

**A SURVEY REPORT ON SUBSTANCE ABUSE AND MENTAL HEALTH****Siya Sharma\*, Ankit Sharma, Tushar Chauhan, Sourav Thakur, Vipasha Kango, Ritesh**

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**\*Corresponding Author****Siya Sharma**Dreamz College of  
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Sundernagar,**ABSTRACT**

There is a complex connection between substance addiction and mental health issues that influences diagnosis and treatment. Many individuals who develop substance use disorder are also diagnosed with mental health disorder and vice versa. Many national surveys have found that about half of those who have a mental illness during their lives will also experience a substance use disorder and vice versa. This project examines the intersection of substance abuse and mental health from a pharmacological perspective. Pharmacological treatments are essential for managing both substance abuse and its associated mental health disorders. Medications such as naltrexone, methadone, buprenorphine are widely used in treating opioid dependence, while benzodiazepines and SSRIs are employed to manage anxiety and depression. By acknowledging the intricate

relationship between substance abuse and mental health, we can develop person centred strategies to address these interconnected public health concerns. The consequences of untreated substance abuse and mental health disorder can be devastating, leading to increased risk of overdose, suicide and long-term health damage. Furthermore, the economic burden of these disorder is substantial, impacting healthcare systems, productivity and societal well-being. By this research we found out that there isn't enough professional help available in our society and people still find it difficult to talk about their mental health and instead of professional help they tend to use drugs because it makes them feel temporarily better.

**KEYWORDS:** Depression, Health damage, Anxiety, Pharmacological treatment, Mental illness, suicide.

## INTRODUCTION

Individuals with mental illness cope with a lot. They should hurt themselves is the first thing that crosses their minds. A person with mental disease experience hopelessness. They wonder who they should talk to about it because society is so critical of them. Substance misuse occurs in those who believe they are alone. The final option they consider is using drugs or alcohol to get high and temporarily forget about their sadness. The main reason why people abuse alcohol or drugs is because they are under stress, find it difficult to communicate their feelings to others, and believe that no one can relate to them or solve their problem. In addition, communication is crucial for those who are coping with mental health concerns. Sometimes a person also experiences anxiety attacks and panic attacks without even knowing what it actually is but they ignore it because they think that if they told it to some-body they will think that they are mad. Because there is lack of knowledge in our society and in India talking about mental health isn't very common and that's the major issue. If awareness is spread across it might become a huge help to people who are suffering from mental health conditions. The first step to deal with it is talking out with someone and not directly just shift to medications first they should go for taking therapies. Have counselling sessions. Because sometimes a person just wants a person whom they can talk to they just want someone who will listen to them.

People who become drug addict needed someone at the addiction stage whom they can talk to who can educate them at that time but because lack of professional help around them they just continue to do it so, and in the end becomes an addict. But when at a certain time they realise that they need to stop then it becomes too late by then and again because lack of professional help around them they just continue whatsoever they were doing and end their life because of being a drug addict.

Parents should also understand that mental health is as important as physical health. And they should watch what their children is doing or suffering from. Living nowadays is so stressful even sometime the parents are also suffering from a mental health condition and they just don't care about that. Because they need to present themselves as tough people who can deal with anything which makes the thing worse in future that may even cause conflict between the parents and their child. There is so much need of professional help in our society. People should immediately see a mental health expert whenever they think that something wrong is going on with them. Stress may also cause heart attacks. That is a major cause of people

dying nowadays even without knowing that their daily stress caused it. If counselling doesn't help a person's then they should switch to medication. Mental health conditions are depression, anxiety disorders, bipolar disorder, dementia, attention deficit, hyperactivity disorder, schizophrenia, obsessive compulsive disorder, post traumatic stress disorder. Effective treatment for individuals with comorbid substance abuse and mental health disorder typically involves integrated treatment approaches. This approaches combine therapeutic modality to address both conditions simultaneously such as psychotherapy, pharmacotherapy and supportive services. Evidence based interventions including cognitive behavioural therapy and motivational interviewing have demonstrated effectiveness in treating these complex condition by targeting both the substance abuse and mental health symptoms. The dual diagnosis model of treatment is crucial in providing comprehensive care that improves outcomes and supports sustained recovery.

