

A Study On Impact Of Habits Of Contract Workers On Occupational Health Issues Of Construction Industry In Tamilnadu

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Abstract

The researchers studied the impact of frequency of various habits of contract workers of construction industry in Tamilnadu on their health issues. The researcher selected five districts from the state of Tamilnadu namely Cuddalore district from North, Erode district East, Vellore district from East, Thoothukudi district from South and Tiruchirapalli district from central Tamilnadu. The sample size of the study is 385 contract workers of construction industry. A well-structured interview schedule was prepared and served to collect primary data from the sample respondents. The study found that the habit 'not wearing safety equipment' was the most frequent habit of workers. The habit of 'sleepless' was the least frequent habit of the contract workers. Bone and muscle related problems were the most frequent health issue faced by the contract workers of construction industry. Hypertension was the least frequent problem. It was also evidenced that the frequency of the habits of 'smoking', 'not wearing safety equipment' and 'getting angry' had significant and positive impact on breathing problems. The frequency of the habits of 'consuming pan masala', 'not wearing safety equipment', 'sleepless' and 'not following safety instructions' had significant and positive impact on bone and muscle problems. The frequency of the habits of 'not wearing safety equipment', 'not washing hands etc.' and 'not following safety instructions' had significant and positive impact on skin related problems. The frequency of the habits of 'smoking', 'consuming liquor', 'sleepless' and 'getting angry'

had significant and positive impact on hypertension problem. The frequency of the habits of 'smoking', 'consuming liquor', 'consuming pan masala', 'having unhealthy food', 'sleepless' and 'getting angry' had significant and positive impact on ENT and neurological problem.

Key Words: Habits, Occupational health issues, impact, construction and contract workers.

Introduction

Economic development is very important for the growth of any country. Economic development is possible, when there is adequate infrastructure in the country. Infrastructure development can be made by construction industry. Hence construction industry is playing a pivotal role in infrastructure development such as, construction of buildings, bridges, roads etc. Apart from these, house is one of the basic needs for people, this need is fulfilled by the industry. Hence, this industry is considered as evergreen industry. The government and also private sector are developing infrastructure in the country. Hence this industry is providing a considerable employment opportunity to people both directly and indirectly. This industry needs a vast number of unskilled and semi-skilled workers rather than a skilled workers. Construction industry uses many types of raw materials for construction such as, cement, sand, brick, rod, chemicals etc., majority of them are made by chemicals and they make gradual impact on human health who are spending long period of time in the work sites. Apart from these, workers in the industry are having some habits such as, smoking, consuming liquor, consuming pan masala, having unhealthy foods etc. Frequency of these habits of workers may vary worker from worker. Frequency of these habits may severe the occupational health issues of the workers.

Generally workers in construction industry faces the problems related to breathing, bone and muscle problems, skin problems, hypertension and ENT and neurological problems. Workers in construction industry faces the prevalence of past morbidity like tuberculosis (1%), malaria (13.7%) and jaundice (10.6%), typhoid (3.4%) were higher than the general population in both groups without any statistically significant differences between them. Prevalence of injury was higher

among civil work group (17.2% and 6.6%.) Current fever, respiratory infections, eye disease were higher among Group I, skin and musculo-skeletal problems were similar (Jayakrishnan T et al, 2013). Musculoskeletal disorders were very common among the construction workers. Workplace injuries were mainly due to improper use of personal protective equipments (Biswas G, Bhattacharya A & Bhattacharya R, 2016). Occupational hazards among construction workers in vary from the very minor spells of aches and pains to severe and even potentially fatal disorders. Major occupational health problems included musculoskeletal disorders, hearing loss, vibration, and contact dermatitis. These problems were preventable through pretesting equipment, products and processes and exposure monitoring and risk assessment are an essential component of occupational health and safety programmes (Subha T, Sathya M & Prakash A 2018). Women in construction industry faced health related problems, most of them have urinary tract infection and musculoskeletal problems, backache, maximum number of women pointed skin problems and respiratory related problems are the major health problems (Banu R & Sampathkumar S (2018). Immigrant workers among these were 55%. 79% workers had habits of smoking or alcohol consumption or both. The percentage of morbidity among workers was 78. Of the various types of morbidities, musculoskeletal problems were the most common illness with 69% prevalence followed by the respiratory problems with the percentage of 59, skin problems in 52%, and ocular morbidity in 51% (Kamalakannan M & Parasuraman G, 2019). The current research work has intended to analyse the impact of frequency of habits on occupational health issues faced by contract construction workers in the state of Tamilnadu.

