

A study to assess substance abuse among building construction workers in urban area of national capital region (NCR)

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Abstract

Background: Workers represent half the world's population and are major contributors to economic and social development. Construction workers include about 5 to 10% of the workforce in industrialized countries. This study was undertaken to assess the prevalence rate of substance abuse among construction workers. find out the type of substance abuse among construction workers. **Methodology:** This cross sectional study was conducted in an urban area of NCR . After taking informed consent, 100 construction workers from the six different construction sites of Ghaziabad were interviewed using a predesigned questionnaire. Data analysis was done by using SPSS vs 16 software. **Results:** Out of the total 100 workers a higher proportion was males (71%), belonged to 0-5 education level (51%) and lower socio economic class (54%). Nearly 32.4. % males smoked daily, while 1.4% males consumed alcohol daily. The duration of substance abuse was found to be two years in about 15 % of respondents. Nearly 41% were involved in substance abuse without any specific reason. Majority of those who reported substance abuse belonged to lower class. **Conclusion:** There is a need of creating supportive environment and to create awareness among workers, so that they can quit substance abuse and sustain with right choices for healthy life.

Keywords: Construction workers , substance abuse , socio-economic , urban area.

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Introduction

Workers represent half the world's population and are major contributors to economic and social development [1]. Construction is one of the important industries employing a large number of people on its workforce. The workers engaged in this industry are victims of different occupational disorders and psychosocial stresses. Construction workers of both organized and unorganized sectors are more prone to physical, mental, economic and psychosocial problems in their daily routine life[2]. Overall, the percentage of workers who are reported of alcohol abuse is between 40% and 70 % [3,4]. These are common substances used in India are tobacco, alcohol, cannabis, opium and heroin are the major drugs of abuse in the country[5].

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The World Health Organization (WHO) has estimated that smoking causes about 4 million deaths worldwide each year. This number is expected to exceed 8 million by 2030. More than 80% of these tobacco-attributable deaths will occur in the developing countries[6]. The most of the workers are illiterate and unaware about the harmful effects of Substance abuse and some of these are abuses due to work stress and low socio-economic cultured people. Migration from rural to urban areas necessitates alterations in social status and living conditions that result in behavioral adaptations to urban life. This is also a major cause of substance abuse among construction workers[7]. With this background this study was undertaken with following objectives:

1. To assess the prevalence rate of substance abuse among construction workers.
2. To find out the type of substance abuse among construction workers.
3. To correlate socio-economic & demographic characteristics with substance abuse.

Methodology

Study Design: Cross sectional study.

Study Period: The study will be conducted for a period of one month in January 2016.

Study Area: It will be conducted in the urban area of National Capital Region (NCR).

Sample Size: 100 construction workers will be taken from the six different construction sites of Ghaziabad (15-20 workers from each site based on informed written consent).

Study Population: The population included in the study is building construction workers of both male and female from six different construction sites of Ghaziabad.

Data Collection: It will be conducted with help of semi-structured interview schedule that is pretested and predesigned type of questionnaire with informed consent by those interviewed.

Study Tool: The interview schedule will consist of items on socio demographic profile & economic condition related questionnaire. The substance abuse with its types and effect on their work and health

related questionnaire will be asked to the workers. It will help in final result, conclusion and discussion of the study.

Data Analysis: Data from the proformas was entered into a database using SPSS vs 16 software and analysis was also done by using SPSS vs 16 software. Chi-square test was used for analysis of qualitative data and "P" value less than 0.05 was considered as statistically significant.

Ethical Consideration: The ethical permission is taken from concerned department and the work place where I have to do the study. Administrative permission will be obtained from the concerned authorities of the selected construction sites. Written consent will be obtained from the samples and confidentiality will be maintained.

Result

Out of the total 100 workers a higher proportion was of male gender (71%).

Table 1: Age distribution of workers

Age Group	Frequency	Percent
15-20	4	4.0
21-25	31	31.0
26-30	26	26.0
31-35	15	15.0
36-40	8	8.0
41-45	9	9.0
46 and Above	7	7.0
Total	100	100.0

Table 1 shows a higher proportion of workers were aged 21-25 yrs (31%).

