

## Research Article

# Profile of substance abusers attending at de-addiction center of GMERS medical college, Dharpur-Patan, Gujarat, India: a cross sectional study

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## ABSTRACT

**Background:** Although the history of substance abuse is as old as mankind itself, recently it has become a global problem that is influenced by social, economic, political, and psychosocial factors. The objective of the study was to study the socio-demographic profile of patients attending at de-addiction center.

**Methods:** The present cross sectional study was conducted at de-addiction center of GMERS Medical College, Dharpur-Patan, North Gujarat, India during December 2014 to July 2015. After obtaining approval from Institutional ethical committee and taking written and verbal consent of patients, total 206 patients were interviewed using predesigned, pretested and semi structured proforma. Data thus collected were analysed using SPSS 17 (trial version).

**Results:** Out of total 206 substance abusers, 138 (67%) patients were between the age group of 25 to 45 years. 69% of the total abusers belonged to socio economic class 4 and 5. 14.6% substance abusers were illiterate 66.9% of the substance abusers were skilled and semi-skilled workers. Out of total 206 substance abusers, 102 (49.5%) patients had family history of substance abuse. 40.8% of the substance abusers had initiated substance abuse in adolescent age group while 45.6% of the substance abusers had initiated substance abuse between 20 to 30 years age group. Mean age of substance initiation in our study was 22±6 years. The mean duration of substance use was 18.1 years. Friends of substance abusers (peer pressure) were responsible for starting of substance abuse in majority of the substance abusers (81.6%). Out of total 206 substance abusers, 128 (62.1%) patients were addicted to alcohol.

**Conclusions:** This study shows that youth is falling in vicious trap of drug abuse at early age. Awareness programs and camps need to be conducted at community level to address this major public health problem of substance use.

**Keywords:** Substance abuse, De-addiction, Addiction, Alcohol, Socio demographic profile

## INTRODUCTION

The health of man is rooted in his socio-cultural environment, which affects his psychophysical development and his well-being. It is the same socio-environmental factors which determine his life-style and behaviour. Drug abuse is defined as self-administration of a drug for non-medical reason, in quantities and frequencies which may impair an individual's ability to

function effectively and which may result in social, physical or emotional harm. The epidemic of substance abuse in young generation has assumed alarming dimensions in India.<sup>1</sup>

The future wealth and manpower of any country depend on the mental and the physical health of the youth of today. We learn from history that man has always sought respite from trials and tribulations of daily life in certain

drugs, herbs and potions which have the capacity of relieving tension, anxiety, fatigue, frustration and indeed transformation of reality into trance or ecstatic states. Changing cultural values, increasing economic stress and dwindling supportive bonds are leading to initiation into substance use. The non-medical use of alcohol and other psychoactive drugs has become a matter of serious concern in many countries. While alcohol abuse is a more or less universal problem, the incidence of drug abuse varies from place to place.

In India, traditional drugs such as opium, charas, bhang, and ganja were used by certain sections of society either for recreation or as part of religious rituals.<sup>2</sup> The WHO reports that the main location for treatment of substance use disorders is the specialist substance abuse system, followed by the mental health system, the general health system, and primary care.<sup>3</sup> Considering the current magnitude of substance use in most societies, and the limited resources available for treatment there is a need to develop services that can reach the maximum number of individuals and have the greatest impact at lowest cost. This can be achieved with broad community-based health care services that can work with individuals in their own communities over longer periods of time.<sup>4</sup> The multiplicity of factors associated with drug abuse and their inter-relatedness makes the problem a complex one.<sup>5</sup> Keeping this in mind, the present research is an attempt to study the socio-demographic profile of patients attending de-addiction center of GMERS Medical College, Dharpur-Patan, North Gujarat, India.

