ORIGINAL RESEARCH

The frequency and factors associated with psychotropic use amongst the health care students and workers in a tertiary hospital of Kashmir, north India: An observational study

[1]Dr. Zuryat Ashraf, [2]Dr. Naser Shaheen Mir, [3]Dr. Athar Shabir, [4]Dr. Samina Farhat

[1,2,3]Senior Resident, Department of Pharmacology, Government Medical College, Srinagar, Kashmir, India
[4]Professor and Head of the Department, Department of Pharmacology, Government Medical College, Srinagar, Kashmir, India

Corresponding Author
Dr. Athar Shabir
Senior Resident, Department of Pharmacology, Government Medical College, Srinagar, Kashmir, India
Email: atharshabir786@gmail.com

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ABSTRACT

Background: In modern era, psychotropic drugs are mainly used by university students and health care workers. The psychotropics are taken mainly to make a change with reality and to seek pleasure. However psychotropic drugs causes many problems such as memory disturbances, interference with concentration and decision making, chronic non-communicable diseases and mental disorders, impairing work efficiency, personal injury, work accidents, remaining absent from duty, job loss, even to the extent of death of the healthcare professional. **Methods:** An electronic questionnaire to figure out the frequency and factors associated with the use of psychotropic substances was prepared and circulated through social media platform like What's app. We received responses from 164 healthcare students and workers, which were then included in the study. **Results:** In our study, 24% of participants reported consumption of psychotropic substances. Tobacco was the most commonly consumed psychotropic agent (30%) followed by anti-depressant drugs (28%) Amongst the anti-depressants, majority of the participants consumed amitriptyline (19%). Amongst the anxiolytics, majority of the participants consumed clonazepam (55%). **Conclusion:** Majority of the participants reported that increased workload, increased stress and poor job satisfaction could be responsible for the consumption of these agents. About 20% participants reported that mental illnesses like depression, anxiety, psychosis, etc could be responsible for consumption of psychotropic agents.

Keywords: mental health, psychosis, psychotropic drugs, workload, anxiety.

INTRODUCTION

The World Health Organization (WHO) describespsychological wellbeing as a state in which a person understands his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make contribution to his or her community(WHO). Psychological distress is defined as emotional anguish which is presented by symptoms like depression, anxiety and functional symptoms which may require treatment[1]. Consumption of psychotropic drugs has increased in general population and is point of concern[2]. These drugs are the chemical substances which act on the central nervous system and produce temporary changes in perception, cognition, mood and behaviour[3]and are used to treat mental health problems[4].The psychotropic drugs include opioidanalgesics, anxiolytics,sedatives, general anaesthetics, antiepileptics, antipsychotics, antidepressants and mood stabilizers, among others[5].In modern era, psychotropic drugs are mainly used by university students[6-8].The studies have shown that the healthcare students are more predisposed to the indiscriminate consumption of drugs[9-11]. The psychotropics are takenmainly to make a change with reality and to seek pleasure[12].Being young, the university students try to explore their identity, their age is an age of transition between adolescence and adulthood, and an age of new opportunities. They are not stable in their emotions and are distancing away from their family values[13].Other factors contributing to increased use of psychotropics amongst healthcare students include psychiatric comorbidities, such as depression and anxiety, easy access and availability of these substances and stressful working conditions[14,15].
It is reported that about 5-10% of health workers in the United States have used psychotropic substances at some point of their life[16].Healthcare workers have

physical exhaustion and psychological suffering, as they work for long hours and have no free time to enjoy themselves. The emotional exhaustion, thus developed, contributes to the emergence of stress and mental disorders, like depression, anxiety, panic, phobia, conversion disorders and use of psychotropic substances[17].The healthcare workers, in order to relieve emotional exhaustion and stress, may find relief and relaxation in the psychotropic substances.The recreational use of psychotropic drugs causes many problems such as memory disturbances, interference with concentration and decision making, chronic non- communicable diseases and mental disorders. Other consequences include impairing work efficiency, personal injury, work accidents, remaining absent from duty, job loss, even to the extent of death of the healthcare professional[18].Considering the high reported statistics of consumption of psychotropic drugs amongst health care workers and students coupled with the dangerous consequences of consumption of these drugs, our study is aimed at identifying the frequency and factors associated with the use of psychotropic substances amongst the health care students and workers in a tertiary care hospital of Kashmir, India.

