Impact of Unrestricted Drug Use on Psychiatric and Behavioral Disorders: Exploring Mental Health Effects in The United States

Excel Onajite Ernest-Okonofua[1], Franklin Ibadin[2], Ogheneyemarho Great Oyiborhoro[3], Aminu Sufu Mahmud[4], Ifeoma Theodora Abengowe[5], Peter Iroro Akpohwaye[6]

[1-6] Igbinedion University, Nigeria,Igbinedion University, Nigeria,Igbinedion University, Nigeria

[1-6] University of South Alabama USA, Igbinedion University, Nigeria, Glasgow caledonian university, Scotland

ABSTRACT	ARTICLE DETAILS
Background: Illicit substance abuse in the United States remains a public health concern as a survey shows that 59% of the population aged 12 or older use illicit substances in a year. Legal highs such as marijuana, opioids, synthetic cannabis, and other substances are responsible for high addiction rates and mental illness. Issues like legalisation, online drugs, and polydrug use only make these issues worse. Special groups are particularly vulnerable to getting treatment hence making the effects of substance use not only societal but individual as well. **Aim:** This research aims to establish the correlation between the use of drugs without prescription and mental illness. It also details how the availability of drugs affects mental health and looks at how to prevent or treat the problem effectively. **Methodology:** A cross-sectional survey design was employed, and the quantitative data collected from 378 participants was analysed. Data was collected with the help of online questionnaires, including participants' background information, their drug-taking behaviour, and psychiatric disorders. Descriptive analysis was performed utilising the SPSS statistical tool to compare the data sets. **Results:** The study shows a positive correlation between substance use and the presence of psychiatric disorders, including anxiety, depression and psychosis. The participants well understand these links and there was an appreciation of early intervention and integrated care models of treatment. However, there are still gaps in the treatment, especially among the marginalised groups of society. **Analysis:** The study highlights the need to increase awareness of the disease, improve treatment access, and to deliver specific interventions. Approaches that address education, equal access to treatment, and stigma are essential interventions for addressing the two risks posed by substance use and related mental health effects.	

INTRODUCTION

Drug use in the United States is a widespread and tangled public health issue of which individuals use both legal and illegal ways to become addicted to these substances (Mack, 2017). National Survey on Drug Use and Health (NSDUH) that about 59% of Americans 12 or older used illicit drugs in the past year with marijuana the most commonly used substance (Azofeifa-Ujueta, 2023). Apart from marijuana, most individuals use other drugs, like cocaine, methamphetamines, hallucinogens, and opioids leading to widespread addiction and health problems (Azofeifa, 2019). In particular, the opioid crisis has been so gruesome, with over 70,000 cases of overdose reported annually attributed to synthetic opioids such as fentanyl (Larkin Jr & Madras, 2019). Another area of concern is the misuse of prescription drugs, as at least 16 million Americans are believed to misuse prescription medicines to ease

pain or spur energy, and tranquilize their anxieties (Preuss et al., 2019). The landscape is made more complex by a rise in polydrug use, individuals taking more than one substance at a time, which heightens health risks and increases the risk for a mental health disorder (Crummy et al., 2020). As per (McCollister et al., 2017) study substance use disorders (SUDs) represent as much of an economic impact, at an annual cost to the United State of over $740 billion for healthcare expenses, lost productivity, and criminal justice costs. Drug use occurs in a variety of population's but have higher prevalence rates and barriers to treatment in young adults, and marginalized communities (Mongelli et al., 2020).

Legal changes, technological development and cultural changes have all paid a part in making drugs available without restriction in the United States. The study by (Hammond et al., 2020) emphasised that 7.6 million Americans reported using cannabis an increase triggered in large part by marijuana legalization at the state level and misuse and dependency rates were edging up, notably among young adults. But beyond cannabis, the internet and dark web make it easier to buy more, ranging from synthetic opioid to designer drug, all with anonymous purchases that rarely traverse traditional law enforcement channels (McCollister et al., 2017). Increased access has extended to the internet and the dark web, where it is estimated that some 2.5 million Americans acquire drugs online each year including high risk drugs like synthetic opioids (Lokala et al., 2022). Besides being more accessible, prescription medications like opioids and stimulants are also becoming widely available over telemedicine and online pharmacies raising fears of over prescription, and abuse (McCann, 2020). These impacts are social communities experience increased crime, homelessness and family disruption.