#### Treatments strategies related to substance abuse and mental health

Sr. no.	Substance used	Mental disorder	Treatment (medication)	Mode of action
01.	Alcohol abuse	Alcohol use disorder Depression Anxiety disorder Alcohol-induced psychotic disorder	Disulfiram (Antabuse) Naltrexone Acamprosate	Inhibits aldehyde dehydrogenase, leading to unpleasant reactions when alcohol is consumed. Opioid receptor antagonist that reduces craving of alcohol. Modulates glutamate transmission and helps restore the balance of brain chemistry disrupted by alcohol.
02.	Cannabis abuse	Cannabis use disorder Anxiety disorder Depression Cannabis induced psychotic disorder	Antidepressants (sertraline) Antipsychotic (risperidone)	It help managing co-occurring depression by increasing serotonin levels. Used for cannabis induced psychosis by blocking dopamine receptors.
03	Stimulant abuse (Cocaine, Methamphetamine)	Stimulant Use Disorder Anxiety Disorders Depression Stimulant-Induced Psychotic Disorder	Antidepressants (SSRIs) Naltrexone	Such as SSRIs, to help manage co-occurring depression by increasing serotonin levels. May be used to help reduce cravings by blocking opioid receptors.
04	Opioid Abuse	Opioid Use Disorder	Methadone	Long-acting opioid agonist

		Depression Anxiety Disorders Opioid-Induced Psychotic Disorder	Buprenorphine (Suboxone) Naltrexone	that helps reduce withdrawal symptoms and cravings.  Partial opioid agonist that reduces cravings while minimizing withdrawal symptoms. Opioid antagonist that blocks the effects of opioids and reduces the potential for relapse.
04	Hallucinogen Abuse (e.g., LSD, Psilocybin)	Hallucinogen Use Disorder Anxiety Disorders Hallucinogen Persisting Perception Disorder (HPPD)	Antipsychotics	Such as risperidone, to manage severe anxiety or psychosis by blocking dopamine receptors.
05	Nicotine Abuse	Nicotine Dependence Anxiety Disorders Depression	Nicotine Replacement Therapy (patches, gums) Bupropion (Zyban) Varenicline (Chantix)	Provides low doses of nicotine to ease withdrawal  Atypical antidepressant that inhibits the reuptake of norepinephrine and dopamine, reducing cravings. Partial agonist at nicotinic receptors, reducing cravings and withdrawal symptoms.
07	Inhalants abuse (glue, nitrous oxide)	Inhalant use disorder Depression Anxiety disorder Cognitive Impairment Psychotic Disorders	Selective Serotonin Reuptake Inhibitors (SSRIs) (fluoxetine) Anxiolytics (e.g., diazepam) Antipsychotics (risperidone)	It works by increasing serotonin levels in the brain. enhance the effect of the neurotransmitter GABA. Antipsychotics reduce symptoms of psychosis by blocking dopamine pathways, which can help alleviate hallucinations and delusions.

### Rationale

The strong association between substance use and mental health highlights the imperative of care integration. Substance use can be validated through any means necessary, for example crowbarring in mental health disorders such as anxiety or depression which some people with much bravado trot out (“I smoke to help me relax.”) only ever makes things worse. On the

other end substance abuse can contribute to, or worsen pre-existing mental health conditions. The following cycle is the method what are known as co-occurring disorders in an person, they complicate treatment and improve relapse chances. But in order for patients to achieve full recovery they must be treated simultaneously for both the psychological and addiction-related elements.

## **AIM AND OBJECTIVE**

### **Aim**

To examine the connection between substance abuse and mental health, aiming to improve understanding and treatment outcomes through integrated approaches.

### **Objective**

To understand the relationship between substance abuse and mental health.

To raise awareness

To explore the role of mental health

To examine the barriers that come in between for treatment

To analyze the impact of substance abuse on specific mental health

### **Survey reports**

To examine the connection between substance abuse and mental health, aiming to improve understanding and treatment outcomes through integrated approaches. I did a survey to aware people on substance abuse and mental health.

### **List of questions asked during the survey**

#### **a) Age**

- ☐ Under 18
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ Above 60

#### **b) Gender**

- ☐ Female
- ☐ Male

- Prefer not say

**c) Occupation**

- Student
- Employed full time
- Employed part time
- Retired
- Others

**d) Education**

- Some high school level
- High school graduate
- Some college
- Bachelor's degree
- Post graduate degree
- Other

**e) Have you ever used any of the following substances?**

- Alcohol
- Nicotine/tobacco
- Marijuana/ cannabis
- Prescription medicines (e.g. Opioids, benzodiazepines)
- Cocaine
- Hallucinogens (e.g., LSD, psilocybin)
- Inhalants (e.g. glue, nitrous oxide)
- No never used
- Other

**f) If yes, please describe the problem you have experienced:**

**g) How often do you use the substance you checked above?**

- Daily
- Weekly
- Monthly
- Yearly

- Rarely
- Occasionally
- Never

**h) Have you ever experienced problem related to substance use (e.g., health issues, relationship problems, legal issues)?**

- Yes
- No

**i) Have you ever felt that you needed to cut down on your substance use?**

- Yes
- No
- Maybe

**j) Have you ever sought help or treatment for substance abuse?**

- Yes
- No
- Maybe

**k) Have you ever diagnosed with a mental health condition?**

- Yes
- No

**l) In the past month, have you experienced any of the following symptoms? (check all that apply)**

- Persistent sadness or low mood
- Anxiety or excessive worry
- Difficulty concentrating
- Changes in appetite or weight
- Loss of interest in activities you used to enjoy
- Thoughts of self-harm or suicide
- Feelings of hopelessness
- None of the above
- Other

