

**A CROSS SECTIONAL STUDY TO ASSESS THE HEALTH SEEKING
BEHAVIOUR AMONG MIGRANT CONSTRUCTION WORKERS,
CHENNAI -2016.**

Dissertation submitted to

THE TAMIL NADU Dr. MGR MEDICAL UNIVERSITY

In partial fulfilment of the requirements for the degree of

**M.D. BRANCH XV
COMMUNITY MEDICINE**



**THE TAMIL NADU Dr. MGR MEDICAL UNIVERSITY,
CHENNAI, TAMIL NADU.**

APRIL 2017

CERTIFICATE OF THE GUIDE

This is to certify that the dissertation titled **“A CROSS SECTIONAL STUDY TO ASSESS THE HEALTH SEEKING BEHAVIOUR AMONG MIGRANT CONSTRUCTION WORKERS, CHENNAI -2016.”** is a bonafide work carried out by Dr.R.Thirukumaran, Post Graduate student in the Institute of Community Medicine, Madras Medical College, Chennai-3, under my supervision and guidance towards partial fulfilment of the requirements for the degree of M.D. Branch XV Community Medicine and is being submitted to The Tamil Nadu Dr. M.G.R. Medical University, Chennai.

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DECLARATION

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ABBREVIATIONS

ACM	Asbestos Containing Materials
COPD	Chronic Obstructive Pulmonary Disease
HAV	Hand Arm Vibration
HSE	Health and Safety Executive
ICMR	Indian Council of Medical Research
ILO	International Labour Organization
IOM	International Organization for Migration
NSSO	National Sample Survey Organization
PHC	Primary Health Centre
TNCWWB	Tamil Nadu Construction Workers Welfare Board
UNESCO	United Nations Educational Scientific and Cultural Organisation
WHO	World Health Organization
WIEGO	Women in Informal Employment: Globalizing and Organizing

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1. INTRODUCTION

“Migrants make significant and essential contributions to the economic, social and cultural development of their host countries and their communities back home. But too often these contributions go unrecognized...”- Guy Ryder, ILO Director-General.

Migration means the movement of people from one place to another. Migration is as old as our civilization where we had a primitive life, wandered from one place to another in search of food, safety and better life. It is one of the most important factor which affects demography and influence the social, political and economic life of the people.

Working population constitute about 50% of the world’s population and a significant proportion of the morbidity in working population is related to their work. Globalization led to new employment patterns, different working conditions, international and inter- state migration which often presents a global challenge to the protection and promotion of health among workers.(1)

According to ILO, there were 232 million migrants in the world in 2013. Around 150 million migrants were economically active.(2) Globally 60 % of the work force constitute informal workers and are the most disadvantaged people which is aggravated by the weakly enforced labour laws.(3) Nearly 50% of the informal workers engage in non- agriculture work in Asia. Due to low level of literacy, lack of employment opportunities in rural areas, raising landless

farmers, seasonal jobs, often affected by natural calamities the informal workers, are exposed to extreme poverty and hence people migrate to urban areas for better jobs.(4)

As per 2001 Census 19% of the Indian population are internal migrants who had moved to other districts or other Indian states. The most common reason for such migration among males is in search of employment.(5)

In India, at the state level, there is a marked variation in the level of urbanization. Highly urbanized states like Tamil Nadu and Punjab show a higher level of in-migration than states like Bihar, Assam and Himachal Pradesh where the urbanization level is low.(6)

Next to agriculture these workers engage in construction work which is entitled as 3D job-- dirty, dangerous and difficult job.(7) Migrants have a different disease profile compared to those of their native place, often engages in dangerous construction works and limitations in accessing health care services like long working hours, low income, language barrier, social insecurity, lack of time and knowledge about public health care facility increases the vulnerability.

Over 90% of urban construction workers are rural migrants, and about one third of rural migrants work in construction industry. Working hours, pay and irregular labour recruitment practices makes the construction industry different from others. Construction workers have suffered from various problems like delayed payment of salaries, exclusion from social security schemes and poor health.(8)

Migrant construction workers are potentially a vulnerable population in relation to their health needs. A key driver of poorer health is inadequate access to health care and coverage, decreased awareness, which combined with higher health risks increase vulnerability in migrant workers, who may also face legal obstacles and are least likely to seek services.(3)

Illness and injuries create hardship among families due to loss of income and expenses incurred in the course of treatment particularly for chronic or debilitating conditions; yet delaying care also has costs related to an increasing severity of conditions requiring more expensive care.(3)

As Chennai is the fourth largest metropolitan city, with huge migrants as labourers in construction sites who are living in slums and pavements, the present study concentrates on migrant construction workers to know the facilitators and barriers in seeking health care which will help to promote their health and for making appropriate interventions.

2. OBJECTIVES

2. Primary Objective:

- To determine the health seeking behaviour among the migrant construction workers at Chennai.

2.1 Secondary Objective

- To determine the factors influencing health seeking behaviour among migrant construction workers.

3. JUSTIFICATION

Migration is increasing worldwide and International Labour Organisation Global estimates on Migrant workers states that the estimated migrants in 2010 were 232 million, 150 million among them were economically productive.(2)

In developing countries, more than half of the migrants engages in informal work and short term migration is the trend in India nowadays. The relationship between informal employment and health issues (either related to the insecurity and vulnerability of informal work or due to occupation-specific health outcomes) are not heavily studied or reported in the literature.(3)

Mostly the migrant informal worker engages in construction and manufacturing industry. India has a Worker's Welfare Fund for construction which registers workers and includes them in welfare schemes such as health insurance. When social protections are theoretically available, such as voluntary membership in a government scheme, construction workers often don't know about them or are too poor to access them.(3)

When compared to other states, Tamil Nadu ranks first in urbanization level with 48% and Construction industry shows a tremendous growth. Among a million of migrant workers in Tamil Nadu, 11.4% involves in construction work and mostly the informal workers are inter – state migrants(10). But the construction workers are disadvantaged, due to the dangerous job, poor living

conditions, inappropriate and inadequate social security schemes which pushes them into highly vulnerable group.

Hence they face greater job insecurity and stress than workers who are formally employed, and have limited access to affordable, quality health care. These conditions increase informal worker vulnerability to poor health, injury and illness. Furthermore, working conditions are often unsafe and unhealthy.

Accessing health care requires leaving work, which reduces the income of informal workers and adds health care expenses.(3)Migrant construction workers suffer from a multitude of problems like delay in getting the payment for their work, poor living conditions which poses them to increased risk of developing disease. Being not covered by social security schemes like health insurance leads on increased out of pocket expenditure for health which prevents them from seeking health care.(8) There are no studies in Tamil Nadu on health seeking behavior among migrant construction workers.

Hence this study concentrates on the health seeking behavior and factors influencing the behavior of migrant construction workers in the capital city of Tamil Nadu.

4. REVIEW OF LITERATURE

4.1 MIGRATION

According to International Organisation for Migration [IOM], Migration is defined as “a process of moving, either across an international border, or within a state.” It is a population movement which includes any kind of movement of people, irrespective of its distance, composition and causes. It includes the migration of refugees, displaced persons, uprooted people and economic migrants.(11)

Migrants may remain in the host country (“settlers”), move on to another country (“transit migrants”), move back and forth between the home and host countries (“circular migrants” such as seasonal workers)(12)

Internal migration is the movement of people from one area to another area within one country. Migration between countries is called as International migration.(13)

4.1.1MIGRANT WORKER

According to ILO, Migrant workers are people who migrate from their native place to other areas in search of work. They are called ‘domestic’ or ‘internal’ migrant workers when they move within the country and ‘foreign’ or ‘international’ migrant workers when they move out of country.(14)

The UN Convention on the Rights of Migrants defines a **migrant worker** as a "person who is to be engaged, is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national." (13)

4.1.2 TYPES OF MIGRANTS

Common categorisation of international migrants:

- Temporary labour migrants(15)
- Highly skilled and business migrants (15)
- Irregular migrants: Migrant workers without any necessary documents and permits.(15)
- Forced migration: Migrants who are forced to move because of external factors like environmental catastrophes or development projects.(15)
- Family members (or family reunion / family reunification migrants). (15)
- Return migrants: people who return to their countries of origin after staying some period in another country. (15)

4.1.3 REASONS FOR MIGRATION

A study by P.Deshingkar et al “Circular Internal Migration and Development in India” (2009)(16)states that there are several push and pull factors such as declining job opportunities in agriculture, land fragmentation, ground water scarcity, increasing natural calamities, decreases the purchasing power of agricultural workers lead to rise in the informal economy.

The Census as well as the National Sample Survey (NSS) points to the fact that the migration is highly influenced by labour market as more than one third of migrants moved with employment and business motives. Nearly 50% of these male migrants shifted to urban areas of whom 69.2% of migrants migrated for employment reasons(9).

A study by Sandhya rani et al “ The Changing Pattern of Internal Migration in India Issues and Challenges”(17)shows an increasing trend in migration to urban areas especially among males who belongs to lower socio-economic class.

4.1.4 GLOBAL RESPONSE TO MIGRANT WORKERS

At the World Health Assembly in May, WHO agreed on four strategies to address the vulnerabilities and health-care needs of migrants.(18)

- Advocacy and policy development to ensure equitable access to health services among migrants.(18)
- Improving health information systems to assess the trend in migrants health to identify and fill gaps in service delivery.(18)
- To sensitize the policy-makers and other stakeholders on migrant health issues to improve service delivery thereby reinforcing migrant-friendly public-health services.(18)
- To establish the minimum health-care standards for all migrant workers.(18)

The International Labour Organisation promotes opportunities for all workers irrespective of their gender and migration status to obtain decent and productive work with freedom, equity, security, and human dignity.(14)

According to International Labour Organisation, decent work for migrant workers means that they should have fundamental human rights at work like the right to be protected against discrimination, protection against accidents or injuries, protection with social security schemes and social inclusion. Even irregular migrant workers should be entitled to their human rights at work.(14)

4.1.5 INDIAN SCENARIO

India is a federal country which comprises 29 states and 7 union territories now. At the state level, there is a marked variation in the level of urbanization. States like Bihar, Assam and Himachal Pradesh are at the bottom of the ranking where the urbanization level is less than 15 percent compared to the states of Tamil Nadu, Punjab, Maharashtra and Gujarat where there is high urbanization level, 37% in Punjab to 48% in Tamil Nadu which is higher than the national average. These highly urbanized states show a higher level of per capita income and also a higher level of in-migration.(6)

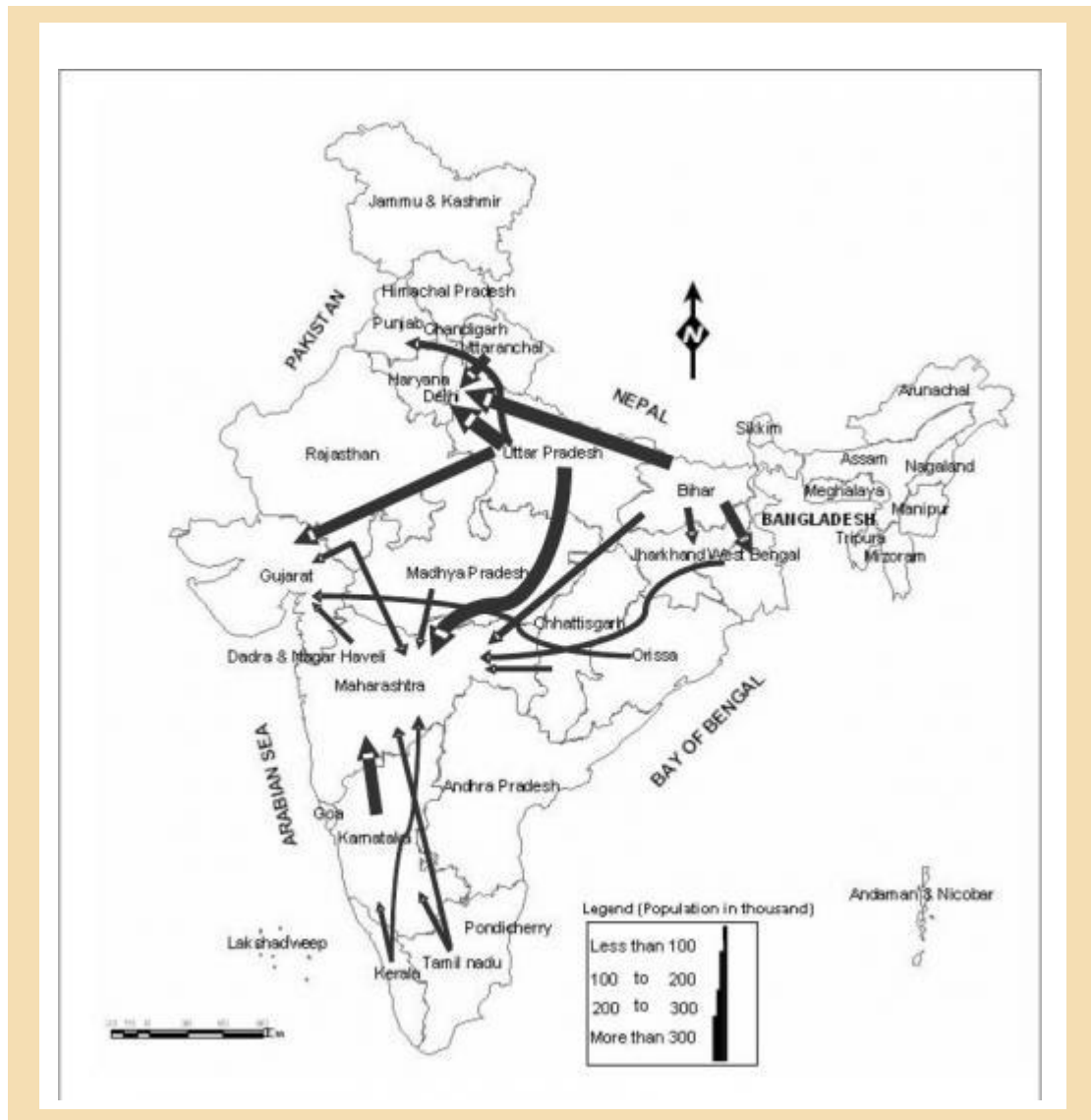
A discussion paper by UNESCO on “Internal Migration and Youth in India: Main Features, Trends and Emerging Challenges” (2013) states that India experienced rapid urbanisation with 31.8% growth in the last decade. Migration in India is likely to steadily increase in the foreseeable future. Around 400 million migrants were expected in 2011 which accounts for one third of the total population of our country.(19)

A study by Usami et al “ Migration in India: Trend and Patterns, Profile of Migrant Workers and Ties with Native Place” states that the major pattern in north India (Punjab and Delhi) was inter-state migration from Uttar Pradesh, Bihar and Himalayan foothill states, while intra-state migration was the dominant pattern in south India especially in Tamil Nadu.(20)

Emerging Patterns of Migration in India

Short term migration is the recent trend in our country. A short term migrant is an individual 'who had stayed away from the village/town for a period of 1 month or more but less than 6 months during the last 365 days for employment or in search of employment are termed as short-term migrant'.(21) This is mainly due to the seasonal job nature in agriculture and lack of skills and low literacy pushes rural workers to urban areas. The short term migrants move from agriculture to construction sector as there is a tremendous growth in the construction sector and easy availability of temporary jobs in this industry.(21)

Figure 1. Internal Migration Flows in India, 2001



Source from reference(22)

A study by Subramani T et al “Analysis of Construction Workers Migrate from Industries” states that around 18% of the workforce are being employed in industries like manufacturing, construction and mining which produces about 27% of the domestic output. The construction industry is important for accentuating internal migration among Indians. Over 90% of urban construction workers are rural migrants, and more than one third of those engages in construction work. The qualitative component of this study demonstrated the risks as well as the states inability to handle such risks. Construction workers have suffered from various problems like delayed payment of salaries, exclusion from social security schemes and poor health.(8)

4.1.6 STATE SCENARIO:

In Tamil Nadu, there are more than one million migrant workers.(10)

The Tamil Nadu labour department conducted a survey in 2016 through a private consultant shows that there are 10.67 lakh migrant unskilled workers in the state. The three major sectors which employs these workers are manufacturing sector (27%), textile industries (14%) and construction sector(11.41%). These data will help the policy makers to improve the healthcare and other benefits to the migrant workers.(10)

A study by Mahendran. G et al “An Economic Analysis of The Migrant Workers with special reference to Thanjavur District, Tamil Nadu” states that the

agriculturists and related workers have limited purchasing power due to seasonal jobs. Natural calamities and working in unorganized sector makes things worse which forces them to migrate towards urban regions.(4).

