observe good ethical practices when conducting research studies. The first ethical practice observed by the researcher is of voluntary participation. The researcher ensured voluntary participation hence no one was coerced into taking an active role during this research study. Neither the research nor the researcher harmed the participants. The pilot test undertaken by the researcher revealed sensitive questions and wording that could have otherwise harmed the research participants. These were refined upon identification and thus the researcher can declare that no one was harmed in any way by this research work. The researcher outlined the purpose of this research work to the participants in an attempt to make them provide the most possible responses. It was highlighted in the introductory part of the questionnaire that the study was purely academic. This made it possible for respondents not withhold information that could otherwise have been valuable to this research work. The disclosure of the purpose and objectives of the study also enhanced the meticulousness and usefulness of the data collected. Privacy and confidentiality of respondents was ensured. The researcher made sure that the participants to this work remain unknown. To the same effect, responses were anonymous. Saunders (2003) avers a response to be anonymous if the research element cannot be identified with a response. The researcher assumed complete responsibility of disclosing the findings of this research work to all stakeholders that were involved in the study.

3.13 Summary

This chapter highlighted a mixed methodology as an approach that was used by the researcher. Mixed approach used both quantitative and qualitative designs. Stratified

sampling method was used to select the sample size of the study and snowball sampling method was used to select interview participants. Data was collected through questionnaires and interviews and data was analysed using thematic analysis and content analysis. Validity, reliability and trustworthiness was done through a pilot test of the questionnaires and interview guides. Ethical principles were observed which included the signing of consent forms. The next chapter the researcher will present chapter four which focuses on data presentation, analysis and discussion

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 INTRODUCTION

In this chapter the collected data on the knowledge of health effects of drugs and substances use among university students stationed at Bindura University of Science Education was analysed and presented. Questionnaires and interviews were used as data collection tools. Thematic analysis were used by the researcher in analysing themes found from the interviews. The researcher created questions from research objectives and verbatim were used and themes found were derived from the verbatim. The chapter presented the quantitative (questionnaires) data which was then supported by qualitative data (interviews for students representatives of different departments and programs].The chapter unfolds by giving the overall responses and gender responses.

4.1. Overall Response and Gender Rate

The response rate was 100% for both interviews and the questionnaires. The questionnaires consisted of both open and closed ended questions. This allowed students to express themselves for some qualitative responses which ensured completeness of data. A total of 307 students were part of this study accounting for 300 general students and 7 who are their group representatives. In addition, 225 (75%) were males while 75(25%) were females. The interviews were conducted among key informants (group representatives), comprising of 7 participants, of which 4 (57%) were males and 3(43%) were females. The results showed that males dominated than their female counterparts. This may be because of the readiness of the male to openly talk about substance and drug use compared to their female counterparts

4.2 Knowledge regarding effects of alcohol on health.

Have you ever received information regarding the effects of alcohol?

Majority 237 [79%] of the study respondents indicated that they received information regarding the effects of alcohol , while a few of them 63 [21%], indicated that they have not received any information regarding the effects of alcohol.
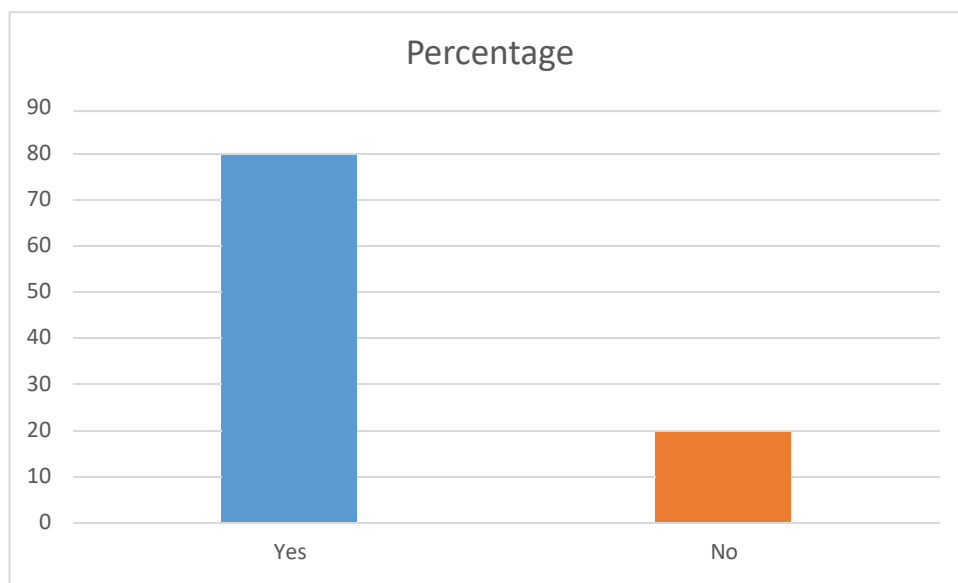
Figure 4.1. Distribution of having received information on effects of alcohol on health.