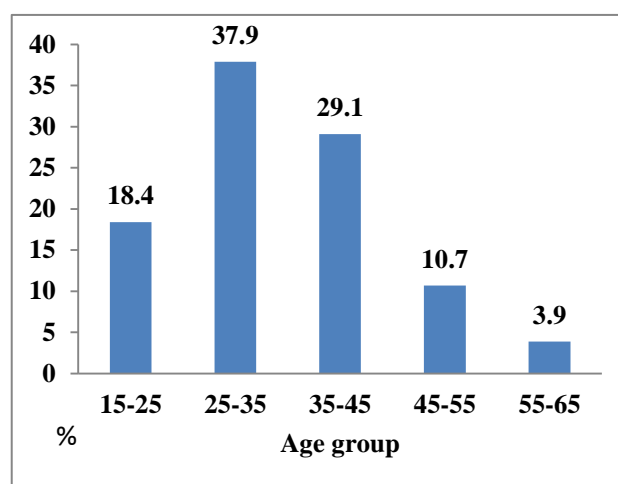
## METHODS

The present cross sectional study was conducted at De-addiction center of GMERS Medical College, Dharpur-Patan, North Gujarat, India during December 2014 to July 2015. Out of the two hundred and sixty consecutively admitted with a history of substance abuse, only 206 were included in the study after screening. After obtaining approval from Institutional ethical committee and taking written and verbal consent of these patients, they were interviewed using predesigned, pretested and semi structured proforma. The screening of the abusers was done to exclude any co-morbid illnesses which may be associated with substance abuse. In particular schizophrenic illness, affective disorders and organic brain diseases were excluded from the study. Patients who denied indulgence but their relatives insisted on their indulgence were also excluded from the study. Data thus collected were analysed using SPSS 17 (Trial Version).

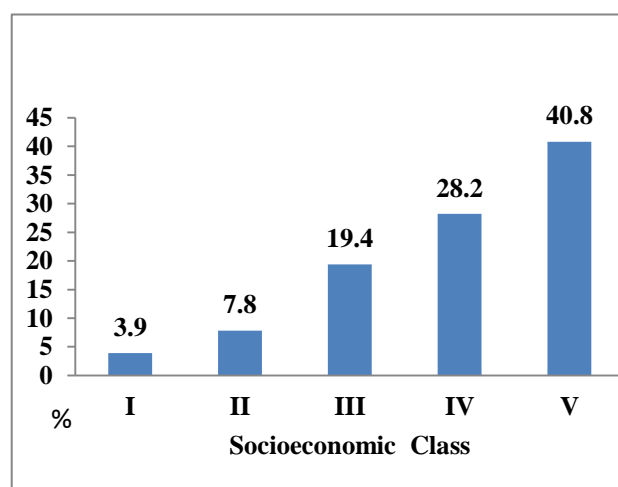
## RESULTS

Out of total 206 substance abusers, 138 (67%) patients were between the age group of 25 to 45 years (Figure 1). 69% of the total abusers belonged to socio economic class 4 and 5 (Figure 2). 14.6% substance abusers were illiterate and 61.2 % of the substance abusers had education up to secondary level of school (Figure 3).

66.9% of the substance abusers were skilled and semi-skilled workers (Figure 4). Out of total 206 substance abusers, 144 (69.9%) patients were married. Out of total 206 substance abusers, 194 (94.1%) patients belonged to nuclear family. Out of total 206 substance abusers, 102 (49.5%) patients had family history of substance abuse. 40.8% of the substance abusers had initiated substance abuse in adolescent age group while 45.6% of the substance abusers had initiated substance abuse between 20 to 30 years age group (Figure 5). Mean age of substance initiation in our study was  $22 \pm 6$  years. The mean duration of substance use was 18.1 years. Friends of substance abusers (peer pressure) were responsible for starting of substance abuse in majority of the substance abusers (81.6%) (Figure 6). 83.5% of the substance abusers were taking substance orally. Out of the total 206 substance abusers, 128 (62.1%) patients were addicted to alcohol followed by 28 (13.6%) patients were addicted to brown sugar (Table 1).



**Figure 1: Age group wise distribution of substance abusers.**



**Figure 2: Socioeconomic classification (according to modified prasad classification) of substance abusers.**

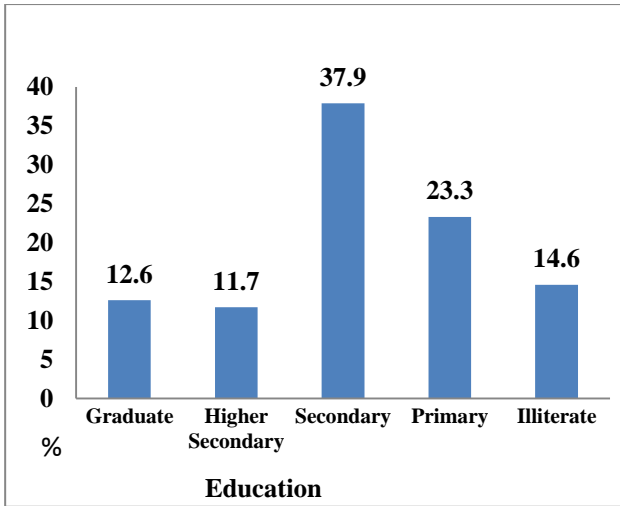


Figure 3: Education wise distribution of substance abusers.