4.1.7 STRUCTURAL BASIS FOR POLICY IMPLEMENTATION

National

The State Ministry of Labour and its departments are responsible for policy framing and implementation of various schemes to protect the migrant workers from exploitation and to improve their working conditions.

Some of the Labour legislations in our country are:

- The Inter State Migrant Workmen Act, 1979.
- The Minimum Wages Act, 1948.
- The Contract Labour Act, 1970.
- The Equal Remuneration Act, 1976.
- The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

Both the Central and State Governments are responsible in enforcing the laws. At the central level, the Chief Labour Commissioner and in the states, the Labour Commissioners and their field offices are held responsible. The other

related departments are Health and Family Welfare department in provision of accessible, quality care services, Human Resource Development, Food and Consumer Affairs, Urban Affairs and Social Justice. The Ministry of Home Affairs is the responsible department for immigration.(9)

International

The external labour migration flows in India is being regulated by Emigration Act. The Ministry of Labour and the Protector of Emigrants are empowered to regulate the procedures for foreign employment. The state should ensure nationals obtain legally valid employment opportunities which is acceptable. The allied ministries in emigration of workers in our country are the Ministry of External Affairs (MEA) and Ministry of Home Affairs. The control of exit is regulated by immigration department under the Ministry of Home Affairs. The Police Department is responsible for investigations regarding complaints on recruitment or any abuses in India.(9)

4.2. DIFFICULTIES FACED BY MIGRANTS

4.2.1 LIVING CONDITIONS

Most live in open spaces or makeshift shelters without safe drinking water and sanitary facilities in spite of the Contract Labour Act which stipulates that appropriate accomodation should be provided by the employer. In addition to seasonal workers, migrant workers also live in parks and pavements. Migrant

workers are not able to access public distribution system and hence they need to spend more for their food.(9)

4.2.2 HEALTH

- Informal workers work in harsh circumstances and they live in unhygienic conditions which adversely affects all aspects of their health and make them easily susceptible to diseases.
- People working in mine quarries and constructions sites are more vulnerable to respiratory, musculoskeletal and skin diseases.
- Violation of safety measures by the employer increases the incidence of workplace accidents.
- Due to their temporary residential status, migrant workers often find it difficult to access the benefits of various healthcare programmes.
- Workers of brick kilns and tile factories often suffer from occupational hazards like myalgia, sunstroke and skin irritation.
- Psychosocial problems are also common as many people migrate leaving their family and more susceptible to malnutrition and substance abuse.(9)

A literature review by Pratik Adhikary et al on “Health Issues among Nepalese migrant workers in the Middle East” stated that the working and living conditions of Asian migrant workers were poor. It was also found out that

migrant workers faced risks of anxiety, depression, tuberculosis and eye injury. They had high risks of workplace injuries, suicide attempts, cardiac arrests, mental illness and high death rates. (23)

4.3. CONSTRUCTION AND CONSTRUCTION WORKERS

- The term **construction** includes the following:

(i) building which includes excavation, structural alteration, renovation and repair of old buildings and demolition of all types of buildings;

(ii) civil engineering which includes excavation, structural alteration, renovation, repair, maintenance and demolition of public constructions like airports, docks, harbours, inland waterways, dams, river and sea defence works, roadways, railways, bridges, tunnels, viaducts and works related to the provision of services such as communications, drainage, sewerage, water and energy supplies;

(iii) The erection and dismantling of prefabricated buildings and structures, as well

as the manufacturing of prefabricated elements on the construction site;(24)

- Construction site can be defined as “any site at which any of the processes or operations described above are carried on” (24)
- Workplace can be defined as a place under the control of an employer where employees need to go for their work.(24)

- The term **employer** describes a person who:
 - i. Physically or legally employs one or more workers on a construction site under his control
 - ii. May be a principal contractor, contractor or a subcontractor depending on the context. (24)

- **Competent person** is one who possess sufficient knowledge, experience, skill and qualification to perform a work safely and efficiently. The designation and duties of such person will be defined by competent authorities.(24)

Construction industry offers numerous employment opportunities for the lower socio economic group worldwide. It is considered as the largest industry after agriculture and it is the primary one in urban region. Construction work often require involvement of numerous labourers both for new building and for maintenance works.

The construction industry contributes positively to the economy of a country. The annual output of the industry was estimated to be 3,000 billion USD worldwide. The industry employs more than 110 million people worldwide. The industry holds a special place in developing countries like India, since it combats the high levels of unemployment. The construction industry mainly involves informal workers and absorbing surplus labour from the rural areas.(25)

Most of the construction workers are unskilled. They comprise only around 5 to 10% of the manpower in developed countries as most of the tasks are machines based. Worldwide, over 90% of construction workers are males. In developing countries, mostly migrant workers engages in these industry as it provides good payment and also offers financial security.(26)

The major economic output of the construction industry is from the developed countries. About 30% of global output is from Europe, 21% from United States and 20 per cent from Japan. Even though there is rapid economic growth and surplus manpower in developing countries, 6% of global output is from China and only 1.7 per cent from India.(25)

4.3.1 Work Organization and Labour Instability

Construction projects involve workers temporarily and the workers may spend a few weeks or months in that project with a nearby shelter and the working hours are long with high risk when compared to other sectors.(26)

The construction projects may employ a large proportion of migrant workers who may be temporary and inexperienced. They may not be well versed in the common language used in their work place which makes difficulty in developing effective, safe teamwork which is essential in construction sites.(26)

4.3.2 Construction Hazards

Construction hazards can be classified into the following four classes:

- Chemical
- Physical
- Biological
- Social.(26)

1.Hazards due to chemicals

Chemical hazards occur as a result of exposure to dusts, fumes, mists, vapours or gases at work site either by inhalation or by absorption through intact skin (e.g., organic solvents). Hazardous chemicals may be a liquid or a semi-liquid like glues, adhesives and tar or a powder like dry cement.(26)

Workers exposed to asbestos are more prone to deaths due to cancer of lung and respiratory system. Painters and bridge rehabilitation workers are susceptible to lead poisoning. Roofers and workers involved in hazardous waste cleaning activities are exposed to heat stress. Workers using vibrating drills like stoper drills among tunnellers may acquire Raynaud's syndrome.(26)

2. Hazards due to physical agents

Every construction project has physical hazards which may include the following:

1. Noise
2. heat and cold
3. ionizing and non-ionizing radiation
4. vibration
5. barometric pressure

Construction work often need to be done in extreme weathers irrespective of time. (26)

3. Hazards due to biological agents

Hazardous biological agents encountered in worksite are infectious organisms, toxic substances or animal attacks. The common contagious diseases that occur among construction workers are histoplasmosis (by a soil fungus), influenza, tuberculosis and vector-borne diseases like yellow fever, malaria or Lyme disease. These diseases occur mainly due to poor working and living environment with inadequate safety measures.(26)

4.Social hazards

Social hazards appear as a result of disturbed social organization in the industry. Employment is often temporary. In addition, employee also keeps changing his work frequently. Most of the projects require the worker to live in work campus away from home and family. This makes the employee to lose his dependable social support.

Workers who lack psycho-social support are unlikely to perform effectively. Irresponsibility of a single worker may threaten the safety of other co-workers. This makes the work so dangerous.

The above hazards are common to all construction workers in one way or another and may result in serious consequences.(26)

4.3.3.MAJOR HEALTH ISSUES AMONG CONSTRUCTION WORKERS

1.High incidence of injuries from accidents is the most common health risk, resulting from unsafe work sites, and lack of appropriate protective equipment and training. An estimated $\frac{3}{4}$ to all of informal construction workers are exposed to occupational hazards. Accidents are so common that they are considered an inevitable part of the work. WIEGO estimates 16-18% of workers are injured in south Asia each year. Workers bear responsibility for their health in the aftermath of accidents.(3)

2.Stress - HSE defines stress as “an adverse reaction to excessive pressure”.

Stress plays a major role in the safety of workers and their health(27)

As per HSE, the top five reasons for stress in construction site are as follows:

1. Expectation of too much work in a limited time period
2. Travelling from one place to other
3. Responsibility of other workers’ safety
4. Lengthy working hours and
5. having a hazardous job.(27)

3.Hand-arm vibration:

Hand-arm vibration (HAV) is vibration transmitted into someone's upper limbs as a result of work activity which involves tools and machinery. Constant exposure to this type of vibration may lead to irreversible health consequences(28)

4.Respiratory disease:

The common work-related lung diseases in the construction industry are Chronic Obstructive Pulmonary Diseases (COPD), silicosis and asthma. (29)

5.Asbestos

Asbestos exposure can lead to life threatening diseases. Hence, construction site should be thoroughly commissioned for any Asbestos Containing Materials (ACMs). Asbestos exposure commonly occurs during demolition and refurbishment work. Proper records should be maintained for ACMs at the construction site to ensure that the level of asbestos exposure is under control. (27)

6.Dermatitis:

As Construction work involves chemicals like cement and organic solvents, irritant contact dermatitis is more common among the workers. Dermatitis will be further aggravated if the exposure continues.(27)

7.Chemical exposures:

These are common and can cause metal poisoning, damage to the central nervous system and liver, dermal and respiratory allergies, cancers and reproductive disorders.(3)

8.Musculoskeletal injuries and disorders:

These include back injuries from carrying heavy loads, and joint pain.(3)

9.Poor living conditions:

Many workers need to live onsite and they are exposed to overcrowding, poor sanitation, high prevalence of disease vectors such as rats and mosquitoes, and continued exposure to construction dust, leading to water-borne disease, dengue fever, and respiratory problems.(3)

4.3.4. INDIAN SCENARIO AND RESPONSE

In India, construction industry has become an integral part of the nation's economy. It is the second largest employer in our country, next to agriculture. Nearly 18 million and 14 million people are employed in this industry directly or indirectly respectively. It constitutes about 40% to 50% of India's capital expenditure on projects in various sectors such as highways, roads, railways, energy, airports, irrigation, etc(30)

In 1996, The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) act and Building and Other Construction Workers Welfare Cess act were enacted to regulate the employment and to provide proper safety and welfare measures for construction workers.(31)

Tamilnadu State Governments have constituted Building and Other Construction Workers Welfare Boards. This board provides timely assistance to the worker in case of accident, pension, sanctioning loans for housing and education, maternity benefits, healthcare expenses etc. It is the responsibility of the state in collecting funds and its proper utilisation for workers' welfare.(31)

This board also states that the person is a construction worker if he/she engages in any of the following construction work:

1. Cutting, breaking and crushing of stone
2. Cutting and polishing of slabs/tiles
3. Wood work including painting varnishing etc.
4. Sewerage and plumbing work
5. Electrical works including wiring, distribution, panel fixing etc.
6. Installation and repair of fire fighting systems
7. Installation and repair of cooling and heating systems
8. Installation of lifts, escalators etc
9. Installation of security gates, devices etc.
10. Fabrication and installation of iron/metal grills, windows, doors
11. Construction of water harvesting structures
12. Interior work including carpeting false ceiling, lighting plaster of paris
13. Cutting glazing and installation of glass panels
14. Making of bricks, roofing tiles etc. not covered under Factories Act, 1948

15. Installation of energy efficient equipment like solar panels etc.
16. Installation of modular units for use in places such as kitchens
17. Making and installation of pre-fabricated concrete modules etc.
18. Construction of sports / recreation facilities including swimming pools, golf courses etc.
19. Construction/erection of signage, road furniture, bus shelters/depots/stands, signalling systems etc.
20. Construction of rotaries, installation of fountains etc.
21. Construction of public parks, walking tracks, landscaping etc.

4.3.5 STATE SCENARIO AND RESPONSE

In Tamil Nadu, more than 25 lakhs of workers are approximately involved in various construction activities. Experts say relatively better wages and employment opportunities in Tamil Nadu draw workers from West Bengal, Odisha, Bihar, Jharkhand and Assam.(10)

According to the migrant worker survey, most of them work in manufacturing companies. The top three districts -- Kancheepuram, Chennai and Tiruvallur -- houses 51.3% of the migrant worker population. Real estate projects and the metro rail work have attracted migrant labour.(10)

Under a central law, states have set up welfare funds for construction workers. The states can collect a cess on construction projects and transfer the amount to the welfare funds which covers the welfare schemes like health insurance educational scholarship for the registered construction workers.

In Tamilnadu, there are more than 16 welfare boards and schemes which involves informal workers from various other sectors.(32)

The board was funded by a tripartite arrangement with equal contribution from employers, trade unions and government. The employers should pay the contribution at the time of plan sanction. Tamilnadu government collects 0.3% cess instead of 2% as advised by central government rules, thereby limiting the funds and hence limiting the scope of its welfare schemes.(33)

As on date, the board has only 40,000 construction workers out of 23 lakh registered workers from 30 districts of Tamilnadu. Benefits for these workers include accident insurance, death benefit, education, maternity benefit, pension, medical facilities, housing subsidy, crèche facilities are being provided under this scheme.(34)

4.4. HEALTH SEEKING BEHAVIOUR

Health seeking behavior accepted by the North American Nursing Diagnosis Association, defined as “a state in which a person in stable health is actively seeking ways to alter his or her personal habits or environment in order to move toward a higher level of health”. Stable health is defined as “the achieving of age

appropriate illness prevention measures, with reporting of good or excellent health, and signs or symptoms of disease, when present, being controlled.”(35)

A study by Shaikh BT et al “Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers”. (2004) states that the health care system utilization either public or private by formal or informal workers depends on various factors like socio-demography, education, cultural beliefs and practices, environmental conditions, and the prevalence of disease and the framework of health care system.(36)

A study by A. H. M. Zehadul Karim et al “Health Seeking Behavior of the Bangladeshi Migrant Workers in Malaysia: Some Suggestive Recommendations in Adjustive Context” a survey conducted in Kuala Lumpur city of Malaysia by snowball technique on 200 workers by convenient random sampling and by face-to-face interviews, with the help of structured questionnaire long with some Focus Group Discussions. The Bangladeshi migrant workers working in Malaysia were fully devoid of any health care facilities from their place of employment. 87% of Bangladeshi workers did not receive any health protection measures at times of necessity and crisis. Many illegal workers were often denied access to this medical support due to the unavailability of legal records regarding their employment.(37)

A study by Chu-Hong Lu et al “Health-Related Quality of Life and Health Service Utilization in Chinese Rural-to-Urban Migrant Workers”. This was a cross-sectional comparative study involving 2315 rural-to-urban migrant workers

and 2347 workers from local urban residents in China in 2013. Health Related Quality Of Life (HRQOL) and self reported health service utilization was assessed. The migrant workers had significantly lower scores in all domains of Health Related Quality Of Life, more likely to report chronic illnesses and recent two-week morbidity but less likely to see a doctor.(38)

A study by Thet Aung et al “Health seeking behaviours among Myanmar migrant workers in Ranong province, Thailand” done in 2009, involved 388 Myanmar migrant workers with a structured questionnaire. The most common health seeking behaviour for the perceived minor health problems were buying drugs without medical advice. Nearly 50% of workers stated that if health condition gets worse or for major health problems, they go to health centers. Apart from socio demographic and individual characteristics, the presence of health insurance, travelling time to the health centers and consultation fees were also significantly associated with the health seeking behaviour of the workers.(39)

A study by Yingchun Peng et al “Factors associated with health-seeking behavior among migrant workers in Beijing, China” involved 2,478 workers by multi-stage stratified cluster sampling method. Face-to-face interviews were conducted using a structured questionnaire survey. Only 4.8% of workers sought medical advice in the past 2 weeks which accounts only 36.4% of people who had illness in the last 2 weeks. Nearly 33.3% of the migrant workers chose self-medication and 30.3% of workers did not take any measures while ill within the

past two weeks. The perceived obstacle to health-care access was the high cost of health service and this was reported by 40.5% of the migrant workers who became sick. Above all, only 6% of workers had insurance coverage in Beijing which adversely affects the health-seeking behaviour significantly among migrants. The per capita income and working hours also affect the rate medical visits among the migrant workers in Beijing.(40)

4.4.1 BARRIERS IN HEALTH SEEKING AMONG CONSTRUCTION WORKERS

A study by Weixian Lee et al “ Health seeking behaviour of male foreign migrant workers living in a dormitory of Singapore” (2011) a cross sectional descriptive study involving 525 male migrant workers of age, 21 years or more showed that 71% of participants did not have or aware of health insurance. The number of rest days, higher basic monthly salary are significantly associated with consultation of doctor. 84% of respondents did the consultation as they felt that the medical care would help to improve work efficiency.(41)

A study by D. Maneze et al “Facilitators and Barriers to Health-Seeking Behaviours among Filipino Migrants: Inductive Analysis to Inform Health Promotion” included 337 of the 552 survey respondents. The major personal facilitator of health-seeking behaviour was the awareness of practices that enhance health. The perceived as barriers were competing priorities of daily living, cultural beliefs and practices, but in new migrants and elderly communication difficulties was a barrier to access health services.(42)

5. METHODOLOGY

5.1. Study Design:

The study was conducted as a community based cross sectional to determine the health seeking behaviour and the factors influencing health seeking behaviour among migrant construction workers in Chennai – Tamil Nadu.