**m) Have you usually cope with stress or emotional challenges?** (select all that apply)

- ☐ Talking to friend or family
- ☐ Exercise or physical activity
- ☐ Engaging in hobbies or interests
- ☐ Substance use (e.g., alcohol, drugs)
- ☐ Professional counselling or therapy
- ☐ Meditation or relaxation techniques
- ☐ Other

**n) Have you ever sought professional helps for mental health issues?**

- ☐ Yes
- ☐ No

**o) Have would you rate your current mental health on a scale of 1 to 10(1 being very poor, 10 being excellent)?**

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10

**p) If you have sought professional help, what type of help did you receive?** (select all that apply)

- ☐ Psychotherapy or counseling
- ☐ Medication
- ☐ Support groups
- ☐ Other

q) Do you feel that there is enough support available in your community for those dealing with substance abuse and mental health issues?

- Yes
- No
- Maybe

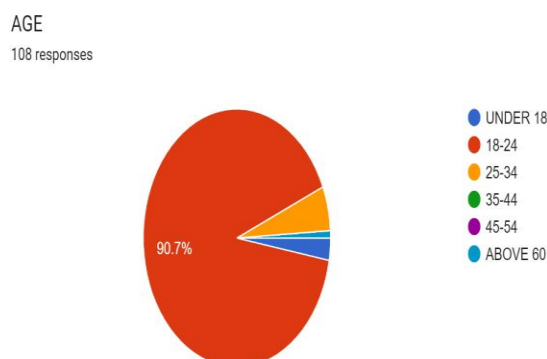
r) What improvements would you like to see in support services for substance abuse and mental health? (open-ended)

s) Any additional comments or suggestions? (open-ended)

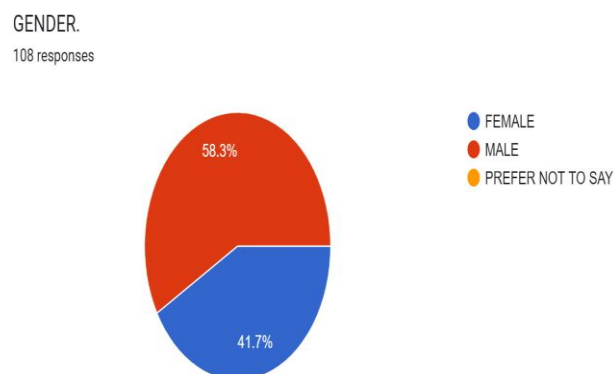
## RESULTS AND DISCUSSION

The survey was conducted separately for each person online on social media platforms, and 108 responded and submitted it with email verification.

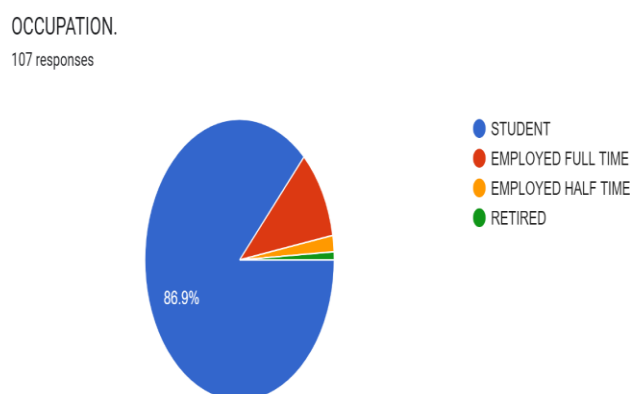
### a) Age



The age distribution of the 108 respondents reveals diverse participation across various age groups. The categories include "Under 18," "18-24," "25-34," "35-44," "45-54," and "Above 60." Analysing the responses from these age ranges can help identify trends in behaviour and attitudes, particularly regarding substance use or mental health, allowing for targeted interventions. Understanding the demographic profile of the participants is crucial for developing effective strategies and resources that cater to the specific needs of each age group.

**b) Gender**

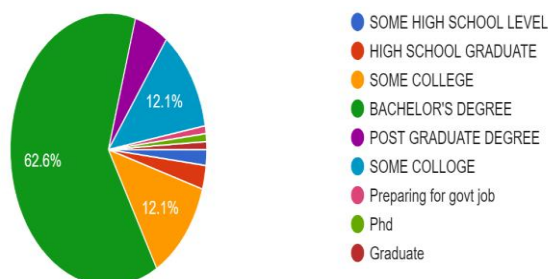
The gender distribution of the 108 respondents includes categories for "Female," "Male," and "Prefer Not to Say." This breakdown provides insight into the gender composition of the survey participants, which can influence perspectives and experiences related to the topics being studied, such as substance use or mental health. Understanding the gender dynamics within the responses is essential for tailoring interventions and support services that address the unique needs and preferences of each group, fostering a more inclusive approach to the issues at hand.

