ORIGINAL ARTICLE

Impact of Covid-19 on Substance Use Behaviours in Kashmir

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ABSTRACT

Aims: Covid-19 has affected the whole world not just as a physical illness but has affected the mental health as well. Considering the situation of pandemic and increasing substance use in Kashmir, this study was planned to understand the impact of Covid 19 on substance use in Kashmir. The study evaluated impact of covid-19 lockdown on initiation and abstinence of substance use, factors associated with patterns of intake of substance use, how people into substance use have coped, pattern of family environment and emotions experienced and level of distress

Materials and Methods: The study is a cross-sectional study with 178 male participants who visited De-addiction Centre of IMHANS during the covid-19 lockdown for treatment. Tools used were socio-demographic profile, semi structured questionnaire and GHQ-12.

Results: The most common illicit drug was Heroin (75.8%), mostly used through Intravenous mode (54.5%). 36% started during lockdown mostly stating peer pressure and boredom as a reason. Around 69.7% witnessed an increase in substance use behaviours and 46.6% reported to use substances to cope during covid-19 lockdown.

Conclusion: Findings reflected a pattern of increase in substance use behaviours resulting more due to peer pressure, emotional distress, boredom and financial issues which were a result of the lockdown that was implemented causing disruption in normal routines. It was also seen that the distress level in these patients. So, this study further points out the need for the policy makers to not only focus on covid-19 but also on the parallel epidemic of substance use in Kashmir valley which is dangerous in terms of its mortality rate and chronic illnesses associated.

Keywords: Covid-19, lockdown, substance use, Heroin, Kashmir

JMS: 2022; 25(3): 22-27 DOI: https://doi.org/10.33883/jms.v25i3.1196

INTRODUCTION

Covid 19 virus started affecting people towards the end of 2019 and then took the shape of a global pandemic in no time. Covid 19 isn't just an illness; it has many concomitant aspects that harm mental health. Covid 19 Pandemic led to isolation, lockdown, and economic shutdown, which caused a lot of changes in personal, psychological, social, emotional and financial aspects of life[1]; when these aspects of life are affected, it can lead to an increase in substance use behaviours.[2] Covid-19 pandemic also hindered treatment-seeking in such patients[3]. As per the negative reinforcement model of substance use, people who use drugs may continue, increase or have a relapse not just due to the positive effects but moreover to escape from the withdrawal symptoms or the unpleasant physical or psychological conditions.[4] Considering this model of substance use, Covid-19 and stressors allied with this pandemic can lead to substance use behaviours.

The valley of Kashmir has been witnessing an alarming increase in substance use, and one of the recent studies has shown that the prevalence of any substance dependence was 1.95 per cent. In contrast, opioid dependence was 1.80 per cent, with Heroin being the most predominant opioid (84 per cent). [12]

Considering the ticking time bomb situation of substance use in Kashmir, the effect of covid-19 and its associated factors, this study was planned to understand the impact of Covid 19 on substance use in Kashmir.

METHODS

This study was a cross-sectional descriptive study. The

Access this article online

Website: www.jmsskims.org

DOI: https://doi.org/10.33883/jms.v25i3.1196

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How to cite this article: Rather Y, Mir Z, Roub F, Maqbool M, Rasool U. Impact of Covid-19 on Substance Use Behaviours in Kashmir. JMS 2022: 25 (3) 22-27

Received: 2022-04-30 Accepted: 2022-06-16

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convenience sampling method was used for data collection purposes. The participants were 178 males who visited the De-addiction Centre of the Institute of Mental Health and Neurosciences-Kashmir during the covid-19 lockdown for treatment-seeking. Institutional Ethical Committee approved the ethical clearance of GMC, Srinagar.

The study sought to evaluate (i) the impact of covid-19 lockdown on initiation and abstinence of substance use in Kashmir, (ii) the factors associated with patterns of intake of substance use during the covid-19 lockdown, (iii) how people into substance use have coped during Covid-19 lockdown (iv) Pattern of family environment and emotions experienced during Covid 19 and its association with substance use behaviours and (v) level of distress in people who use drugs during Covid 19 lockdown.

Tools used were a socio-demographic profile, a semi-structured questionnaire and GHQ-12. The statistical analysis of the study was done with SPSS 23.0 version.

