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"A STUDY TO ASSESS SOCIO-DEMOGRAPHIC PROFILE, JOB CHARACTERISTIC & SELF-REPORTED ILLNESS AMONG THE CONSTRUCTION WORKERS FROM RURAL PART OF CENTRAL INDIA."

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ABSTRACT There is estimated 11.6 million workforce working as construction workers. The construction workers are more vulnerable to socio-economic distress and many health issues. The present study was conducted on the construction worker residing in Sawangi (Meghe) area of Wardha district, Maharashtra in Central India. There were total 200 construction workers enumerated in the area. Out of 200 study participants 133 were male & 67 were female subjects. About 83% study subjects were Hindu by religion. Maximum 54.5% subjects were belonging to lower class followed by 33.5% in lower middle class by modified B.G. Prasad Classification. About 63% study subjects were labourer and 51% subjects were illiterate. Maximum 48.5% study subjects were having musculoskeletal pain as their health issue while, 24.5% subjects were not having any health issue.

KEYWORDS : Construction Workers, Job Characteristics, Musculoskeletal Pain.

INTRODUCTION

There are around 11.6 million construction workers in India as per an estimate hence it is important to measure their morbidities and implement measures to promote health and well-being[1]. Construction workers are more vulnerable to the health issues. Workers represent half the world's population and are major contributors to Socio-economic development. In India, nearly two-thirds of the contribution to the net domestic product is by the unorganized sector. The workers' living conditions are poor with denial of basic amenities to maintain the standard of living, making them prone to health problems [2]. Rural construction workers mostly are the migrant population coming from the distant place. This population is vulnerable for various health hazards and injuries.

Hence a cross sectional Study was planned to assess the Socio demographic profile and health Problems of construction workers working in Sawangi (Meghe) area so as to implement necessary measures.

AIM & OBJECTIVE

Assessment of Socio-demographic profile, job characteristics and self-reported illness in the rural construction workers.

MATERIAL & METHODS

Study Area – The present study was conducted in workers residing in Sawangi (Meghe) of Wardha district in Central India

Study Population – It comprised of all construction workers residing in Sawangi (Meghe) of Wardha district in central India.
Study Design – Community based Cross-sectional Study
Duration of study - Jan 2018 to April 2018.

Sample size and sampling technique – We used Complete enumeration method to collect the sample size. All 200 construction workers enumerated from the residential colony of workers were included in the present study. The data was collected using interview method with a semi-structured questionnaire that was divided into the following parts, namely (1) socio-demographic characteristics; (2) job characteristics including work type, nature, and duration; (3) various self-reported illness. All construction workers were contacted in their lunch time and were interviewed using semi-structured questionnaires.

RESULTS –

Table No. 1 – Socio-demographic Profile of the study participants.

Socio-demographic profile	Number (n=200)	Percentage
Sex		
Male	133	66.5%
Female	67	33.5%
Age (in years)		
< 25 years	20	10.0%
26 - 30 years	68	34.0%
31 – 35 years	107	53.5%
> 36 years	05	2.5%
Religion		
Hindu	166	83.0%
Buddhist	34	17.0%
Marital status		
Married	163	81.5%
Unmarried	33	16.5%
Separate / Divorce	04	2.0%
Education		
Illiterate	104	52.0%
Primary	64	32.0%
Secondary	32	16.0%
Socioeconomic class *		
Class II	06	3.0%
Class III	18	9.0%
Class IV	67	33.5%
Class V	109	54.5%

*(As per Modified B.G. Prasad classification 2017)[3]

There were total 200 construction workers working in Sawangi (Meghe) area. Out of all construction workers, 133 were male and 67 were female. Maximum 53.5% study subjects were in the age group of 31 to 35 years followed by 34% in the age group of 26 to 30 years. About 83% study population were Hindu by religion and 17% were Buddhist by religion. When asked for the marital status, 81.5% study subjects were married followed by 16.5% unmarried study subjects. Also, about 2% study subjects were either separated or divorced from their partner.

About 52% study population were illiterate while 32% & 16% study population were educated up to primary and secondary level respectively. As per Modified B.G. Prasad Classification 2017, maximum 54.5% study subjects were belonging to class V of socio-economic status followed by 33.5% belonging to class IV of socio-economic status. While, about 3% study subjects were belonging to class II of socio-economic status.