**c) Occupation**

In a survey of 107 participants regarding their occupations, a significant majority (86.9%) identified as students. The remaining respondents included those employed full-time and part-time, as well as retirees. This suggests that the sample is largely composed of individuals in an educational setting, indicating a youthful demographic or a focus on students within the group.

#### d) Education

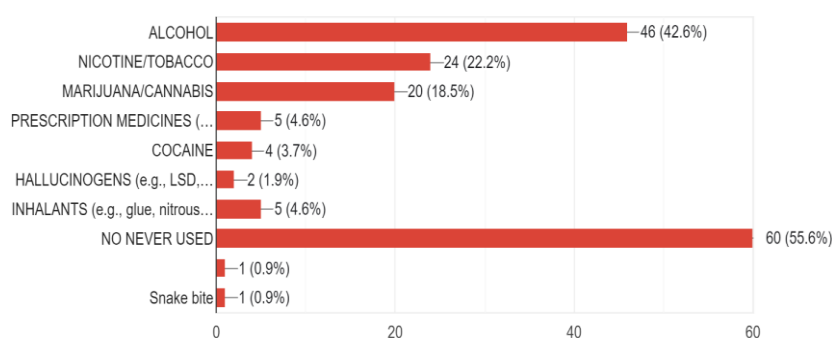
EDUCATION.  
107 responses



In a survey of 107 participants regarding their education levels, the majority (62.6%) reported having some college education. High school graduates and those with some high school education each accounted for 12.1% of respondents. A smaller portion indicated having a bachelor's degree or a postgraduate degree, while a few mentioned preparing for government jobs or pursuing a PhD. This distribution suggests a relatively high level of educational attainment among participants, with many having pursued further education beyond high school.

#### e) Have you ever used any of the following substances?

Have you ever used any of the following substances?  
108 responses



In a survey of 108 participants regarding their use of various substances, the most commonly reported was alcohol, with 42.6% indicating they have used it. Nicotine or tobacco also had a high prevalence at 22.2%. Marijuana or cannabis followed, with 18.5% of respondents, as well as prescription medicines. Cocaine and hallucinogens were reported by 3.7% each. A

significant number, 55.6%, stated they have never used any of the substances listed. This data highlights the varying patterns of substance use within the group, with alcohol and nicotine being the most frequently used substances.

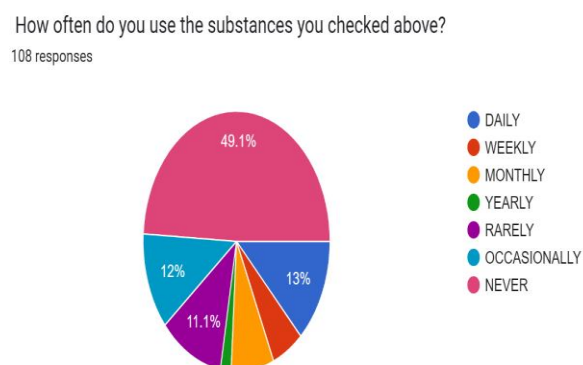
**f) If yes, please describe the problems you have experienced:43 responses**

- No
- Nothing
- Insomnia
- None
- No problem
- Stay high wastages of money
- Felt good
- When you leave the muscles and nerves get pain too much that I can't explain the type of pain and this thing goes on until your body get totally detoxed.
- N/A
- Relationship issue, loneliness, anxiety
- Never consumed
- None so far
- Daily life experience
- No problem at all
- Health
- I have only experienced weight loss due to loss of appetite and a bit of laziness
- It was very blurry experience the mind was fully relaxed and i feel soo happy at that time
- Dizziness, stomachache
- Sedation
- Dizziness
- I don't have any problem
- NA

Among the 43 responses detailing problems experienced with substance use, a range of issues were reported. Some participants indicated no problems at all, while others mentioned specific issues like insomnia, anxiety, and relationship difficulties. Physical symptoms such as dizziness, stomachaches, and muscle pain during detox were also highlighted. A few

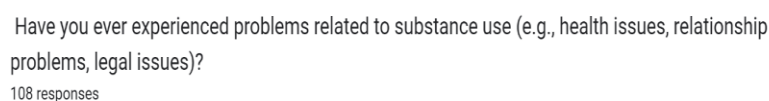
responses reflected a more casual attitude, with phrases like "stay high" and "felt good," suggesting some respondents did not perceive negative effects. Overall, this feedback illustrates a diverse array of experiences, emphasizing the complex relationship between substance use and individual well-being.

**g) How often do you use the substance you checked above?**



In a survey of 108 participants about the frequency of their substance use, 49.1% reported using substances weekly, making it the most common response. Additionally, 13% indicated daily use, while 12% used substances monthly and 11.1% yearly. The remaining respondents described their usage as rare or occasional. This data reveals a prevalent pattern of regular substance use among participants, particularly on a weekly basis.