Literature Review

Kumar M.P. and Gopalakrishnan S (2020) in their study evidenced that about 63.9% were smokers, 62.9% consuming alcohol and 57.6% use other form of tobacco. Nearly 69.9% were pre-hypertensive and 15% were hypertensive. About 87.4% had normal BMI, 5.3% were underweight and 7% were overweight. Nearly 78.8% of workers sought medical care and they preferred allopathic system (97.7%) for treatment. 87.4% preferred treatment from private hospitals while 8.8% preferred to get treatment at the construction site itself and remaining goes to government hospitals for treatment. Most workers (95.0%) preferred outpatient's treatment. **Supriyatna H, Kurniawan W and Purba**

H.H (2020) in their study concluded that there were two sources of risk that are very influential namely risks originating from internal and external, both viewed technically and non-technically. The study also showed that the use of 4D-BIM technology, the use of personal protective equipment, the use of construction tools according to their permits and the non-technical results, namely awareness to work safely, knowledge and culture about occupational safety and health, construction building projects had the highest accident rates compared to other industrial projects. **Venugopal V et al (2020)** in their study found that to heat stress as a health and productivity risk factor that could have long-term and irreversible health impacts. In-depth assessments are urgently needed to develop scientifically sound preventative interventions and protective labour policies to avert the adverse occupational health and productivity consequences for millions of workers globally, thereby aiding poverty reduction.

Joshi SK (2021) in their study stated that in Nepal, during the COVID-19 pandemic, health workers have to take the risk of infecting themselves while providing care for the patients. This led to the infection of thousands of health workers and also lost quite a few healthcare workers in the line of duty in Nepal. **Cedstrand E et al (2022)** found positive effect of the intervention components on professionals' role clarity. The pandemic appeared to have negatively affected stress and psychosocial working conditions. The study concluded that that co-creating occupational health interventions could be one solution for improved implementation fidelity. More studies were needed to evaluate these intervention components. They also recommend researchers of future intervention studies consider using missing not at random, sensitivity analysis. **Magalhaes L.M.C.A et al (2022)** in their study evidenced that the number of lost days of work per worker and the frequency of licenses increased despite the decrease in the Absenteeism Duration Index and stabilization of the Frequency of Medical Workers. As for the adherence of the workers to the Periodic Medical Examinations, it was decreasing, with a higher percentage in the year 2012.

Bondebjerg A et al (2022) in their study stated that under the supervision of review authors, two review team assisted independently to screen titles and abstracts to exclude studies that are clearly irrelevant. Studies considered eligible by at least one assistant or studies where there is insufficient information in the title and abstract to judge eligibility was

retrieved in full text. The full texts screened independently by two review team assistants under the supervision of the review authors. Disagreement of eligibility was resolved by the review authors. **Wang Y et al (2022)** found that the OHSML of most listed companies in China's energy industry was still at a low-end level. During 2009–2019, although the annual OHSML of listed companies in China's energy industry showed an upward trend, the growth rate was low, and even the OHSML of some listed companies in the energy industry showed the characteristics of reduced fluctuations. From the perspective of the PFT three-dimensional subsystem level of OHSM, the evaluation level of the governance framework subsystem was the highest, whereas the evaluation level of the management process subsystem and the management effectiveness subsystem were relatively low. **Nnaji A (2022)** in their study found that the hypothesis, Employees attitude towards the use of personal protective equipment was significantly and positively related to Employers involvement in OHS issues. Organizational commitment towards OHS was significant and positively related to Environmental impact. This indicated the need for more enforcement from management on the use of personal protective equipment, and conduct regular safety checks.

Objectives

The study has been conducted with the following objectives.

- To study the frequency of various habits of contract workers of construction industry in the state of Tamilnadu.
- To study various health issues faced by contract workers of construction industry in the state of Tamilnadu and
- To evidence the impact of the frequency of various habits of contract workers on health issues faced by them.