5.2. Study Place:

The study was conducted at construction sites in Chennai.

5.3. Study Duration:

The study was carried out from February 2016 to September 2016. The period of field study was from May 2016 to July 2016.

5.4. Study Population:

The study population comprised of migrant construction workers (16 years and above) in Chennai.

A. Inclusion Criteria:

- Migrant construction workers - construction workers who have been away from the native place for a minimum period of 6 months till date of interview.
- Who give consent

B. Exclusion Criteria:

- Those who were not present on two consecutive visits.

5.5. Sample Size:

Calculated sample size: 425 individuals

Sample size covered: 425 individuals.

Sample size is calculated using the formula;

$$\begin{aligned} Z^2 pq / d^2 &= \frac{1.96 \times 1.96 \times 36 \times 64}{5 \times 5} \\ &= 353.89 = 354 + 71 \text{ (20\% Nonresponse rate)} \\ &= 425 \end{aligned}$$

Sample size was calculated with the prevalence of 36% from the study titled **“Health-seeking behaviour of male foreign migrant workers living in a dormitory in Singapore”** with the confidence level of 95% and relative precision of 5%. Sample size is derived after adding 20% of nonresponse rate.

5.6.Sampling Method:

- The first stage involved the line listing of major construction sites in Chennai
- The second stage involved selecting a construction site by simple random sampling.
- In the third stage, all the construction workers involved were approached for the study
- The second and the third stages were repeated till reaching the estimated sample size
- The data collection was done in two construction sites to achieve the estimated sample size

5.7.Study Tool:

- Questionnaire was obtained from Dr. Jerald Chkoh, Associate Professor, Yong Loo Lin, School of Medicine, Singapore and Dr. Joash Chong. The questionnaire was modified according to the local needs.

The study was conducted as one to one interview with the questionnaire.

Questionnaire: The questionnaire for the present study contained 3 major parts and in three languages viz., English, Tamil and Hindi.

- The first section covers personal and socio-demographical information

like age, nationality, marital status, education, salary and working conditions.

- The second section covers how they would respond to illness which was elucidated by four hypothetical illness or injury scenarios:
 1. An upper respiratory tract infection (URTI),
 2. An URTI lasting three days and complicated by high fever(38 degree C).
 3. A worksite injury to the foot with some pain but no functional impairment, and
 4. The same worksite injury but with pain so severe as to cause functional impairment.
- The third section covers previous health seeking experience based on participants response to a previous illness or injury and their reasons for and not seeking medical attention.
- The questionnaire was translated with assistance from volunteer translators from amongst the workers at the survey site to answer participants queries.

5.8 Variables of Interest & Operational Definitions:

Socio demographic variables

- Age: Completed age at the time of interview was considered for the study
- Smoker : Every individual who declared himself a smoker during data collection is considered smoker, regardless of the number of cigarettes consumed;
- Migrant: People who are away from native place either intra - state or inter – state and from other countries were considered as migrant
- Construction workers: Workers in construction industry for a minimum of 6 months were approached. The International Labour Organization (ILO) classifies the construction industry as government and private-sector firms erecting buildings for habitation or for commercial purposes and public works such as roads, bridges, tunnels, dams or airports.
- Health seeking behaviour: Health seeking behaviour from a public health perspective explains the reasons behind the delay in receiving treatment and care, non-compliance with treatment or the nonutilization of preventive measures

5.9. Data Collection and Methods:

- a. Data collection was done in the study area after obtaining prior permission from the Director, Institute of Community Medicine and The Dean, Madras Medical College and approval of Institution Ethical Committee, Madras Medical College. (Annexure)
- b. Data collection was done in the construction site after obtaining prior permission from concerned authorities (Annexure)
- c. Each participant was given a brief introduction about the study and informed written consent was obtained from all participants (In illiterate elders, a thumbprint was taken in front of witnesses).
- d. Data was collected from the individuals by one to one interview, asking the questions in their language with the help of translators. (Students of Madras Medical College as well as amongst workers who are willing to translate)
- e. Relevant information was obtained from the respondent using the questionnaire at the dormitory near the construction site in the evening time. Questions were read out to the study subjects in exactly the same order as listed in the questionnaire and sufficient time was given to the subjects to respond. If the study subject haven't understood the question, the question was repeated in the same manner without probing for the answer.

5.10. Services rendered:

- Health education about personnel hygiene like hand washing before food intake, after handling construction raw materials, to use gloves in workers having skin problems was given and to wear hard hat always during working hours, ear muffs in operating machineries, face mask in dusty work environment, to wear goggles during welding and metal cutting and to stop smoking and alcohol.
- Health education was given along with the family members about nutrition, proper vaccination to children, the importance of environmental hygiene in preventing outbreaks of diarrhoeal disease, flu, mosquito borne diseases like dengue, malaria etc.,
- Health education was given about the nearby public health facility, the availability of 24*7 emergency services and speciality services. The availability and services of 108 and 1096 were explained in detail.
- Participants and their family members were treated for minor ailments and appropriate referral service was offered.

6. DATA ENTRY & ANALYSIS

6.1. Data Entry

The data collected from the questionnaires were entered in Microsoft Excel 2013 version and the master chart was framed. The data entered were double checked for any errors. The data from the master chart were exported to Statistical Package for Software Solutions (SPSS) version 16 for analysis. Totally data was collected from 439 people. After checking for non- response and erroneous data, 14 individuals' data were removed from the study accounting to a total of 425 people.

6.2. Data Analysis

Categorical variables were presented in the form of frequency distributions and percentages. Association between categorical variables are tested using Chi square tests and Fisher exact tests.

6.3. Data presentation

The distribution of categorical data in the study were represented by tables, pie chart and bar charts.

7. RESULTS

7.1. SOCIO-DEMOGRAPHIC DETAILS OF STUDY POPULATION

7.1.1. Age and gender distribution of study population

Table 1 Distribution of age among study population

Age category	Number of participants (N=418)	Percentage (%)
16 to 30 years	284	67.9
31 to 45 years	90	21.5
46 to 60 years	40	9.6
More than 60 years	4	1

Most of the construction workers in the study group belonged to the age group 16 to 30 years. Only one percent of the study group were above 60 years of age. Only 31 (7.4% of the study participants) were female. Mean age of the study population was 29.3 ± 11.1 years

7.1.2. State of origin

Table 2 State of origin of the study population

State of origin	Number of participants (N=418)	Percentage (%)
Andhra Pradesh	31	7.4
Assam	2	0.5
Jharkhand	90	21.6
Madhya Pradesh	10	2.4
Maharashtra	11	2.6
Orissa	47	11.2
Pondicherry	2	0.5
Tamil Nadu	125	29.9
Uttar Pradesh	9	2.2
West Bengal	89	21.3

Nearly 30% of construction workers were intra-state migrants from various other places of Tamilnadu. Almost 22% and 21% of study participants had migrated from Jharkhand and West Bengal respectively.

7.1.3. Distribution of religion:

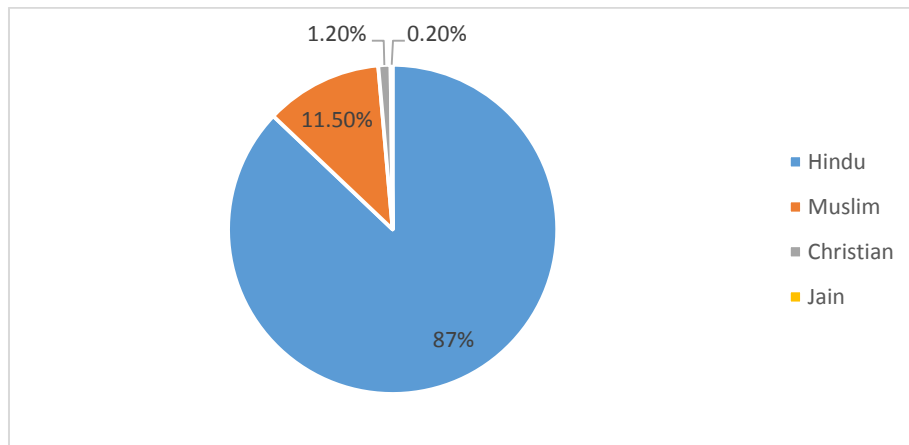


Figure 2 Distribution of religion among study population

Most of the migrant construction workers studied belonged to the religion Hindu (87%). 11.5% belonged to the religion Muslim, 1.2% belonged to the religion Christian and 0.2% belonged to the religion Jain.

7.1.4. Marital status

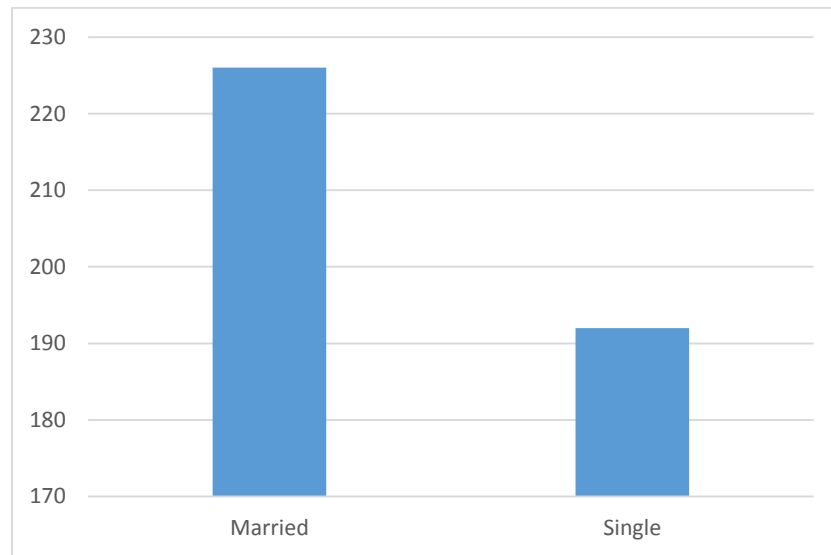


Figure 3 Marital status among study population

Among the study population, majority of them (54%) were married and 46% of them were single.

7.1.5. Educational status

Table 3 Educational status among study population

Educational status	Number of study participants (N=418)	Percentage (%)
No formal education	115	27.5%
Primary	185	44.2%
Secondary	75	17.9%
Diploma	19	4.7%
Degree	24	5.7%

Nearly 28% of study participants had no formal education. Most of them (44%) had primary school education. Only 10% had degree or diploma.

7.1.6. Number of family members supported

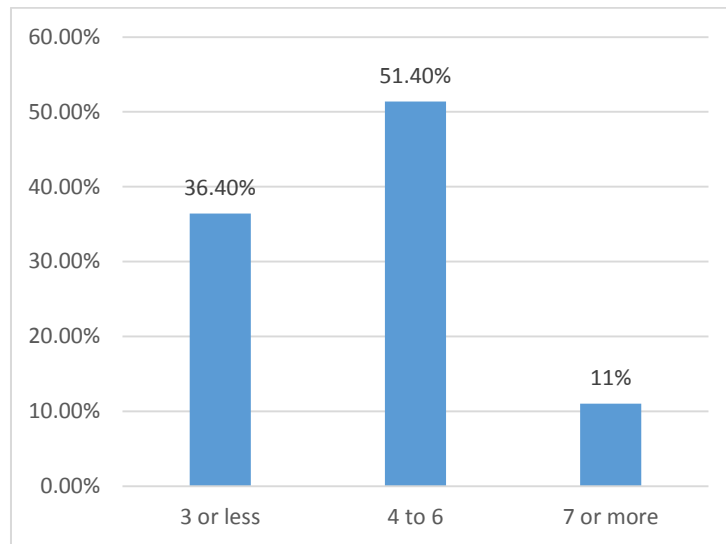


Figure 4 Number of family members supported by the study participants

Nearly half of the study population supported 4 to 6 family members. Almost 11% of them supported 7 or more members. The average number of family members supported by the study population was 1.7 ± 0.6 .

7.2. OCCUPATIONAL DETAILS OF STUDY POPULATION

7.2.1. Details of working hours

Table 4 Occupational details of the study population

Occupational detail	Number of study participants (N=418)	Percentage (%)
Average working hours per day		
8 hours or less	160	38.3
9 to 12 hours	242	57.9
More than 12 hours	16	3.8
Working hours per week		
Less than 48 hours	88	21
More than 48 hours	332	79
Duration of interval		
Less than 1 hour	6	1.4
1 hour	402	96.2
More than 1 hour	10	2.4

Nearly 58% of the study population worked on an average of 9 to 12 hours whereas only 3.8% worked for more than 12 hours.

Nearly 79% of the study population had working hours more than 48 hours in a week.

Almost all the migrant construction workers had interval in between working hours. Most of the migrants had an interval of duration one hour or more. Only 1.4% of migrants had interval less than one hour.

7.2.2. Type of work

Table 5 Type of work by the study population

Type of work	Number of participants (N=418)	Percentage (%)
Masonry	240	57.3
Machinery / fitting	38	9.1
Supervision	37	8.8
Electrical	30	7.2
Metal cutting	25	6
Welding	19	4.5
Painting	17	4.1
Sand/water blasting	4	1
Chemical cleaning	4	1
Carpentry	3	0.7
Piping	2	0.5

Majority of the study population (57%) were working as masonry followed by machinery / fitting 9%, supervision 9% and electrical work 7%.

7.3. HEALTH BELIEF OF THE STUDY POPULATION

7.3.1. Response to Scenario A: Sneezing/coughing/having a runny nose without a fever

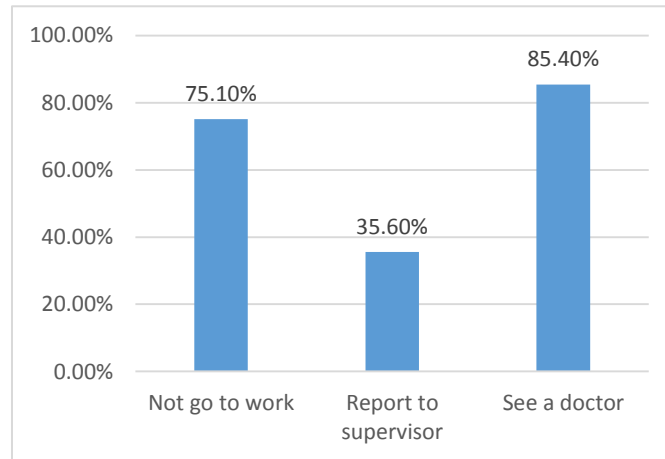


Figure 5 Response of study population to sneezing/coughing/runny nose without fever

The above figure shows that nearly 75% of migrant construction workers studied will not go to work, only 36% will report their illness to supervisor and 85.4% will see a doctor for illness if they get sneezing/coughing/runny nose without fever.