**h) Have you ever experienced problems related to substance use?**

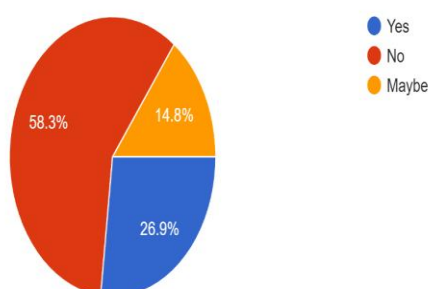


In a survey of 108 participants regarding their experiences with problems related to substance use, a significant majority (70.4%) reported having encountered such issues, including health

problems, relationship difficulties, or legal complications. In contrast, 29.6% indicated that they have not experienced any related problems. This highlights the substantial impact substance use can have on individuals' lives, affecting various aspects of their well-being and relationships.

**i) Have you ever felt that you needed to cut down on your substance use?**

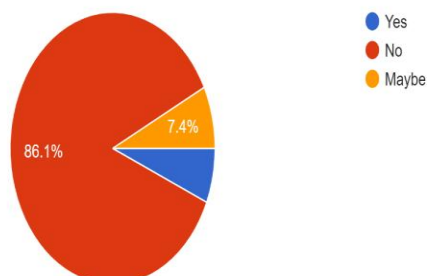
Have you ever felt that you needed to cut down on your substance use?  
108 responses



In a survey of 108 respondents about whether they have felt the need to cut down on their substance use, 14.8% indicated that they have felt this way. Meanwhile, 58.3% reported that they have not felt the need to reduce their use, and 26.9% were uncertain. This data suggests that while some individuals recognize a potential issue with their substance use, a majority either feel confident in their usage or are unsure about their need for change.

**j) Have you ever sought help or treatment for substance abuse?**

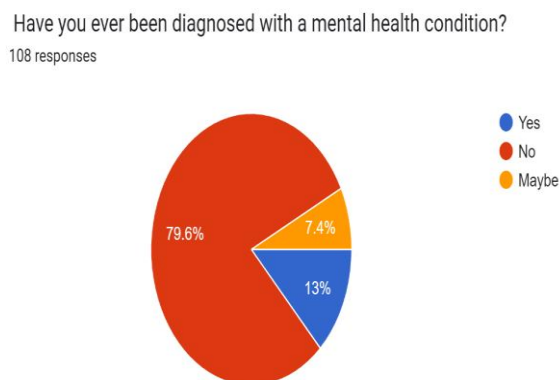
Have you ever sought help or treatment for substance abuse?  
108 responses



In a survey of 108 participants regarding whether they have sought help or treatment for substance abuse, a substantial majority (86.1%) indicated that they have not sought

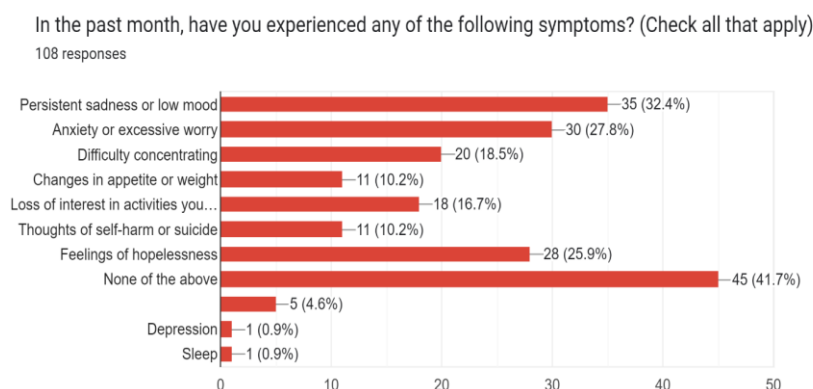
assistance. Only 7.4% reported having sought help, while a small portion were unsure. This suggests that a significant number of respondents may be struggling with substance abuse without accessing available resources or support.

**k) Have you ever been diagnosed with a mental health condition?**



In a survey of 108 respondents regarding whether they have ever been diagnosed with a mental health condition, a significant majority (79.6%) indicated that they have not received such a diagnosis. Only 13% reported having been diagnosed, while 7.4% were uncertain. This suggests that a large portion of the participants may not have formally recognized mental health issues, potentially reflecting a lack of awareness or access to mental health services.