When further asked to explain about the effects of alcohol on health, most students clearly showed that they knew the effects of alcohol on health which included alcoholism, increase in risk-taking behaviours leading to possible contraction of HIV/AIDs, sexually transmitted infections, fatigue, depression and cognitive failures at university.

> Group Representative 1 said: *"I have seen some of our fellow students who started with us who have developed some illness and has been frequenting the student clinic at the university and some are no longer coming to school because they are being admitted in some hospitals".*

> Student 3 further supported what was said by Group Representative: *"Some of our colleagues are wasted due to alcohol. Some have developed HIV/AIDs because of risk behaviour they have been engaging in when getting drunk"*

The sentiments of these were a common phenomenon among most of the students. This clearly indicate the harm that alcohol may have to the health of the people in general.

Can abuse of alcohol lead to poor performance

The study findings reveals that the majority 280 [93.2%] of the study respondents agreed that abuse of alcohol can lead to poor performance at university, while very few of them 20 [6.8%] disagreed that it could lead to poor performance at school. When students were interrogated on their response to whether alcohol could lead to poor performance in their academics at the university, majority of students who revealed that it could lead to poor performance further indicated that a student who has drunk alcohol could have some

headache and may not even report to classrooms the following day which can affect learning.

> Student 1 said: *"Alcohol is not good because I have seen some students failing because they are usually drunk".*
>
> Student 2 said: *"I saw some of my fellow students who were drunk failing to concentrate in class and they could sleep while in lectures and these failed the exams".*

These comments from the recorded above statements of the 2 students, were the general comments that came from most of the students. This clearly show that alcohol is not good for students' performances in class.

Can abuse of alcohol lead to university drop out?

A total of 261 [87%] student agreed that abuse of alcohol can lead to university dropout, while 39 [13%] disagreed that it can lead a learner to drop out of university. These who indicated that it could lead to school dropouts at the university further supported their augments by indicating that some students fail to pay their fees after using the school fees money to buy alcohol. They said some students have failed to pay and as a result they ended up dropping from the university.

4.3 KNOWLEDGE REGARDING THE EFFECTS OF MARIJUANA ON HEALTH

In order to gather data on knowledge regarding the effects of marijuana on health, students responded as follows:

Use of marijuana was reported as a major contributor to mental illness by 264 (88%) students. Only 38(12%) students had no knowledge that marijuana could cause mental illnesses.

> They even indicated in some statements that, Group Representative 2: *"When one uses marijuana, he can actually see things that other normal people can not see and some even become very violent".*
>
> *Student 4: Some students have been admitted to a mental hospital following use of marijuana and even Guka.*

Some students 210 (70%) further indicated that marijuana can lead students to engage in criminal activities and can lead to being arrested.

One student clearly said: *"I fear these guys who use marijuana because they sometimes become very violent that the only option available is to report them to police and they get arrested for their acts of criminality linked to use of illicit drug/substance".*

Another Student said: *"Some of our colleagues who have been using marijuana and other substances were seen breaking rooms for other students in order to steal money and other items so they can sell and get more of these substances. This to me showed that this substance is addictive and leads to dependence syndrome. I do not like it!".*

4.4 KNOWLEDGE REGARDING THE EFFECTS OF CIGARETTES ON HEALTH.

When students were asked about their knowledge regarding use of cigarettes on health, majority, 259(86%) showed that they had knowledge of the effects of cigarette smoking such as increased risk of tuberculosis, lung cancer, chest pains and risk of chest infections, chronic cough, and dependence syndrome. Although a few 41 (14%) students said that they did know the health effects of cigarette use, they also admitted that the use of cigarette could increase health risks especially on the lung health.