7.3.2. Response to Scenario B: [3 days after Scenario A] + High fever of 38⁰C, with sneezing/coughing/having a runny nose

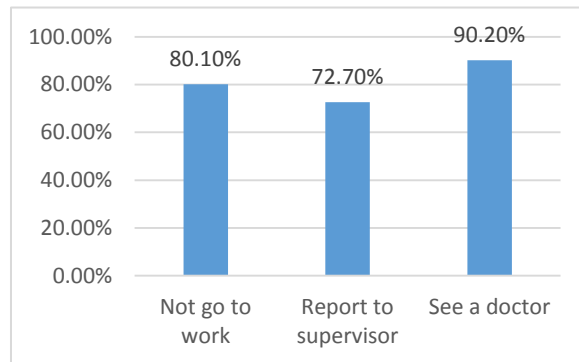


Figure6. Response of study population to High fever and sneezing/coughing/runny nose for 3 days

The above figure shows that almost 80% of the study population will not go to work, nearly 73% of them report their condition to supervisor and 90% of them will see a doctor when they get high fever and sneezing/coughing/runny nose for 3 days.

7.3.3. Response to Scenario C: Experiences pain when his foot is hit by a heavy object, but still able to walk

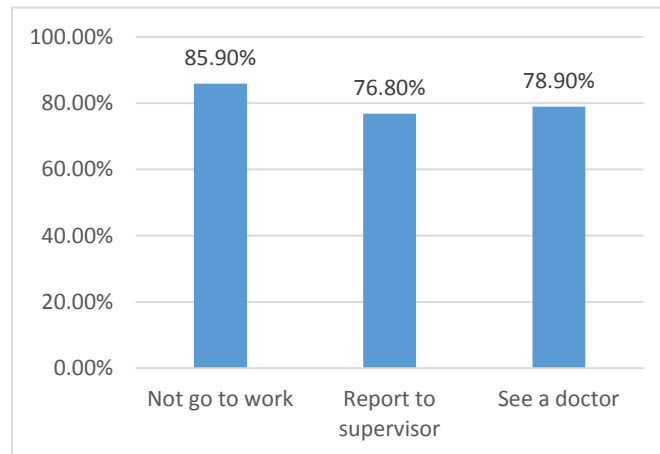


Figure 7 Response of study population to pain when his foot is hit by a heavy object, but still able to walk

The above figure shows that 86% of study population will not go to work, 77% will report their illness to supervisor and 79% of them will see a doctor when they experience pain due to hit by heavy object and still are able to walk.

7.3.4. Response to Scenario D: [3 days after Scenario C] + Unable to walk anymore

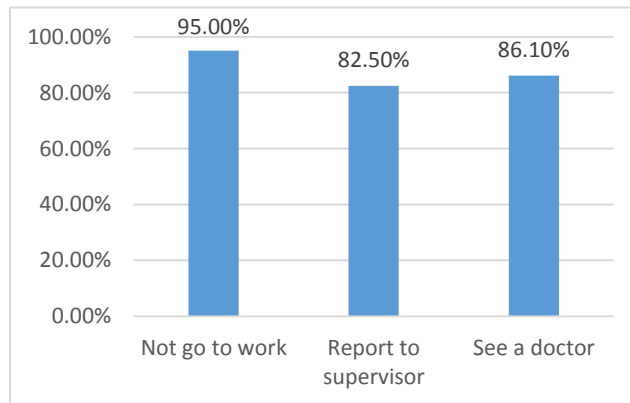


Figure 8 Response of study population to pain when hit by a heavy object and not able to walk anymore

The above figure shows that 95% of migrant construction workers studied will not go to work, 82.5% of them will report to supervisor and nearly 86% of them will see a doctor when they experience pain due to hit by a heavy object and not able to walk anymore.

7.3.5. Payment for healthcare in different scenarios for the study population

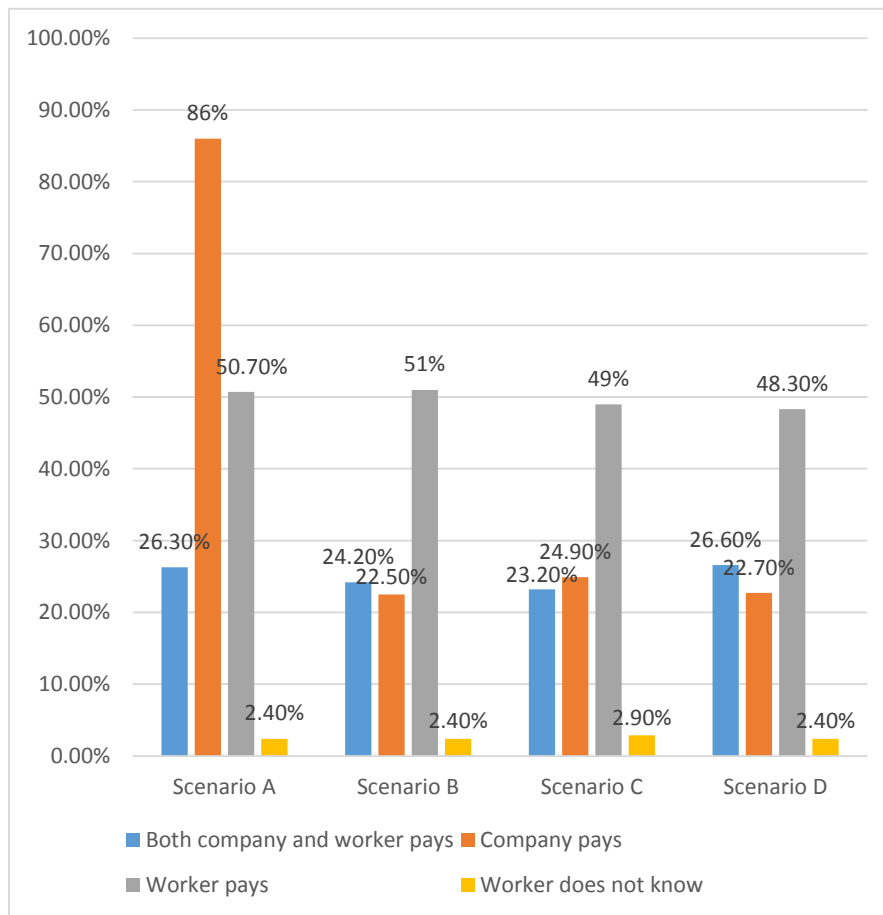


Figure 9 Payment for healthcare at different scenarios for the study population

The above table shows the belief of the migrant workers in the payment for healthcare in case they are falling ill. Nearly 50% of the migrant workers believes that they have to pay themselves for their healthcare in all the four scenarios. Nearly 20-25% of them believes that their company will pay for healthcare. About 24 to 26% of them believes that he/she together with the company has to pay for their healthcare. Nearly 2.5% of the workers did not know who will pay for their healthcare expenditure.

7.4. HEALTH SEEKING EXPERIENCE OF STUDY POPULATION

Among the study population, only 98 migrant construction workers had fallen sick or got injured after starting to work. The health seeking experience for those 98 migrant construction works was analysed.

7.4.1. Types of symptom experienced

Table 6 Types of symptoms experienced during the most recent episode of illness

Type of symptom	Number of study participants (N=98)	Percentage (%)
Fever	26	26.5
Cough	23	23.5
Blocked/runny nose	19	20.4
Sore throat	18	18.7
Stomach ache	18	18.7
Injuries	18	18.7
Body/joint pain	13	13.2
Skin problems	10	10.2

The most common symptom experienced by the study population was fever (26.5%), followed by cough (23.5%), blocked/runny nose (20.4%), stomach ache (18.7%), sore throat (18.7%) and injuries (18.7%).

7.4.2. Timing of last sickness/injury

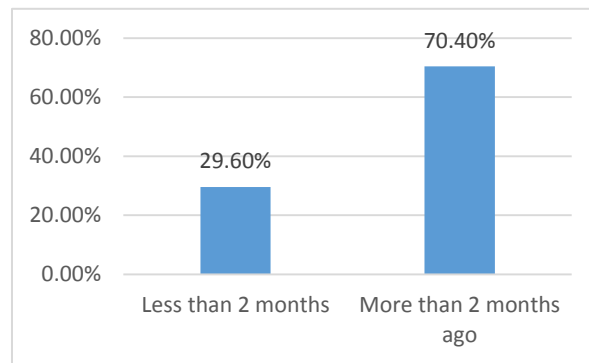


Figure 10 Timing of most recent illness episode

Among the participants who experienced illness, around 30% of them had illness less than 2 months ago and remaining 70% of them had illness more than 2 months ago.

7.4.3. Severity of the most recent episode

Table 7 Severity of the last episode of illness

Severity of the episode	Number of participants (N=98)	Percentage (%)
Not serious at all	48	49
A little serious	22	22.4
Quite serious	24	24.5
Very serious	4	4.1

Nearly half of the migrants experienced illness that was not serious at all. Out of the remaining participants, 4 of them had experienced a very serious illness.

7.4.4. Delay in seeking medical advice

Table 8 Time taken to seek medical advice for the study population

Delay in seeking medical advice	Number of participants (N=98)	Percentage (%)
3 days or less	46	48
3 days to 1 week	13	13.3
More than 1 week	5	4.1
Did not remember	2	2
Did not go to the clinic	32	32.7

Among those who had an illness, 48% of them sought medical advice within 3 days. Nearly 33% of them did not seek any medical advice for their illness.

7.4.4. Healthcare facility visited

Only 66 of those who had illness (67%) visited health care facility for treatment.

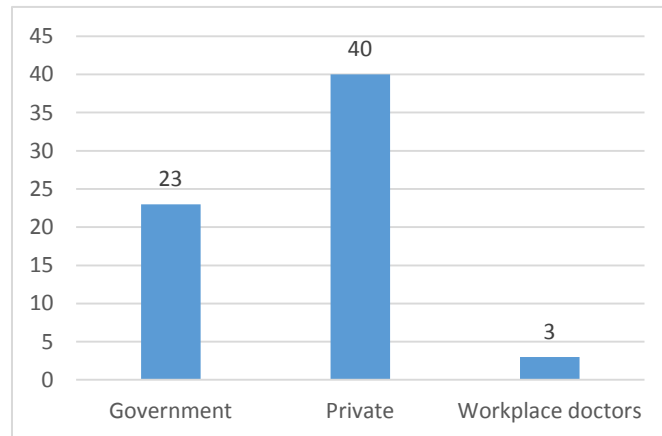


Figure 11 Healthcare facility visited by the study population for the recent illness

Among the 66 migrant workers visited the healthcare facility for the recent illness, most of them visited private healthcare facility. Only 3 visited workplace doctors for their illness.

7.5. FACTORS INFLUENCING THE HEALTH SEEKING BEHAVIOUR

7.5.1. Influence of working hours per day

Table 9 Influence of working hours per day on health seeking behaviour

Working hours per day	Visited healthcare facility	Did not visit healthcare facility	Total
Less than 9 hours	24 (53.3%)	21 (46.7%)	45
More than 9 hours	42 (79.3%)	11 (20.8%)	53
Total	66	32	98
p value – 0.009, Fisher’s Exact test			

The above table shows that there is a significant association of working hours per day with the health seeking behaviour of the study population. That is, more proportion of workers with working hours of more than 9 hours per day sought healthcare facility more than those with working hours of less than 9 hours per day.

7.5.1. Influence of severity of the illness in visiting healthcare facility

Table 10 Influence of severity of illness on health seeking behaviour of study population

Severity of the illness	Visited healthcare facility	Did not visit healthcare facility	Total
Not serious at all	22 (45.8%)	26 (54.2%)	48
A little serious	18 (81.8%)	4 (18.2%)	22
Quite serious	23 (95.8%)	1 (4.2%)	24
Very serious	3 (75%)	1 (25%)	4
Total	66	32	98
p value <0.001, Fisher's Exact test			

The above table shows the proportion of migrant construction workers visited who visited healthcare facility based on the severity of their illness. It can be seen that there is a statistically significant association between the severity of the illness and healthcare facility visit. That is, as the illness gets more severe, more number of migrant construction workers visited healthcare facility for their illness.

7.5.2. Influence of severity of illness on time taken to seek healthcare facility

Table 11 Time taken to seek healthcare facility based on the severity of illness

Severity of illness	Time taken to seek healthcare facility			Total
	Less than 3 days	More than 3 days	Did not seek at all	
Not serious at all	14 (29.2%)	8 (16.7%)	26 (54.2%)	48
A little serious	12 (57.1%)	5 (23.8%)	4 (19%)	21
Quite serious	17 (73.9%)	4 (17.4%)	2 (8.7%)	23
Very serious	3 (75%)	1 (25%)	0	4
Total	46	18	32	96
p value – 0.001, Fisher’s Exact Test				

The above table shows the time taken to seek healthcare facility during the illness among the study population. Since 2 of the migrant workers did not remember about the time taken to seek healthcare facility, they were excluded from the analysis. It was found that there was a significant association between the severity of illness and the time taken to seek healthcare facility. That is, workers with more serious illness visited healthcare facility earlier than others who did not find their illness to be serious.

7.5.1. Reasons for seeking healthcare for illness

Table 12. Reasons cited for seeking healthcare among those who had illness

(N=66)

Reason	Number of participants (N=66)	Percentage (%)
I am willing to listen to doctor's advice about medication and lifestyle change	42	63.6
I think this is a dangerous condition and I might die from it	34	51.5
Seeking a doctor will help me do my work better and feel better	24	36.4
It has affected my work and/or sleep and/or leisure activities	21	31.8
I must take care of my body	21	31.8
My friends saw a doctor when they had similar sickness	14	21.2
I have been told by friends/employer to see a doctor if I am sick	13	19.7
I have previously had this condition and it worsened without seeing a doctor	13	19.7
I might get sent back to my place if the illness is not treated	9	13.6

Among those who had visited healthcare facility for their illness, most of them cited the reason that they were willing listen to doctor's advice. Other common reasons for seeking healthcare were fear of illness, being not able to work efficiently and peer influence.

7.5.2. Reason for not seeking healthcare for illness

Table 13 Reasons cited for not seeking healthcare among those who had illness (N=32)

Reason	Number of participants (N=32)	Percentage (%)
I don't think my illness is serious	18	56.3
I don't have enough money to pay for visit to the doctor and medication	9	28.1
I previously recovered without seeing a doctor	5	15.6
If I miss work, I might lose my job	5	15.6
I don't know where to find a doctor	3	9.4
No one has told me to see a doctor if I am sick	3	9.4
No one I know saw a doctor because of this	3	9.4
I might get sent back to my place for being sick	2	6.3
I don't think Chennai health care system is good	1	3.1

Among those who did not seek healthcare for their illness, most of them cited the reason that their illness was no serious. Other common reasons were financial constraints, past experience of same illness and inadequate awareness about the healthcare facility.

8. DISCUSSION

This study was a cross-sectional done among the migrants construction workers which is often a neglected and vulnerable population. This study was done at Chennai, Tamilnadu. This study aimed to study the health seeking behaviour of migrant constructions workers at Chennai. It also aimed to study the factors that influence the health seeking behaviour among the same population.

Majority of the study population (90%) belonged to the economically productive age group 16 to 45 years. Most of them could be single earning member of the family on whom the family could be entirely dependent financially.

Nearly 93% of the migrants were males. Several studies also showed that most of the migrants were males (17). Majority of them (68%) belonged to the age group 16 to 30 years of age. This can be because of unemployment prevailing in the rural areas.