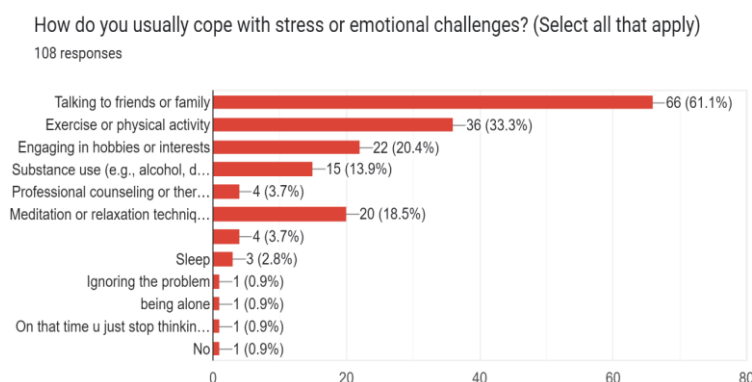
**l) In the past month, have you experienced any of the following symptoms?**



In a survey of 108 participants regarding symptoms experienced in the past month, a significant number reported persistent sadness or low mood (32.4%) and anxiety or excessive

worry (27.8%). Other common symptoms included difficulty concentrating and changes in appetite or weight, each reported by 27.8% of respondents. Additionally, 18.5% noted a loss of interest in activities, while 10.2% experienced thoughts of self-harm or feelings of hopelessness. Overall, these findings highlight a range of emotional and psychological challenges faced by participants, with a notable percentage reporting multiple symptoms.

#### m) How do you usually cope with stress or emotional challenges?

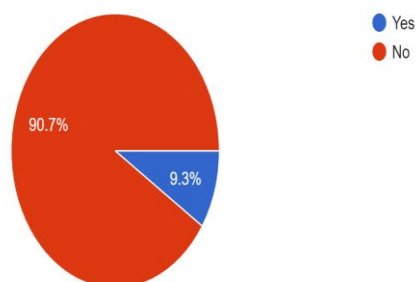


In a survey of 108 participants on coping strategies for stress and emotional challenges, the most frequently reported methods were talking to friends or family and engaging in exercise, both at 61.1%. Other common approaches included engaging in hobbies (33.3%), substance use (33.3%), and seeking professional counseling or therapy (20.4%). Meditation and relaxation techniques were utilized by 20.4% of respondents, while sleep, ignoring the problem, and being alone were less common strategies. This suggests a preference for social support and physical activity as primary coping mechanisms.

#### n) Have you ever sought professional help for mental health issues?

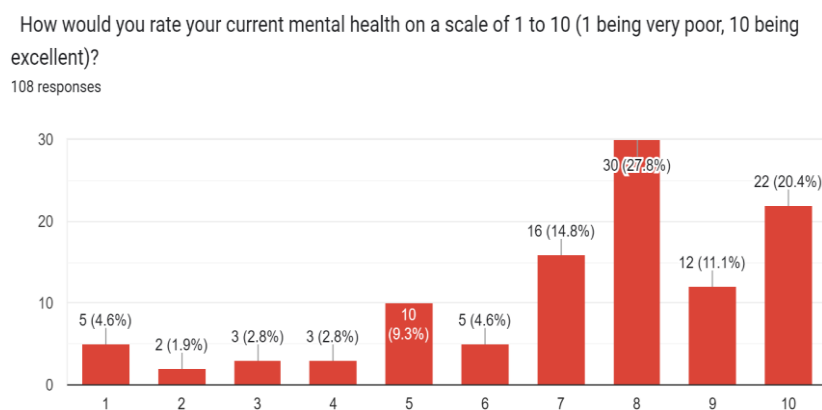
Have you ever sought professional help for mental health issues?

108 responses



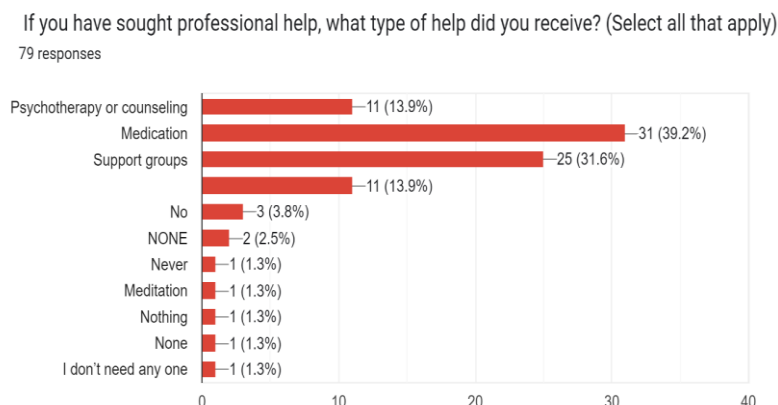
In a survey of 108 respondents regarding whether they have sought professional help for mental health issues, only 9.3% indicated that they had. This suggests that a vast majority of participants, approximately 90.7%, have not pursued professional support for their mental health challenges, highlighting a potential barrier to accessing mental health care.

**o) How would you rate your current mental health?**



In a survey of 108 participants rating their mental health on a scale from 1 to 10, responses showed a diverse range of self-assessments. The most common ratings clustered around 6 and 7, with 27.8% and 20.4% of respondents, respectively, indicating a generally positive outlook. However, some participants rated their mental health lower, with a small percentage (4.6%) giving the lowest score of 1 or 2. Overall, the results reflect varied experiences of mental health within the group, highlighting both struggles and strengths.

