

A Study On The Health Problems Among Migrant Construction Labourers In Lucknow and surrounding site

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ABSTRACT

Background Migrant laborers in the construction industry have been significantly increasing in India over the past decade but studies related to their health problems are limited. Several studies have concluded that migrant laborers are more prone to health hazards and poor health status due to communication difficulties and also due to their poor living and working conditions. The **objectives of this study** is to identify the general health problems and occupation related injuries of migrant construction workers, to assess their treatment seeking behavior and to assess the factors associated with their health problems and treatment seeking behavior. **Methods:** A quantitative study was conducted to assess the magnitude of health problems among the migrant laborers. A total of 140 laborers were interviewed in the periphery of Lucknow district of Uttar Pradesh and their general health problems, treatment seeking behavior and their working conditions were assessed. **Results:** The study revealed that 50% suffered from body aches. Of all the respondents 31% were afflicted with some form of injury in the past 6 months of their work and stated the main reason for their injury was falls from heights. Their treatment seeking behavior was very low of only 37% that sought treatment for an illness or an injury. The study also showed that being paid by the employer for treatment as well as those who were married have a greater odd of seeking treatment. **Conclusion:** Migrant laborers are subjected to various health problems and occupation related injuries. There is need for frequent inspections from the state as well as the health departments . Civil Society Organisations can play a major role by setting up health camps.

Key Words: Inter-state migrants, construction laborers, morbidity profile, injuries, treatment seeking behavior

Introduction

There are such 8.5 million workers engaged in building and other construction activities in India. They constitute the most vulnerable segment amongst the unorganised workforce in the country owing to their temporary nature of work and lack of a definite employee-employer relationship. Apart from this there is neither a fixed working hour, nor any documentation like an employee register, attendance, etc .maintained by the employers due to the temporary nature of assignment. Construction

is one of the oldest industries of mankind¹. The construction industry constitutes a major part of the economy as it employs a large number of workers.

The risk to life and limb is manifold more than that of their counterparts engaged in other organised/unorganised sectors. They do not get any proper medical facility and any statutory grievance mechanism is also totally absent for them. Whatever statutory provisions exist for them the apathetic bureaucratic machinery has made it so labyrinthine and complicated that it is beyond the limit of an ordinary worker to approach any such forum or institutional body. The indifferent attitude of the

central and respective state governments has compelled the construction and building workers to live in utter exploitation and deprivation. There is no scene of the end of injustice perpetrated upon them by both their employers and the state machinery in the near future.

Most of the construction workers are migrant labourers and landless labourers from eastern U.P, Bihar, Orissa, Rajasthan and other economically weaker regions of India. A majority of them are OBC, Dalit or Scheduled tribes who come to urban centres in search of either livelihood or to supplement their earnings during the lean period when their main source of employment (agriculture and other peripheral activities associated with it) is not available in season (i.e. in non-sowing season). Many other people, especially Tribals, who are forced to leave their ancestral villages due to reasons like the 'Naxalite issue' (as in Chhattisgarh), displacement due to dams and other 'development' activities like mining and industrialisation, that renders them landless with little or almost no compensation. These people who for centuries lived as subsistence farmers suddenly turn into landless peasants. Bereft of everything they have no other option but migrate to the urban centres for living as a construction or building worker. This occupation requires no capital and these people sell the only commodity which they have – their labour power. So it no surprise that this segment of the working class is the most exploited and vulnerable to all sorts of machinations of contractors. In the absence of any united voice these helpless, voiceless workers are forgotten and left to wallow in their own misery while the city takes pride in the buildings that they construct with their sweat, tears toil and blood.

India is changing and modernizing very quickly. The NSSO(1999-2000) stated that 370 million workers constituted about 92% of the total unorganized workforce in the country (Adsul BB,et al 2011).The laborers in the construction industry are a special target population as they face many health related issues such as musculoskeletal disorders, respiratory infections and traumatic injuries (Joshi S, Simkhada P, et al 2011). In India, the migrants from other states constitute the major labor force in the

construction industry. This type of migration is basically from the relatively less developed states to the large metropolis and other large states.

