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Original Research Article

Health seeking behaviour among construction workers in Kancheepuram district, Tamil Nadu: a descriptive study

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ABSTRACT

Background: Construction workers form the second largest working group in the un-organized sector and their life depends on the daily wages they earn. This study was planned to assess the health seeking behaviour of construction workers in an urban area of Kancheepuram District in Tamil Nadu.
Methods: This descriptive cross-sectional study was done among 302 male construction workers by random sampling from four construction sites using a pre-tested structured questionnaire. Data collected was analysed using SPSS Version 21 software and the result presented using descriptive statistics. Institutional ethical committee approval and informed consent were obtained.
Results: Among construction workers, nearly 55% belonged to less than 40 years age. Majority were illiterates and more than half of them were working as helpers for masons, painters and centring workers. 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.
Conclusions: Majority of construction workers prefer private allopathic medical facilities for their medical treatment, even though it adds to their out of pocket expenditure. There seems to be a knowledge gap, convenience and financial burden in their health seeking behaviour.

Keywords: Disease, Illness, Labourers, Morbidity

INTRODUCTION

Healthcare seeking behaviour (HSB) has been defined as, "any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy".[1] Health seeking behaviour can also be referred to as illness behaviour or sick-term behaviour. Health seeking behaviour is situated within the broader concept of health behaviour, which encompasses activities undertaken to maintain good health, to prevent ill health, as well as dealing with any departure from a good state of health.[2]

Usually the health seeking behaviour is preceded by a decision making process that is further governed by individual and/or household behaviour, community norms and expectations as well as provider related characteristics and behaviour.[1] Access to health facilities, socio-economic status and perceived quality of service have been found to be significant influencers of health

seeking decisions among different population segments. Inappropriate HSB has been linked to worse health outcomes, increased morbidity and mortality and poorer health statistics.[3]

Factors affecting health-seeking behaviour

A variety of factors have been identified as the leading causes of poor utilization of health care services. Review of the global literature suggests that these factors can be classified as cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility, and disease pattern and health service issues.[4]

The construction industry is one of the most hazardous industries and the workers in the construction sites has been facing many occupational injuries and fatality risks because the nature of the work is outdoor operations, working at heights, working in dynamic and complex environments. A hazard is a potential source of harm or an adverse health effect on a person or persons. "Hazard" and "Risk" are often used interchangeably. Workers of construction sites are, generally, exposed to an excessive risk of being injured at work. Generally, all skilled, semi-skilled and unskilled workers are at the risk of being injured or suffering from various illnesses and even death in a construction site. The level of risk varies with activities they are engaged in at the site.[5]

Study conducted by Htut found that the common health seeking behaviour of the workers were undertaking self-care and majority consulting at private clinics compared to the consultation at public service. The main reasons for utilization of public health service were their own choice, the severity of the illness and the recommendation by the others.[6] Htut also found that the majority of the respondents (90.7%) suffered some kind of health problem within 3 months before the study. The common symptoms of the illness were musculoskeletal problem and respiratory tract infection and only half of them knew their diagnosis and most couldn't go to work due to their illness. Most of the respondents accepted that their illness was not serious.[6]

Construction workers have a lot of health issues during the construction process at the workplace. Therefore, health promotion programmes are necessary for workers worldwide to provide the knowledge about causes of ill health and preventive measures towards promoting a change in individual behaviour, which will provide more beneficial health seeking behaviour. Health seeking behaviour varies from the same communities or individuals when faced with different illnesses.

A study by Hamberger described the health seeking behaviour of workers and determined some of the reasons like non-compliance with treatment, not taking proper preventive measures and the time taken for the treatment process as reasons for their laxity.[7] The study conducted by Naing et al, among the construction workers found that self-medication is the common way of health care behaviour for controlling all kinds of illness, especially TB-suspicious symptoms among migrant construction workers.[8] According to the study of skin cancer prevention among the construction workers in Queensland, who were faced with skin damage problems; workers started taking some of the preventive measure including using sun protective clothing, broad brimmed hat, sunglasses and water resistant sunscreen to prevent further damages.[9]

According to a study conducted by the authors in Kancheepuram District in Tamil Nadu, during 2018, it was found that the construction workers were affected by several acute and chronic diseases involving almost all the systems of the human body. The most prevalent morbidity among the construction workers was found to be due to musculoskeletal problems. external injuries, skin and eye problems, abdominal problems, respiratory, dental and urinary problems, fever, ENT problems, CNS problems and cardiovascular problems.[10]

Most of the construction workers suffer from multiple health problems which makes them more susceptible to frequent sickness absenteism and loss of income. They need to be treated appropriately and get back to their work at the earliest. This depends on the availability, accessability and affordability of the medical care facilities available to them at the time of their need. In this background the authors planned this study with the objective of finding out the health seeking behaviour of the constuction workers in the study area in relation to the reasons for the high morbidity among them.