**p) If you have sought professional help, what type of help did you receive?**

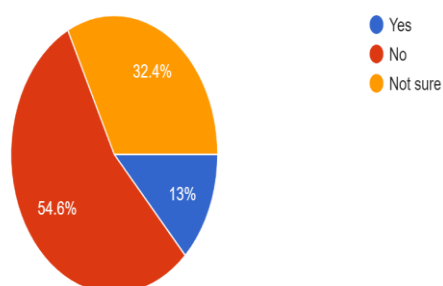


In a survey of 79 respondents who sought professional help for mental health issues, various types of support were reported. The most common forms of assistance were psychotherapy or counseling (39.2%) and medication (31.6%). Additionally, some participants attended support groups (13.9%). A notable portion indicated they received no help at all or did not feel the need for assistance, reflecting a range of experiences and attitudes toward seeking support. Overall, the data highlights diverse approaches to professional help in mental health care.

**q) Do you feel there is enough support available in your community for those dealing with substance abuse and mental health issues?**

Do you feel that there is enough support available in your community for those dealing with substance abuse and mental health issues?

108 responses



In a survey of 108 respondents regarding the availability of community support for substance abuse and mental health issues, 54.6% indicated that they do not feel there is enough support. Only 32.4% believed that sufficient resources exist, while 13% were uncertain. This indicates a prevailing concern about inadequate support systems for individuals facing these challenges, highlighting the need for enhanced resources and services in the community.

**r) What improvements would you like to see in support services for substance abuse and mental health? (Open-ended)**

- People should stop substance abuse. and focus on their health career and family.
- Ended
- Negative thoughts
- Reduce the cost of alcohol and increase the cost of other substances
- Availability of counselling services
- Free therapies and medication to help get rid of addiction. Awareness regarding helping other with substance use rather than telling them to report the ones with substance use.

- Normalise the problem like cold cough not treat it like a bad thing
- I started enjoying with my family and with my personal relationship □
- Take time for selfcare
- People need to understand that mental health issues are not a joke it is a serious thing. people need to respect everyone's thoughts and their mental state...
- No
- Enhance confidence by various skills enhancement programs by which student can choose their own aim according to interest,
- Education
- Spend time in nature. Connect with other. Find ways to learn and creativity.
- Meditation
- Banned alcohol
- People suffering from mental health conditions should form a good relationship with people and spend time with other people who encourage them and be surrounded by people who are optimist and government should provide mental health Services counselling and free medication and free treatment for people who are suffering from mental health condition and substance
- Change govt. Stop supply drugs and free medication for treatment. Awareness about mental health and substance abuse should be done.
- People need to start recognizing the problem and instead of blaming be the support system for people who are dealing with this.
- No comments
- I think just stop thinking about that bad condition. Go to the gym. do some exercise and try to do better on that work. If you think you are really in very bad situation u can take a therapy. You consult with therapist. Otherwise if you have someone in your life who is very important (like: mother father boyfriend girlfriend) and you easily talk about your situation that far better.
- Camps related with no drugs and other illegal substances
- Camps etc.
- I would like to see more therapists and Psychotherapists that would help deal with all the emotional and mental problems a person might have who's involved in this substance use.
- More awareness on mental health. Mental health is as important as physical health. More therapy centres should be made.

- Nothing
- Family and Community Involvement: Engaging families and support networks in the treatment process helps build a stronger support system for individuals recovering from substance abuse and mental health challenges. Training for Healthcare Providers: Increasing the education and training of general healthcare providers to better identify and address co-occurring mental health and substance abuse issues would ensure that more people get the help they need earlier. Education and Awareness Campaigns: Raising awareness about substance abuse and mental health can help reduce stigma and encourage people to seek help earlier. Public campaigns should target both youth and adults.
- Developing a support system

s) **Any additional comments or suggestions?** (Open-ended)

- No
- Nope
- No
- In Himachal Pradesh needs lots of development in many things also specially In mental health It's like a shame thing for people and even lots are not aware deal it with only themselves inside can't even talk to their family members about their problems that's the saddest thing Awareness is very important normalize the mental health treatment
- Our nation should be drug free for that people or student must go to ground which keep the young generation away from bad habits
- Educating young people about the dangers of drugs and alcohol, as well as promoting healthy ways to cope with stress and problems, can help reduce the risk of addiction. Programs in schools, involving parents, and having community support networks are effective ways to prevent substance abuse.
- Alcoholic consumption banned
- This is a good initiative for people who are suffering from substance abuse and mental health they cannot tell their feelings openly but by this form they will be a little relaxed by telling the feelings here
- Good initiative
- No comments
- No. This was just a humble response from my side

- Teenagers mostly fall in this trap of drug addiction because at this age when they feel hopeless instead of some professional support they find relief in drugs.
- Nothing else