RESULTS

The current study was conducted on a sample of 178 participants who visited the Outpatient Department of the Institute of Mental Health and Neurosciences-Kashmir. Out of 178 participants majority, i.e., 56.2% were in the age group of 21-30 years, 40.4 per cent were students, 36 per cent had an income of 10,000-25,000, followed by 33.7 per cent with an income slab of above 50,000. The educational qualification of most people who used drugs was 10+2 (23.0 per cent) and Graduates (25.8 per cent). A considerable number of the participant were married (74.7 per cent) and were from nuclear family arrangements (62.9 per cent), and belonged to rural areas (65.2 per cent). (Table 1)

Table 1: Socio-demographic profile of the participants.

	Frequency	%age
AGE (in years)		
1-20	48	27
21-30	100	56.2
31-40	29	16.3
Above 40	1	0.6
OCCUPATION		
Full time employed	43	24.2
Part time employed	3	1.7
Unemployed	21	11.8
Self employed	39	21.9
Student	72	**40.4**
INCOME (in Rupees)		
Less than 10,000	21	11.8
10,000-25,000	64	36.0
26,000-50,000	33	18.5
Above 50,000	60	33.7
EDUCATION		
Illiterate	14	7.9
Primary	1	0.6
Middle	21	11.8
Matric	32	18.0
10+2	41	23.0
Graduate	46	25.8
Master/ Professional	23	12.9
MARITAL STATUS		
Single	133	74.7
Married	44	24.7
FAMILY TYPE		
Nuclear	112	62.9
Joint	53	29.8
Extended	13	7.3
LOCALITY		
Rural	116	65.2
Urban	61	34.3

The primary substance of use was opioids (87.6 per cent), with Heroin (75.8 per cent) being the predominant drug of use, followed by medicinal opioids (11.8 per cent). The most common mode of opioid use was intravenous (54.5 per cent). Out of the participants, 61.8 per cent initiated substance use during the covid-19 lockdown. The most common reasons for starting substance use were peer pressure (12.4 per cent) followed by boredom (10.7 per cent). It was found that the pattern of intake increased during lockdown (69.7 per cent) happened due to peer pressure (28.1 per cent), followed by emotional distress (19.1 per cent) and those who witnessed a decrease (20.2 per cent) attributed it majorly to less availability of drugs (17.4 per cent). 46.6 per cent of the participants reported using substances as a method to cope with the lockdown. 57.3 per cent reported witnessing warmth and emotional family ties during the covid-19 lockdown. Findings show that 73.6 per cent witnessed negative emotions during the covid-19 lockdown, and 54.4 per cent reported that their family is aware of their substance use behaviours. (Table 2)

The participants felt distressed as measured by GHQ with a mean of 7.6629 and standard deviation of 3.22401 (Table 3)

DISCUSSION

The covid-19 pandemic has brought significant challenges to the health care system around the globe, with significant challenges in managing most medical disorders, including

Table 2: Pattern of substance use and substance use behaviour in participants

		PATIENTS (N) TOTAL=178	FREQUENCY (%AGE)
Primary substance of use			
Cannabis		16	9.0
Opioids	Heroin	135	75.8
	Tramadol/ Tapentadol	21	11.8
	Total	156	87.6
Sedatives/Benzos		2	1.1
Alcohol		4	
Present Mode of Opioid Use			
Chasing		39	21.9
IV		97	54.5
Oral		22	12.4
Did you start abuse during lockdown?			
No		110	61.8
Yes		64	36.0
If you started taking substance during Covid -19 lockdown, what were the possible reasons?			
Boredom		19	10.7
Peer Pressure		22	12.4
Conflictual Family Relationship		14	7.9
Attitude of family		2	1.1
Financial Issues		9	5.1
During lockdown has your pattern of intake changed?			
Increased		124	69.7
Decreased		36	20.2
No Change		12	6.7
If intake has increased, it happened due to:			
Emotional stress		34	19.1
Financial stress		28	15.7
Peer pressure		50	28.1
Others		12	6.7
If intake has decreased, it happened due to:			
Less Availability of Drugs		31	17.4
Willing to quit		3	1.7
Family Support		2	1.1
How have you been coping with the Covid-19 lockdown?			
Spending time with friends		45	25.3
Being on social networking sites		37	20.8
Using substances		83	46.6
Being with family		13	7.3
What sort of environment have you witnessed at home during Covid-19 lockdown?			
Warmth and Emotional family ties		102	57.3
Negative comments and hostility towards him/her		68	38.2
Abusive pattern of relationship between others		8	4.5
What sort of emotions did you feel during covid-19 lockdown?			
Positive		47	26.4
Negative		**131**	**73.6**
Does your family know about your substance abuse?			
No		81	45.5
Yes		97	54.5