MATERIALS AND METHODS

Our study was conducted in the Department of Pharmacology, Government Medical College Srinagar for a period of three months (from December 2022 to February 2023) after getting approval from Institutional Ethical Committee.An electronic questionnaire to figure out the frequency and factors associated with the use of psychotropic substances was prepared and circulated amongst healthcare students and workers in a tertiary hospital of Kashmir through social media platform like WhatsApp.The questionnaire consisted of three sections. The first section dealt with the demographic characteristics of the study population. The second section gathered information about the average hours of study or work, level of job satisfaction and the types of psychotropic drugs consumed, if any. The questions in the third section aimed to identify the factors associated with the use of psychotropic substances. Options of the questions were framed on three - point Likert scale. We received responses from 164 healthcare students and workers, which were then included in the study. Responses were compiled using Microsoft Excel Sheet and then analyzed. Percentage analysis of the data was done.

RESULTS

Table 1: ***Demographic profile of study population***

Parameter		Number	Percentage
Age in Years	18-28	99	61
	29-38	49	30
	39-48	11	7
	49 and above	4	2
Gender	Male	78	48
	Female	85	52
Residence	Urban	78	48
	Rural	84	52
Work Profile	Health care students	73	45
	Physician	29	19
	Surgeon	7	4
	Physiotherapist	4	2
	Nurse	2	1
	Pharmacist	2	1
	Others	46	28
Average Hours of Study or Work	< 4 hours	30	18
	4-6 hours	64	39
	7-9 hours	44	27
	10- 12 hours	16	10
	13-15 hours	6	4
	>15 hours	3	2
Level of Job Satisfaction	Low	31	21
	Moderate	97	65
	High	21	14

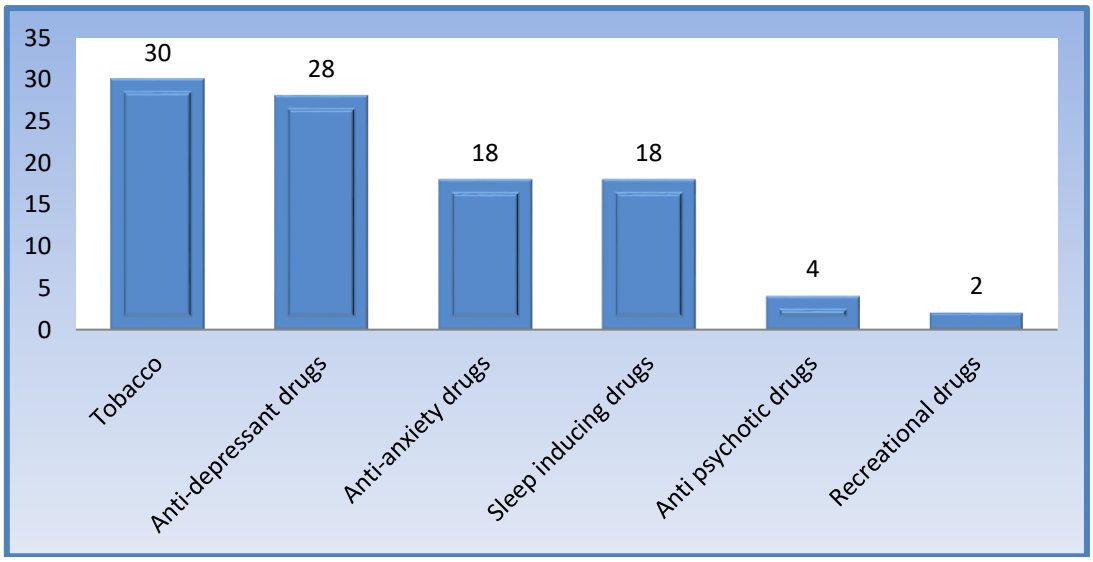

Figure 1: Different types of psychotropic drugs consumed by study participants.