Group Representative 5 said: *" Use of tobacco has been a major health issue increasing the risk of dependence syndrome among those that use it. It can even cause TB".*

Another Student weighed in and said: *" Cigarette smoking can cause lung cancer and the person will be coughing and coughing"*

Another student said: *"The colour of the teethe can change. This is bad!*

4.5. ATTITUDES REGARDING ALCOHOL, MARIJUANA AND CIGARETTES

One hundred and two (34%), of the study participants agreed that Marijuana removes fear of presentations at school, while very few 87 (29%) strongly agreed that marijuana removes fear of presentations at school. Moreover, 87 (29%) disagreed,while 68 (23%) strongly disagreed that marijuana removes fear of presentations at school. The study findings also indicated that few, 48 (16 %), agreed that cigarettes arenot addictive, while 22 (7%) strongly agreed that cigarettes are not addictive. Furthermore, 138 (46%) disagreed, while 92 (31%) strongly disagreed that cigarettes are not addictive.

Moreover, 34 (11%) of study respondents agreed that using dagga improves memory and learning ability, while 23(8%) strongly agreed that using marijuana improves memory and learning ability. Furthermore, 133 (44%) disagreed while 111 (37%) strongly disagreed that using marijuana improves memory and learning ability. The study findings also reveal that 32 (11%) disagree that they cannot eat well before they smoke cigarettes and 10 (3%) strongly disagreed that they cannot eat well before they smoke cigarettes. Additionally, 104 (51%) agreed while 73 (35%)strongly agreed that they cannot eat well before they smoke cigarettes. Table 4.1

Table 4.1: Respondents' response on attitudes towards substance abuse (N=300)

Item	Agree		Strongly Agree		Disagree		Strongly Disagree	
	F	(%)	**F**	(%)	**F**	(%)	**F**	(%)
Substances such as marijuana removes fear of presentationsat school.	102	34	42	14.1	87	29.1	141	22.8
Substances such as cigarettes are not addictive.	48	16	22	7.3	138	46.1	92	30.6
Using substances such as marijuana improves memory and learning ability.	34	11.2	23	7.8	133	44.2	111	36.9
I cannot eat well before I smoke cigarettes.	32	10.7	10	3.4	152	50.5	106	35.4
Using substances such as marijuana improves memory and learning ability.	23	7.8	13	4.4	147	49	116	38.8

4.8 DISCUSSION OF THE RESULTS

This section discusses major findings of this study that investigated students' knowledge on health effects of drug and substance use at Bindura University of Science Education. To the best knowledge of the researcher, this is one of the first studies to be carried out post COVID 19 era whose thrust is on students at tertiary levels in Zimbabwe. Students demonstrated knowledge on the health effects of drugs and substance use. This study showed that, despite knowledge on the health effects of drug and substances use, some students indulged in substance and drug abuse. The use of substances and drugs was shown to contribute to absentism which resulted in university dropouts. These findings concurred with the findings of the study conducted by Grigsby, etal., (2018) that also evidenced that students knew that using --- and alcohol could contribute to learners missing school and leading to poor school performance, Based on these study findings, the study discusses these results as follows:

4.8.1 University students' knowledge regarding the effects of alcohol on health

This study revealed that university students were aware that excessive alcohol consumption could lead to health problems such as impairment of cognitive function and difficulties in decision making skills. The studies by (Wilson, Willoughby, Tanyos, Graham, Walker, Laslett, & Ramsoomar, 2024, McCambridge, Mitchell, Lesch, Filippou, Golder, Garry & Madden, 2023) collaborated with the findings from this study which also reflected on the use of alcohol being linked to inability to reason clearly. A global review of the impact on women from men's alcohol drinking: the need for responding with a gendered lens. Furthermore, use of alcohol was linked to increased risk of mental health issues such as depression and anxiety. Another study by Christensen, Bilberg, Andersen, Nielsen, & Nielsen (2023) cemented the findings from this study and showed that mental illness increases three folds amongst those who use alcohol.