Potential work related health problems faced by these migrant labourers are musculoskeletal disorder, respiratory problems, dermatitis, eye and ear problems (K Mobed, E B Gold, et al 1992). Due to poor sanitation facilities they are prone to many communicable diseases, gastro-intestinal and urinary tract infections⁴. Low socio-economic status, poor access to health care services and language and cultural barriers also contributes existing health problems in this population(LeoS. Morales, Marielena Lara, et al 2002).

As the study on migrant laborers are limited, this study will help us to assess the magnitude of their general health problems and occupation related injuries among the migrant construction laborers and also to study their health care seeking behavior. This study also would help to scientifically access their work exposures and conditions which are necessary to characterize and reduce the occupational health risks and enable these migrant construction laborers to live in a healthy and productive life. Objectives of the study were, to identify the general health problems and occupation related injuries of migrant construction workers, to assess their treatment seeking behavior and to assess the factors associated with their health problems and treatment seeking behavior.

Methods

A quantitative study using a cross-sectional descriptive study design was carried out using pre designed and pre-tested survey questionnaires. The study was carried out in central Uttar Pradesh mainly Lucknow and its peripheris. Lucknow is a major area of construction activities second only to the NCR region of Greater Noida- Ghaziabad-Gurgaon belt. Since 2000 and particularly after economic liberalisation Lucknow has witnessed a steep growth in construction and building activities. Both the state government and the private sector

have been involved in multi-million projects ranging from the construction of residential apartments to that of the gigantic structures. The study was carried out from the 30th of June 2012 to 30 November 2012.

The baseline study population comprised of all migrant construction workers, who have been working in the city for a period of 6 months or more. In this study both males and females were considered as respondents. The survey questionnaire covered general demographic details, general health problems, occupation related injuries and their working conditions. The participants were asked to recall and report instances of any form of general health problems while working on the construction sites in the past 3 months, also subjects were asked to report any form of injuries which occurred in the past six months or more of their work. The general health problems included respiratory morbidity which included those who have one or more symptoms (cough, breathlessness, persistent cold, sore throat or shortness of breath) which occurred 2 times or more in the past 3 months, urinary tract infections which includes those who have two or more symptoms (loin pain, burning sensation while urinating) which occurred once or more in the past 3 months, gastro-intestinal infection includes those who have one or more symptoms (loose stools, melena, gastric pain more than 6 hours) which occurred 2 times or more in the past 3 months, body aches such as back pain neck pain etc which occurred in the past 3 months, skin infections includes those who have one or more symptoms (itching, patches, scaly skin and blisters) which occurred 2 times or more in the past 3 months, hearing difficulty included those who had difficulty in hearing during the interview, varicose veins which included those participants who had a protrusion in the course of their veins, and finally injury included those study participants who had any form of injury which was caused due to construction activities which afflicted them in the past 6 months of work at construction sites.

This study has considered only those injuries such as bruises, deep cuts and head injuries that occurred at the construction site. On

affirmation by the migrant laborers of the occurrence of the injury at the site, further questions were asked regarding the circumstances under which such injuries occurred.

The study took care of the research Ethics and verbal informed consent was obtained from the participants.

The sample size considered for this study is 140 samples, which is calculated using the formula $(z)^2pq / (m)^2$. The prevalence of respiratory infections of 10% is considered with an error of 5% and confidence level of 95%.

The data was analyzed using statistical packages. Frequencies and percentages were determined for analysis. Logistic regression was performed to determine associations between different variables.

Results

A total of 140 participants were included in the study from 5 construction sites. It took about 30 minutes to complete a single questionnaire and the questionnaires were filled out on the spot by the researcher. Out of the 140 participants totally interviewed in the city 98% (137) were males and only 2% (3) were females due to the fact that they work during the initial and last stages of the construction as helpers and are very few in number. The construction industries show the general characteristics of the participants. The age of the participants varied from a lower age limit of 18 years to an upper limit of 61 years. Majority of the migrant laborers were in the age group of 18-37 years of age (80.7%), an important fact that is to be noted was 9.3% were in the age group of less than 18 year of age. Out of the 140 participants 69% of the migrant laborers were never married and 31% were currently married.

A majority of 31.4% of the laborers had completed their primary schooling which included classes from 1st standard to the 7th, 31.4% completed their high school (8-10th), 24.3% were illiterate, 9.3% completed their higher secondary (11-

12th) and 3.6% had completed graduation such as B.A literature.