METHODS

Study design

This is a cross-sectional descriptive study conducted among building construction workers in the urban area of Kancheepuram district in Tamil Nadu.

Study area and study population

This study was carried out in an urban area in Anakaputhur and Pammal Municipality where there was a number of contruction activities going on. Construction workers belonging to the building construction sites and residing in the areas of Anakaputhur and Pammal Municipality formed the study population.

Sample size

Based on the studies done earlier, and taking into consideration the lowest prevalence for an illness, it was found to be fever which affected about 23.11% of construction workers.[11] Based on this reference value, sample size was calculated by using the formula sample size: $N=4PQ/L^2$ with 5% degree of freedom, the sample

size calculated was 273, which was rounded of to 275. By adding 10% for non response rate, and the final sample size derived was rounded off to 302.

Sampling technique

A total of 15 construction sites were identified during the study period in the study area of which four buildering site was choosen by simple random sampling method. The data collection was carried out in their residential place after working hours among the male construction workers. All the available male construction workers were interviewed for the data collection in the following order: workers from site A (88), site B (65), site C (88), site D (61), totaling to 302.

Ethical committee approval

Institutional Ethical Committee had approved to carry out the study. Before initiation of the study, informed consent was obtained from each subject. Translator was used to get informed consent from other state migrated construction workers.

Pilot study

Pre testing was carried out on 20 construction workers for standardizing the questionnaire in a site which was not included in the study. Based on observations made during the pilot testing necessary changes were made in the questionnaire. The results of the pilot test were not included in the final analysis

Data collection tools

A structured questionnaire was used which includes the following details of construction workers: socio-demographic profile. Morbidity profile, blood pressure, height, weight and their health seeking behaviour.

Inclusion criteria

All construction workers who were working in the construction site for more than 3 months and consented for the study and the construction workers who were above 18 years of age were included.

Exclusion criteria

Workers above 50 years of age and who were not previously in the construction field and construction workers who were less than 18 years of age were excluded.

Data collection

The data was collected from 302 construction workers during the period of September to November 2018. All the construction workers belonging to the four building construction sites selected in Anakaputhur and Pammal Municipality were contacted and explained the purpose of the study. Data was collected using structured interview schedule. Translator was used in collecting data from migrant construction workers.

Data analysis

Data was entered and analyzed by using statistical software tool SPSS version 21.0.1. In order to determine the morbidity pattern of the construction workers and health seeking behaviour among the construction workers, descriptive statistics were used for the presentation of the results.

RESULTS

The study conducted among the construction workers in the study area regarding their health seeking behaviour had been analysed using descriptive statistics and the results are present here in the form of descriptive tables.

The age range of the construction workers were between 18 to 50 years. From the Table 1, it can be seen that nearly 32.1% of the workers were between the ages of 18 to 25 years while 24.2% were above the ages of 36 years. Nearly 95.4% of the workers were following the Hindu religion and nearly 47.0% were illiterates. Regarding their nature of work, it was found that about 41.4% of the study group were doing the work of helper/ assistant to the masons or centring or painters.

Table 1: Demographic characteristics of the study group (n=302).

Demographic parameters	Frequency	Percentage (%)
Age group (in years)		
≤25	97	32.1
26-30	71	23.5
31-35	61	20.2
≥36	73	24.2
Religion		
Hindu	288	95.4
Muslim	12	4.0
Christian	2	0.6
Level of education		
Illiterate	142	47.0
Primary	65	21.5
Middle school	83	27.5
High school	11	3.7
Higher secondary	1	0.3
Type of work		
Mason	99	32.8
Helper/Assistants	125	41.4
Centring work	63	20.9
Carpenter	1	0.3
Painter	14	4.6

The Table 2 shows the risk factors, which were found among the study population. About 63.9% of the workers were found to be regular smokers, while 62.9% were found to be consuming alcohol regularly. Other form of tobacco use was found among 57.6% of the workers. It was found that nearly 69.9% of the workers were pre-hypertensive and nearly 15% were suffering from hypertension. Regarding the body mass index (BMI), about 87.4% were found to be in the normal BMI category, while 5.3% were found to be underweight and 7% were found to be overweight.