Methodology

The researchers has made an attempt to study the impact of frequency of various habits of contract workers of construction industry in Tamilnadu on their health issues. For this purpose, the researcher selected five districts from the state of Tamilnadu namely Cuddalore district from North, Erode district East, Vellore district from East, Thoothukudi district from South and Tiruchirapalli district from central Tamilnadu. The sample size of the study is 385 contract workers of construction

industry from the study area. The sample respondents were selected using convenient sampling method. A well-structured interview schedule was prepared and served to collect primary data from the sample respondents. The researchers applied appropriate statistical tools to analyse the data such as, Cronbach's Alpha test to test the reliability of the interview schedule, Factor analysis for reducing factors and regression analysis to know the impact of frequency of habits on the health issues of contract workers in construction industry in the study area.

Results and Discussion

This part of the research paper presents the results and discussion of frequency of habits of contract workers and their impact on various health issues faced by them. Workers in construction industry are having many habits such as smoking, consuming liquor, consuming pan masala, betel and tobacco, consuming abnormal number of tea / coffee, nor wearing safety equipment, having unhealthy food, sleepless, not washing hands etc, not following safety instructions, getting angry while working. But the frequency of these habits may vary from worker to worker and according to its frequency, it affects the health of the workers. The following table brings out the results of descriptive statistics of frequency of habits of contract workers in construction industry in the study area. It shows the results of mean, standard deviation, coefficient of variation and mean rank of the habits.

Table 1: Descriptive Statistics of Frequency of Habits of Contract Workers

Sl. NO.	Habits	$\bar{x}$	Σ	CV	Mean Rank
1.	Smoking	2.3	0.9	39.3	2
2.	Liquor	2.2	1.1	50.3	3
3.	Pan masala	2.0	0.8	39.3	6
4.	Betel & Tobacco	1.9	0.7	36.7	7
5.	Consuming abnormal number of tea / coffee	2.3	1.0	42.9	2
6.	Not wearing safety equipment	2.4	1.1	46.2	1
7.	Having unhealthy food	2.1	0.9	41.6	4
8.	Sleepless	1.5	0.8	49.4	10
9.	Not washing hands etc.	1.7	0.8	44.3	9
10.	Not following safety instructions	2.0	1.0	50.2	5
11.	Getting angry while working	1.8	1.0	53.7	8

Source: Primary Data

Table 1 exhibits that the calculated mean value of the habit 'not wearing safety equipment' was highest at 2.4 and it was ranked first among the all habits of contract workers. Followed by, the mean value of the habits 'consuming abnormal number of tea / coffee' and 'smoking' was high at 2.3, these factors are ranked 2nd. Hence, not wearing safety equipment, smoking and consuming abnormal number of tea / coffee were the top habits of the contract workers of construction industry in the study area. The habits of consuming liquor and having unhealthy foods are also found to be high in the study area. The calculated mean value of the habit 'sleepless' was lowest at 1.5, it was ranked 10th and therefore the habit of sleepless was the least frequent habit of the contract workers, followed by 'not washing hands etc.' and 'getting angry while working', their calculated mean values were 1.8 and 1.7 respectively and they were ranked 9th and 8th respectively.

Health Issues Faced

The frequency of occupational health issues faced by the contract workers are being collected from the respondents using five point scalling technique. Frequency was categorized into five such as, problems faced continuously, frequently, occasionally, rarely and never faced. The researcher identified 21 various occupational health problems faced by contract workers in construction industry in Tamilnadu. With the view of reducing these number of factors, the researcher applied factor analysis. This portion of the thesis presents the results of the factor analysis on occupational health problems faced by contract workers in construction industry in the study area. The results of the communalities of the statements before and after the factor extraction are presented in the following Table. The initial communality i.e., before extraction is assumed to be 1. However, after factor extraction the communality depend upon the amount of variance available for the analysis of the selected variable. Individually, 100 percent variance is available for analyzing the statements/variables. However, after factors are extracted, the same variance is lost in the process. Hence, it is required to analyze the remaining variance available for the analysis. The individual variances are presented in the following communalities. It is the proportion of variance explained by the variables after extraction by factor analysis.