Table 2: Education level of workers

Education Qualification	Frequency	Percent
0-5	51	51.0
5-10	44	44.0
10 and Above	5	5.0
Total	100	100.0

Table 2 shows 0-5 education level was more common (51%).

Table 3: Socio economic status of workers

Socio Economic Status	Frequency	Percent
Middle Class	9	9.0
Lower Middle Class	37	37.0
Lower Class	54	54.0
Total	100	100.0

Table 3 shows lower socio economic class is more common (54%) among workers.

Table 4: Substance Abuse among workers

Substance abuse		Gender	
		Male	
		M	%
Tobacco	No	41	57.7%
	Daily	23	32.4%
	2-4 times/week	0	.0%
	1-3 times / week	0	.0%
	Occasional	7	9.9%
Alcohol	No	37	52.1%
	Daily	1	1.4%
	2-4 times/week	6	8.5%
	1-3 times/Month	2	2.8%
	Occasional	25	35.2%

Nearly 32.4. % males smoked daily, while 1.4% males consumed alcohol daily. (Table 4)

Table 5: Duration of substance abuse

	Since how Long(years)	Frequency	Percent
Worker	No	63	63.0
	1	10	10.0
	2	15	15.0
	3	8	8.0
	5	2	2.0
	6	2	2.0
	Total	100	100.0

The duration of substance abuse was found to be two years in about 15 % of respondents followed by one year in 10% of respondents . (Table 5)

Table 6: Reason related to substance abuse

Reason for taking	Frequency	Percent
Enjoy	8	22.22
Tension	7	19.44
More Reason	6	16.66
No Reason	15	41.66
Total	36	100.0

Table 6 shows that nearly 41% were involved in substance abuse without any specific reason followed by for enjoyment (22.22%) and to relieve tension (19.44%) .

Table 7: Tobacco use in relation to socioeconomic Status

Group		Tobacco			Total
		No	Daily	occasional	
Socio Economic Status	Middle Class	5	3	1	9
	Lower Middle Class	28	6	3	37
	Lower Class	37	14	3	54

Total	70	23	7	100
Chi-Square Value= 2.24, d.f.=4, P value = .0.688				

Majority of those who consumed tobacco belonged to lower socioeconomic class. (Table 7)

Table 8: Alcohol intake in relation to Socio Economic Status

Group		Alcohol					Total
		No	Daily	2-4 times/week	1-3 times/Month	Occasional	
Socio Economic Status	Middle Class	5	0	0	1	3	9
	Lower Middle Class	29	0	1	1	6	37
	Lower Class	32	1	5	0	16	54
Total		66	1	6	2	25	100
Chi-Square = 11.16 Df=8 P-value= 0.93							

Majority of those who consumed alcohol belonged to lower class. (Table 8)

Discussion

In the present study, the percentage of tobacco and alcohol use was found to be 59% and 63%. Lower prevalence was reported by Saxena V *et al* in Dehradun and Sarangi L *et al* in Orissa where the prevalence of substance abuse was found to be 46.9% and 43.4% respectively[8,9]. Nearly 40.5% of medical students self reported substance abuse[10]. In the present study, cigarettes followed by alcoholic beverages were the most commonly abused substances. Similarly, in the studies conducted by Sarangi L *et al* in Orissa and Kokiwar PR *et al* in Andhra Pradesh, tobacco products and alcohol were the most commonly abused substances[9,11]. This may be due to the easy accessibility and availability of these products. In the present study, majority of the substance abusers belonged to lower social class. On the contrary the study conducted by Saxena V *et al* revealed that highest percentage of substance abusers (61.3%) were from upper social class families[8]. In a study conducted by Naskar *et al* in Calcutta, a higher percentage of substance abusers were from business-class families (62.7%).[12] With the growing recognition that most illicit drug users and heavy drinkers are members of the work force, the workplace has become an increasingly significant, though still underutilized, vehicle for the delivery of substance abuse prevention services[13]. There is a need of creating supportive environment and to create awareness among workers, so that they can quit substance abuse and sustain with right choices for healthy life.

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