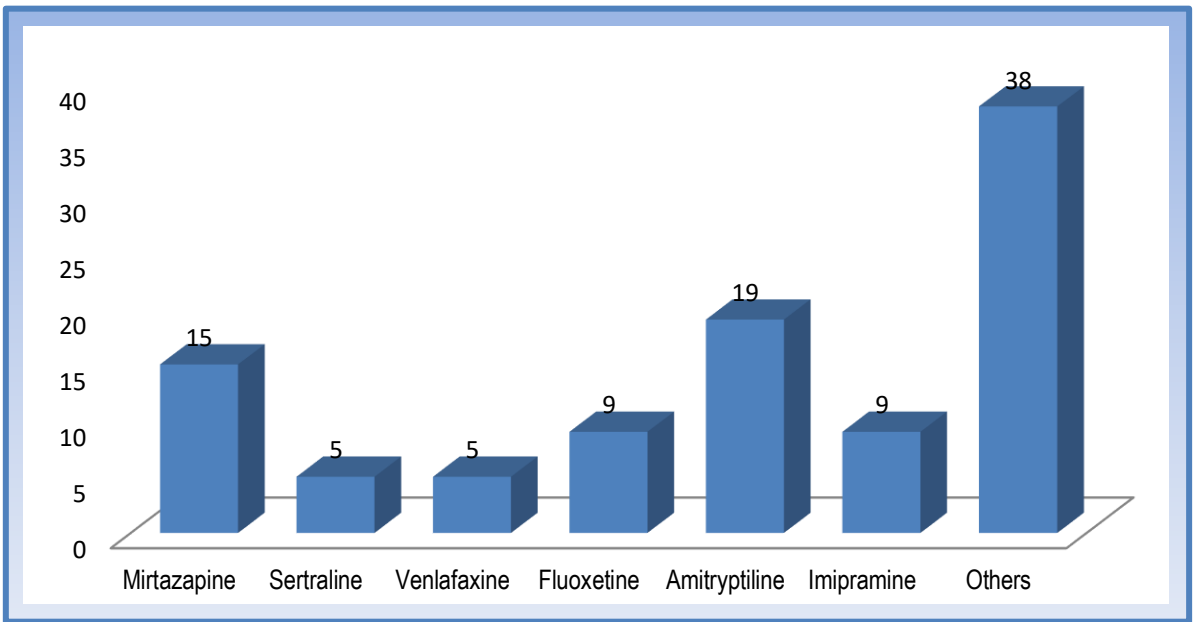

Figure 2: Various anti depressants drugs consumed by study participants.