Table 2: Communalities of Variables of Occupational Health Problems Faced by Contract Workers in Construction Industry

Sl. No.	Factors	Initial	Extraction
1	Shoulder pain	1.000	0.734
2	Back-pain	1.000	0.544
3	Breathing problem	1.000	0.607
4	Injuries	1.000	0.550
5	Skin allergies	1.000	0.498
6	Head ache	1.000	0.629
7	Hair falling	1.000	0.658
8	Wrist pain	1.000	0.572
9	Neck hurt	1.000	0.608
10	Body pain	1.000	0.532
11	Eye sight problems	1.000	0.729
12	Hypertension	1.000	0.611
13	Hearing problems	1.000	0.456
14	Deceases due to short sleep	1.000	0.661
15	Bone fractures due to falling of materials etc.	1.000	0.545
16	Feeling high stress	1.000	0.511
17	Neurological problems	1.000	0.643
18	Lungs problems like Asbestosis	1.000	0.552
19	Asthma	1.000	0.597
20	Knee pain	1.000	0.551
21	Finger pain	1.000	0.593

Table 2 depicts that the individual variances of the variables were high, which were a statistically significant range. The results indicate that the calculated values of extracted communalities of all the variables are greater than 0.5. The extracted communalities show the goodness of fit of the factor analysis. Higher the value of extracted communalities of the variables, the better it is. Hence, for factor analysis, all the variables can be taken. The factor analysis applies the process of Principle Component Analysis (PCA) with the view of identifying and estimating the eigenvalues of principle components. After calculating the Eigen values of the components, they are arranged in descending order with respect to calculated Eigen values. According to Kaiser's criterion, the factors having Eigen value more than 1 are retained for the study. This leads to the reduction of factors as shown in the Table below. Factor analysis is a statistical tool used to describe the variability among observed and correlated variables in terms of a potentially lower number of unabsorbed factors. It is mainly used to reduce the number of variables taken by the researcher. On the basis of inter correlation

between the variables and several the factors are grouped one. The researcher identified 21 occupational health problems faced by contract workers in construction industry of the state of Tamilnadu. In order to reduce and group the inter correlated variables into one, factor analysis was applied and the results of Eigen values, percentage of variance, cumulative percentage for initial Eigen values and rotation sums of squared loadings are presented in the following table.

Table 3: Total Variance Explained: Occupational Health Problems Faced

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% Variance	Cumulative per cent	Total	%Variance	Cumulative per cent
1	1.432	11.817	11.817	1.432	11.817	11.817
2	1.358	10.465	22.282	1.358	10.465	22.282
3	1.300	9.819	32.101	1.300	9.819	32.101
4	1.256	9.781	41.882	1.256	9.781	41.882
5	1.204	9.732	51.614	1.204	9.732	51.614
6	0.998	7.436	59.050			
7	0.989	5.320	64.370			
8	0.968	5.148	69.518			
9	0.926	4.149	73.667			
10	0.907	3.619	77.286			
11	0.893	3.426	80.712			
12	0.845	3.257	83.969			
13	0.834	3.114	87.083			
14	0.827	2.228	89.311			
15	0.804	2.018	91.329			
16	0.782	1.805	93.134			
17	0.771	1.714	94.848			
18	0.767	1.652	96.500			
19	0.729	1.271	97.771			
20	0.692	1.193	98.964			
21	0.638	1.036	100.000			

Extraction Method: Principal Component Analysis.

Source: Primary Data

Table 3 shows the results of factor analysis in terms of Eigen values at initial stage and after the process of rotation method for the occupational health issues faced by contract construction workers in in the study area. The results indicated that all the 21 factors were reduced into 5 factors by factor analysis by following rotation method, i.e. which are having

Eigen value of more than 1. All the 5 factors explained 51.614 per cent of variance of the included statements. It is assumed that the explained variance is sufficient and the extracted variables can be used for further analysis. For the purpose of modifying the extracted components representing the selected statements (21 statements or variables), orthogonal rotation (Varimax) is applied. The Rotated Component Matrix (RCM) shows the factor loading of each variable to the extracted factors. The factor loadings can be defined as the correlation between the factors and the variables. It is assumed that every variable considered for the study must have significant factor loading to only one factor and insignificant factor loadings to all other extracted factors. Its results along with correlation under rotated matrix are presented in Table ///.

