

SHORT ARTICLE

Psychiatric morbidities among youth (11-24 years) and its association with drug abuse: A cross-sectional study from Jammu city of UT of J&K

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ABSTRACT

Background: Knowledge is still scarce about mental health and psychiatric morbidities among youth with Substance Use Disorders (SUDs). Epidemiological studies indicate an association between SUDs and psychiatric morbidity. **Aims and Objectives:** The present study aimed to assess burden of psychiatric morbidities among youth and to determine their association with drug use. **Methodology:** This cross-sectional study was conducted among youth (11-24 years) who were attending the OPD in a tertiary care teaching hospital as a patient or an accompanying attendant to the patient. Psychiatric morbidity was measured by means of Depression Anxiety Stress Scale (DASS-21). **Results:** The results revealed that 20% of the youth were drug users. Among drug users, depression, anxiety and stress were present in 18.51% in comparison to 3.24% among non-users. Age, gender, residence, literacy levels and monthly family income were significantly associated with drug abuse ($p < 0.05$). The medical problems commonly reported by surveyed youth included poor eye sight (42.5%), frequent headaches and dental problems (38.29%) and problem in sleeping (27.65%). **Conclusion:** Results of this study have revealed significant association between psychiatric morbidities and substance use. Among the psychiatric morbidities, anxiety and stress were found to be the most common among drug users.

KEYWORDS

Depression, Anxiety, DASS-21, Substance Abuse, Psychiatric Morbidities

INTRODUCTION

Psychiatric morbidity in the form of depression, anxiety and stress remains a major public health concern among the youth, more so among the youth who happen to be substance users. Among the problems reported by persons seeking treatment for drug addiction, anxiety and depression remain the most common. Reports indicate that about 50% of persons with severe mental disorders are affected by substance abuse and of all people who are diagnosed as mentally ill, 29% abuse either drugs or alcohol.(1) Presence of

both depression and anxiety poses significant risks in drug addicts irrespective of etiology.(2)

Youth represents a critically important time as students transition from school to college/university in pursuance of educational opportunities and to achieve career goals. They face challenges like increased independence and responsibility which at times, may lead to highly stressful situations.(3)

Psychiatric morbidity and substance use disorder may co-occur due to multiple reasons like

(i) Common risk factors,(4,5) (ii) substance use-related mental health problems(6,7) (iii) self-medication hypothesis(8) and (iv) substance use induced mental health problems.(4)

During review of literature, it was found that a few studies about psychiatric morbidities among youth have been conducted in developed nations and to a lesser extent in developing nations

This study aims

- To examine the association between psychiatric morbidity and substance use among youth (11-24 years) in UT of J&K.

MATERIAL & METHODS

Study Design: Cross-sectional study

Study Population: Youth in the age group of 11-24 years attending or accompanying patient in outpatient department of a tertiary care teaching hospital

Duration of study: 1st November 2019 to 31st October 2020

Sampling Technique: The study sample was recruited using convenient sampling from the OPDs of Government Medical College and Hospital, Jammu where the youth used to visit either as patients to seek medical attention or as attendants of patients. A total of 270 participants were enrolled into the study.

Method of Data Collection: The study was undertaken after due approval from the Institutional Ethical Committee (No. IEC/GMC/2021/352). The researcher approached the youth (11-24 years) who were attending the OPDs of Government Medical College Jammu either as patient or as an attendant. They were first briefed about the purpose of the study and for those who agreed to participate, an informed written consent was taken, also telephonic consent was taken from his/her parents in case of a minor or if not accompanied by any parent. The investigator built a good rapport with the participants and all the eligible candidates were asked to fill a self administered questionnaire. Anonymity was assured to the study participants. The method of filling the questionnaire was also explained to the participants. The queries raised by the study subjects were clarified by the researcher. The participants were allowed to remain in a separate room while filling up the questionnaire in

order to maintain privacy and confidentiality. The study was conducted once a week and only five to six participants filled the questionnaire per day as it required 25-30 minutes to complete one questionnaire.

The questionnaire sought information regarding socio-demographic parameters of study subjects. Mental health of respondents was assessed using DAS-Scale 21, which is a short version (21 item) of a 42-item self report instrument designed to measure three related negative emotional states: depression, anxiety and stress (with 7 items per subscale). Patients were asked to score every item on a scale from 0 (did not apply to me at all) to 3 (applied to me very much). Sum scores for the total DAS-Scale 21 range between 0 and 120. Scores ≥ 60 (for DASS-total) and ≥ 21 (for the depression subscale) are labelled as "high" or "severe". Information was also sought about the current medical problems among them.

Inclusion criteria:

Apparently healthy subjects

Agreed to participate in this study by giving written consent

Exclusion criteria:

1. Seriously ill individuals
2. Those who were below 11 years and above 24 years of age
3. Youth with a family member having serious illness
4. Those on some psychiatric medication

Ever User: Those study subjects who had consumed substance (drug) even once in their lifetime in any quantity were considered ever users

Non User: Those subjects who had never consumed any substance (drug) in any quantity in their life

Statistical Analysis:

Data thus collected was entered into Microsoft Excel spreadsheet. For descriptive variables, data was presented as mean with standard deviation and percentages. Association between variables was assessed using chi-square test and p-value < 0.05 was considered as statistically significant.