Almost 30% of them were intra-state migrants. Since Tamilnadu has an urbanization level of around 48%, it has higher level of in-migration from other states in addition to the intra-state migration from rural areas to urban areas(6). Higher proportion of migration from Jharkhand, West Bengal and Orissa can be due to relatively better wages and employment facilities at Tamilnadu as seen in a previous study (10).

As 68% of the study population belonged to the age group 16 to 30 years, a relatively higher proportion (46%) were found to be single.

The educational status of the study population was found to be poor with 28% of them having no formal education. This was consistent with the report of UNESCO which showed higher proportion of migrants to be illiterate. However, the proportion of illiterate in our study was found to be much lower than that in UNESCO report (19). This can be because our study population had 30% intra-state migration from within Tamilnadu which has a better literacy rate.

Most of them supported 4 to 6 family members financially. Low educational status and higher financial responsibility in the family could have forced these people to migrate to urban areas where there is higher level of per capita income and more employment opportunities(6).

8.1. Occupational details of the study population

The current study showed that nearly 62% of the study population had more than 9 hours of average working hours per day. Almost 80% of the study population had more than 48 hours of working hours per week. But the study population had a good duration of interval in between working hours. Almost most of them had an interval of at least half an hour during the working hours.

As the working hours increase, it can ultimately reflect in the health-seeking behaviour of the study population. The migrant workers tend to rest during the available free time rather than seeking healthcare for their illness. The heavy

working hours also affect the health status of the migrant workers and aggravates any illness if present.

8.2. Health belief of the study population

In our current study, the study population was given four different scenarios and asked for the participants' response to each scenario. The response of the participants was found to be good in scenario C and D (a scenario of getting injuries) when compared to scenario A and B (a scenario of sneezing/coughing/having runny nose/fever). This shows that the migrant workers gave more importance to injuries rather than to infectious diseases.

It was also found from the hypothetical scenarios that the study participants would visit a doctor if the illness gets severe. This shows that the migrant workers are able to take better care of their own health and are aware of the danger signs. This result seems to be better when compared to a study that showed half of the migrant workers would go to the healthcare facility only when their illness gets severe.(39)

However, it was found that nearly 17.5% and 27% of workers would not report to their supervisors if their injuries or infection respectively get worse. This may cause delay in access to healthcare leading to worsening of conditions. This also shows communication gap prevailing in the construction site that may compromise work-site safety. Infectious diseases like malaria and dengue also

keep spreading to other workers if no proper information to the supervisors/employers is given.

Nearly 2.5% of the workers were ignorant of who will pay for their healthcare if they get any illness. Only 20 to 25% of the workers had confidence in their company in terms of healthcare payment. Participants who thought that they have to spend themselves for their healthcare might feel financially insecure and hesitate to approach healthcare facility for their illness.

8.3. Health seeking experience

Current study showed that only 24% of the study population have had an illness episode after being employed in the construction site. This proportion can be an underestimate since only self-reported illness were included.

Most of the illness reported were mainly of infectious origin. This shows the increased susceptibility of the migrant workers to infections due to poor living conditions. However, the proportion who sought medical advice was found to be consistently similar for all the type of symptoms reported. This finding is similar to that of a study done among migrants at Singapore. (41)

Almost 50% of the illness reported were perceived as not serious by the migrant workers. Half of the workers who had illness had sought healthcare facility within 3 days of illness. Nearly 33% did not seek healthcare facility for their illness. This proportion seem to be far better than the proportion found in a study done among Bangladeshi and Chinese migrant population (37)(40)

Most of them used private healthcare facility for their healthcare. This finding is similar to that of a study done at Thailand where most of them preferred private health facility(39)This shows that the migrant workers are not aware of the healthcare services available at subsidized costs in government healthcare sectors.

8.4. Factors influencing health seeking behaviour

In the current study, it was found that more number of migrants working for more than 9 hours sought medical advice for their illness as compared to migrants working for less than 9 hours. It was also seen that migrants getting severe illness were more likely to seek healthcare facility.

It can be concluded that migrants working for more than 9 hours gets severe illness because of their work stress and hence they seek healthcare more than others. Also, migrants working for more number of hours earn more and it can be a financial reason that they seek healthcare.

The time taken to seek healthcare for an illness was found to be less for those who perceived their illness to be serious. This shows that there is availability of affordable and accessible healthcare services around their working site. This finding correlates well with the reason cited by the study population for not seeking healthcare.

The most common reason for seeking medical advice for illness was that they were willing to listen to doctor's advice. This suggests the positive attitude

of the migrant workers towards adopting healthy lifestyle. What needs to be done is to sufficiently educate them about the available healthcare services and healthy lifestyle. Other common reasons for seeking healthcare were fear of illness, being not able to work efficiently and peer influence. The reasons cited for seeking healthcare was more consistent with the study done at Singapore (41).

The most common reason cited for not seeking healthcare was that their illness was not serious. This finding is consistent with the finding of previous study done at Singapore among South Asian migrants (41). Other common reasons were financial constraints, past experience of same illness and inadequate awareness about the healthcare facility. Financial reasons could have been mostly cited by migrants with lower income as in the previous study done at Singapore(41)

9. SUMMARY AND CONCLUSION

A community based cross sectional survey was conducted among 418 migrant construction workers of 16 years and above working in two construction sites in Chennai to determine the health seeking behaviour and the factors influencing the health seeking behaviour among the study population.

A semi-structured questionnaire was used to collect information regarding the socio-demographic details, health belief, health seeking experience in the recent past illness and perceived facilitators and barriers in health seeking experience.

The study revealed the following findings:

1. Nearly 89% of the study population belonged to the age group 16 to 45 years of age.
2. Almost 30% of the study population were intra-state migrants. Most of the inter state migrants were from Jharkhand, West Bengal and Orissa.
3. Majority of them had only primary level of education. Almost 28% of them had no formal education.
4. Nearly half of them found to support 4 to 6 family members financially.
5. Almost 62% of them were working for more than 9 hours a day. The duration of interval seemed to be sufficient with almost 99% of them getting an interval of duration more than half an hour.

6. The health seeking behaviour seemed to be better for injuries when compared to that for infectious diseases.
7. The migrant workers seek health care when the illness is getting worse.
8. Nearly 2.5% of the study population had no idea of who will pay for their healthcare. Half of the study population did not have confidence in their company in terms of healthcare payment.
9. Only 98 migrant construction workers had illness episode after starting to work in the construction site.
10. Almost 27% of the study population reported to have had fever, 23% have had cough, followed by blocked/runny nose (20.4%), sore throat (18.7%), stomach ache (18.7%), injuries (18.7%), body/joint pain (13.2%) and skin problems (10.2%).
11. Nearly half of the illness was perceived as not so serious by the study population. Only 4% perceived their illness as very serious.
12. Majority of them (48%) sought healthcare within 3 days of illness. Nearly 33% did not seek healthcare facility at all for their illness.
13. Out of 66 migrant workers who sought medical advice, 40 of them visited private healthcare facility for their illness.
14. Migrants working for more than 48 hours a day sought medical advice more than those working for less than 48 hours a day

15. Migrants who felt their illness to be very serious sought healthcare more than others who felt their illness to be less serious.
16. Migrants who felt their illness to be very serious sought healthcare more readily, that is, within three days than migrants who felt their illness to be less serious.
17. The most common reason cited for seeking health care was to obtain medical advice for their illness.
18. The most common reason cited for not seeking medical advice was that the workers did not find their illness to be serious. Financial constraint was the second most commonly cited cause.

To conclude, the health seeking behaviour of the migrant construction workers at Chennai was found to be relatively good when compared with the previous studies done at Singapore and Beijing (41)(40). The health seeking behaviour depends mainly on the perceived severity of the illness. Financial constraint was cited as a reason for not seeking healthcare. This should be addressed to the employer and necessary healthcare facilities should be made available for vulnerable low income group.

10. LIMITATIONS

1. Most of the details provided by the study participants were self – reported which was not cross verified due to paucity of medical records.
2. There was a possibility of recall bias in the information provided.
3. Since this study was done in a metropolitan city where the health facilities are high with good accessibility, this study cannot be generalized to other sub – urban areas of Tamil Nadu.
4. Although well trained translators were used to avoid linguistic difficulties, there may be a chance of information bias.
5. Other factors influencing health seeking behaviour like health insurance, other social security schemes has not been covered in this study.
6. The health seeking behaviour of the family members supported by the participant has not been studied.

11. RECOMMENDATIONS

1. Pre-placement and periodic health examinations should be conducted and health education must be given regarding the expected health problems and preventive measures
2. Health education regarding Ergonomics is important in reducing risks to worker's health.
3. Sickness register and accident register should be maintained in the office with complete details.
4. Workplace doctors must be employed within the construction site for periodic health examination and health education to improve their health seeking behaviour.
5. The migrant construction workers should be ensured access to health care by providing social security schemes like health insurance.
6. Further studies are needed to assess the utilization and efficiency of social security schemes available, qualitative research to assess the Worker's unmet needs.

12. REFERENCES

1. Declaration on Workers Health [Internet]. Italy: World Health Organization; 2006 [cited 2016 Oct 3]. p. 4. Available from: http://www.who.int/occupational_health/Declarwh.pdf
2. ILO global estimates on migrant workers [Internet]. 2015 [cited 2016 Oct 3]. Available from: http://www.ilo.org/global/topics/labour-migration/publications/WCMS_436343/lang--en/index.htm
3. Health Vulnerabilities of Informal Workers - The Rockefeller Foundation [Internet]. [cited 2016 Oct 3]. p. 129. Available from: <https://www.rockefellerfoundation.org/report/health-vulnerabilities-of-informal-workers/>
4. G. Mahendran, M.A. MP, V. Ramajayam PD. Status of Migrant Workers with Special Reference to Thanjavur District, Tamilnadu. Lang INDIA Strength Today Bright Hope Tomorrow [Internet]. 2012 [cited 2016 Oct 3];12:10. Available from: <http://www.languageinindia.com/dec2012/mahendaranmigrantworkers.pdf>
5. Internal Labor Migration in India Raises Integration Challenges for Migrants | migrationpolicy.org [Internet]. Available from: <http://www.migrationpolicy.org/article/internal-labor-migration-india-raises-integration-challenges-migrants>
6. World Migration Report 2015 | International Organization for Migration [Internet]. 2016. Available from: <https://www.iom.int/world-migration-report-2015>
7. Hazardous Work (Occupational Safety and Health) [Internet]. [cited 2016 Oct

- 4]. Available from: <http://www.ilo.org/safework/areasofwork/hazardous-work/lang--en/index.htm>
8. T.Subramani VJ. Analysis Of Construction Workers Migrate From Industries. Int J Appl or Innov Eng Manag [Internet]. 2015 [cited 2016 Oct 3];4(5):10. Available from: <http://www.ijaiem.org/Volume4Issue5/IJAIEM-2015-05-22-61.pdf>
9. Ravi Srivastava SKS. An overview of migration in India, its impacts and key issues [Internet]. 2003 [cited 2016 Oct 3]. Available from: http://www.eldis.org/vfile/upload/1/document/0903/Dhaka_CP_2.pdf
10. Tamil Nadu now home to 1 million migrant workers: Study - Times of India [Internet]. 2016. Available from: <http://timesofindia.indiatimes.com/city/Chennai/Tamil-Nadu-now-home-to-1-million-migrant-workers-Study/articleshow/50861647.cms>
11. Key Migration Terms | International Organization for Migration [Internet]. [cited 2016 Oct 4]. Available from: <http://www.iom.int/key-migration-terms>
12. How health systems can address health inequities linked to migration and ethnic [Internet]. WHO Regional Office for Europe; 2010 [cited 2016 Oct 4]. p. 44. Available from: http://www.euro.who.int/_data/assets/pdf_file/0005/127526/e94497.pdf
13. Migrant | United Nations Educational, Scientific and Cultural Organization [Internet]. Available from: <http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/migrant/>

14. International Labour Standards on migrant workers' rights: Guide for policymakers and practitioners in Asia and the Pacific [Internet]. 2007 [cited 2016 Oct 3]. Available from: http://www.ilo.org/asia/whatwedo/publications/WCMS_146244/lang--en/index.htm
15. Stephen Castles. INTERNATIONAL MIGRATION AT THE BEGINNING OF THE TWENTY _ FIRST CENTURY: GLOBAL TRENDS AND ISSUES. ISSJ [Internet]. 2000 [cited 2016 Oct 4];13. Available from: http://www.msu.ac.zw/elearning/material/1330864594Reading_1_international_migrationnnn.pdf
16. PriyaDeshingkar. Circular Internal Migration and Development in India. Overseas Dev Institute, London [Internet]. 2009 [cited 2016 Oct 3];8:28. Available from:<http://essays.ssrc.org/acrossborders/wp-content/uploads/2009/08/ch8.pdf>
17. Sandhya Rani Mahapatro. The Changing Pattern of Internal Migration in India Issues and Challenges [Internet]. 2012 [cited 2016 Oct 3]. Available from: <http://epc2012.princeton.edu/papers/121017>
18. WHO | Overcoming migrants' barriers to health [Internet]. WHO. World Health Organization; 2011 [cited 2016 Oct 4]. Available from: <http://www.who.int/bulletin/volumes/86/8/08-020808/en/>
19. S Irudaya Rajan. Internal Migration and Youth in India: Main Features, Trends and Emerging Challenges [Internet]. 2013 [cited 2016 Oct 3]. Available from:

<http://unesdoc.unesco.org/images/0022/002214/221487e.pdf>

20. Yoshifumi Usami. Migration in India: Trend and Patterns, Profile of Migrant Workers and Ties with Native Place. Univ Tokyo [Internet]. [cited 2016 Oct 3];2. Available from: http://www.l.u-tokyo.ac.jp/~tindas/Abstract_Usami.pdf
21. S Chandrasekhar AS. Urbanization and Spatial Patterns of Internal Migration in India. 2015;
22. Bhagat RB, Mohanty S. EMERGING PATTERN OF URBANIZATION AND THE CONTRIBUTION OF MIGRATION IN URBAN GROWTH IN INDIA. Asian Popul Stud [Internet]. 2009 Mar [cited 2016 Oct 4];5(1):5–20. Available from: <http://www.tandfonline.com/doi/abs/10.1080/17441730902790024>
23. Pratik A. Health issues among nepalese migrant workers in the middle east. Heal Sci J. iMedPub;
24. ILO CONSTRUCTION OS&H, A free, comprehensive, international, digital training package in occupational safety and health for the construction industry [Internet]. [cited 2016 Oct 4]. Available from: http://www.icea.ir/wp-content/uploads/2016/05/wcms_161771.pdf
25. Construction Workers in the Informal Economy | WIEGO [Internet]. [cited 2016 Oct 4]. Available from: <http://wiego.org/informal-economy/occupational-groups/construction-workers>
26. James L. Weeks. Chapter 93. Construction. HEALTH AND SAFETY HAZARDS IN THE CONSTRUCTION INDUSTRY [Internet]. International

- Labour Office. p. 133. Available from: <http://www.ilocis.org/documents/chpt93e.htm>
27. LONDON HAZARDS CENTRE. HEALTH RISKS ASSOCIATED WITH CONSTRUCTION WORK [Internet]. [cited 2016 Oct 4]. Available from: http://www.lhc.org.uk/wp-content/uploads/HEALTH_RISKS_ASSOCIATED_WITH_CONSTRUCTION_WORK.doc1.pdf
 28. Vibration - Controlling physical health risks - Managing occupational health risks in construction [Internet]. Available from: <http://www.hse.gov.uk/construction/healthrisks/physical-ill-health-risks/vibration.htm>
 29. Construction - Lung disease [Internet]. Available from: <http://www.hse.gov.uk/lung-disease/construction.htm>
 30. Dr.Pa.Kaja Mohideen PD. AN OVERVIEW OF CONSTRUCTION SECTOR IN INDIAN ECONOMY. IJMSS [Internet]. 2015;3(2):10. Available from: [file:///C:/Users/admin/Downloads/IJMSS2332feb23 \(3\).pdf](file:///C:/Users/admin/Downloads/IJMSS2332feb23%20(3).pdf)
 31. Direction given by Central Govt. to State Govt. regarding Implementation of Provisions of the B&OCWWB [Internet]. Government of India Ministry of Labour & Employment; 1996 [cited 2016 Oct 4]. p. 10. Available from: [http://www.nirmana.org/pdf/downloads/Direction given by Central Govt](http://www.nirmana.org/pdf/downloads/Direction%20given%20by%20Central%20Govt)
 32. Worker Welfare Funds in India | WIEGO [Internet]. Available from: <http://wiego.org/informal-economy/worker-welfare-funds-india>
 33. Construction Workers Unite under One Banner in Tamil Nadu | Media Room |