Table 2: Risk factors found among the study population (n=302).

Risk factor parameters	Frequency	Percentage (%)
Smoking habit		
Smoker	193	63.9
Non-smoker	109	37.1
Alcohol habits		
Present	190	62.9
Absent	112	37.1
Other form of tobacco		
Present	174	57.6
Absent	128	42.4
Hypertension		
Stage 2 hypertension	3	1.0
Stage 1 hypertension	43	14.2
Pre hypertension	211	69.9
Normal	45	14.9
BMI grouped		
Underweight	16	5.3
Normal	264	87.4
Overweight	21	7.0
Obese	1	0.3

Table 3 shows the results of analysing the treatment seeking behaviour for morbidity among the construction workers. From the table, it can be inferred that the majority of the constriction workers had taken treatment for their morbidities whenever they fall ill. Nearly 78.8% of the workers said some form of disease affected them during the past 3 months and they sought medical care when they fell ill. The remaining was not very much concerned about their ill-health. The study result shows that the majority of the construction workers among the study group preferred Modern Medicine / Allopathic system (97.7%) for their treatment, while the remaining few preferred Ayurveda system for treatment of their illness.

The study also reveals that a good majority of the workers prefer treatment from the private hospital / practitioners (87.4%) while nearly 8.8% preferred to get some kind of treatment available at the construction site itself and the remaining few goes to the government hospitals for treatment. Most of the workers also preferred to get the treatment as outpatients (95.0%) visiting the health care facility according to their convenience.

According to 69.5% of workers who visited private hospitals/ clinics/ drug stores during their illness period spent more money from their pocket to buy medicine (both prescription and over the counter medicines). According to 15.9% workers consultation charges were expensive while 5% workers paid more money for laboratory investigation, while 4.6% felt they spent more money meeting the travel expenses among others.

Table 3: Health seeking behaviour of the study group (n=302).

Health seeking behaviour	Frequency	Percentage (%)
Treatment history during the past 3 months		
Yes	238	78.8
No	64	21.2
Type of treatment *(n=238)		
Allopathic medicine	233	97.9
Ayurveda medicine	5	2.1
Place of treatment *(n=238)		
Government hospital	6	2.5
Private hospital	208	87.4
Construction site	21	8.8
Both private and construction site	3	1.3
Mode of treatment *(n=238)		
Outpatient	226	95.0
Inpatient	12	5.0
Components of expenses incurred while treatment seeking during illness		
Cost of medicines (prescription and over the counter)	210	69.5
Consultation charges	48	15.9
Investigation charges	18	6.0
Travel expenses	14	4.6
Other expenses	12	4.0

*Denotes total=238.

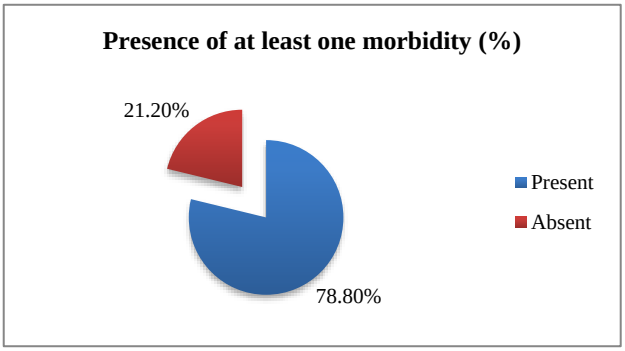

Figure 1: The presence any morbidity among study group.

While analysing the results it is also found that nearly 78.8% of the workers were found to be suffering from at least one form of disease conditions or were symptomatic of some illness during the past 3 months till the start of the study. This is illustrated in Figure 1.

DISCUSSION

The cross-sectional study on the health seeking behaviour of construction workers in an urban area of Kancheepuram district in Tamil Nadu shows the varied problems faced by the workers in seeking health care when they need it most, is discussed below.

From this study, it was identified that majority of the construction workers (78.8%) had history of illness and were seeking some kind of the treatment when they become ill. Majority (97.7%) of them were found to be seeking treatment form allopathic medicine. Most (87.4%) of the workers were seeking treatment from private hospitals and most of them (95.0%) prefer to get the treatment as outpatients from the hospitals

The health seeking behaviour among workers in view of public health problems has determined some of the reasons like non-compliance with treatment, workers who do not take proper preventive measures and taking more time for treatment process.[8] In addition, among the construction workers, self-medication is the common way of health care behaviour for controlling all kinds of illness.[9] The health seeking behaviour determines the complexity of impact on an individual's behaviour when they fall ill at a given time and place.[2] Health seeking behaviour varies from the same communities or individuals when faced with different illnesses.