Although, there are complex challenges in managing psychiatric and behavioral disorders associated with a drug use in the United States, high prevalence rates of SUDs often coexist among mental health conditions(McCabe et al., 2017). (Yule & Kelly, 2019) highlighted that individuals with comorbid mental health disorders including depression, anxiety or schizophrenia also struggle to treat their addiction, with many resulting to turn to drug or alcohol for coping. Together these different deterrents add to the stigma surrounding mental health and drug use, which discourages individuals from seeking help, and especially in underserved communities with few mental health services (Drew & Martin, 2021). This study aims to understand the adverse mental health burden of unrestricted drug use in the United States with regard to the relationship with the development of psychiatric and behavioral disorders. It examines the number of mental health disorders that are drug use related, the influence of the accessibility of drugs on those health issues, whether there an association of certain drugs and specific mental health problems, and identification of prevention and intervention strategies to prevent or alleviate certain crises of mental health because of the misuse of the drugs.

METHODOLOGY

This work relies mainly on a primarily quantitative approach to assess the effects of the liberal use of drugs on psychiatric and behavioural disorders with a particular emphasis on mental health in the United States. The following is a description of the research design, the method of selecting the sample, the data collection techniques, and the analysis plan to facilitate clarity and replication.

RESEARCH DESIGN

This study adopts a cross-sectional survey design to survey the connection between the unrestricted use of drugs and its impact on the disorders of the psychiatric and behavioural systems in the United States. The current study's cross-sectional research design allows the accumulation of data from a diverse population within a certain period, which makes it easier to determine the relationship between variables (Aljarallah et al., 2023). The research primarily adopts a quantitative approach because it allows the collection of numerical data that can be analysed statistically. This design is especially appropriate for studying drug use behaviours and their mutual relations with mental health outcomes, based on the findings of empirical research.

SAMPLE SIZE AND SELECTION

The participants for this study are 378, based on the estimation to provide enough power for the test. The target participants are recruited through convenience sampling from several social media platforms to achieve a large sample and variability. Recruitment is done through Facebook, forums for people with mental health issues, and postings on bulletin boards. Participants eligible for the study are any adult at least 18 years of age and a resident of the United States. These are the specific inclusion criteria set for this research to increase the chances of the sample representing the target population (MM Rahman, 2023). An attempt is made to ensure that participants are selected from different age groups and genders, ethnicities, and socio-economic classes to increase the study's external validity.

DATA COLLECTION

The data is generated by administering a self-completed online questionnaire that provides quantitative data on drug use, psychiatric state, and behavioural problems. The survey uses closed-ended questions that will elicit standardised responses that can

be quantitatively analysed (Alam, 2020). It is divided into topics such as demographic details, rate and kind of drug use, as well as self-identified psychological disorders. Self-report scales, including but not limited to the

DATA ANALYSIS

The survey data collected is analyzed using Statistical Package for the Social Sciences (SPSS) software (Okagbue et al., 2021). Demographic data and the participant's substance use history are summarised using measures such as mean, frequency, and standard deviation. Descriptive statistical methods, correlation analysis, regression analysis, t-tests, etc., are used to study the association between drug use and various psychiatric and behavioural disorders (Casella and Berger, 2024). Data management has become very efficient in SPSS, and the accuracy of the dataset cannot be questioned while processing it (Pallant, 2020). Moreover, chi-square tests are also used to test relationships between categorical variables, such as drug type and specific psychiatric symptoms.

ETHICAL CONSIDERATIONS

A recognised IRB approves the study's academic and practical aspects to ensure compliance with the research ethics (Hayes, 2020). An informed consent form displayed at the onset of the online survey informs participants about the purpose, processes, and measures taken regarding privacy. All the respondents are volunteers and are free to pull out at any given time without repercussions. To ensure privacy, all data is anonymous, and the survey tool is set up so that no identifiable information, such as IP address, can be collected.