Table 3: General Health Questionnaire-12 of participants

	Mean	Standard Deviation	Minimum	Maximum
Total GHQ	7.6629	3.22401	.00	12.00

substance use disorders. As the pandemic brought social and economic difficulties, concerns started emerging about the effect of the pandemic on individuals with mental illnesses.[5] Covid-associated social distancing and financial woes could exacerbate mental illness with consequent new initiation of substance and worsening or relapse among those with a history of substance use.[6] However, COVID-19 pandemic-associated restrictions could also lead to a substantial change in substance use patterns as there could be a change in the quality of illicit substances. As there was difficulty in accessing treatment services and medications due to lockdown, the authors believed there might be few patients who could relapse because of these factors. Keeping these facts in consideration, the current study aimed to assess the substance use pattern among individuals seeking treatment at a tertiary care de-addiction centre in Kashmir. The present study's findings reveal that most patients were 2130 years old, unmarried, students, graduates, and of rural origin. This socio-demographic profile concurs with earlier studies on treatment seekers from the institute. In contrast to Western studies, the current study did not have any patients from the female population seeking treatment for substance use. This could be explained by poor treatment-seeking behaviour among females and the stigma related to substance use in a traditional society like Kashmir. Previous studies from Kashmir have corroborated these results.[7,8] Patients with nuclear families with both parents working and higher socioeconomic status that somewhere creates a barrier to regular supervision of children. Studies have found similar findings where the prevalence of substance use was seen more in adolescents of the nuclear family.[9] Results point out that the majority of the participants were unmarried. That indicates that the unmarried population were more inclined toward both drugs; it also suggests that marital status added to the family's responsibilities, which acted as a barrier to consuming drugs. These findings are generally consistent with the relationship between social roles (marriage) and cessation of substance use; marriage leads to a decline in

deviant or socially disapproved behaviours such as illicit drug use.[10]

Opioids were the illicit substance for which most individuals sought treatment from the centre, and only a few sought treatments for other substances like Alcohol or Cannabis. This is in contrast to most of the studies from India, which have reported alcohol being one of the most significant use substances among treatment seekers. Kashmir, a Muslim majority region, and the associated social taboo to alcohol use could explain these results. Similar results have been observed in another community-based study from Kashmir.[11,12]

Media reports have reported that heroin use in Kashmir has increased exponentially over the last couple of years. As far as opioid use in Kashmir is concerned, the picture was dominated by pharmaceutical opioids, as reported in previous studies.[7,8]. However, media reports have been raising concerns about the increasing heroin use in Kashmir for the last couple of years.[13] The rise of Tapentadol use and consequent treatment-seeking is worth the attention of policymakers. The dependence potential of Tapentadol in the rest parts of India has been documented, and Kashmir appears to be no exception. Post scheduling of Tramadol in Narcotic Drugs and Psychotropic Substances Act, Tapentadol use seems to be an alternative, especially for individuals substituting other pharmaceutical opioids with Tapentadol.[14,15]

An estimated 17,000 in only two districts of Kashmir have been grappling with this issue of injection drug use recently. The current study further corroborates this worrisome trend as most treatment seekers were injection drug users.[12]

In contrast to studies conducted between the mid-2010s, there has been a dramatic change in substance use patterns in Kashmir, and injection drug use appears to predominate the drug use scenario. This trend puts the users at an increased risk for parenterally transmitted infections such as human immunodeficiency virus (HIV), hepatitis C virus (HCV) and hepatitis B virus (HBV) and even fatal complications like drug overdose deaths. Media reports from Kashmir have been reporting about the emergence of overdose deaths that go under-reported due to poor treatment-seeking, social stigma and inadequate reporting by service reporters.[16]

Authors have suggested a liability for increased substance use to cope with psychological distress due to Covid-19.[17,18,19] While few authors have also suggested that the risk may be lower due to financial distress and reduced availability due to Covid-19 associated restrictions.[20] In the current study, most treatment seekers had started during the lockdown, which suggested that the former hypothesis was more relevant in our study. Compared to the lockdown associated with Covid-19, Kashmir witnessed a prolonged curfew due to socio-political conditions just before the emergence of the pandemic.