Table 4 :Occupational Health Issues Faced by Contract Workers in Construction Industry (Rotated Component Matrix^a)

Sl. No.	Occupational Problems Faced	Component					Factor Name
		1	2	3	4	5	
1	Breathing problem	0.842					Breathing Related Problems
2	Lungs problems like Asbestosis	0.786					
3	Asthma	0.771					
4	Shoulder pain		0.854				Bone and Muscle Related Problems
5	Back-pain		0.843.				
6	Injuries		0.813				
7	Wrist pain		0.806				
8	Neck hurt		0.742				
9	Body pain		0.716				
10	Bone fractures		0.697				
11	Knee pain		0.681				
12	Finger pain		0.652				Skin Related Problems
13	Skin allergies			0.759			
14	Hair falling			0.743			Hypertension
15	Head ache				0.786		
16	Hypertension				0.752		
17	Feeling high stress				0.688		ENT and Neurological Problems
18	Eye sight problems					0.806	
19	Hearing problems					0.793	
20	Deceases due to short sleep					0.742	
21	Neurological problems					0.655	

Table 4 indicates that the results of factor analysis for the occupational health issues faced by contract workers in

construction industry in the study area. 21 factors were reduced into five factors by using factor analysis. The factors Breathing problem, Lungs problems like Asbestosis and Asthma were highly correlated with factor 1, hence they were grouped into one and they were labelled as “Breathing Related Problems”. The factors Shoulder pain, Back-pain, Injuries Wrist pain, Neck hurt, Body pain, Bone fractures, Knee pain and Finger pain were highly correlated with factor 2, hence they were grouped into one and they were labelled as “Bone and Muscle Related Problems”. The factors, Skin allergies and Hair falling were highly correlated with factor 3, hence they were grouped into one and labelled as “Skin Related Problems”. The factors Head ache, Hypertension and Feeling high stress were highly correlated with factor 4, hence they were grouped into one and named as “Hypertension”. The factors Eye sight problems, Hearing problems, Deceases due to short sleep and Neurological problems hence they were grouped into one and it was labelled as “ENT and Neurological Problems”.

Descriptive Statistics of Occupational Health Issues

The researcher identified a total of 21 occupational health issues may affect the contract workers of construction industry in the state of Tamilnadu. In order to reduce number of factors, Factor analysis was applied and the statistics reduced all the 21 factors into 5, namely, breathing related problems, bone and muscle related problems, skin related problems, hypertension and ENT and Neurological problems. The following table presents the results of descriptive statistics of the five occupational health issues faced by contract workers of construction industry in the study area. This statistics include mean, standard deviation and coefficient of variation.

Table 5: Descriptive Statistics of Occupational Health Issues Faced by Contract Workers in Construction Industry

Sl. No.	Factors	$\bar{x}$	σ	CV	Mean Rank
1.	Breathing Related Problems	3.15	0.83	26.32	2
2.	Bone and Muscle Related Problems	3.40	0.43	12.54	1
3.	Skin Related Problems	3.00	0.97	34.74	3
4.	Hypertension	2.75	0.80	28.99	5
5.	ENT and Neurological Problems	2.79	0.67	22.23	4

Source: Primary Data

The results of table 5 show that the calculated mean value of the bone and muscle related problems was highest among all

the five problems, which stood at 3.40, it was ranked first and therefore bone and muscle related problems were the most frequent health issue faced by the contract workers of construction industry in the study area. Followed by, the calculated mean value of breathing related problems and skin related problems were also high at 3.15 and 3.00 respectively, they were ranked 2nd and 3rd respectively, hence breathing related problems and skin related problems were also found to be frequent health issue for contract workers of construction industry in the study area. The calculated mean value of the problem of hypertension was lowest at 2.75 and it was ranked last (5th), hence the problem of hypertension was the least frequent problem for contract workers of construction industry in the study area, followed by ENT and neurological problem was also found to be least frequent problem for the respondents, since its calculated mean value was low at 2.79 and it was ranked 4th. The results of standard deviation and coefficient of variation showed that there was low level of deviation in the frequency of the problems faced by the respondents from their respective mean values.

Impact of Habits of Workers on Occupational Health Issues

The impact level of occupational health issues of workers in construction industry may vary on the basis of their habits. The study also analysed various habits of contract workers in the study area. Frequency of the bad habits may impact the severeness of occupational health issues of the workers. Hence the researcher studied the impact of various habits of the contract workers on severeness of occupational health issues, for this purpose regression analysis was applied and the results are presented in the following tables. For this purpose, the following null hypothesis was framed.