STRENGTHS AND LIMITATIONS

Regarding the advantages of the chosen methodology, the following can be noted: accessibility of the web as a source of information, relatively low cost of the experiment, and the opportunity to reach many people from different geographical locations. Using the online survey format provides easy sample recruitment and helps in fast data collection. However, some limitations should be mentioned. The use of self-reported data adds the possibility of response biases like under or over-reporting of drug use or psychiatric symptoms. Furthermore, the study's cross-sectional nature and convenience sampling may reduce the generalisation of the results. Nevertheless, the above limitations can be considered acceptable in light of the research aims and objectives for developing an understanding of the effects of drug use on mental health.

RESULTS

The results section provides demographic data, perceptions of the effects of drug use, and inter-observer reliability of the employed scales. It includes age and gender distribution, response to statements on mental health and its social aspect, the validity of the knowledge scale, mental health scale, social influence scale, and treatment efficacy scale.

Table 1:Frequency Table

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 years	23	6.1	6.1	6.1
	24-30 years	90	23.8	23.8	29.9
	31-36 years	147	38.9	38.9	68.8
	37-44 years	93	24.6	24.6	93.4
	45 years and above	25	6.6	6.6	100.0
	Total	378	100.0	100.0	

The age frequency table below indicates the number of respondents in every age group. Most of the participants, 38.9%, are between 31 and 36 years old and, therefore, can be deemed the largest group in this study. The second largest age group is 37-44 years, 24.6%. The third largest age group is between 24-30 years which is 23.8%. Participants aged 18 years and below makeup only 6.1% of the study population, while those 45 years and above also form only 6.6%. This data is dominated by middle-aged participants, which may cause a bias in the results if experiences or attitudes toward drug use differ depending on age.

Impact of Unrestricted Drug Use on Psychiatric and Behavioral Disorders: Exploring Mental Health Effects in The United States

Table 2: Gender

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	229	60.6	60.6	60.6
	Female	149	39.4	39.4	100.0
	Total	378	100.0	100.0	

The gender frequency table shows that the sample includes more males, 60.6%, compared to females, 39.4%. Such a situation may be attributed to demographic characteristics or study recruitment methods. Participants included both males and females, though a more significant number of male participants could be seen as limitative in terms of gender-specific perception of drug use and its consequences.

Table 3: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Drug abuse is a leading cause of behavioral disorders in the United States.	378	1.00	5.00	3.4709	1.07316
Most individuals are aware of the mental health risks associated with drug misuse.	378	1.00	5.00	3.5688	1.03354
There is sufficient public education about the psychiatric implications of drug use.	378	1.00	5.00	3.5291	1.06073
Unrestricted drug use leads to long-term psychiatric disorders, such as anxiety and depression.	378	1.00	5.00	3.7937	.79438
Behavioral disorders like aggression and impulsivity are often linked to substance abuse.	378	1.00	5.00	3.8571	.79168
Drug use increases the likelihood of developing psychosis or similar mental health conditions.	378	1.00	5.00	3.8016	.78128
Co-occurring mental health and substance use disorders are a growing concern in society.	378	1.00	5.00	3.8466	.74830
Unrestricted drug use negatively affects family dynamics and relationships.	378	1.00	5.00	3.5053	.95313
Communities suffer significant economic consequences due to drug-related mental health issues.	378	1.00	5.00	3.3757	1.04368
The stigma surrounding mental health and drug use prevents effective treatment.	378	1.00	5.00	3.7381	.86957

Increased availability of drugs correlates with a rise in violent or criminal behaviors.	378	1.00	5.00	3.7778	.84836
There are sufficient resources for treating psychiatric disorders caused by drug use.	378	1.00	5.00	3.8730	.79438
Early intervention programs are effective in reducing the mental health impact of drug use.	378	1.00	5.00	3.8280	.79090
Restricting drug availability could decrease the prevalence of behavioral disorders.	378	1.00	5.00	3.8254	.81510
Mental health services should prioritize addressing the impact of drug use.	378	1.00	5.00	3.8519	.75641
Valid N (listwise)	378				