Although the findings shows that university students had knowledge on the health effects of alcohol, they still indulged in alcohol consumption, and presented with some of the mental health effects they described. Therefore, the health interventions around health education on alcohol use reduction is singularly important to reduce or prevent the mental health effects of alcohol use among university students

4.8.2 University students' knowledge regarding the effects of marijuana on health

Our study that revealed a significant proportion of university students believed use of marijuana had no negative effects on the mental health, despite available evidence suggesting a link to increased risk of anxiety and depression (Agius, 2023). This was a shocking revelation amongst university students who actually knew the effects of alcohol and other substances could increase the risk of mental health. This suggest need for further investigation on the behaviour regarding uptake of marijuana among university students. Furthermore, there may be need to evaluate level

of cannabis in students' blood or urine which may assist in any interventions towards detoxification of the substances from the system of the students or health education towards reduction or prevention in use. It is important to note that the researcher observed that a few of the students were aware of the potential effects of marijuana in impairing the cognitive function and academic performance among these university students. This finding concurs with other studies among these special groups of learners and even adolescents who use marijuana who have indicated the mental health effects of these substances. Findings by Tembo, et al. (2017) showed that students had knowledge that those who use marijuana were at risk of having delusional experiences which is one of the mental health issues associated with the use of substances. The use of substances such as marijuana was also shown to be associated with housebreaking and sell of personal belongings as a way of getting more financials for buying marijuana (Grigsby, et al., 2023), which was also shown in the researcher's study that marijuana creates dependence syndrome as one of the adverse effects of it.

4.8.3 University students' knowledge regarding the effects of cigarettes

The study which the researcher carried out, revealed that the participants had knowledge of the effects of smoking cigarettes such has increased risk of heart disease, lung cancer and tuberculosis. These finding from the study are collaborated by Trofor, et al., (2023) who also revealed that students had knowledge of the effects of cigarette smoking. Other effects of cigarette smoking as revealed in this study from the participants include eye problems such as glaucoma, cataracts and also respiratory problems such as emphysema and chronic bronchitis. These findings further cement the findings by Chung, Lee, Han, Shin, & Lee, (2023) who echoed the same. The knowledge of the effects of cigarette smoking helps plan for interventions towards eradication of cigarette use as it has increased risk to the health of persons in the communities in general.

4.8.4 Attitudes towards combined use of alcohol, marijuana and cigarette by student

Different attitudes towards use of substances and drugs were revealed in the researcher's study. There was a view of acceptability for using alcohol among students and they integrated that in their everyday activities while at the university. They indicated that use of alcohol was an important social phenomenon which allowed socialization of students. Such views allowed students to abuse alcohol leading to alcoholism and other mental health challenges. This was also reported in a study by World Health Organization (2019) who attributed use of alcohol as a major threat to health wellbeing of the alcohol users. Other studies (Celik, Gold and Fuehrlein, 2024, Yimam, Luslseged, Tura, Bedassa, Wariso, Rameto, & Abdella, 2024, Creery, & Davies, 2024). have also shown that alcohol has a potential of dependence syndrome which can lead to alcoholism and mental health effectsInterestingly, the study revealed that students recognized the health risks associated with use of alcohol and yet they lacked strength to stop use of alcohol in their daily lives. This is more to do with choices of an individual rather than anything else. Health education and use of edutainment are important pillars to express the dangers associated with

alcohol which has a turning point to most individuals (Sumpf, 2024, Stuever, 2024]. Regarding cigarette smoking, the study showed that majority of university students held a negative attitude towards smoking although there were some who viewed use of cigarette as being a gentleman and a mark of manhood and independence from the family adults. Such a view is likely to reinforce cigarette smoking among university students who feels that they are now independent and they can express as they feel. This attitude has been long held among peers who influence the action of their other colleagues in use of cigarettes (Prasad, 2024).. The reinforced attitude of cigarette smoking is thus likely to increase the risk of poor health among those that uses cigarettes and those that become passive smokers because of their association to the smokers. Therefore, there is need for behavioural health education to improve understanding of the potential effects of cigarette smoking on the health of individuals. This will improve perceptions of university students towards cigarette smoking and reduce use leading to reduction in potential harms associated with smoking. The use of marijuana has been reported in this study as a negative phenomenon among majority of the university students at Bindura University of Science Education. However, the other students have been reported to accept use of marijuana in their quest for excellence and tackling life challenges posed by academic endeavors. These students negates the negative health effects posed by marijuana. Other studies (Cservenka, & Donahue, 2024, Watts, Lebel, Chaput, Giesbrecht, Dewsnap, Baglot, & Tomfohr-Madsen, 2024) concurred with the findings from this study and have even explained the negative health effects posed by use of marijuana.