A predominant number of the laborers hailed from the state of West Bengal (34%), 31% from Assam, 15% from Orissa and the remaining 21% were from other states which included Bihar, Orissa, W. Bengal and eastern Uttar Pradesh.

A large fraction of the laborers were employed as helpers (37.9%), 25.7% were masons,

8.6% were concrete workers and painters and the remaining 19.3% were employed as carpenters, steel fitters and tile layers.

The daily wages received by the migrant laborers in the two city varied, in Kochi the wages payed to the laborers varied from Rs 200 to Rs 499 whereas in Chennai the wages ranged from Rs 100 to Rs 550.

Table-1
Morbidity Profile of the Study Population

Morbidity	Frequency		Percentage	
	Yes	No	Yes	No
Respiratory morbidity	59	81	42	58
Symptoms of urinary tract infections	25	115	17	83
Gastro-intestinal infections	44	96	31.4	68.6
Body aches	71	69	50.7	49.3
Skin infections	38	102	27.1	72.9
Difficulty in hearing	13	127	9.3	90.7
Injuries	43	97	31	69
Other ailments	43	97	30.7	69.3

shows the distribution of health problems or the morbidity profile among the migrant construction laborers. It shows that among the 140 participants included in the study 50% suffered from body ache, 42% suffered from respiratory difficulties, 17% showed symptoms of urinary tract

infections, 31.4% suffered from gastrointestinal difficulties, 27.1% suffered from skin infections, 9.3% from hearing difficulties, 31% were afflicted with some form of injury during their work and 30.7% suffered from other ailments such as vomiting, headache, giddiness, swelling of the face, numbness and varicose veins.

Table-2
Nature of Injuries Among The Study Population

Nature of the injury	Frequency	Percentage
Struck by an object	19	44
Fall	12	28
Falling objects	8	19
Carrying sharp or heavy objects	4	9

shows the percentage distribution of the respondents on the nature of the injuries. Out of the 43 respondents that were injured 28% were injured from falls off a ladder and off rooftops, 19% due to falling objects and 9% from carrying sharp or heavy

objects. Out of the 43 subjects injured in the past 6 months or more of their work, 32 subjects stated that they had been injured once during their work at the respective sites and 11 of the subjects were injured twice and more during their work. Only 5%

of the laborers noted that they were provided medical support by the employer in the case of an injury or health problem. Also out of the 140 respondents only 37% sought treatment for their recent illness. Out of the 52 respondents that sought treatment, majority of 42% sought treatment due to injuries, 37% due to fever, 8% due to itching and blisters and the remaining 13% due to other ailments such as severe vomiting, swellings, gastric pain and chest pains. The study noted that 58% of the participants sought treatment after a day or

more and 42% sought treatment on the same day. The table shows the percentage distribution of the type of provider utilized by the respondents. Out of the 52 migrant laborers, 48% of the laborers visited private hospitals, 25% public hospitals, 19% relied on self medication and 8% went to the doctors residence for treatment. A large fraction of the respondents stated proximity as the reason for selecting private hospital (57%) as a source of treatment.

Table-3
Type of Provider Utilized By The Study Population

Provider utilized	Frequency	Percentage
Private hospital	13	25
Public hospital	25	48
Doctors residence	4	8
Self medication	10	19

There were questions pertaining to the use of Personal Protective Equipments (PPE) at the construction sites, 78 of the subjects reported that the employer provided them with protective gear but only 19% of them utilized these PPE. The PPE present at the sites included safety helmets, safety belts, safety shoes, hand gloves, goggles and fall arrester.

The problems that were faced by the migrant laborers at their respective sites were assessed. A maximum of 48.6% of the respondents reported that they faced difficulties such as communication problems, 7.9 % stated that they were not provided information in accessing services and 5% faced other problems such as quarrel with local workers, hostile community members and being tortured by fellow natives.

It was observed that the basic amenities provided at the sites were extremely poor. Though

three of the sites provided them with sanitation facilities the toilets were clogged and unkempt. None of the sites provided safe drinking water and the accommodation provided to them was in a pitiable condition with an average of at least 11 members in a closed shed. Logistic regression was carried out to assess which were the factors related to treatment seeking behavior and health problems. The results of the logistic regression showed that provision of medical support and marital status influenced the odds of their treatment seeking behavior. This is shown in table 5a.