The table of descriptive statistics contains the participants' ratings of statements regarding the effects of drug use on mental health. The results on the Likert scale (1-5) mean score are between 3.37 and 3.87, all above the middle point, indicating that the participants agree with the statements. The highest mean score reflects the statement for treating psychiatric disorders associated with the use of drugs, which can be interpreted as a positive attitude about the availability of treatments. As is the case with the previous statements, means for statements about mental illnesses and substance use disorders (3.85), the necessity of focusing on mental health services (3.85), and the connection between substance use disorders and behavioral disorders (3.86) are high. The results of the current study provide support for the assertion that participants understand the relationship between substance use and mental health issues. A relatively weaker consensus is indicated by lower mean scores like 3.37 for the statement regarding the economic effects of drug-related mental health issues. This is shown in the standard deviations, which are 0.74 – 1.07. As earlier mentioned, statements like co-occurring disorders and psychosis have a slight standard deviation (0.74-0.79), which shows that there is consistency in the response. On the other hand, the scores of statements about public education (1.04) and economic consequences (1.04) are more volatile as the participants have perceived differently. These statistics give an insight into how people perceive drug use and mental health problems.

Scale: Knowledge and Awareness
Table 4: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.865	4

Cronbach's Alpha for the knowledge and awareness scale is 0.865, which shows good reliability. This implies that all the items in this scale provide a valid indication of participants' knowledge regarding drug use and its consequences.

Scale: Mental Health Implications

Table 5: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.731	4

The mental health implications scale has acceptable levels of reliability, as shown by Cronbach's Alpha of 0.731. This indicates that the items successfully measure the participants' knowledge of the effects of drug use on mental health.

Scale: Social and Economic Impact

Impact of Unrestricted Drug Use on Psychiatric and Behavioral Disorders: Exploring Mental Health Effects in The United States

Table 6: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.775	4

The scale measuring social and economic impacts has Cronbach's alpha coefficient of 0.775. Therefore, it is reliable. The items do tap into the perceptions of other social and financial implications of drug use.

Scale: Treatment and Prevention

Table 7:Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.807	4

The reliability of the treatment and prevention scale is tested using Cronbach's Alpha with a value of 0.807. This is in concordance with responses to questions on the adequacy and effectiveness of intercessions in the reduction of mental health consequences of substance use.

DISCUSSION

The study sheds light on the complex relationship between unrestricted drug use and its impact on mental health, highlighting participants' perceptions of the challenges posed by substance abuse. The findings provide a comprehensive picture of the issue by examining key areas such as awareness, psychiatric implications, societal consequences, and the adequacy of treatment and prevention efforts. These insights align with existing literature, offering essential impact on public health policies and interventions.

PUBLIC AWARENESS OF RISKS

A significant theme emerging from the study is the participants' awareness of the risks associated with drug misuse. Most respondents recognized the connection between substance abuse and its harmful effects on mental health. This general awareness reflects findings from Nawi et al. (2021), which emphasized that knowledge about the dangers of drug use is crucial for reducing its prevalence. Public understanding of drug-related risks is often shaped by education campaigns, which have gained prominence in recent years. However, the study also uncovered varying perceptions about the adequacy of public education on the psychiatric implications of drug use. This inconsistency mirrors critiques of Bercaw et al. (2022), which highlighted the limited reach of some campaigns, particularly in marginalized communities. While awareness of general risks appears strong, the nuanced understanding of specific consequences, such as long-term mental health effects, remains uneven. Strengthening educational initiatives tailored to diverse audiences could enhance the public's ability to make informed choices, particularly in areas where drug misuse is prevalent
.