Ho : There is no significant impact of the habits of the contract workers on health issues faced by them.

To make the test the following regression model was framed and applied.

$$IHI = \alpha + \beta HB + \epsilon$$

Where, IHI indicates Impact on Health Issues, α indicates constant, HB indicates Habits of the contract workers and ϵ indicates error term. Table 6 gives the results of ANOVA and adjusted R^2 of the impact of various habits of contract workers on various health issues faced by them.

Table 6: ANOVA and Adjusted R² of Impact of Habits on Various Health Issues

Health Issues	Model	F	Sig.	R ²
Breathing related problems	1	14.107	0.000	0.13
Bone & Muscle Problems	2	7.935	0.000	0.09
Skin related problems	3	5.019	0.000	0.12
Hypertension	4	5.776	0.000	0.10
ENT & Neurological problems	5	8.998	0.000	0.11

a. Dependent Variable: Breathing Related Problems

b. Predictors: (Constant), Habits of Workers

It could be known from table 6 that the calculated F-value of ANOVA under regression analysis of testing the impact of various habits of contract workers on various health issues faced by them is fit for the study, their calculated F statistics were statistically significant at 1 per cent level. Each variable explained the health issues of contract employees from 9 to 13 per cent. Table 7 brings out the results of regression coefficient of frequency of habits on health issues of contract workers in construction industry in the state of Tamilnadu.

Table 7: Impact of Habits on Health Issues of Contract Workers

Factors	Nature of Problems Faced									
	Breathing		Bone & Muscle		Skin		Hypertension		ENT & Neurological	
	Beta	t	Beta	t	Beta	t	Beta	T	Beta	t
(Constant)		2.550 (0.011)		2.684 (0.008)		3.637 (0.000)		3.909 (0.000)		2.147 (0.032)
Smoking	0.221	5.406 (0.000)	0.014	0.273 (0.785)	0.004	0.083 (0.934)	0.312	7.223 (0.000)	0.416	7.296 (0.000)
Liquor	0.093	1.617 (0.107)	0.077	1.328 (0.185)	0.039	0.678 (0.498)	0.268	3.181 (0.008)	0.375	6.304 (0.000)
Pan masala	-0.013	-.243 (0.808)	0.306	4.112 (0.000)	-0.006	-0.118 (0.906)	-0.020	-0.366 (0.714)	0.411	7.204 (0.000)
Betel & Tobacco	-0.082	-1.341 (0.181)	-0.078	-1.281 (0.201)	-0.058	-0.949 (0.343)	-0.059	-0.966 (0.335)	-	-1.345 (0.179)
Tea / coffee	-0.057	-1.037 (0.300)	-0.053	-0.959 (0.338)	-0.072	-1.295 (0.196)	-0.071	-1.284 (0.200)	-	-0.973 (0.331)
Not wearing safety equipment	0.124	4.467 (0.004)	0.338	3.729 (0.027)	0.338	6.729 (0.000)	-0.047	-0.905 (0.366)	-	-0.730 (0.466)

Unhealthy food	0.086	1.525 (0.128)	0.096	1.703 (0.089)	0.111	1.979 (0.059)	0.051	0.901 (0.368)	0.189	3.588 (0.003)
Sleepless	-0.063	-1.124 (0.262)	0.266	6.158 (0.000)	-0.046	-0.822 (0.411)	0.429	6.514 (0.000)	0.270	4.229 (0.000)
Not washing hands	-0.048	-.884 (0.377)	-0.036	-0.659 (0.510)	0.436	3.659 (0.020)	-0.043	-0.795 (0.427)	- 0.048	-0.883 (0.378)
Unfollowing safety instructions	-0.064	-1.149 (0.251)	0.251	5.916 (0.000)	0.151	5.916 (0.000)	-0.026	-0.455 (0.649)	- 0.053	-0.945 (0.345)
Getting angry	0.217	3.230 (0.018)	-0.014	-0.258 (0.796)	-0.046	-0.885 (0.377)	0.433	6.633 (0.000)	0.207	6.136 (0.000)

Note: Figures in bracket refers to p-value.