There is a view that was also held among Bindura University of Science Education students; that the use of marijuana could improve memory and learning ability. This view could promote the use of marijuana negating the negative health effects of marijuana to themselves. These findings were also collaborated by findings of the study by Roditis, et al., (2016) which showed that adolescents believed that marijuana is more socially acceptable and is less risky as compared to cigarettes, and also believed that marijuana gives better concentration spans when in school.

4.8 SUMMARY

This chapter presented and analysed data which were collected from Bindura University in Mashonaland Central. University students' knowledge and attitudes regarding the effects of alcohol, cigarettes and marijuana were presented. An association between knowledge of effects regarding alcohol, cigarettes and marijuana and demographic information of university students was drawn. The following chapter will present a discussion of the research findings, conclusion, and limitations of the study, as well as recommendations from the study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

Chapter 4 presented, analysed and discussed the findings of the study. In this chapter, the researcher presents a summary of the findings, the conclusion and the recommendations of the study whose aim was to assess knowledge of the effects of drug and substance abuse among University students at Bindura University of Science Education in Mashonaland Central Province of Zimbabwe.

5. 1 SUMMARY OF FINDINGS

This study used a mixed method approach (qualitative and quantitative) to assess the knowledge of students on the effects of drugs and substance abuse on their health. The study made use of 300 students and 7 student representatives acting as key informants. The study showed that majority of the students had knowledge of the of effects all drugs and substance on the health of individual students. However, it was observed that some of the students did not have knowledge regarding effects of drugs and substance abuse on their health. Those who knew that alcohol had some effects on the health indicated that use of alcohol could lead to alcoholism, poor performance in school, fatigue, depression, cognitive failures and indulgence in high risk behaviours leading to contraction of HIV/AIDS, STIs and school dropouts. Interesting is that 93% of the students reported that use of alcohol could lead to poor performance at the university. A total of 89% reported that use of alcohol could lead to school dropouts and this was associated with the either using the money meant for school fees to buy alcohol or any other substances which the students may be in need of to satisfy the crave.

The use of marijuana was also exposed to have some health effects including mental illness and violent episodes which is associated with disinhibition of behaviours. Criminal activities were reported to be one of the major challenges experienced with the use of marijuana and or Guka. This led to high crime rate in the hostels and arrests of some students leading to high dropouts and also some admissions to mental health hospitals. The fact that 70% knew that use of marijuana and "*Guka*" was associated with high crime rate indicated the need to increase health education on preventing use of these substances. The highest percentage 86% had knowledge that marijuana could increase the risk of mental illnesses.

Majority 86% were shown to have knowledge that use of cigarettes could contribute to diseases such as tuberculosis, chronic cough, chest pains and lung cancer. However, it is also important to note that those very few 14% even if they did not know the real health effects of cigarettes, they were aware that the use could cause some health effects.

The students' attitude towards use of the drugs and substances varied amongst the students. Some agreed to the effects of substances and drug use on their health whereas, some where of an disaggred that the the use of drugs and substances had effects on the health.

5.2. CONCLUSION

In conclusion, this mixed method study (Qualitative and Quantitative) showed that students had knowledge of the effects of drugs and substance abuse on health. The study concluded that university students have high knowledge that abuse of alcohol, marijuana and cigarettes possess many health and social difficulties such as leading a student to perform poorly at university, and to engage in criminal activities, and contributing to lung diseases and respiratory illnesses. The study also concluded that students had positive attitudes regarding the effects of substance abuse wherein the majority of the majority did not believe that marijuana improves memory and learning ability.

5.3. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made

Practice

It is recommended that professional nurses, psychologist and social workers should conduct awareness campaigns regularly in all universities to reinforce knowledge among young people about substance abuse.