THE CONNECTION BETWEEN SUBSTANCE ABUSE AND MENTAL ILLNESS

There was harmonious recognition of the severe impact of drug abuse on mental health among participants. The research also reestablishes the relationship between substance use and mental illness, including anxiety, depression, and psychosis. The preceding findings tally with Price (2020), who pointed out that substance use is a risk factor for poor mental health. Since chronic drug exposure affects brain function, it makes the users vulnerable to these conditions, as described by Salmanzadeh et al. (2020). Mental health and substance use disorders were the fastest-growing dual diagnoses to surface. This coexistence of these two disorders makes it difficult to treat and manage the affected persons. According to van (2023), the National Institute on Drug Abuse, these issues must be solved through the integrated care model. The latter was evident in perceptions expressed by participants who acknowledged the need for integrated care models that address the multiple needs of users. Although the results also show that most participants agree with the statements stating that drug misuse has adverse effects on mental health, variation across participants' responses to these statements might indicate differences in their perception. For instance, participants had slightly divergent views on the degree to which early intervention can help prevent psychiatric effects. These variations may be due to different experiences with the treatment or Different education on mental health status.

PEOPLES AND EXISTING ECONOMY IMPACTS OF SUBSTANCE USE

Alcoholism and drug addiction are not limited to the individual, but rather, it has widespread effects on families, communities, and even within the society. They both pointed out that participants were aware of the stress that drug misuse has on relationships and interactional patterns. These results are consistent with MI Naples (2021), which pointed out that drug use in the

Impact of Unrestricted Drug Use on Psychiatric and Behavioral Disorders: Exploring Mental Health Effects in The United States

United States was costing hundreds of billions of US dollars annually through healthcare costs, reduced productivity, and criminal justice costs. However, the study failed to establish whether the participants had any awareness of the economic impact of drug-related mental health problems. Concerning financial consequences, the mean ratings given to statements were a little lower than those given to other items. These differences are consistent with the observation that people's discussions mainly focus on the consequences for themselves and not on the overall economy (Drupp, Moritz, et al., 2021). Enhancing people's knowledge of the economic consequences of substance abuse might expand the community's involvement in programs to prevent substance use and support recovery. The study also reveals that participants experienced many prejudices related to substance use and mental health that act as a barrier to the treatment process. This observation is consistent with the findings of Na et al. (2024), who stressed that stigma discourages people from seeking support and weakens the impact of community health programs. Stigma reduction is significant when it comes to education and community involvement, as people embrace those affected and accept them back into society.

TREATMENT AND PREVENTION: OPTIMISM AND GAPS

Regarding the availability of resources, participants seemed to have faith in the available resources and also the early intervention programs, stating that there exist enough resources to deal with mental health due to substance use. This concurs with Thapar et al. (2022), who noted that preventive interventions, if sustained in the long term, were more advantageous, especially for the young population. With early intervention, it is possible to interrupt the continuum of substance use and related mental health consequences, thus lessening the total disease load on the healthcare system. However, these findings also highlighted differences in the perceived treatment adequacy between the two groups. In terms of access to mental health services, participants observed that it was inconsistent, especially concerning marginalised communities. This finding is supported by the Substance Abuse and Mental Health Services Administration, which pointed out that rural and low-income populations are the most deprived of access to care (Reilly, 2021). Increasing the scope of telemedicine-related activities and extending community programs can help overcome these gaps, avoiding any person's lack of necessary resources. Another recognizable theme was the emphasis on the importance of the integrated care approach to treating dual diagnosis. They stressed that mental health services should be incorporated into more general health care systems. This aligns with the World Health Organisation's recent push to move substance abuse treatment into primary care contexts (World Health Organisation, 2020). Integrated care models of treating mental health and substance use can enhance the treatment results and minimize the patient's relapse.