Our study found that the possible reasons for trying out substances during lockdown were peer pressure, boredom and conflictual familial relationships, which is in concordance with other studies. Studies have reflected a consistent pattern of increased substance use in adolescents from disturbed families with conflictual dynamics.[21]

An increase in substance use patterns in the current study and new onset of substance use can be explained by the negative reinforcement model of substance use. Thus, in response to disasters and major psychosocial stressors, an increase in stress /anxiety leads to initiation or increased substance use patterns.[22,23] The same has been observed during past disasters.[24]

The economic setback due to the pandemic has added financial strains leading to disruption of routine healthy family atmospheres[1] that can affect adolescents' mental health. Furthermore, as schools and colleges were closed, children and adolescents could not meet their friends. They were isolated, which became an increase in isolation, and being unable to meet friends has also been a contributing factor to distress.[25] Due to these disturbances, incidences of domestic violence and parental discord, child sexual abuse and strains in a child-parent relationship have increased [26], which can increase the vulnerability to substance use.

Along with substance use behaviours, the Covid-19 pandemic has also induced widespread mental health issues in people who use drugs[27], likely to maintain or increase substance use behaviours as a coping mechanism[28]. Due to social isolation, physical distancing, fear and uncertainty, work from home, financial strains, and familial conflicts[29], there has been an increase in depressive and anxiety features[30] and for people with depression, there is reduced

activation in the mesolimbic reward circuit. At the same time, illicit drugs are known for activating the reward system.[31]

CONCLUSION

Our findings reflected a pattern of increased substance use behaviours resulting more from peer pressure, emotional distress, boredom and financial issues resulting from the implemented lockdown, disrupting regular routines. It was also seen that the distress level in these patients was high, causing them to indulge more in substance use. So, this study further points out the need for the policymakers to not only focus on covid-19 but also on the parallel epidemic of substance use in Kashmir valley, which is dangerous in terms of its mortality rate and chronic illnesses associated. Therefore, policymakers must make adequate intervention plans for this health crisis.

Conflict of Interest: None

Funding: None

Written Informed Consent: Taken

REFERENCES

1. Fegert JM, Vitiello B, Plener PL, Clemens V. Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: a narrative review to highlight clinical and research needs in the acute phase and the long return to normality. Child and adolescent psychiatry and mental health. 2020 Dec;14(1):1-1.
2. Sheridan Rains L, Johnson S, Barnett P, Steare T, Needle JJ, Carr S, Lever Taylor B, Bentivegna F, Edbrooke-Childs J, Scott HR, Rees J. Early impacts of the COVID-19 pandemic on mental health care and on people with mental health conditions: framework synthesis of international experiences and responses. Social psychiatry and psychiatric epidemiology. 2021 Jan; 56(1):13-24.
3. Russell D, Peplau LA, Cutrona CE. The revised UCLA loneliness scale. Concurrent and discriminant validity evidence. 1997; 1980:39.
4. Koob GF, Le Moal M. Drug addiction, dysregulation of reward, and allostasis. Neuropsychopharmacology. 2001 Feb 1; 24(2):97-129.
5. Yao H, Chen JH, Xu YF. Patients with mental health disorders in the COVID-19 epidemic.
6. Dietze PM, Peacock A. Illicit drug use and harms in Australia in the context of COVID-19 and associated restrictions: Anticipated consequences and initial responses. Drug and alcohol review. 2020 May; 39(4):297.
7. Farhat S, Hussain SS, Rather YH, Hussain SK. Sociodemographic profile and pattern of opioid abuse among patients presenting to a de-addiction centre in tertiary care Hospital of Kashmir. Journal of basic and clinical pharmacy. 2015 Jun;6(3):94.
8. Rather YH, Bashir W, Sheikh AA, Amin M, Zahgeer YA. Socio-demographic and clinical profile of substance abusers attending a regional drug de-addiction centre in chronic conflict area: Kashmir, India. The Malaysian journal of medical sciences: MJMS. 2013 May;20(3):31.
9. Daniel LT, Krishnan G, Gupta S. A study to assess the prevalence and pattern of substance use among male adolescents in suburban area of Delhi. Indian Journal of Social Psychiatry. 2017 Jul 1; 33(3):208.
10. Homish GG, Leonard KE, Cornelius JR. Illicit drug use and marital satisfaction. Addictive behaviors. 2008 Feb 1; 33(2):279-91.
11. Gopikrishnan SK, Ponraj DG, Newtonraj A, Purty AJ, Manikandan M, Vincent A. Prevalence and determinants of Alcohol use in a remote rural area in South India: A community-based cross-sectional study. Journal of Family Medicine and Primary Care. 2020 Aug; 9(8):4333.
12. Rather YH, Bhat FR, Malla AA, Zahoor M, Massodi PA, Yousuf S. Pattern and prevalence of substance use and dependence in two districts of Union Territory of Jammu & Kashmir: Special focus on opioids. Journal of Family Medicine and Primary Care. 2021 Jan;10(1):414
13. Kashmir's heroin crisis is reaching epidemic proportions 23 JUN 2021https://www.trtworld.com/magazine/kashmir-s-heroin-crisis-is-reaching-epidemic-proportions-47761
14. Basu D, Mahintamini T, Ghosh A, Roub F, Subodh BN, Mattoo SK, Avasthi A. Tapentadol, the new kid on the block in India: Is it time to worry?. Indian Journal of