RESULTS

A total of 270 youth were assessed out of which 54 (20%) were ever users and 216 (80%) were non-users of drugs.

Table 1: Socio-demographic profile of ever users and non-users (n=270)

S.No	Variables	Total	Ever Users (n=54)		Non-Users (n=216)		p value
			n	%	n	%	
1	Age (in years)						
	<12	03	00	0.00	03	1.38	0.000
	12to <18	95	02	3.70	93	43.05	
	18 to <24	172	52	96.28	120	55.54	
	Mean Age±SD (In Years)		21.87±2.81		17.86±3.69		
2	Gender						
	Male	222	51	94.44	171	79.16	0.008
	Female	48	03	5.55	45	20.83	
3	Residence						
	Rural	75	22	40.74	53	24.53	0.01
	Urban	195	32	59.25	163	75.46	
4	Religion						
	Hindu	203	43	79.62	160	74.07	0.77
	Muslim	40	10	18.51	30	13.88	
	Other	03	01	1.85	2	12.03	
5	Level Of Education						
	Upto Secondary	115	06	11.11	109	50.45	0.000
	Higher Secondary And Graduate	155	48	88.88	107	49.52	
6	Literacy Status Of Father						
	Literate	269	54	100	215	99.53	0.62
	Illiterate	01	0	0.00	01	0.46	
7	Literacy Status Of Mother						0.29
	Literate	157	28	51.85	129	59.72	
	Illiterate	113	26	48.14	87	40.27	
8	Monthly Family Income (INR)						
	≤10000	00	00	0.00	00	0.00	0.002
	10000-50000	94	09	16.66	85	39.33	
	50000-100000	164	41	75.9	123	56.92	
	≥100000	12	4	7.40	08	3.70	

Table 2: Medical problems suffered by drug users and non-users

Medical Problem	Ever Users (n = 46)		Non-Users (n = 147)	
	No.	%	No.	%
Dental Problems	01	2.17	18	38.29
Poor Eye Sight	03	6.52	20	42.55
Hearing Problem	01	2.17	02	4.25
Allergies/Asthma/Frequent colds	00	0.00	10	21.27
Gastrointestinal problems	01	2.17	03	6.38
Weight gain/weight loss	01	2.17	06	12.76
Trouble in breathing	01	2.17	02	4.25
Increased heart beat	42	91.30	05	10.63
Problem in sleeping	43	93.47	13	27.65
Frequent headaches	42	91.30	18	38.29
Fainting spells	02	4.34	02	4.25
Maniac/panic attack/aggression/violent behavior	34	73.91	07	14.89

Table 3: Distress along three axis of DASS among drug users and non users

Mental Health Status	Ever users (n = 54)		Non users (n = 216)	
	No.	%	No.	%
Only Depression	00	0.00	00	0.00
Only Anxiety	03	5.55	15	6.94
Only Stress	00	0.00	04	1.85

Mental Health Status	Ever users (n = 54)		Non users (n = 216)	
	No.	%	No.	%
Depression and Anxiety	02	3.70	01	0.46
Anxiety and Stress	28	51.85	09	4.16
Depression and Stress	00	0.00	00	0.00
Depression, Anxiety and Stress	10	18.51	07	3.24
Total	43	79.61	36	16.66

Table 4: Association of depression, anxiety and stress with drug use among study subject

S.No.		Ever users n=54		Non users n=216		χ^2	p
		n	%	n	%		
1	Depression						
	Absent	42	77.77	208	96.29	26.60	0.00
	Mild	08	14.81	02	0.92		
	Moderate	04	7.40	06	2.77		
2	Anxiety						
	Absent	11	20.37	184	58.18	106.10	0.00
	Mild	14	25.92	18	8.33		
	Moderate	23	42.59	09	4.16		
	Severe	06	11.11	02	0.92		
	Extremely severe	00	0.00	03	1.38		
3	Stress						
	Absent	16	29.62	196	9.74	105.67	0.00
	Mild	26	48.14	14	6.48		
	Moderate	12	22.22	03	1.38		
	Severe	00	0.00	03	1.38		
	Extremely severe	00	0.00	00	0.00		

Table 4 reveals that prevalence of depression, anxiety and stress was higher among drug users as compared to non –users and association of each psychiatric morbidity with drug use was found to be statistically significant ($p=0.00$).