Government should impose harsh laws against people found selling alcohol, marijuana and cigarette to young people.

Body of knowledge

Based on the findings of this study, the researcher recommends a study to develop a model to reinforce knowledge regarding the substance abuse consequences among youths.

The researcher further recommends that a study be conducted to evaluate the effectiveness of substance abuse prevention programmes that are already in place.

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APPENDIX 1: Questionnaire.

Section A: Demographic Information

Mark only one (1) response per statement by encircling the response of your choice. Where you need to explain your response, please do so by writing on the space provided.

1. What is your gender?

    Male

    Female

Section B: Knowledge regarding effects of drugs and substances on the health

2. Have you ever received information regarding the effects of alcohol on health

    Yes

    No

If yes, can you explain these effects

_____

_____

_____

3. Can abuse of alcohol cause poor performance and dropouts at the university?

    Yes

    No

4. Have you ever received information on the effects of marijuana on health?

    Yes

    No

If yes, please explain these:

_____

_____

_____

5. Is it true that the use of marijuana can increase risk of mental illness?

    Yes

    No

Kindly provide your explanation to the risks of mental health problems

_____

_____

_____

6. Can use of marijuana leads to criminal activities?

Yes

No

Explain some of the criminal activities that has occurred as a results of use of marijuana

_____

_____

_____

7. Have you ever received information on the effects of cigarettes on health?

Yes

No

Explain these effects that are caused by cigarettes on the Health

_____

_____

Section C: Attitudes towards drug and substance use.

Answer the following statements by **AGREE, STRONGLV AGREE, DISAGREE or STRONGLV DISAGREE** by putting a circle on your chosen answer.

1. Substances such as marijuana removes fear of presentations at school.

    1. Agree

    2. Strongly agree

    3. Disagree

    4. Strongly disagree

2. Substances such as cigarettes are not addictive.

    1. Agree

    2. Strongly agree

    3. Disagree

    4. Strongly disagree

3. Using substances such as dagga improves memory and learning ability,

    1. Agree

    2. Strongly agree

    3. Disagree

    4. Strongly Disagree

4   I cannot eat well before I smoke a cigarette.

    1. Agree

    2. Strongly agree

    3. Disagree

    4. Strongly disagree

5   I cannot eat well before I smoke dagga

    1. Agree

    2. Strongly agree

    3. Disagree

    4. Strongly disagree

Thank you for your time and response

APPENDIX 2: INTERVIEW GUIDE FOR THE KEY PARTICIPANTS

Interview Guide seek for your opinion on the topic: Knowledge of health effects of drug and substance use among students in their second year at Bindura University of Science Education.

•Introduction

Thank you for taking the time to participate in this interview. I am interested in learning about your knowledge of health effects of drug and substance use among students in their second year at Bindura University of Science Education.

Questions

1. How common are substance that are abused by students at this university?
2. What the commonly reported effects of these substances on their health?
3. What effects has been reported related to these substances relating to school performance?
4. How best can we avoid these effects on the health of the students?

<Thank you for participating>

APPENDIX 3: INFORMED CONSENT

Dear Participant

I am Takawira Chityeza, a student at Bindura University of Science Education (BUSE). I am carrying out a study to assess knowledge of students regarding effects of drugs and substances on the health at Bindura University of Science Education as part of fulfilment of the requirements of the Honors degree in Nursing Science and Education. The purpose of this study is to to assess knowledge of students regarding effects of drugs and substances on the health. Permission to carry-out the study has been obtained from relevant authorities. I am kindly requesting for your participation in the completion of this questionnaire anonymously and this will take about 15-25 minutes. The information that you shall provide will be treated with privacy and confidentiality and it shall be used strictly for academic purposes only. Your name should not appear anywhere on the questionnaire so that identity

will not be traceable or revealed at any time during the study. You are allowed to withdraw from participation at any time should you feel like doing so. This will not affect the quality of care being provided to you.

Participant's signature.. Date..

I have explained the study to the above participant and have sought understanding for informed consent.

Investigator's name…………………………………………

Investigator
signature...Date..

Contact details: The investigator can be contacted at 2 Referral Hospital in Harare or through Bindura University of Science Education, Department of Health Sciences. Email: chityezat@gmail.com. Contact Cell: 0773528409