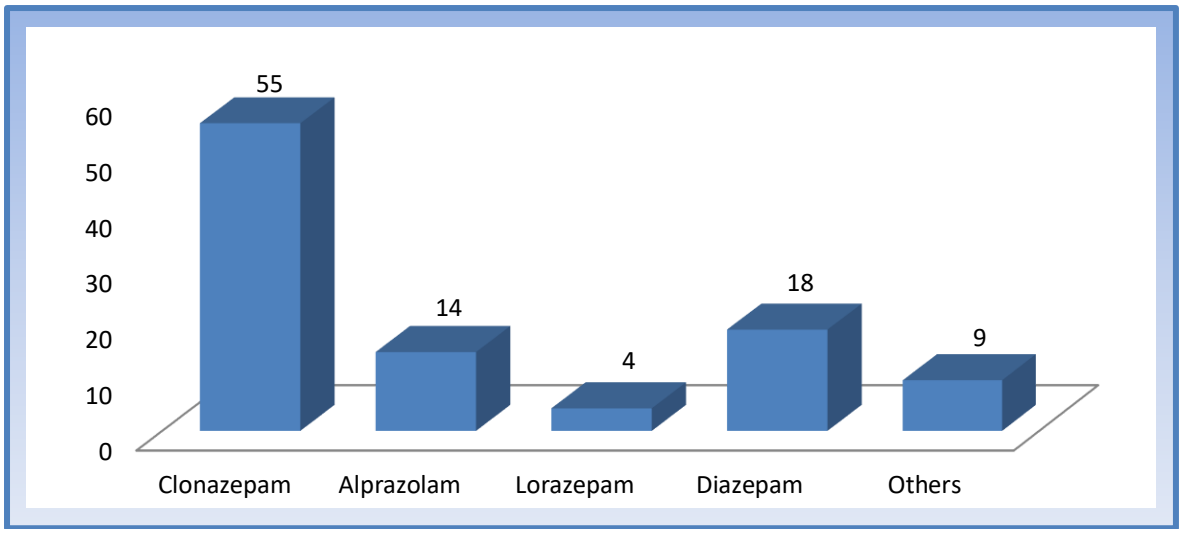

Figure 3: Various anti-anxiety drugs consumed by study participants.

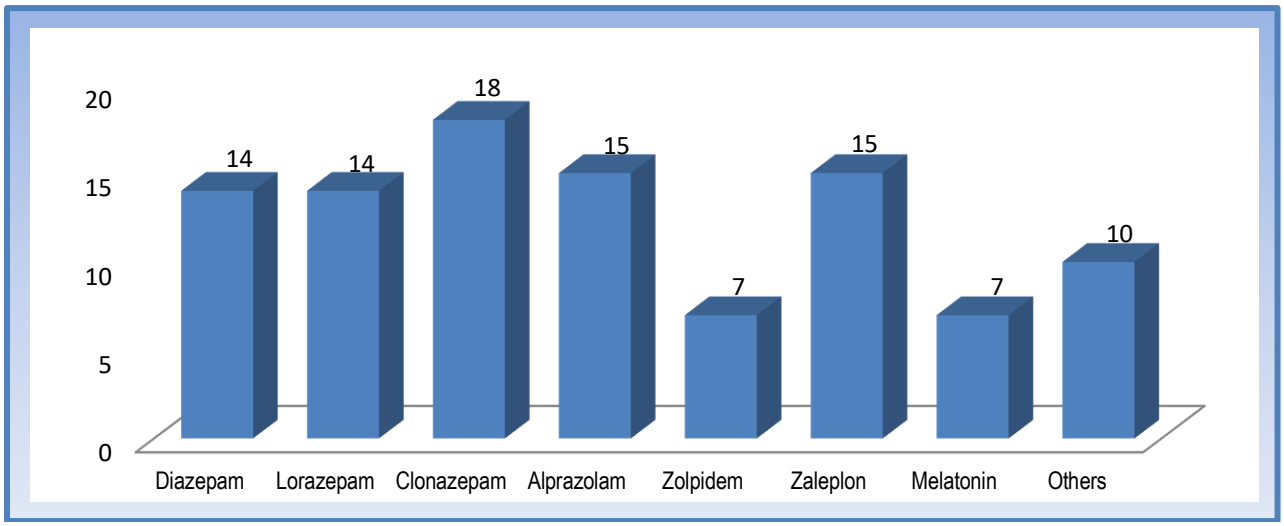

Figure 4: Various hypnotic drugs consumed by study participants.