DISCUSSION

The prevalence of drug users was found to be 20% (54/270). These findings are in agreement with those reported by NFHS-5 for alcohol users in males aged 15 years and above. As per data for UT of Jammu and Kashmir from NFHS-5, it was found that 3.6% women and 38.3% men of more than 15 years had used tobacco in different forms. Further, NFHS-5 reveals that approximately 25% of men more than 15 years were consumers of tobacco and alcohol in Jammu district.(9) Faizi N et al reported ever user rate of 33.3% and current user at 12.9%.(10) Mean age of the drug users in the present survey was 21.87 ± 2.81 years with majority of substance users being males (94.4%) and these results were in agreement with those reported by Majumder U et al, Anita et al and Choudhary et al.(11,12,13) About three-fourth (72.2%) of the respondents belonged to urban areas which is consistent with the findings reported by Majumder U et al and Sidhu TK et al.(11,14) About two-fifth of the respondents had

literacy levels upto secondary levels which is in contrast to the findings reported by Majumder U et al and Vaibhav et al.(11,15)

The major medical problems reported by the ever user respondents were sleeping problems, frequent headaches and increased heart rate whereas poor eye sight and frequent headaches were among the main complaints reported by non-user respondents. Majumder U et al(11) in their study reported agoraphobia, nocturnal enuresis and somnambulism as the morbid conditions among the respondents.

The prevalence of depression, anxiety and stress among the drug users was found to be 22.2%, 79.6% and 69.3% respectively in the present study. Van Zyl et al in a study conducted among medical students reported 26.6% prevalence for depression and anxiety and 29.5% for stress as per DASS-21 screening tool.(16) Lower levels of depression to the tune of 8% and 3.7% were reported by Majumder U and Khairkar et al in their respective studies.(11,17) Other psychiatric morbidity – Generalized Anxiety Disorder –was reported at 11.3% and 8.4 % by Dodangi et al(18) and Majumder U et al(11) in their respective studies. Gardvik KS et al(19) reported an association

between having tried illicit drugs and presence of psychiatric morbidity in girls.

Mohamed et al reported that 81% of drug users had moderate to severe depression in comparison to 18% among non-drug users.(20) Similarly anxiety levels were severe in more than two-third of drug users while majority of non drug users had a mild level of anxiety. On a similar note, Pakhtunkhwa et al also reported severe levels of depression among drug addict people.(21)

Mohamed et al reported a positive correlation between presence of anxiety, depression and substance related problems and it was explained by direct causation model which states that one disorder lowers the threshold for the expression of the other disorder.(20) The results of the present study has also revealed that 18.5% of drug users were having all the three components of psychiatric morbidity i.e depression, anxiety and stress and these results are in consonance with those reported by Mohamed et al.(21)

The results of the present study have revealed that among the socio-demographic variables, age, gender, residence, literacy levels and monthly income were found to be significantly associated with drug abuse. However, Wubetu AD reported that being male, a divorced family, living greater than 20 years in the town, having substance user family members and having friend substance users as independent predictors of lifetime legal substance use.(22)

The present study has certain inherent limitations like consecutive sampling and small sample size due to which the results may lack generalizability. Further the information sought regarding depression, anxiety and stress was self-reported and there may be some degree of under-reporting by the participants. Finally, the cross sectional design of the study limits determination of causal relationships between depression, anxiety and substance use.

CONCLUSION

This study examined psychiatric morbidity among youth who were on drug abuse in Jammu city of India. Drug use prevalence was found to be 20% and higher burden of psychiatric morbidity was found among drug users in comparison to non-users. Age, gender, literacy levels, residence, etc. were significantly associated with drug abuse ($p < 0.05$). Interventions to increase awareness and change perception regarding substance users is likely to address psychiatric morbidities among them. Results can be incorporated by health planners to design and implement comprehensive

interventions and effective health promotion strategies.

RECOMMENDATION

The findings highlight the urgent need for integrated strategies targeting both prevention and management of psychiatric morbidities among youth engaged in substance abuse. Policy makers should prioritize:

- Formulating youth-friendly policies and programs that address substance use and its mental health consequences.
- Implementing school- and community-based awareness campaigns to reduce stigma and promote early help-seeking.
- Strengthening counseling and rehabilitation services tailored to the psychosocial needs of young people.

LIMITATION OF THE STUDY

As this was a cross-sectional study, causal inferences between substance use and psychiatric morbidity cannot be established. The study relied on self-reported data, which may be subject to recall or social desirability bias. Furthermore, the findings are limited to urban youth of Jammu city and may not be generalizable to rural populations or other regions.

RELEVANCE OF THE STUDY

This study provides crucial epidemiological evidence on the dual burden of psychiatric morbidity and substance abuse among youth in Jammu, a relatively under-researched region. By identifying sociodemographic correlates such as age, gender, literacy, and residence, it contributes to the understanding of risk factors in this population. The findings add value to the existing body of knowledge by offering region-specific insights that can guide locally appropriate preventive and therapeutic interventions, thereby informing health planners and policymakers in designing targeted, evidence-based strategies.

AUTHORS CONTRIBUTION

MHM: Conceptualization & Study Design, Data Collection, Manuscript Writing, Methodology & Analysis. BL: Data Collection, Manuscript Writing. RG: Methodology & Analysis. AK: Conceptualization & Study Design, Data Collection. RKG: questionnaire, Conceptualization & Study Design, Data Collection. Burhan Hameed: questionnaire, Conceptualization & Study Design, Data Collection

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