SUBSTANCE ABUSE: A HOLISTIC VIEW

The results of this study provide a clear picture of the various ways in which drug abuse affects mental health and society. There is consensus from the participants' responses about the need for specific strategies, education, and fair distribution of resources. Such observations are in line with various research studies, which highlight that a global approach should be used to tackle the issue of substance use. Jemberie et al. (2020) pointed out that the management of substance use should be focused on prevention, treatment, and community mobilisation. The conclusion of this study can affirm the presented perspective concerning individual and societal dynamics. For instance, the participants' recognition of the social and economic impacts of substance use shows that there should be policies that deal with the causes of substance abuse, including poverty and illiteracy (Amaro et al., 2021). The study also also also emphasises the importance of public awareness in the creation of attitudes toward drug use. Participants understand general risk, but knowledge deficits related to specific areas, such as the economic impact, are evident. Targeted education campaigns could help reduce these gaps and promote a better-informed society and better able to act in its interests.

POLICY AND PRACTICE IMPLICATIONS

The findings of this study have the following policy, practice, and community implications for policymakers, healthcare practitioners, and community stakeholders. First, the findings call for improved public awareness campaigns that focus on the risks associated with drug use to the user and the whole society. Therefore, the campaigns should be targeted to different audiences so that the stakeholders can help enhance people's awareness of various issues to encourage healthier choices. Second, detecting the dual diagnosis emphasizes the need for an integrated treatment approach. The authors also recommend that the funding should go to programs that address mental health and substance use disorders (Alegría and G. Frank, 2024). Integrated care contributes not only to the better situation of a particular patient but also to the decrease in overall demands on a healthcare system. Third, the variation in the perceived adequacy of treatment means that resources should be distributed. Teledermatology, m-Health, health fairs, and continuing medical education for physicians may be ways of providing care in underserved areas. Thus, the increase in the availability of mental health services is crucial for meeting the needs arising from substance abuse. Lastly, reducing stigma is still an important issue of concern. The study shows that stigma in society regarding mental illness and substance use is still a

significant barrier to the advancements of treatment and rehabilitation. The stakeholders can develop a system that encourages people to find support and recover thanks to the focus on open discussion and involving the public.

CONCLUSION

This study aimed to identify the effects of unrestricted drug use on psychiatric and behaviour disorders in the United States for the chosen themes during primary quantitative methodology, including awareness, mental health effects, social impact, treatment, and preventive measures. The results also show the importance of the substance abuse treatment dilemma and the multifaceted impact of the disorder on people, families, and societies. The participants had a good general knowledge about some of the dangers of substance abuse and the relationship between substance abuse and psychiatric disorders, including anxiety, depression, and psychosis. Nonetheless, there are also weaker points in the fine-tuning of the understanding, including the issue of the economic cost and the sufficiency of the public schools. Early intervention and availability of treatment were two things that most of the respondents agreed on, as expressed in this study. However, still, the finding indicated that equal access to treatment is still a big concern, especially for the minority population. Mental health and substance use disorders were found to coexist, and the strategies that were named as important included integrated care approaches and equitable distribution of mental health services. Also noteworthy was the identification of the problem of prejudice associated with taking drugs and having mental disorders, which prevents people from seeking help. The study resonates with empirical literature to emphasize the importance of integrated and complex approaches toward addressing the mental health effects of drug abuse. Public awareness, polyclinical care, and fair distribution of resources need to be taken up by policymakers and healthcare managers. Through supporting such changes and implementing evidence-based policies and interventions to overcome such challenges, the stakeholders involved can enhance the community's outlook and handle substance use disorders and related mental health complications.

REFERENCES

1) Alam, Md. K. (2020). A Systematic Qualitative Case study: questions, Data collection, NVivo Analysis and Saturation. *Qualitative Research in Organizations and Management: An International Journal*, *16*(1), 1–31. https://doi.org/10.1108/QROM-09-2019-1825

2) Azofeifa-Ujueta, A. (2023). *Assessing and Characterizing Marijuana Use Disorders (DSM-5)—National Survey on Drug Use and Health, United States, 2020*. Western Michigan University.

3) Azofeifa, A. (2019). Driving under the influence of marijuana and illicit drugs among persons aged≥ 16 years—United States, 2018. *MMWR. Morbidity and Mortality Weekly Report*, *68*.