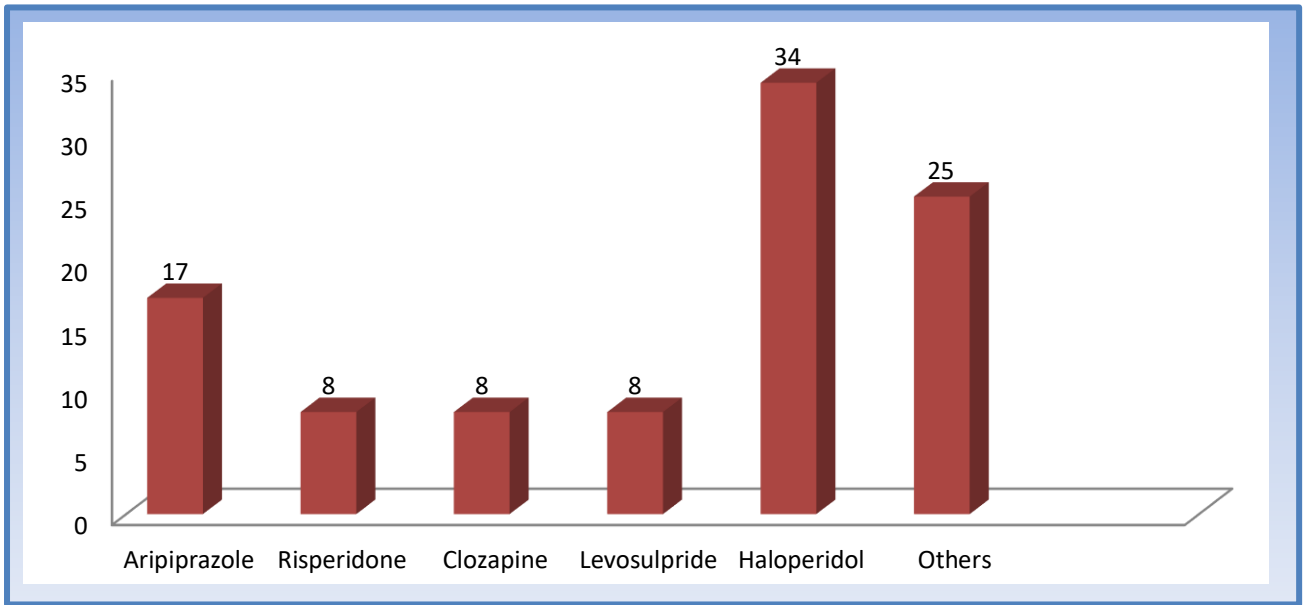

Figure 5: Various anti psychotic drugs consumed by study participants.

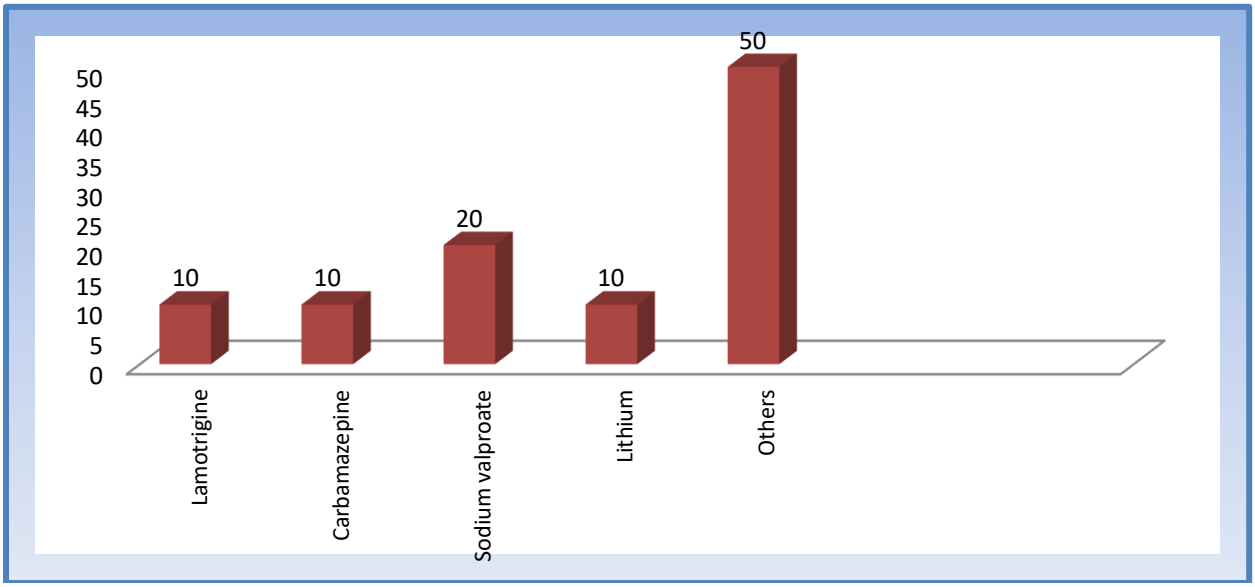

Figure 6: Various mood stabilizers consumed by study participants.