## CONCLUSION

In summary, the relationship between substance abuse and mental health is a complex one that requires comprehensive treatment. Often times, those suffering from a mental health disorder turn to substances for self-medication making this initially promising solution more of cycle towards dependency and further deteriorating symptoms. On the flip side, substance abuse can cause or worsen other mental health conditions that then hamper efforts at recovery. Treatment is only effective when it recognizes this dual diagnosis and provides therapies that examine the two in collaboration. Fostering integrated care that joined mental health services with substance abuse treatment led to better outcomes and a lower chance for relapse. Focusing on early intervention, education and support systems will be critical to breaking the cycle of addiction and mental health decline ensuring those affected can achieve an improved sense of well-being. It is paramount to link these two issues as solving one issue does in turn help the other, but addressing them side by side could be beneficial for creating healthier communities and decreasing prejudice towards both substance abuse disorder patients and mental health mentally ill populations.

## REFERENCES

1. National Institute on Drug Abuse. *Substance Use and Mental Health*. Link, 2021.
2. World Health Organization. *Mental Health and Substance Use*, 2019.
3. Kessler, R. C., et al. "The epidemiology of serious mental illness: results from the National Comorbidity Survey Replication (NCS-R)." *Archives of General Psychiatry*, 2005; 62(6): 593-602. Link
4. Corrigan, P. W., & Watson, A. C. "Understanding the stigma of mental illness." *World Psychiatry*, 2002; 1(1): 16-20.
5. Murthy, P. "Mental health in India: The need for an urgent intervention." *Indian Journal of Psychiatry*, 2010; 52(1): S1-S2.
6. Barlow, J., et al. "Parenting programs for parents of children with mental health problems: A systematic review." *Journal of the American Academy of Child & Adolescent Psychiatry*, 2016; 55(2): 87-92.

7. Cohen, S., Janicki-Deverts, D., & Miller, G. E. "Psychological stress and disease." *JAMA*, 2007; 298(14): 1685-1687.
8. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders* Arlington, VA: American Psychiatric Publishing, 2013; 5.
9. Koob GF, Volkow ND. Neurobiology of addiction: a neurocircuitry analysis. *The Lancet Psychiatry*, 2016; 3(8): 760-73.
10. National Institute on Drug Abuse. Medications to treat opioid use disorder. National Institutes of Health. Updated, 2022.
11. Sinha R. Chronic stress, drug use, and vulnerability to addiction. *Annals of the New York Academy of Sciences*, 2008; 1141(1): 105-30.
12. Ling W, Mooney L, Hillhouse M. Prescription opioid abuse, pain, and addiction: clinical issues and implications. *Drug and Alcohol Review*, 2011; 30(3): 300-5.
13. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5®)*. 5th ed. American Psychiatric Publishing, 2013.
14. Substance Abuse and Mental Health Services Administration (SAMHSA). *Co-Occurring Disorders: A Guide for Mental Health Professionals*. Retrieved from SAMHSA, 2016.
15. National Institute on Drug Abuse (NIDA), 2020. *Comorbidity: Addiction and Other Mental Illnesses*. Retrieved from NIDA
16. Drake, R. E., & Mueser, K. T. *Dual Diagnosis: A Review of the Evidence*. In *Handbook of Psychiatric Services*, 2000; 243-257. American Psychiatric Publishing.
17. Kertesz, S. G., & Weitlauf, J. *Substance Use Disorders and Mental Health: Intersecting Issues*. *Journal of Substance Abuse Treatment*, 2009; 36(1): 16-26.
18. Back, S. E., & Brady, K. T. *Integrating Substance Use Disorder Treatment into Mental Health Services*. *Psychiatric Services*, 2010; 61(3): 304-306.
19. World Health Organization (WHO). *Mental Health and Substance Use*. Retrieved from WHO, 2021.
20. Mueser, K. T., & Gingerich, S. *The Complete Guide to Crisis & Trauma Counseling. Substance Abuse Treatment and Mental Health Services Integration*, 2015.
21. Brady, K. T., & Back, S. E. *Women and Addiction: A Comprehensive Handbook*. Guilford Press, 2012.
22. Mueser, K. T., & Gingerich, S. *The Complete Guide to Crisis & Trauma Counseling. Substance Abuse Treatment and Mental Health Services Integration*, 2015.

23. Kessler, R. C., et al. *Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication*. *Archives of General Psychiatry*, 2005; 62(6): 593-602.
24. Volkow, N. D., et al. *Medication-Assisted Therapies—Tackling the Opioid-Overdose Epidemic*. *New England Journal of Medicine*, 2018; 378(18): 1685-1687.
25. Meyer, J. M., & Hiller, M. L. *The Economic Burden of Mental Disorders and Substance Abuse Disorders*. *American Journal of Psychiatry*, 2014; 171(12): 1335-1344.