A Study conducted by Htut found that the common health seeking behaviour of the respondents were self-care among 40.2% of the workers. They consulted more at private clinic (40.2%) when compared to public health services (14.1%). The main reasons for their health seeking behaviour were based on their own choice (88.9%), the severity of the illness (16.7%) and the recommendation by the others (11.1%). Those who had consulted at public health services said that they go there because of the accessibility (96.3%) and were satisfied by the service.[6] These findings were similar to the finding of this study where majority of the workers prefer private clinics for their treatment.

Htut also found that the majority of the respondents (90.7%) suffered some kind of health problem within 3 months before the study. The common symptoms of the illness were musculoskeletal problem (26.8%) and respiratory tract infection (21.3%) and only half of them knew their diagnosis (52%) and 74.8% couldn't go to work due to their illness. Most of the respondents (77.2%) accepted that their illness was not serious.[6] These findings were also found to be similar to the findings of this study.

Adsul et al in their study on all male workers found that 96.4% belonged to 15-45 years age group and the average number of health problems in the workers was 1.41. Regular consumers of tobacco and alcohol were 50.48 and 14.65%, respectively. Nearly one-fifth of the workers had febrile illness, of which 20.71% had suspected malaria; 12.6% had respiratory infections, while 3.4% were found to have hypertension. They also found that there was a statistically significant association between type of occupation and morbidity status.[11] These morbidity findings among the construction workers in this study were also almost similar.

Sithara in Calicut also reported similar findings when studied the choice made by the workers for availing the health care services found that 55% choose private clinics and 34% choose the drug stores, even though it incurs out of pocket expenditure. Since the working hours of Govt. PHCs and the working hours of the migrant labourers are same, they often goes to nearby drug stores to get relief at the onset of diseases so they do not lose a working day and the wage.[12]

Raj et al in their study in the urban area of Mangalore also found that when the study participants had an illness, 65.70% visited a health facility and majority (82.50%) preferred private doctors. Nearly 62.50% visited the private doctor so that they could get better and go for work and earn more while 37.0% were unable to afford the treatment due to high treatment cost.[13]

In contrast to these findings and the findings of this study, Aman et al in their study conducted in Kochi, found that about 77% of the workers were aware of the availability of Government health care facilities nearby their site and among them 59% said that they used to seek health care from Government health facilities. Majority of them (85.4%) were happy with the health care facilities available there. In accessing and seeking health care, financial reasons, language barrier and inconvenient timings of health centres were major issues faced by them.[14]

Similarly a study conducted by Raj et al, among agricultural workers in Belgaum, found that 48.75% opted government doctors and 28% opted private doctors as the first priority health care providers for their illness. 37.75% preferred private or AYUSH practitioners and 18.25% opted government doctors in case illness was not cured or they were not satisfied with the treatment given by the first health care provider.[15]

The finding of this study shows that the medical expenditure spent by the workers was for the cost of medicines, consultation charges, investigation charges and travel expenses. The workers were spending money for the different components of medical care from their own pocket. Similar findings were reported by studies conducted by Vasudevan, who reports that out of pocket expenses for medical care ranges from 3-5% of their total

income and Archana reports that the cost of health care is high to treat acute illnesses (66.2%), chronic illnesses (29.4%) and hospitalization (4.3%).[16,17]

From most of the studies it can be found that the identified barriers for seeking health care among construction workers in different construction sites include knowledge gaps and financial barriers. In most of the places the workers initially preferred to go to the private clinics/doctors when they seek medical care rather than going to government health facilities. This may be due to the fact that the private clinics are available in close proximity and also they can visit the private clinics after their work hours, so that they will not loose their daily wages. Even though majority preferred allopathic medicine for treatment to other systems of medicine, they wanted quick fixes to get relieved of symptoms and go for work even if they need to pay from their pocket to get the treatment.

So, there is a need to create awareness among the workers about their health and safety issues at work place. Provision of health insurance coverage and health screening services should also be made available to help them lead a socially and economically productive life. There is an urgent need to create awareness among the workers about their health and safety issues, working environment, proper use of protective wears, provision of first aid, referral services and sanitation at their living and workplace.[10]

Limitation of the study

The limitation of this study is that the data collection could be done only among a small sample of 302 construction workers available from the selected four building construction sites identified in the comparatively smaller study area. The data collection was done only among the male construction workers so the gender based comparison among the study group could not be made. The study needs to be extended to a wider geaographical area with more study sample, consisting of workers of both sexes and doing different categories of construction works, so that a better and broader generalisable outcome can be obtained.