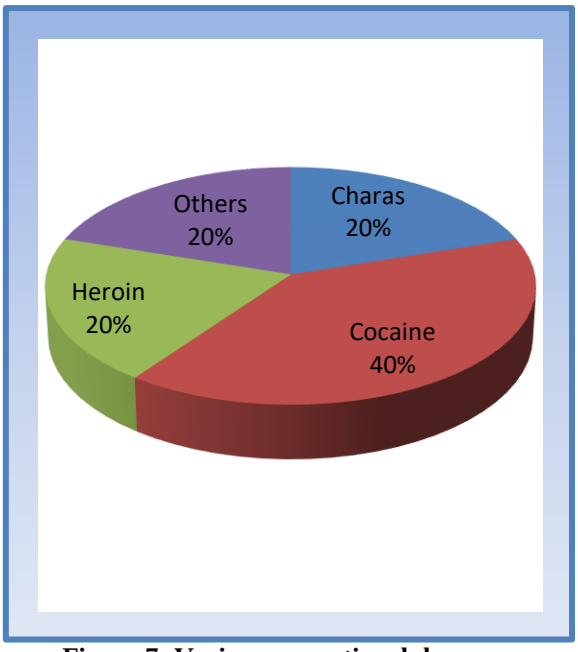

Figure 7: Various recreational drugs consumed by study participants.

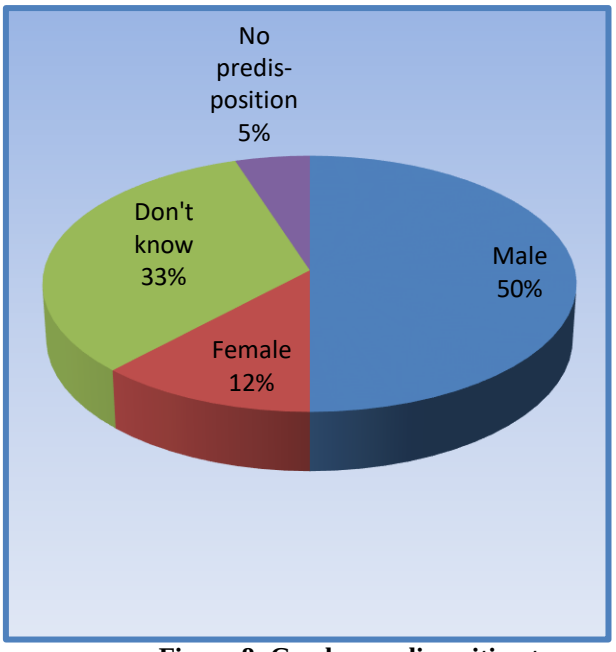

Figure 8: Gender predisposition to consumption of psychotropics.

Table 2: Possible reasons responsible for the consumption of psychotropic drugs

	Yes	No	Don't know
Whether psychotropic drugs consumed	38(24%)	119(73%)	5(3%)
Can increased workload be associated with the use of psychotropics	80(50%)	37(24%)	42(26%)
Can increased stress be responsible for the consumption of psychotropics	86 (54%)	29(18%)	44(28%)
Can poor job satisfaction be associated with the use of psychotropics	86 (54%)	31(21%)	40(25%)
Do you smoke or drink to cut down the stress during work	15(9%)	138(87%)	5(4%)
Whether mental disturbances like anxiety, depression were responsible for intake of psychotropics	32(20%)	104(67%)	21(13%)
Whether peer pressure can be responsible for the consumption of psychotropics	9(5%)	140(89%)	10(6%)

DISCUSSION

This study evaluated the frequency and factors associated with consumption of psychotropic drug usage amongst the health care students and workers in a tertiary hospital of Kashmir.There have been limited studies assessing the use of psychotropic drug usage in health care students and workers in our setup, hence we conducted the current study.