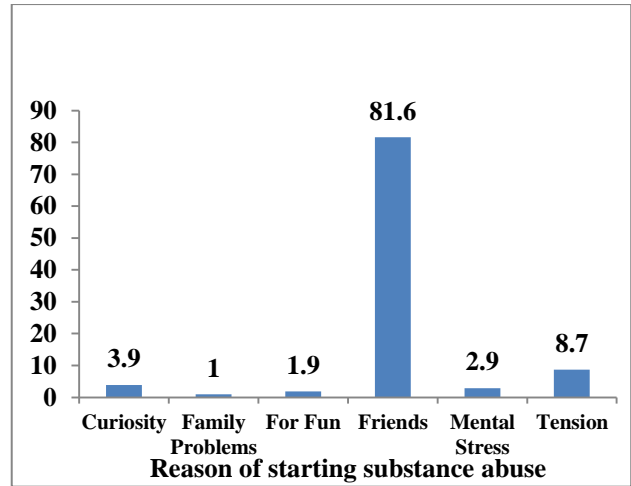


Figure 6: Distribution of substance abuser according to their reasons of starting substance abuse.

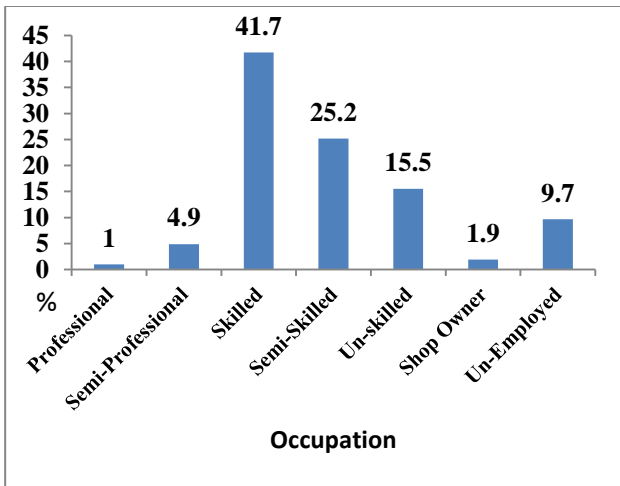


Figure 4: Employment wise distributions of substance abusers

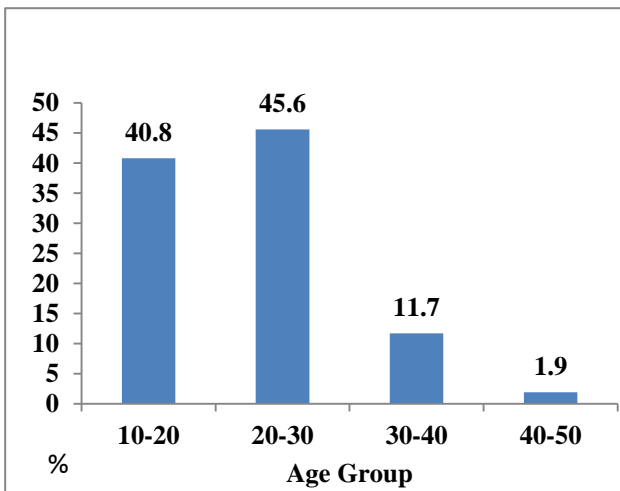


Figure 5: Distribution of substance abuser according to their age of initiation of substance abuse.