Table No. 2 – Job characteristics & Self-reported illness

	Number	Percentage
Job Characteristics (n=200)		
Laborer	126	63.0%
Assistance Service	32	16.0%
Plumber / Electrician	29	14.5%
Carpenter	13	6.5%
Years of Working in Construction Industry(n=200)		
< 2 Years	36	18%
2-5 Years	56	28%
>5 Years	108	54%
Self-reported Illness (n=200)		
Musculoskeletal Pain	97	48.5%
Respiratory Problems	36	18%
HTN/DM	33	16.5%
Menstrual problem **(n= 67)**	29	43.2%
Dermatological Problems	16	8.0%
Other	23	11.5%
No Health Problem	49	24.5%

When asked for the various jobs of the construction workers, about 63% were found to be labourer by job followed by 16% study subjects who were providing assistance services at the work place. Also, about 14.5% study subjects were plumber or electrician by work and 6.5% were carpenter.

About 108 (54%) study participants were working from more than 5 years in construction industry followed by 28% working from 2 to 5 Years of duration.

On inquiring about their self-reported illness, about 48.5% study subjects reported musculoskeletal pain as their most common self-reported illness followed by 18 % and 16.5% subjects reported they were suffering from Respiratory Problems and Hypertension/Diabetes respectively. Also, out of all 67 female study participants about 29 (43.2%) reported to have menstrual problems in the form of dysmenorrhoea, irregular menses, etc. About 24.5% study subjects did not report any illness at the time of interview.

About 11.5% of the study participants reported to be suffering from other health ailments like Fever, Acid peptic disease, Upper respiratory tract complaints etc.

TABLE NO. 3 – Association between Job characteristics & Presence of self-reported illness.

Job Characteristics	Self-reported Illness		Total
	Present	**Absent**	
Labourer	112 (88.9%)	14 (11.1%)	126 (100.0%)
Assistance services	18 (56.2%)	14 (43.8%)	32 (100.0%)
Plumber/Electrician	16 (55.2%)	11 (44.8%)	27 (100.0%)
Carpenter	05 (38.5%)	08 (68.5%)	13 (100.0%)
Total	151 (75.5%)	49 (24.5%)	200 (100.0%)
$X^2 = 34.741$ df = 3 p-value < 0.001			

From the above table we came to know that out of all labourer 88.9% were having self-reported illness. Also, more than 50% of study subject belong to Assistance services and plumber/electrician were having self-reported illness. While, out of all carpenter study subjects only 38.5% reported illness. The association between job characteristics and presence of self-reported illness was found to be statistically highly significant. (p-value <0.001). This indicate that more strenuous the job, more chance of having the health problem.

Also, it was found that all the study subjects live in the kaccha house provided by contractor bringing them here for work, all the study participants go in the field for defecation and all study participants told that they were provided with all safety equipment when ever needed at working place (Non-tabulated data).

DISCUSSION

In the present study, about 66.5% study participants were male and 33.5% study participants were female. This difference between gender may be due to requirement of male at construction site for some specific works. Also, maximum 54.5% were belong to Lower socio-economic status according to Modified BG Prasad classification 2017 followed by 33.5% in Lower middle class socio-economic status. This means that more than 80% study subjects were earning less than Rs. 2000/month. The study conducted by Tiwari & etal showed that 57.2% study participants were earning less than 5000 per month.[4]

Also, about 63% in the present study were labourer, while 16% study participants were assistance service provider or helper which is contrary to the results of Tiwari & etal[4] where majority 48.2% were helper class. This difference in the result may be due to different requirement of different working sites. When enquired about the self-reported illness maximum 48.5% reported to have musculoskeletal pain as their health problem, while 16.5% were suffering from Hypertension/Diabetes. Also, out of all female more than 40% had menstrual problem in the form of dysmenorrhea, irregular menstrual cycles. These results were similar to the results of study conducted by Tiwai & etal[4] and Mohopatra[5] where most of the study participants present musculoskeletal pain as their common problem.

CONCLUSION

The present study was conducted on the rural construction worker working in Sawangi (Meghe) in Rural Central India. Maximum construction was male by gender. More than fifty percent study participants were belonging to the Lower socio-economic class by Modified B.G. Prasad Classification 2017. Maximum study participants were in the age group of 31 to 35 years of age and maximum were working in the construction industry for more than 5 years. Out of all rural construction workers maximum worker were labourer by followed by assistance service provider. Maximum study participants reported musculoskeletal pain as their most common self-reported illness. Also, more than forty percent female participants were having menstrual problem. The association between job characteristics of study participants and the presence of self-reported illness were found to be statistically highly significant.

Conflict of Interest : Nil

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