When compared to self payment being paid by the employer have 10 times higher odds of seeking treatment (95% C.I- 1.155-93.189) and when compared to being never married a married individual has 0.27 times lesser odds of seeking treatment (95% C.I - 0.113-0.658).

Table-4
Determinants of health problems faced by the migrant laborers

Factors	Odds ratio	95%CI	p-value
1. Place of work (Mohanlalganj)	4.571	1.715-2.188	0.002
2. Caste (1-BC, 2-other castes)	0.423	0.091-1.976	0.274
Omnibus test: model p value <0.05			
Classification accuracy >80.7			

Discussion

There is a growing need of migrants as laborers in the informal or the precarious employment market. To conduct studies among them is a difficult task as their nature of work demands frequent shifting of their places. This study is a stepping stone as it quantifies their health problems, their treatment seeking behavior and work conditions which would help to provide interventions that can substantially reduce their health problems and enable these migrant laborers to live in a more socio-economic productive life.

Health problems, treatment seeking behavior and work conditions among the migrant laborers

The study showed that male population dominated the industry (98% males). A study conducted by David Golsheyder et al also showed that males dominated the construction industry (94% males).

The study showed that half the proportion of migrant laborers suffered from body aches which was consistent with other studies as a study conducted by Josh' TK et al also showed that 59.4% of industrial workers suffered from MSD. About 31% of the laborers suffered from injuries of some form in the : past 6 months or more of their work which is also seen in another study conducted by Xiuwen et al which showed 23.5% of the laborers suffered from Fatal injuries at the construction sites. The seeking of medical services was very low among the migrant laborers, with a very low treatment seeking behavior of 37% and majority of 42% sought treatment for injuries rather than for any other health problem. Only 5% of the laborers reported that the employer had payed for their medical

expenses, this could be one of the reasons why their treatment seeking behavior is low. Of the respondents 48% stated utilizing private medical services reporting proximity as the major reason for visiting private medical services. The utilization of protective services were very low of 19% among the laborers as they stated that they found wearing gears made it difficult to work with ease at the site. Only one site out of the sites that were visited had first aid facilities available, this shows how poorly equipped the employers are in case of emergencies. Majority of the laborers stated that communication difficulties was the major problem they faced due to language barriers.

The multivariate logistic regression demonstrated that being payed by an employer has a 10 times higher odds of seeking treatment whereas being married has a 0.27 times lesser odds of seeking treatment which can be attributed to the fact that being married raises the responsibility hence spending for health would reduce. It was Es also noted that the level of literacy among them is very low and also minors continue to be employed as helpers which is illegal in our country. Majority of the laborers that were interviewed were from the north east and the most common reason stated was low wages and the potential to earn better wages in the south as reported to them by their friends and relatives. Crowded living by the migrants and the restricted toilets creates an unhygienic surrounding which could be potentially harmful for their health as well as for the society.

The central as well as the state governments have passed many laws such as the industrial and labor acts, but these acts and rules seem to be only in paper and has not been effectively enforced. During the study two human rights violations were noticed which was

appointment of child laborers in the labor camps as well as harassment of the migrant laborers by the natives and the locals. Also they faced many health problems and were prone to injuries during their work at the sites. Their site conditions were poor, shabby and dirty. These are clear indications that violation of the inter-state migrant workmen act, 1979 which clearly states that suitable working conditions must be ensured to the laborers, to provide and maintain suitable residential accommodation to such workmen during the period of their employment and to provide the prescribed medical facilities free of charge.

Suggestions

Multiple approaches are suggested. One is the creation of an awareness of the migrant laborers rights under the law. Unionisation of migrant workers could help. Unionisation could prevent exploitation and help them realize their rights. There should be frequent inspections by the state government to ensure the working conditions are apt and their wages are paid according to the law. The health department should also provide regular health checkups for the migrant laborers and also should hold responsibility in providing low cost medicines as cost was one of the reasons why their treatment seeking behavior was low. Ngo's as well as community based organizations can take up initiatives such as providing health camps and also by conducting IEC to safe guard their health and lives. Finally corporate's could also play a major role through programmes according to their Corporate Social Responsibility Act.

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