CONCLUSION

Construction workers are more prone to develop different types of morbidities in the form of communicable and non-communicable diseases apart from injuries. This study identifies risk factors like alcoholism, smoking and consumption of other forms of tobacco by the workers contributing to the majority of morbidities. Nearly 78.8% of the workers were found to be suffering from at least one form of disease or were symptomatic during the past 3 months. Majority of construction workers prefer private allopathic medical facilities for their medical treatment, rather than the public facility even though it adds to the out of pocket expenditure. Factors like knowledge gap, convenience, accessibility and financial burden plays a major role in their health seeking behaviour. It is essential to have health education and awareness creation sessions at regular intervals along with screening and health check up camps held periodically. Provision for adequate Social Security Measures and Health Insurance Policies for the construction workers should be formulated for their benefit so that their health seeking behaviour is enhanced.

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REFERENCES

1. Olenja J. Editorial, Health seeking behaviour in context. East African Medical Journal 2003;80(2):61-2.
2. MacKian S. A Review of Health Seeking Behaviour: Problems and Prospects. Internal Concept Paper. London: Health Systems Development Programme, London School of Hygiene and Tropical Medicine; 2001.
3. Latunji OO, Akinyemi OO. Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. Ann Ib Postgrad Med. 2018;16(1):52-60.
4. Babar TS, Juanita H. Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers, Journal of Public Health. 2005;27(1):49-54.
5. Vitharana VHP, Subashi DS, Sudhira DS. Health Hazards, Risk and Safety Practices in Construction Sites - A Review Study, Engineer 2015;XLVIII(03):35-44.
6. Htut ZY. Health Seeking Behavior Among The Construction Workers At Tha-Kan Bridge Construction (Bogalay), Thesis for the Degree of Master of Public Health (MPH), University of Public Health, Yangon, 2017.
7. Amichai-Hamburger Y. Technology and Psychological Well-Being. Cambridge: University Press; 2009.
8. Naing T, Geater A, Pungrassami P. Migrant workers' occupation and healthcare-seeking preferences for TB-suspicious symptoms and other health problems: a survey among immigrant workers in Songkhla province, southern Thailand. BMC Int Health Hum Rights. 2012;12(1):22.
9. Skin Cancer Prevention in Queensland's Construction and Outdoor Workers, 2006. Ski

Cancer Prev. 2006. Available at: http://www.sun-safety.qld.gov.au/documents/sc-outdoor-workers.pdf. Accessed on 10 September 2014.
10. Mohankumar P, Gopalakrishnan S, Muthulakshmi M. Morbidity Profile and Associated Risk Factors among Construction Workers in an Urban Area of Kancheepuram District, Tamil Nadu, India. J Clin Diagnos Res. 2018;12(7):LC06-9.
11. Adsul BB, Laad PS, Howal PV, Chaturvedi RM. Health problems among migrant construction workers: A unique public-private partnership project. Indian J Occup Environ Med. 2011;15(1):29-32.
12. Sithara RS, Ajeesh S. Health Needs, Health Seeking Behaviour of Interstate Migrants and Health System Response: A Case study. J Social Work Educ Pract. 2017;2(2):58-66.
13. Raj U, Pracheth R, Nischith KR. Are workers in construction sites of Mangalore city healthy? A cross-sectional study. Int J Community Med Public Health. 2018;5:1122-6.
14. Aman B, Teena MJ, Rakesh PS. Health Care Seeking Behaviour of Migrant Labourers in Ernakulam District, Kerala, Amrita J Med. 2018;14,(3): 34-37.
15. Rajesh RK, Shivaswamy MS, Mahesh DM. Health-Seeking Behavior of Rural Agricultural Workers: A Community-Based Cross-Sectional Study. Int J Med Public Health 2013;3(1):33-7.
16. Vasudevan U, Akkilagunta S, Kar SS. Household out-of-pocket expenditure on health care - A cross-sectional study among urban and rural households, Puducherry. J Family Med Prim Care. 2019;8:2278-82.
17. Archana R, Kar SS, Premarajan KC, Lakshminarayanan S. Out of pocket expenditure among the households of a rural area in Puducherry, South India. J Nat Sc Biol Med. 2014;5:135-8.

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