- New Trade Union Initiative [Internet]. [cited 2016 Oct 4]. Available from:
[http://www.ntui.org.in/media/item/construction-workers-unite-under-one-
banner-in-tamil-nadu/](http://www.ntui.org.in/media/item/construction-workers-unite-under-one-banner-in-tamil-nadu/)
34. TAMIL NADU CONSTRUCTION, WORKERS WELFARE BOARD. HANDBOOK OF INFORMATION UNDER THE RIGHT TO INFORMATION ACT, 2005 [Internet]. 2005 [cited 2016 Oct 4]. 117 p. Available from:
http://www.tn.gov.in/rti/proactive/labour/handbook_tncwwb.pdf
35. Health seeking behaviors | definition of health seeking behaviors by Medical dictionary [Internet]. Available from: [http://medical-dictionary.
Thefreedictionary.com/health+seeking+behaviors](http://medical-dictionary.thefreedictionary.com/health+seeking+behaviors)
36. Shaikh BT, Hatcher J. Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. J Public Health (Oxf) [Internet]. 2005 Mar [cited 2016 Oct 3];27(1):49–54. Available from:
<http://www.ncbi.nlm.nih.gov/pubmed/15590705>
37. H. M. Zehadul Karim A, Mohamad Diah N. Health Seeking Behavior of the Bangladeshi Migrant Workers in Malaysia: Some Suggestive Recommendations in Adjustive Context. Asian Soc Sci [Internet]. 2015 Apr 20 [cited 2016 Oct 3];11(10):348. Available from: [http://www.ccsenet.org/
journal/
index.php/ass/article/view/47783](http://www.ccsenet.org/journal/index.php/ass/article/view/47783)
38. Lu C-H, Luo Z-C, Wang J-J, Zhong J-H, Wang P-X. Health-related quality of life and health service utilization in Chinese rural-to-urban migrant workers. Int

- J Environ Res Public Health [Internet]. 2015 Feb [cited 2016 Oct 3];12(2):2205–14. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25689996>
39. Thet Aung, Sathirakorn Pongpanich MGR. HEALTH SEEKING BEHAVIOURS AMONG MYANMAR MIGRANT WORKERS IN RANONG PROVINCE, THAILAND. J Heal Res 2009 [Internet]. 2009 [cited 2016 Oct 3];2(3):5–9. Available from: [http://www.jhealthres.org/upload/journal/286/23\(suppl\)_p5-9_thetaung.pdf](http://www.jhealthres.org/upload/journal/286/23(suppl)_p5-9_thetaung.pdf)
40. Peng Y, Chang W, Zhou H, Hu H, Liang W, Gu S, et al. Factors associated with health-seeking behavior among migrant workers in Beijing, China. BMC Health Serv Res [Internet]. BioMed Central; 2010 Dec 19 [cited 2016 Oct 3];10(1):69. Available from: <http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-10-69>
41. Lee W, Neo A, Tan S, Cook AR, Wong ML, Tan J, et al. Health-seeking behaviour of male foreign migrant workers living in a dormitory in Singapore. BMC Health Serv Res [Internet]. BioMed Central; 2014 Dec 10 [cited 2016 Oct 3];14(1):300. Available from: <http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-300>
42. Maneze D, DiGiacomo M, Salamonson Y, Descallar J, Davidson PM, Maneze D, et al. Facilitators and Barriers to Health-Seeking Behaviours among Filipino Migrants: Inductive Analysis to Inform Health Promotion. Biomed Res Int [Internet]. Hindawi Publishing Corporation; 2015 [cited 2016 Oct 3];2015:1–9. Available from: <http://www.hindawi.com/journals/bmri/2015/506269/>

ANNEXURE 1

INFORMATION SHEET

A CROSS SECTIONAL STUDY TO DETERMINE THE HEALTH SEEKING BEHAVIOUR AMONG MIGRANT CONSTRUCTION WORKERS, CHENNAI -2016.

International movement of migrant labour is an increasing global phenomenon, with approximately half of about 175 million migrants around the world being migrant workers. The increasing number of migrant workers in high risk occupation like construction in Chennai and their long working hours may elevate the risk of occupational accidents. They are also at risk from occupational skin and lung diseases, and work related musculo-skeletal disorders. Additionally, outbreaks of infectious diseases such as dengue, pneumonia and leptospirosis and typhus fever have been documented, possibly due to high density living conditions and poor sanitary living conditions. The high risk of health related problems may be compounded by issues with inadequate and delay in access to health care, particularly in lower income workers.

In this study, we will be assessing the health seeking behaviour among migrant construction workers at Chennai by asking questions under the domains such as your demographic profile, health belief, and health seeking experience. The privacy of the participants in the research will be maintained throughout the study. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

Taking part in this study is voluntary. You are free to decide whether to participate in this study or to withdraw at any time. Your decision will not result in any loss of benefits to which you are otherwise entitled. The results of the special study may be intimated to you at the end of the study period or during the study if anything is found abnormal which may aid in the management or treatment or prevention.

Signature of investigator

Signature of the participant

ஆராய்ச்சித் தகவல் தாள்

தலைப்பு: சென்னையிலுள்ள புலம் பெயர்ந்த பெருநகர கட்டுமான தொழிலாளர்களில் சுகாதார எதிர்நோக்கும் நடத்தை பற்றிய ஆய்வு

உலகளவில் 175 மில்லியன் புலம் பெயர்ந்த தொழிலாளர்கள் உள்ளனர். அவர்களுடைய நீண்ட வேலை நேரம் மற்றும் அதிக அபாயமான தொழில் காரணமாக தொழில்துறை விபத்துக்கான வாய்ப்புகள் அதிகரிக்கிறது.

அவர்களுக்கு தொழில்துறை நுரையீரல் மற்றும் தோல் நோய்களும் தொழில்துறை தசைக்கூட்டு நோய்களும் ஏற்படுவதற்கான வாய்ப்புகள் அதிகம் உள்ளது. மேலும் நெருக்கமான மற்றும் சுகாதாரத்தற்ற வாழ் இடங்களினாலும் டெங்கு, கபவாதம், லெப்டோஸ்பைரோஸிஸ் போன்ற தொற்று நோய்கள் வருவதற்கான வாய்ப்புகளும் அதிகம் உள்ளது.

இப்பிரச்சனைகள் போதுமான அளவு மருத்துவ வசதிகள் இல்லாததினாலும் சுகாதார சேவையை அணுகுவதில் ஏற்படும் காலதாமதத்தினாலும் மேலும் மோசமடைகிறது.

ஆகையால் சென்னையிலுள்ள புலம் பெயர்ந்த கட்டுமான தொழிலாளர்களில் சுகாதார எதிர்நோக்கும் நடத்தை பற்றிய இந்த ஆய்வு மேற்கொள்ளப்படுகிறது. நீங்கள் இந்த ஆராய்ச்சியில் பங்கேற்க நாங்கள் விரும்புகிறோம். நீங்கள் இந்த ஆராய்ச்சியில் பங்கேற்க நாங்கள் விரும்புகிறோம்.

இந்த ஆராய்ச்சியின் முடிவுகளை அல்லது கருத்துக்களை வெளியிடும் போதோ அல்லது ஆராய்ச்சியின் போதோ தங்களது பெயரையோ அல்லது அடையாளங்களையோ வெளியிட மாட்டோம் என்பதையும் தெரிவித்துக் கொள்கிறோம்.

இந்த ஆராய்ச்சியில் பங்கேற்பது தங்களுடைய விருப்பத்தின் பேரில் தான் இருக்கிறது. மேலும் நீங்கள் எந்நேரமும் இந்த ஆராய்ச்சியிலிருந்து பின்வாங்கலாம் என்பதையும் தெரிவித்துக் கொள்கிறோம்.

இந்த சிறப்புப் பரிசோதனைகளின் முடிவுகளை ஆராய்ச்சியின் போது அல்லது ஆராய்ச்சியின் முடிவின் போது தங்களுக்கு அறிவிப்போம் என்பதையும் தெரிவித்துக் கொள்கிறோம்.

ஆராய்ச்சியாளர் கையொப்பம்

अनुबंध

सूचना पत्रिका

चेन्नै, तमिलनाडु के प्रवासी निर्माण मजदूरों में स्वास्थ्य संबंधी बर्ताव पर एक प्रतिनिध्यात्मक जाँच – प्रजा प्रति प्रतिनिध्यात्मक जाँच – 2016

अंतरराष्ट्रीय प्रवासी कर्मचारियों की संख्या इतनी बढ़ गयी हैं कि आज लगभग 175 मिलियन प्रवासी कर्मचारियों को पाया जा सकता हैं। इनकी बढ़ती हुई संख्या और इनके काम की खतरों से दुर्घटनाएँ भी बढ़ रही है। इसके अलावा त्वचा, माँसपेशी, हड्डी और साँस संबंधी बीमारियाँ भी बढ़ रही हैं। साथ में संक्रामक रोग जैसे डेंगू, निमोनिया, लेप्टोस्पाइरोसिस का फैलना भी है, जिसकी वजह भीड़, रहने की तरीके, गंदा वातावरण हो सकता है और एक बात कि इन लोगों को सही इलाज पाने की फूरसत भी नहीं मिलती है, खासकर जिनकी कमाई बहुत कम है।

इस जाँच में हम इन चेन्नै निर्माण मजदूरों के स्वास्थ्य संबंधी बर्ताव की जानकारी लेंगे। इसलिए हम इनके परिवार, स्वास्थ्य संबंधी जानकारी और व्यवहार, कोई त्वचा, साँस, माँसपेशी संबंधी बीमारियों के बारे में सवाल पूछेंगे। ये जानकारी कभी किसी और को नहीं बतायी जाएगी।

इस जाँच में भाग लेना आपकी अपनी मर्जी है। कभी भी आप इस जाँच से बाहर जा सकते हो जिससे आपको कोई नुकसान नहीं होगा।

इस जाँच के परिणाम आपको जरूर बताया जाएगा। अगर कोई बीमारी है तो, इसका इलाज भी किया जाएगा या इलाज में मदद किया जाएगा।

जाँचकर्ता के हस्ताक्षर

हिस्सेदार के हस्ताक्षर/

अंगूठा निशान

दिनांक

ANNEXURE 2
INFORMED CONSENT FORM

**A CROSS SECTIONAL STUDY TO DETERMINE THE HEALTH SEEKING
BEHAVIOUR AMONG MIGRANT CONSTRUCTION WORKERS, CHENNAI -2016.**

Name of the participant:

Age/Sex:

Study ID No:

Date:

- (1) I have been explained in detail about the study and its procedure. I confirm that I had completely understood the study and have had the opportunity to ask questions
- (2) I understand that my participation in the study is voluntary and that I'm free to withdraw at any time, without giving any reason, without their medical care or legal rights being affected.
- (3) I understand that the principal investigator, others working on the investigator's behalf, the Ethics Committee and the regulatory authorities will not need my permission to look at my health records both in respect of the current study and any further research that may be conducted in relation to it, even if I withdraw from the trial. I agree to this access. However I understand that my identity will not be revealed in any information released to third parties or published.
- (4) I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s).
- (5) I agree to my participation in the above study.

Signature of investigator

**Signature or Thumb
impression of the participant**

Date:

ஆராய்ச்சி ஒப்புதல் படிவம்

தலைப்பு: சென்னையிலுள்ள புலம் பெயர்ந்த பெருநகர கட்டுமான தொழிலாளர்களில் சுகாதார எதிர்நோக்கும் நடத்தை பற்றிய ஆய்வு

பெயர்:

வயது:

பால்:

ஆராய்ச்சி சேர்க்கை எண்:

தேதி:

இந்த ஆராய்ச்சியின் விவரங்களும் அதன் நோக்கங்களும் முழுமையாக எனக்குத் தெளிவாக விளக்கப்பட்டது.

எனக்கு விளக்கப்பட்ட விஷயங்களை நான் புரிந்து கொண்டு நான் எனது சம்மதத்தைத் தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் பிறரின் நிர்ப்பந்தமின்றி என் சொந்த விருப்பத்தின் பேரில் தான் பங்கு பெறுகிறேன். நான் இந்த ஆராய்ச்சியிலிருந்து எந்நேரமும் பின்வாங்கலாம் என்பதையும் அதனால் எந்தப் பாதிப்பும் ஏற்படாது என்பதையும் நான் புரிந்து கொண்டேன்.

இந்த ஆராய்ச்சியின் விவரங்களைக் கொண்ட தகவல் தாளைப் பெற்றுக் கொண்டேன். நான் என்னுடைய சுயநினைவுடன் மற்றும் முழு சுதந்திரத்துடன் இந்த மருத்துவ ஆராய்ச்சியில் என்னைச் சேர்த்துக்கொள்ள சம்மதிக்கிறேன்.

ஆராய்ச்சியாளரோ அல்லது அவரைச் சார்ந்தவர்களோ நெறிமுறைக்குழு உறுப்பினர்களோ நான் இந்த ஆராய்ச்சியிலிருந்து விலகினாலும் என்னுடைய அனுமதியின்றி எனது உடல்நிலை குறித்த தகவல்களை இந்த ஆராய்ச்சிக்கோ இது தொடர்பான வேறு ஆராய்ச்சிக்கோ பயன்படுத்திக் கொள்ள முடியும் என்பதைப் புரிந்து கொண்டு சம்மதம் அளிக்கிறேன். ஆனாலும் எனது அடையாளம் வெளியிடப்பட மாட்டாது என்பதையும் புரிந்து கொள்கிறேன்.

இந்த ஆராய்ச்சியின் தகவல்களையும் முடிவுகளையும் அறிவியல் நோக்கத்திற்காக பயன்படுத்துவதற்கு நான் அனுமதிக்கிறேன். இந்த ஆராய்ச்சியில் பங்குபெற நான் சம்மதிக்கிறேன்.

ஆராய்ச்சியாளர் கையொப்பம்

பங்கேற்பாளர் கையொப்பம்

தேதி:

मंजूरी फार्म

चेन्नै, तमिलनाडु के निर्माण मजदूरों में स्वास्थ्य बर्ताव पर एक प्रजा प्रति
प्रतिनिध्यात्मक जाँच - 2016

हिस्सेदार का नाम -

उम्र / लिंग -

जाँच ID No. -

दिनांक -

1. मुझे इस जाँच की पूरी जानकारी दी गयी है और मैं साफ-साफ इसके बारे में समझ चुका हूँ। मुझे प्रश्न पूछने का अवसर भी दिया गया था।
2. मुझे इस बात की समझ है कि मैं अपनी मर्जी से इस जाँच में भाग ले रहा हूँ और किसी भी समय बिना किसी तकलीफ से बाहर आ सकता हूँ।
3. मैं मानता हूँ कि जाँचकर्ता और उनके साथ आए अधिकारियों को मेरे स्वास्थ्य पर जाँच करने का पूरा अधिकार है। इसके लिए मेरी मंजूरी की जरूरत नहीं है। अगर मैं इस जाँच से बाहर जो जाता हूँ। तब भी वे मेरे स्वास्थ्य के प्रति जाँच कर सकते हैं। मुझे पता है कि मेरी निजी जानकारी किसी और को नहीं बतायी जाएगी।
4. अगर मेरी जाँच के परिणाम या स्वास्थ्य की जानकारी सिर्फ जाँच के लिए मात्र उपयोग किये जाए। तो मैं कोई बाधा नहीं डालूँगा।
5. मैं इस जाँच में भाग लेने के लिए पूर्ण रूप से मंजूर हूँ।

जाँचकर्ता के हस्ताक्षर

हिस्सेदार के हस्ताक्षर/

अंगूठा निशान

दिनांक

ANNEXURE 3

A CROSS SECTIONAL STUDY TO DETERMINE THE HEALTH SEEKING BEHAVIOUR AMONG MIGRANT CONSTRUCTION WORKERS, CHENNAI -2016.