### DISCUSSION

India is facing a problem of multiple epidemics with infectious diseases at one end of the spectrum and life-style related diseases at the other end. The diseases affecting mental health, including substance abuse disorders constitutes the remainder of the spectrum. In the present study, all the patients who attended the De-addiction centres were males. While females are largely confined to indoors, the males have a more easy access to illicit substances than females. The lack of female patients at the Deaddiction centres can also be attributed to the poor health seeking behaviour among females, owing to the embarrassment and shame they might face on revealing this behaviour to their families and society.<sup>6</sup> Studies from the South East Asia Region have also reported a male predominance.<sup>7,8</sup>

Worldwide there is a rising trend in the number of people who resort to substance abuse at an early age.<sup>9,13</sup> In our study too, most of the substance users had started taking drugs between the ages of 11 to 20 years. The mean age for the initiation of substance use in our study was  $22 \pm 6$  years which is very similar to that reported in a study from Iran.<sup>14</sup> A comparatively lower mean age of initiation of substance use was reported in studies from Chennai and Faridkot in India, where the mean age was 17.7 years and 15.0 years respectively.<sup>15,16</sup> The mean duration of substance use in our study was 18.1 years which was higher to that reported in a study from Iran.<sup>17</sup> In our study, majority of the patients cited peer pressure (friends) as a reason for initiating substance use.

In present study 14.6% substance abusers were illiterate and 61.2 % of the substance abusers had education up to secondary level of school. In Ahmadabad, India 39.1% patients had completed their higher secondary education.<sup>18</sup> In our study 66.9% of the substance abusers were skilled and semi-skilled workers and only 9.7% of the patients were unemployed. In Karachi, Pakistan

29.6% patients were unemployed; whereas in Chennai, India 31.7% were unemployed.<sup>19,20</sup> A very small number of patients in our study (4.6%) were either divorced or separated which is significantly lower to that reported in a study from Naskar NN et al where 22.3% patients were

divorced or separated.<sup>21</sup> The presence of substance use in the family seems to be a significant factor in our study when compared to studies from Ahmadabad and Ghaziabad, where family history of substance use was observed in 26% and 24.8% patients respectively.<sup>18,22</sup>

**Table 1: Distribution of substance abusers according to type substance use, route and quantity of substance use.**

Sr. No.	Type of substance	Route of substance abuse	Quantity of substance	No. of substance abuser	Percentage	Category wise percentage
1	Alcohol	Oral	1-5 pouch	72	35.0	62.1
			6-10 pouch	40	19.4	
			11-15 pouch	10	4.9	
			16-20 pouch	6	2.9	
2	Charas		1-4 times	6	2.9	9.7
			5-8 times	14	6.8	
3	Alprazolam		<5 tablets	2	1.0	2.9
			>5 tablets	4	1.9	
4	Bhang		<11 glasses	2	1.0	2
			>11 glasses	2	1.0	
5	Cough Syrup		<5 bottles	2	1.0	2
			>5 bottles	2	1.0	
6	Ganja	<6 times	2	1.0	2	
		>6 times	2	1.0		
7	Gutkha	>10 packets	2	1.0	2	
8	Opium	>3 times	2	1.0	2	
9	Cigarette	<5 packets	2	1.0	1	
10	Brown Sugar	Nasal	4-6 times	14	6.8	13.6
			7-9 times	8	3.9	
			9 and above times	6	2.9	
11	White Ink		<6 bottles	4	1.9	2.9
			>6 bottles	2	1.0	

In our study, out of total 206 substance abusers, 128 (62.1%) patients were addicted to alcohol followed by 28 (13.6%) patients were addicted to brown sugar. In a study from Ahmadabad, 70.2% of the patients were addicted to alcohol which is similar to our study findings.<sup>18</sup> The global burden of disease attributable to alcohol and illicit drug use amounts to 5.4% of the total burden of disease.<sup>3</sup> The National Family Health Survey 3 (NFHS-3) data from India showed that in the age group of 15-24 years, the prevalence of alcohol consumption was 1% among females and 19% in males.<sup>23</sup> As per the World Drug Report, Cannabis is the most widely used illicit drug followed by Amphetamine-type stimulants, opioids and cocaine. However, there is a lack of information regarding use of illicit drugs in countries such as China and India, as well as in emerging regions of consumption.<sup>24</sup>

## CONCLUSION

This study shows that youth is falling in vicious trap of drug abuse at early age. There is urgent need of community based studies to estimate the magnitude of this problem and to study the conditional factors influencing the use of substances especially among the adolescents. Health education regarding the harmful effects (physical and psychological) of substance use should be addressed in schools and colleges. Awareness Programs and Camps need to be conducted at community level to address this major public health problem of substance use.

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*Ethical approval: The study was approved by the Institutional Ethics Committee*

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