In our study, majority of respondents (61%) were in the age group of 18-28 years, with female predominance (52%). Most of the participants (52%) lived in rural areas and majority of the participants were healthcare students (36%).

In our study, 24% of participants reported consumption of psychotropic substances.In other studies conducted by Shresthaet al[19] and Ribeiro et al[20], 44% and 84% of participants consumed psychotropic substances respectively. In our study, tobacco was the most commonly consumed psychotropic agent (30%) followed by anti-depressant drugs (28%)whereas in the study conducted by Ribeiro et al[20], alcohol was the most commonly used psychotropic (41%) followed by tobacco (19%). In our study, amongst the anti-depressants, majority of the participants consumed amitriptyline (19%). This was in contrast to the study conducted by Martinez et al[21]in which majority of participants consumed fluoxetine. In our study, amongst the anxiolytics, majority of the participants consumed clonazepam (55%). This was in contrast to the study conducted by Martinez et al[21]where majority of the participants consumed diazepam. In our study, amongst the hypnotics, majority of the participants consumed clonazepam (18%) while alprazolam was the most commonly used hypnotic as reported by Akvardaret al[22]in his study. Amongst the recreational drugs, majority of the participants in our study consumed cocaine. This was in contrast to the study conducted by Tovani et al[23] where majority of participants consumed marijuana. In our study, amongst the anti-psychotics and mood stabilizers, majority of the participants consumed haloperidol and sodium valproate respectively.

In our study, when asked whether there was any gender predisposition to consumption of psychotropic agents, majority of the participants replied that males

were more predisposed to consumption of psychotropic agents. This is in agreement with a study conducted by Freitaset al[24]. When asked about the average hours of work, 39% responded between 4-6 hours whereas 27% responded with 7-9 hours.When asked about the opinion that whether increase in work load was associated with use of psychotropic agents, 50 % of the participants replied in affirmative. Similarly in a study conducted by Giurgiu et al[25],increased workload, night shifts, stress and fatigue were associated with the use of psychotropic substances. Also, in a study conducted by Riberio et al[20], consumption of psychotropic drugs was prevalent amongst workers with workload exceeding 60 hours per week (50%), those who worked at weekends (22.9%). When asked whether poor job satisfaction was associated with increased use of psychotropics, 54% participants replied positively. Similarly in a study conducted by Martins et al[26],poor job satisfaction was associated with the increase in intake of psychotropics. Poor job satisfaction in health care students and workers may be attributed to emotional and physical exhaustion and poor working conditions. When asked whether the participants indulged in smoking or drinking to cut down stress during work, 9% replied in affirmative. When asked whether the participants suffered from any mental illnesses due to which they consumed psychotropic drugs, 20% replied positively. This was in agreement with a study conducted by Pereira et al[27]where 21% of health workers with depression consumed psychotropic drugs. When asked whether peer pressure was the driving force for consumption of psychotropic substances, 5% of the participants replied in affirmative. In a study conducted by Shreshtha et al[19], 13% participants consumed psychotropic substances due to peer pressure.

CONCLUSION

There is an increasing concern regarding use of psychotropic agents amongst health care workers and students. In our study, 24% participants reported consumption of psychotropic agents. Tobacco was most commonly consumed followed by anti-depressant drugs, anti-anxiety drugs. Majority of the participants reported that increased workload, increased stress and poor job satisfaction could be responsible for the consumption of these agents. About 20% participants reported that mental illnesses like depression, anxiety, psychosis, etc could be responsible for consumption of psychotropic agents.

Conflict of interest:
There was no conflict of interest among the authors.
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