QUESTIONNAIRE

SECTION A : GENERAL

S.No. : _____

Age :

Site : _____

State :

Gender : Male Female

Religion : Christian / Catholic Hindu Muslim None
 Others : _____

Marital Status : Single Separated Married

widowed. _____

Number of people you are supporting with your salary : _____

How long have you been working in the present site : _____

Main type of work in the last 3 months : Oiling Painting Welding Sand/Water blasting
 Piping Metal cutting Electric Work
 Chemical cleaning Machinery / Fitting Supervision
 masonry .

Highest level of education : None College Primary Diploma
 Secondary Degree

Average number of working : 48 hours or less 42-45hrs 45-48 hours
Hours per week (including overtime) More than 48 hrs

How many hours do you work per day :

Do you get interval during your work : Yes No

If yes, how long is your interval?: _____

SECTION B : HEALTH BELIEF

1. If your work made you fall sick or get injured, are you more likely to see a doctor? Yes No

2. Will you see a Doctor IF

a) You had itchy skin in the groin area. Yes No

b) You had fingernail problems. Yes No

c) You had itchy / painful skin on your hands Yes No

d) You had a skin lump that was red and painful Yes No

e) you had injury Yes No

3a. If you are sneezing / coughing / having a runny nose but you have no fever, you will:

- Go to work as usual Yes No
- Report condition to supervisor Yes No
- See a doctor Yes No

3b. Even If your supervisor says not to see a doctor, will you still see a doctor? Yes No

3c. If you see a doctor for this, who will pay for it?
 I Pay Both company and I pay Company Pays I don't know

4a. If 3 days later, you have a high fever of >38°C, sneezing / coughing / runny nose, you will:

- Go to work as usual Yes No
- Report condition to supervisor Yes No
- See a doctor Yes No

4b. Even If your supervisor says not to see a doctor, will you still see a doctor? Yes No

4c. If you see a doctor for this, who will pay for it?
 I Pay Both company and I pay Company Pays I don't know

5a. If a heavy object hit your foot and it is painful, but you can still walk, you will:

- Go to work as usual Yes No
- Report condition to supervisor Yes No
- See a doctor Yes No

5b. Even If your supervisor says not to see a doctor, will you still see a doctor? Yes No

5c. If you see a doctor for this, who will pay for it?
 I Pay Both company and I pay Company Pays I don't know

6a. If 3 days after an object hits your foot, and you cannot walk anymore, you will:

- Go to work as usual Yes No
- Report condition to supervisor Yes No
- See a doctor Yes No

6b. If you see a doctor for this, who will pay for it?
 I Pay Both company and I pay Company Pays I don't know

SECTION C : HEALTH SEEKING EXPERIENCE

1. Have your ever fallen sick or gotten injured since you've started working in Chennai.
 Yes No (if no Go to Section D)

2. When was the last time you fell sick or got injured?
 Less than 3 months ago More than 3 months ago






3) During the episode did you have:

- a. Fever? Yes No
- b. Cough? Yes No
- c. Blocked or Runny Nose? Yes No
- d. Sore throat? Yes No
- e. Stomachache? Yes No
- f. Body or Joint pain? Yes No
- g. Injuries? Yes No

h. Skin problems (e.g. itch, pain)

Yes No

4. How serious do you think that episode was?

 1	 2	 3	 4	 5
<i>Not serious at all</i>	<i>A little serious</i>	<i>Quite serious</i>	<i>Very serious</i>	<i>Extremely serious</i>

5. How long did you take before getting medical advice?

- 3 days or less 3 days to 1 week Less than 1 month but more than 1 week
 1 month or more I don't know I did not go to the clinic

6a. Did you see a doctor when you had this condition?

Yes No

6b. Where did you see a doctor?

- Government hospital
 Private clinics
 workplace doctors

If you saw a doctor, go to 7, skip 8.

If you did not see a doctor, skip 7, go to 8.

7. Why did you see a doctor?

- a) I might get sent back to my place if the illness is not treated. Yes No
b) Seeking a doctor will help me do my work better and feel better. Yes No
c) It has affected my work and /or sleep and / or leisure activities. Yes No
d) I am willing to listen to doctor's advice about medication and lifestyle change Yes No
e) I think this is a dangerous condition and I might die from it. Yes No
f) I have been told by friends / employer to see a doctor if I am sick Yes No
g) I have previously had this condition and it worsened without seeing a doctor. Yes No
h) My friends saw a doctor when they had similar sickness. Yes No
i) I must take care of my body. Yes No
j) Others : _____

8. Why did you NOT see a doctor?

- a) I might get sent back to my place for being sick. Yes No
b) I don't know where to find a doctor. Yes No
c) I don't think Chennai health care system is good. Yes No
d) I don't know enough money to pay for visit to the doctor and medication. Yes No
e) If I miss work, I might lose my job. Yes No
f) I don't think that my illness is serious. Yes No
g) No one has told me to see a doctor if I am sick. Yes No
h) I previously recovered without seeing a doctor. Yes No
i) No one I know saw a doctor because of this. Yes No
j) Others : _____

प्रश्नयावली

धारा: अ) जनरल

आयु : स. क्र. : _____
राज्य : साइट : _____
लिंग : पूरष महिला
धर्म : ईसाई/कैथोलिक हिंदु मुस्लिम कोई नहीं
वैवाहिक स्थिति : अविवाहित अलग विवाहि
विधवा

इसके इलावा : _____

कितने लोग आपके वेतन पर निर्भर करते हैं : _____
आप कब से वर्तमान साइट में काम कर रहे हैं : _____
पिछले 3 महीने में : तेल लगाने चित्रकारी वेल्डिंग रेत / जल नष्ट
काम का मुख्य प्रकार गरमा धातु काटने इलेक्ट्रिक वर्क
रासायनिक सफाई मशीनरी / फिटिंग पर्यवेक्षण
इसके इलावा : _____
शिक्षा का उच्चतम स्तर : कोई भी कॉलेज प्राथमिक डिप्लोमा
माध्यमिक डिग्री

काम करने की औसत संख्या: 48 घंटे या उससे कम 42-45 बजे 45-48 घंटे

प्रति सप्ताह घंटे (ओवरटाइम सहित)अधिक अधिक 48 बजे

कितने घंटे आप प्रति दिन काम करते हैं: _____

आपको अपने काम के दौरान अंतराल मिलता है? हां नहीं

अगर हां, तो आपके अंतराल कितना समय है? : _____

खंड बी: स्वास्थ्य विश्वास

1. अगरआपकेकामकियाआपबीमारगिरजातेहैंया घायल हो, तुम और एक डॉक्टर को देखने की संभावना है?

हाँ नहीं

आपको डॉक्टर के पास कब जाना चाहिए, अगर -

2. जब आप को कमर वाले भाग में खुजली हो रही हो ? हां नहीं

3. जब आपको नाखून की समस्या हो ? हां नहीं

4. जब आपके हाथों की त्वचा पर खुजली या दरद हो रहा हो ? हां नहीं

5. जब त्वचा पर गांठ पडने के कारण त्वचा लाल हो जाए और दरद हो ? हां नहीं

6.A) जब आपको छीके, खांसी और नाक से पानी चल रहा हो लेकिन बुखार न हो, तो आपको क्या करना चाहिए:

- रोजाना की तरह काम करना चाहिए हां नहीं
- परेवेशक को स्थिति के बारे में बताना चाहिए हां नहीं
- डॉक्टर के पास जाना चाहिए हां नहीं

6 ब) अगर आपका परेवेशक आपको डॉक्टर के पास जाने से मना करे तो क्या तब आप डॉक्टर के पास जाओगे? हां नहीं

6 क) अगर आप इस हालत में डॉक्टर के पास जाओगे तो उसका बिल कोन अदा करेगा ?

मैं अदा करुगा कंपनी और मैं अदा करुगा कंपनी पता नहीं

7 अ) ठीक तीन दिन बाद आपको बहुत ज्यादा बुखार , छीके, खांसी, नाक से पानी चल रहा हो, तो आप क्या करोगे ?

- रोजाना की तरह काम करना चाहिए हां नहीं
- परेवेशक को स्थिति के बारे में बताना चाहिए हां नहीं
- डॉक्टर के पास जाना चाहिए हां नहीं

7 ब) अगर आपका परेवेशक आपको डॉक्टर के पास जाने से मना करे तो क्या तब आप डॉक्टर के पास जाओगे? हां नहीं

7. स) अगर आप इस हालत में डॉक्टर के पास जाओगे तो उसका बिल कोन अदा करेगा ?

मैं अदा करुगा कंपनी और मैं अदा करुगा कंपनी पता नहीं

8 अ) अगर कोई भारी चीज आपके पैर पर लगती है और पैर में दरद हो रहा है लेकिन आप अभी भी चल पा रहे तो आप क्या करोगे ?

- रोजाना की तरह काम करना चाहिए हां नहीं
- परेवेशक को स्थिति के बारे में बताना चाहिए हां नहीं
- डॉक्टर के पास जाना चाहिए हां नहीं

8 ब) अगर आपका परेवेशक आपको डॉक्टर के पास जाने से मना करे तो क्या तब आप डॉक्टर के पास जाओगे? हां नहीं

8 स) अगर आप इस हालत में डॉक्टर के पास जाओगे तो उसका बिल कोन अदा करेगा ?

मैं अदा करुगा कंपनी और मैं अदा करुगा कंपनी पता नहीं

9 अ) एक वस्तु के बाद 3 दिनों के लिए अपने पैर मारता है, और तुम अब और नहीं चल सकता है, तो आप होगा:

- रोजाना की तरह काम करना चाहिए हां नहीं
- परेवेशक को स्थिति के बारे में बताना चाहिए हां नहीं
- डॉक्टर के पास जाना चाहिए हां नहीं

9 बी) अगर आपका परेवेशक आपको डॉक्टर के पास जाने से मना करे तो क्या तब आप डॉक्टर के पास जाओगे? हां नहीं

9 स) अगर आप इस हालत में डॉक्टर के पास जाओगे तो उसका बिल कोन अदा करेगा ?

मैं अदा करुगा कंपनी और मैं अदा करुगा कंपनी पता नहीं

सेक्शन सी – सेहतमंद रहने के तरीके

१) क्या आप कभी बीमार या जख्मी हुए जब अपने चेन्नई में काम करना शुरू किया ?






हां नहीं

२) आखिरी बार आप कब बीमार या जख्मी हुए थे ?

३ महीने पहले दो महीने से ज्यादा

ibmwrI के समय आपकोkXwथा -

- ३) बुखार हां नहीं
४) खांसी हां नहीं
५) बंद या बहता हुआ नाक हां नहीं
६) गले में खराश हां नहीं
७) सिरदर्द हां नहीं
८) शरीर या जोड़ों में दर्द हां नहीं
९) चोटे हां नहीं
१०) त्वचा संबंधी मुश्किलें (खराश या दर्द) हां नहीं
११) इसके इलावा _____
१२) आप इस परकन्न को कितना गंभीर मानते हो ?

				
1	2	3	4	5
sIrIXsnhI	QoVwsIrIXs	kwPIsIrIXs	bhuqsIrIXs	bhuqjXwdwsIrIXs

१३) आपने कितनी देर पहले मेडिकल लीव ले ली ?

- तिन दिन या कम तीन तीनदिन से एक हफ्ता एक महीने से कम लेकिन एक हफ्ते से ज्यादा
 एक महीना या ज्यादा नहीं पता मैं कतनिक गया नहीं था

१५अ) क्या आप डॉक्टर के पास जाओगे जब अप इस स्थिति में होंगे? हां नहीं

१५ब) आप डॉक्टर को कहा पर मिले ?

- सरकारी हस्पताल/पोलीक्लीनिक
 प्राइवेट जी पी/कार्यालय
 स्वास्थ्य की सेवा क्लिनिक

ANNEXURE 4

**INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003**

EC Reg.No.ECR/270/Inst./TN/2013
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To
Dr. Thirukumaran .R.
Post Graduate in M.D. Community Medicine
Institute of Community Medicine
Madras Medical College
Chennai 600 003

Dear Dr. Thirukumaran .R.

The Institutional Ethics Committee has considered your request and approved your study titled **"A CROSS SECTIONAL STUDY TO ASSESS THE HEALTH SEEKING BEHAVIOUR AMONG MIGRANT CONSTRUCTION WORKERS CHENNAI -2016" NO. 26062016.**

The following members of Ethics Committee were present in the meeting hold on **07.06.2016** conducted at Madras Medical College, Chennai 3

- | | |
|--|---------------------|
| 1.Dr.C.Rajendran, MD., | :Chairperson |
| 2.Dr.Isaac Christian Moses,MD.Ph.D.Dean(FAC)MMC,Ch-3 | :Deputy Chairperson |
| 3.Prof.Sudha Seshayyan,MD., Vice Principal,MMC,Ch-3 | :MemberSecretary |
| 4.Prof.B.Vasanthi,MD., Prof.of Pharmacology.,MMC,Ch-3 | : Member |
| 5.Prof.P.Raghumani,MS, Prof. of Surgery,RGGGH,Ch-3 | : Member |
| 6.Prof.Baby Vasumathi, Director, Inst. of O&G,Ch-8 | : Member |
| 7.Prof.K.Ramadevi,MD, Director,Inst.of Bio-Chem,MMC,Ch-3 | : Member |
| 8.Prof.M.Saraswathi,MD.,Director, Inst.of Path,MMC,Ch-3 | : Member |
| 9.Tmt.J.Rajalakshmi, JAO,MMC, Ch-3 | : Lay Person |
| 10.Thiru S.Govindasamy, BA.,BL,High Court,Chennai | : Lawyer |
| 11.Tmt.Arnold Saulina, MA.,MSW., | :Social Scientist |

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary - Ethics Committee

MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE
CHENNAI-600 003

கடைசி கேள்வித்தாள்

SECTION A : பொது கேள்விகள்

வ.எண்.: _____

வயது : _____ இடம் : _____

மாநிலம் : _____ மொழி : _____

பாலினம் : ஆண் பெண்

மதம் : கிரிஸ்துவர் / கத்தோலிக்க இந்து முஸ்லீம்
 மதம் இல்லை மற்றவை: _____

திருமண தகுதி : தனி பரிந்து வாழ்பவர் திருமணமானவர்
 மனைவி இழந்தவர் மற்றவை : _____

உங்கள் சம்பளத்தோடு எத்தனை நபர்களை உதவுகிறீர்கள்: _____

எத்தனை காலமாக நீங்கள் இந்த இடத்தில் வேலை செய்கிறீர்கள்: _____

கடந்த 3 மாதங்களில் : ஓய்லிங் பைண்டிங் வெல்டிங் மணல்/நீர் வடித்தல்
முக்கியமான வேலை பைபிங் மெட்டல் வெட்டுதல் மின்சார வேலை
 கெமிக்கல் சுத்தம் செய்தல் இயந்திரங்கள் / பொருத்தும்
 மேற்பார்வை வேலை மற்றவை: _____

எது வரைக்கும் கல்வி : கல்வி இல்லை கல்லூரி ஆரம்ப பள்ளி
 டிப்ளோமா உயர்நிலைப் பள்ளி பட்டம்

அடிப்படை மாத சம்பளம் : 48 மணிக்கு குறைவாக 42-45 மணி 45-48 மணி
 48 மணிக்கு மேலாக More than 48 hrs

ஒரு நாளைக்கு எத்தனை மணி நேரம் வேலை செய்கிறீர்கள் :

தங்கள் வேலை நேரத்தில் இடைவேளை உண்டா : ஆம் இல்லை

ஆம் எனில், இடைவேளை எவ்வளவு நேரம் : _____

நீங்கள் இடைவேளையை எவ்வளவு நேரம் எடுத்துக்கொள்வீர்கள்? _____

சென்னை வருவதற்கு முன்னர் உங்களுக்கு கடந்த மருத்துவ வரலாறு:

தோல் பிரச்சினைகள் (e.g. eczema) ஆம் இல்லை தெரியாது
நுரையீரல் பிரச்சினைகள் (e.g. eczema) ஆம் இல்லை தெரியாது
எலும்பு /கூட்டு/தசை பிரச்சினைகள் ஆம் இல்லை தெரியாது
நீண்ட கால நோய்கள் (எ.கா. நீரிழிவு, உயர் இரத்த அழுத்தம்) ஆம் இல்லை தெரியாது
மற்றவை : _____

நீங்கள் புகைப்பிடிப்பீர்களா? ஆம் இல்லை
மருத்துவமனையில் முன்னைய அனுமதி? ஆமாம் எதற்காக? _____ இல்லை
வேலை தளத்தில் காயங்கள் ஏற்பட்டுள்ளதா? ஆமாம் எதற்காக? _____ இல்லை
சென்னையில் மருத்துவரை பார்த்திருக்கிறீர்களா? ஆமாம் எதற்காக? _____ இல்லை

SECTION B : உடல் நல நம்பிக்கை

1. வேலை உங்கள் உடல் நலத்தை பாதித்தால் நீங்கள் மருத்துவரை பார்க்க அதிகமாக
ஆசைப்படுவீர்களா ஆம் இல்லை

மருத்துவரை பார்ப்பீர்களா?