a. Dependent Variable: Health Issues

Table 7 shows that frequency of smoking habits, Not wearing safety equipment and Getting angry had positive impact on breathing problems faced by them, since its calculated regression coefficients (0.221, 0.124 and 0.217 respectively) were significant at 5 per cent level, hence the null hypothesis was rejected. The habits of consuming liquor, pan masala, betel and tobacco, having abnormal tea / coffee, having unhealthy food, sleepless, not washing hands etc. and not following safety instructions did not have significant impact on breathing problems faced by contract workers of construction industry in the study area. Frequency of the habit of consuming pan masala, Not wearing safety equipment, sleepless and Unfollowing safety instructions of contract workers in the study area had positive impact on bone and muscle related problems faced by them, since their calculated regression coefficients (0.306, 0.338, 0.266 and 0.251 respectively) were significant at 5 per cent level, hence the null hypothesis was rejected. The habits of smoking, consuming liquor, betel and tobacco, having abnormal tea / coffee, having unhealthy food, not washing hands etc. and getting angry did not have significant impact on bone and muscle problems faced by contract workers. Frequency of the habit of 'not wearing safety equipment', Not washing hands and Unfollowing safety instructions had positive impact on skin related problems faced by them, since their calculated regression coefficients (0.338, 0.436 and 0.151 respectively) were significant at 5 per cent level, hence the null hypothesis was rejected. The habits of smoking, consuming liquor, pan masala, betel and tobacco, having abnormal tea / coffee, having unhealthy food, sleepless, and getting angry did not have significant impact on skin related problems faced by contract workers.

Frequency of the habit of smoking, consuming liquor, sleepless and getting angry of contract workers had positive impact on hypertension problem faced by them, since their calculated regression coefficients (0.312, 0.268, 0.429 and 0.433 respectively) were significant at 5 per cent level, hence the null hypothesis was rejected. The habits of consuming pan masala, betel and tobacco, having abnormal tea / coffee, not wearing safety equipment, having unhealthy food, not washing hands etc. and not following safety instructions did not have significant impact on hypertension problem faced by contract workers of construction industry in the study area. Frequency of the habit of smoking, consuming liquor, having unhealthy foods, sleepless and getting angry had positive impact on ENT and neurological problems faced by them, since their calculated regression coefficients (0.416, 0.375, 0.189, 0.270 and 0.207 respectively) were significant at 5 per cent level, hence the null hypothesis was rejected. The habits of consuming betel and tobacco, having abnormal tea / coffee, not wearing safety equipment, not washing hands etc. and not following safety instructions did not have significant impact on ENT and neurological problems faced by contract workers of construction industry in the study area.

Conclusion

Workers in construction industry have more probability to have occupational deceases, since the nature of materials used in the industry. Severity and earliness of occupational deceases of construction workers is high depend on frequency of some habits of workers such as smoking, consuming liquor etc. The study analysed the frequency of habits of workers and their impact on occupational health issues faced by them. The study found that the habit 'not wearing safety equipment' was the most frequent habit of workers. Followed by the habits of 'consuming abnormal number of tea / coffee' and 'smoking'. The habits of consuming liquor and having unhealthy foods are also found to be high. The habit of 'sleepless' was the least frequent habit of the contract workers, followed by 'not washing hands etc.' and 'getting angry while working'. Bone and muscle related problems were the most frequent health issue faced by the contract workers of construction industry in the study area, followed by, breathing related problems and skin related problems. Hypertension was the least frequent problem for contract workers of construction industry in the study area, followed by ENT and neurological problems. It was also evidenced that the frequency of the habits of 'smoking',

'not wearing safety equipment' and 'getting angry' had significant and positive impact on breathing problems. The frequency of the habits of 'consuming pan masala', 'not wearing safety equipment', 'sleepless' and 'not following safety instructions' had significant and positive impact on bone and muscle problems. The frequency of the habits of 'not wearing safety equipment', 'not washing hands etc.' and 'not following safety instructions' had significant and positive impact on skin related problems. The frequency of the habits of 'smoking', 'consuming liquor', 'sleepless' and 'getting angry' had significant and positive impact on hypertension problem. The frequency of the habits of 'smoking', 'consuming liquor', 'consuming pan masala', 'having unhealthy food', 'sleepless' and 'getting angry' had significant and positive impact on ENT and neurological problem.

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