4) Alegría, M., & G. Frank, R. (2024). *Google Scholar*. Google.com. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&as_ylo=2020&q=Policymakers+should+prioritize+funding+for+programs+that+combine+mental+health+and+substance+abuse+treatment&btnG=

5) Ali, A. M., Alkhamees, A. A., Hori, H., Kim, Y., & Kunugi, H. (2021). The Depression Anxiety Stress Scale 21: Development and Validation of the Depression Anxiety Stress Scale 8-Item in Psychiatric Patients and the General Public for Easier Mental Health Measurement in a Post COVID-19 World. *International Journal of Environmental Research and Public Health*, *18*(19), 10142. https://doi.org/10.3390/ijerph181910142

6) Aljarallah, N. A., Almuqbil, M., Alshehri, S., Khormi, A. M. S., AlReshaidan, R. M., Alomran, F. H., Fawzan Alomar, N., Alshahrani, F. F., Alshammari, M. S., Alsanie, W. F., Alhomrani, M., Alamri, A. S., & Asdaq, S. M. B. (2023). Satisfaction of patients with health care services in tertiary care facilities of Riyadh, Saudi Arabia: A cross-sectional approach. *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.1077147

7) Amaro, H., Sanchez, M., Bautista, T., & Cox, R. (2021). Social vulnerabilities for substance use: Stressors, socially toxic environments, and discrimination and racism. *Neuropharmacology*, *188*(188). https://doi.org/10.1016/j.neuropharm.2021.108518

8) Bercaw, L. E., Levinson, A., Fletcher, D., Shuman, S. B., Hughes, S., Peddada, S., & Walsh, E. G. (2022). Assessing Disparities in Medicaid Home- and Community-Based Services: A Systematic Review. *Journal of Aging & Social Policy*, 1–20. https://doi.org/10.1080/08959420.2022.2081424

9) Casella, G., & Berger, R. (2024). *Statistical Inference*. Google Books. https://books.google.com.pk/books?hl=en&lr=&id=cqUIEQAAQBAJ&oi=fnd&pg=PP1&dq=Inferential+statistical+methods&ots=BSdsOCwENX&sig=CF8MzG6aBGHy7P3qo9SE_VmYicw&redir_esc=y#v=onepage&q&f=false

10) Crummy, E. A., O'Neal, T. J., Baskin, B. M., & Ferguson, S. M. (2020). One is not enough: understanding and modeling polysubstance use. *Frontiers in Neuroscience*, *14*, 569.

11) Drew, J. M., & Martin, S. (2021). A national study of police mental health in the USA: stigma, mental health and help-seeking behaviors. *Journal of Police and Criminal Psychology*, *36*(2), 295-306.

12) Drupp, Moritz A, Kornek, U., Meya, J. N., & Sager, L. (2021). Inequality and the Environment: The Economics of a Two-Headed Hydra. *Econstor.eu*. http://hdl.handle.net/10419/248992

13) Hayes, A. F. (2020). *Statistical Methods for Communication Science*. Routledge. https://doi.org/10.4324/9781410613707

14) Jemberie, W. B., Stewart Williams, J., Eriksson, M., Grönlund, A.-S., Ng, N., Blom Nilsson, M., Padyab, M., Priest, K. C., Sandlund, M., Snellman, F., McCarty, D., & Lundgren, L. M. (2020). Substance Use Disorders and COVID-19: Multi-Faceted Problems Which Require Multi-Pronged Solutions. *Frontiers in Psychiatry*, *11*. https://doi.org/10.3389/fpsyt.2020.00714

15) Larkin Jr, P. J., & Madras, B. K. (2019). Opioids, overdoses, and cannabis: is marijuana an effective therapeutic response to the opioid abuse epidemic. *Geo. JL & Pub. Pol'y*, *17*, 555.