Psychiatry. 2020 Nov; 62(6):697.

15. Mukherjee D, Shukla L, Saha P, Mahadevan J, Kandasamy A, Chand P, Benegal V, Murthy P. Tapentadol abuse and dependence in India. Asian Journal of Psychiatry. 2020 Mar 1; 49:101978.
16. https://www.thekashmirmonitor.net/srinagars-youth-death-in-pahalgam-hotel-heroin-dealer-among-four-arrested/https://www.thecitizen.in/index.php/en/newsdetail/index/9/17216/heroin-abuse-rises-in-kashmir-deaths-go-unreported-say-doctors
17. Mallet J, Dubertret C, Le Strat Y. Addictions in the COVID-19 era: Current evidence, future perspectives a comprehensive review. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2021 Mar 2; 106:110070.
18. Patwardhan P. COVID-19: Risk of increase in smoking rates among England's 6 million smokers and relapse among England's 11 million ex-smokers. BJGP open. 2020 Jun 1;4(2).
19. Ramalho R. Alcohol consumption and alcohol-related problems during the COVID-19 pandemic: a narrative review. Australasian Psychiatry. 2020 Oct; 28(5):524-6.
20. Rehm J, Kilian C, Ferreira-Borges C, Jernigan D, Monteiro M, Parry CD, Sanchez ZM, Manthey J. Alcohol use in times of the COVID 19: Implications for monitoring and policy. Drug and alcohol review. 2020 May; 39(4):301-4.
21. Latendresse SJ, Rose RJ, Viken RJ, Pulkkinen L, Kaprio J, Dick DM. Parenting mechanisms in links between parents' and adolescents' alcohol use behaviors. Alcoholism: Clinical and Experimental Research. 2008 Feb; 32(2):322-30.
22. Goldmann, E., Galea, S., Mental health consequences of disasters. Annu. Rev. Public Health.2014. 35, 169183.
23. Baker TB. Addiction motivation reformulated: Enaffektivbehandling model afnegativforstærkning. Psychol. Rev. 2004; 111:33-51.
24. Rogers AH, Shepherd JM, Garey L, Zvolensky MJ. Psychological factors associated with substance use initiation during the COVID-19 pandemic. Psychiatry Research. 2020 Nov 1; 293:113407.
25. Volkin S. The impact of the COVID-19 pandemic on adolescents. John Hopkins University. 2020.
26. Atilola O, Stevanovic D, Balhara YS, Avicenna M, Kandemir H, Knez R, Petrov P, Franic T, Vostanis P. Role of personal and family factors in alcohol and substance use among adolescents: an international study with focus on developing countries. Journal of Psychiatric and Mental Health Nursing. 2014 Sep;21(7):609-17.
27. Galea S, Merchant RM, Lurie N. The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention. JAMA internal medicine. 2020 Jun 1; 180(6):817-8.
28. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, Rubin GJ. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. The lancet. 2020 Mar 14; 395(10227):912-20.
29. Lima CK, de Medeiros Carvalho PM, Lima ID, de Oliveira Nunes JV, Saraiva JS, de Souza RI, da Silva CG, Neto ML. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). Psychiatry research. 2020 May 1; 287:112915.
30. Dubey S, Biswas P, Ghosh R, Chatterjee S, Dubey MJ, Chatterjee S, Lahiri D, Lavie CJ. Psychosocial impact of COVID-19. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. 2020 Sep 1; 14(5):779-88.
31, Höflich A, Michenthaler P, Kasper S, Lanzenberger R. Circuit mechanisms of reward, anhedonia, and depression. International Journal of Neuropsychopharmacology. 2019 Feb;22(2):105-18.