16) MI Naples . (2021, March 8). *About | HeinOnline*. HeinOnline.

https://heinonline.org/HOL/LandingPage?handle=hein.journals/rutjulp19&div=15&id=&page=

17) MM Rahman . (2023). *Sample Size Determination for Survey Research and Non-Probability Sampling Techniques: A Review and Set of Recommendations | Journal of Entrepreneurship, Business and Economics*. Www.scientificia.com. https://www.scientificia.com/index.php/JEBE/article/view/201

18) McCabe, S. E., West, B. T., Jutkiewicz, E. M., & Boyd, C. J. (2017). Multiple DSM-5 substance use disorders: A national study of US adults. *Human Psychopharmacology: Clinical and Experimental*, *32*(5), e2625.

19) McCann, J. D. (2020). Do no good: how controlled substance regulations prohibit the use of telemedicine to provide medication-assisted therapy for opioid use disorder. *Tulsa L. Rev.*, *56*, 313.

20) McCollister, K., Yang, X., Sayed, B., French, M. T., Leff, J. A., & Schackman, B. R. (2017). Monetary conversion factors for economic evaluations of substance use disorders. *Journal of substance abuse treatment*, *81*, 25-34.

21) Mongelli, F., Georgakopoulos, P., & Pato, M. T. (2020). Challenges and opportunities to meet the mental health needs of underserved and disenfranchised populations in the United States. *Focus*, *18*(1), 16-24.

22) Na, B., Jiwon, J., & Park. (2024). *APA PsycNet*. Apa.org. https://psycnet.apa.org/fulltext/2022-40012-001.html

23) Nawi, A. M., Ismail, R., Ibrahim, F., Hassan, M. R., Manaf, M. R. A., Amit, N., Ibrahim, N., & Shafurdin, N. S. (2021). Risk and protective factors of drug abuse among adolescents: A systematic review. *BMC Public Health*, *21*(1). https://doi.org/10.1186/s12889-021-11906-2

24) Okagbue, H. I., Oguntunde, P. E., Obasi, E. C. M., & Akhmetshin, E. M. (2021). Trends and usage pattern of SPSS and Minitab Software in Scientific research. *Journal of Physics: Conference Series*, *1734*(1), 012017. https://doi.org/10.1088/1742-6596/1734/1/012017

25) Pallant , J. (2020). *SPSS Survival Manual*. Google Books. https://books.google.com.pk/books?hl=en&lr=&id=2DYbEQAAQBAJ&oi=fnd&pg=PP1&dq=SPSS+&ots=CoRvaXu7f3&sig=dqfYW9i7u3PihckuOazxtVlF-uc&redir_esc=y#v=onepage&q=SPSS&f=false

26) Preuss, C. V., Kalava, A., & King, K. C. (2019). Prescription of controlled substances: benefits and risks.

27) Price, A. (2020). Online Gambling in the Midst of COVID-19: a Nexus of Mental Health Concerns, Substance Use and Financial Stress. *International Journal of Mental Health and Addiction*, *20*(1). https://doi.org/10.1007/s11469-020-00366-1

28) Reilly, M. (2021). Health Disparities and Access to Healthcare in Rural vs. Urban Areas. *Theory in Action*, *14*(2), 6–27. https://doi.org/10.3798/tia.1937-0237.2109

29) Salmanzadeh, H., Ahmadi-Soleimani, S. M., Pachenari, N., Azadi, M., Halliwell, R. F., Rubino, T., & Azizi, H. (2020). Adolescent Drug exposure: a Review of Evidence for the Development of Persistent Changes in Brain Function. *Brain Research Bulletin*, *156*(1), 105–117. https://doi.org/10.1016/j.brainresbull.2020.01.007

30) Thapar, A., Eyre, O., Patel, V., & Brent, D. (2022). Depression in young people. *The Lancet*, *400*(10352), 617–631. https://doi.org/10.1016/s0140-6736(22)01012-1

31) van. (2023). Tackling Addiction with Integrated Care. *Open Journal of Therapy and Rehabilitation*, *11*(03), 122–147. https://doi.org/10.4236/ojtr.2023.113010

32) World Health Organization. (2020). *Operational Framework for Primary Health Care Transforming Vision Into Action*. https://iris.who.int/bitstream/handle/10665/337641/9789240017832-eng.pdf