2. உள் தொடை அருகே அரிப்பு இருந்தால் ஆம் இல்லை
3. விரல் நக பிரச்சினைகள் இருந்தால் ஆம் இல்லை
4. கைகள் அரிப்பாகவும் வலியாகவும் இருந்தால் ஆம் இல்லை
5. தோலின் மேல் வலிக்கும் ஒரு சிவப்பான கட்டி இருந்தால் ஆம் இல்லை

6a. உங்களுக்கு இருமல், மூக்குச்சளி இருக்கிறது. ஆனால் காய்ச்சல் இல்லை, நீங்கள்:

- எப்போதும் போல வேலைக்கு போவீர்கள் ஆம் இல்லை
- மேற்பார்வையாளரிடம் தெரிவிப்பீர்கள் ஆம் இல்லை
- மருத்துவரை பார்ப்பீர்கள் ஆம் இல்லை

6b. மேற்பார்வையாளர் மருத்துவரை பார்க்க வேண்டாம் என்று சொன்னாலும் மருத்துவரை பார்ப்பீர்களா? ஆம் இல்லை

6c. நீங்கள் மருத்துவரை பார்த்தால், யார் பணம் கட்டுவார்?

- நான் கட்டுவேன் நானும் நிறுவனமும் சேர்ந்து கட்டுவோம்
- நிறுவனம் கட்டும் எனக்கு தெரியாது

7a. மூன்று நாட்களுக்கு பிறகு, அதிக காய்ச்சலிருந்தால் (38 டிகிரிஸ்), இருமல், மூக்குச்சளி தொடர்ந்திருந்தால், நீங்கள்:

- எப்போதும் போல வேலைக்கு போவீர்கள் ஆம் இல்லை
- மேற்பார்வையாளரிடம் தெரிவிப்பீர்கள் ஆம் இல்லை
- மருத்துவரை பார்ப்பீர்கள் ஆம் இல்லை

7b. மேற்பார்வையாளர் மருத்துவரை பார்க்க வேண்டாம் என்று சொன்னாலும் மருத்துவரை பார்ப்பீர்களா? ஆம் இல்லை

7c. நீங்கள் மருத்துவரை பார்த்தால், யார் பணம் கட்டுவார்?

- நான் கட்டுவேன் நானும் நிறுவனமும் சேர்ந்து கட்டுவோம்
- நிறுவனம் கட்டும் எனக்கு தெரியாது

8a. கனமான பொருள் உங்களுடைய காலின் மேல் விழுந்துள்ளது. நடக்க முடிகிறது ஆனால் வலி மிக அதிகம் நீங்கள்:

- எப்போதும் போல வேலைக்கு போவீர்கள் ஆம் இல்லை
- மேற்பார்வையாளரிடம் தெரிவிப்பீர்கள் ஆம் இல்லை
- மருத்துவரை பார்ப்பீர்கள் ஆம் இல்லை

8b. மேற்பார்வையாளர் மருத்துவரை பார்க்க வேண்டாம் என்று சொன்னாலும் மருத்துவரை பார்ப்பீர்களா? ஆம் இல்லை

8c. நீங்கள் மருத்துவரை பார்த்தால், யார் பணம் கட்டுவார்?

- நான் கட்டுவேன் நானும் நிறுவனமும் சேர்ந்து கட்டுவோம்
- நிறுவனம் கட்டும் எனக்கு தெரியாது

9a. கனமான பொருள் காலின் மேல் விழுந்து மூன்று நாட்கள் கடந்துள்ளது. இப்போது நடக்க முடியவில்லை, நீங்கள்:

- எப்போதும் போல வேலைக்கு போவீர்கள் ஆம் இல்லை
- மேற்பார்வையாளரிடம் தெரிவிப்பீர்கள் ஆம் இல்லை
- மருத்துவரை பார்ப்பீர்கள் ஆம் இல்லை

9b. மேற்பார்வையாளர் மருத்துவரை பார்க்க வேண்டாம் என்று சொன்னாலும் மருத்துவரை பார்ப்பீர்களா? ஆம் இல்லை

9c. நீங்கள் மருத்துவரை பார்த்தால், யார் பணம் கட்டுவார்?

- நான் கட்டுவேன் நானும் நிறுவனமும் சேர்ந்து கட்டுவோம்
- நிறுவனம் கட்டும் எனக்கு தெரியாது

SECTION C : உடல் நல உதவி நாடும் பழக்கங்கள்

1. நீங்கள் சென்னையில் வேலை செய்ய ஆரம்பித்ததிலிருந்து, எப்போதாவது காயங்கள் ஏற்பட்டுள்ளதா? நோய்வாய்ப்பட்டீர்களா? ஆம் இல்லை (Section D செல்லவும்)

2. கடைசியாக எப்போது காயம் பட்டீர்கள் / நோய்வாய்ப்பட்டீர்கள்?

கடந்த மூன்று மாதங்களில்

மூன்று மாதங்களுக்கு முந்தி

அப்போது உங்களுக்கு

3. காய்ச்சல்?

ஆம் இல்லை

4. இருமல்?

ஆம் இல்லை

5. மூக்குச்சளி?

ஆம் இல்லை

6. தொண்டை வலி?

ஆம் இல்லை

7. வயிற்றுவலி?

ஆம் இல்லை

8. உடல் மூட்டு வலி?

ஆம் இல்லை

9. காயங்கள்?

ஆம் இல்லை

10. தோல் பிரச்சினைகள் (e.g. அரிப்பு, வலி)

ஆம் இல்லை

11. மற்றவை: _____

12. இந்த சம்பவம் எவ்வளவு மோசமாக இருந்தது என்று நீங்கள் நினைக்கிறீர்கள்?

				
1	2	3	4	5
மோசம் இல்லை	கொஞ்சம் மோசம்	அதிக மோசம்	மிகவும் மோசம்	மிகுந்த மோசம்

13. மருத்துவ ஆலோசனை பெற்றதற்கு முன் எத்தனை நாள் காத்திருந்தீர்கள்?

3 நாட்கள் அல்லது குறைவான

3 நாட்கள் - 1 வாரம்

1 மாதத்திற்கு குறைவு ஆனால் 1 வாரத்திற்கு மேல்

1 மாதம் அல்லது மேலாக

எனக்கு தெரியாது

மருத்துவரை பார்க்கவில்லை

14. நோய்வாய்ப்பட்டப்போது நீங்கள்:

• பாரம்பரியமான மருந்துகள் எடுத்தீர்களா

ஆம் இல்லை

• சொந்த மருந்துகள் எடுத்தீர்களா

ஆம் இல்லை

• நண்டனிடமிருந்து மருந்துகள் எடுத்தீர்களா

ஆம் இல்லை

• வேலையை நிறுத்தினீர்களா

ஆம் இல்லை

15a. நோய்வாய்ப்பட்டப்போது நீங்கள் மருத்துவரை பார்த்தீர்களா

ஆம் இல்லை

15b. மருத்துவரை எங்கே பார்த்தீர்கள்?

பொது மருத்துவமனை / கிளினிக்

தனியார் / ப்ரைவேட் கிளினிக்

ஹெல்த் சர்வீஸ் கிளினிக்

15c. நோய்வாய்ப்பட்டப்போது மருத்துவமனையில் அனுமதிக்கப்பட்டீர்களா? ஆம் இல்லை

மருத்துவரை பார்த்திருந்தால், 17 செல்லவும், 18 தவிர்க்கவும்

மருத்துவரை பார்க்கவில்லை என்றால், 18 செல்லவும், 17 தவிர்க்கவும்

16a. ஏன் நீங்கள் மருத்துவரை பார்த்தீர்கள்?

a) நான் குணமடையவில்லை என்றால் என்னை என் சொந்த ஊருக்கு திரும்பி அனுப்புவார்கள்.

ஆம் இல்லை

b) மருத்துவரைப் பார்த்தால் வேலையை அதிக சிறப்பாக செய்ய முடியும்

ஆம் இல்லை

c) என் வேலை, தூக்கம், ஓய்வு பாதிக்கப்பட்டுள்ளது.

ஆம் இல்லை

- d) மருத்துவர் சொல்லும் ஆலோசனையை கேட்பேன். ஆம் இல்லை
- e) இது ஒரு ஆபத்தான சூழ்நிலை, இதிலிருந்து இறக்கக்கூடும் ஆம் இல்லை
- f) உடல் நலமில்லை என்றால் மருத்துவர் பார்க்க வேண்டும் என்று நண்பர்கள் / முதலாளி சொன்னார்கள் ஆம் இல்லை
- g) முன்பு இதே நோய்வாய்ப்பட்டபோது என் நண்பர்கள் மருத்துவரை பார்த்தார்கள் ஆம் இல்லை
- h) அதே நோய்வாய்ப்பட்டபோது என் நண்பர்கள் மருத்துவரை பார்த்தார்கள் ஆம் இல்லை
- i) நான் என் உடலை பார்த்துக்கொள்ள வேண்டும் ஆம் இல்லை
- j) மற்றவை : _____

16b. இவற்றில் எது முக்கியமான காரணம்?

(a/b/c/d/e/f/g/h/i/j)

17a. ஏன் நீங்கள் மருத்துவரை பார்க்கவில்லை?

- a) நோயின் காரணமாக என் சொந்த ஊருக்கு அனுப்புவார்கள் ஆம் இல்லை
- b) மருத்துவரை எங்கே போய் பார்ப்பது என்று தெரியவில்லை ஆம் இல்லை
- c) சென்னையில் மருத்துவர் சேவை நல்லதில்லை என்று நினைக்கிறேன் ஆம் இல்லை
- d) மருத்துவ ஆலோசனைக்கும் மருந்துகளுக்கும் கட்டுவதற்கு எனக்கு பணமில்லை ஆம் இல்லை
- e) வேலைக்கு செல்லாவிட்டால் வேலையிலிருந்து நீக்கப்படுவேன் ஆம் இல்லை
- f) என் உடல் நலம் அவ்வளவு மோசமாக தெரியவில்லை ஆம் இல்லை
- g) உடல் நலமில்லை என்றால் மருத்துவர் பார்க்க வேண்டும் என்று நண்பர்கள் / முதலாளி யாரும் அறிவுரை கொடுக்கவில்லை ஆம் இல்லை
- h) நான் முன்பு ஒரு மருத்துவர் பார்க்காமல் குணமடைந்தேன் ஆம் இல்லை
- i) எனக்கு தெரிந்தவர் யாரும் இந்த மாதிரியான நோய்க்கு மருத்துவர் பார்த்ததில்லை ஆம் இல்லை
- j) மற்றவை: _____

17b. இவற்றில் எது மிக முக்கியமான காரணம்?

(a/b/c/d/e/f/g/h/i/j)

SECTION D : தசை கூட்டு பிரச்சனைகள்:

1. கடந்த மூன்று (3) மாதங்களில், இங்கே வலி இருந்திருக்கிறதா?

- கழுத்து முதுகு தோள் இடுப்பு கைகள்
 கால்கள் / பாதங்கள் வலி இல்லை (Section E செல்லவும்) மற்றவை _____

2. எத்தனை நாட்களுக்கு இந்த வலி இருந்தது? _____

3. வலியினால் வேலையிலிருந்து ஓய்வு எடுத்தீர்களா? ஆம் இல்லை
4. வேலையினால் இந்த வலி ஏற்பட்டது என்று நீங்கள் நினைக்கிறீர்களா? ஆம் இல்லை
5. இந்த சம்பவம் எவ்வளவு மோசமாக இருந்தது என்று நீங்கள் நினைக்கிறீர்களா? ஆம் இல்லை

				
1	2	3	4	5
மோசம் இல்லை	கொஞ்சம் மோசம்	அதிக மோசம்	மிகவும் மோசம்	மிகுந்த மோசம்

SECTION E : தோல் பிரச்சினைகள்:

- கடந்த மூன்று (3) மாதங்களில் உங்களுக்கு தோல் பிரச்சினைகள் ஏற்பட்டுள்ளதா?
 ஆம் இல்லை (Section F செல்லவும்)
- உடலில் எந்த பகுதியில் இந்த பிரச்சினைகள் ஏற்பட்டன?
 கைகள் பாதங்கள் உடல் கால்கள்/கரங்கள்
 முகம் உள்தொடை மற்றவை _____
- எந்த மாதிரியான பிரச்சினை?
 வலி அரிப்பு சிவப்பாதல் வீக்கம் மற்றவை
- இந்த சம்பவம் எவ்வளவு மோசமாக இருந்தது என்று நீங்கள் நினைக்கிறீர்கள்?

 1	 2	 3	 4	 5
மோசம் இல்லை	கொஞ்சம் மோசம்	அதிக மோசம்	மிகவும் மோசம்	மிகுந்த மோசம்

SECTION F : காய்ச்சல்:

கடந்த மூன்று (3) மாதங்களில்,

- காய்ச்சல் ஏற்பட்டுள்ளதா? ஆம் இல்லை
- இருமல் ஏற்பட்டுள்ளதா? ஆம் இல்லை
- மூக்குச்சளி ஏற்பட்டுள்ளதா? ஆம் இல்லை
- மூச்சு விட கஷ்டப்பட்டீர்களா? ஆம் இல்லை

- இந்த சம்பவம் எவ்வளவு மோசமாக இருந்தது என்று நீங்கள் நினைக்கிறீர்கள்?

 1	 2	 3	 4	 5
மோசம் இல்லை	கொஞ்சம் மோசம்	அதிக மோசம்	மிகவும் மோசம்	மிகுந்த மோசம்



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1. INTRODUCTION

"Migrants make significant and essential contributions to the economic, social and cultural development of their host countries and their communities back home. But too often these contributions go unrecognized..."- Guy Ryder, ILO Director-General.

Migration means the movement of people from one place to another. Migration is as old as our civilization where we had a primitive life, wandered from one place to another in search of food, safety and better life. It is one of the most important factors which affects demography and influence the social, political and economic life of the people.

Working population constitutes about 50% of the world's population and a significant proportion of the morbidity in working population is related to their work. Globalization led to new employment patterns, different working conditions, international and inter-state migration which often presents a global challenge to the protection and promotion of health among workers.(1)

According to ILO, there were 232 million migrants in the world in 2013. Around 150 million migrants were economically active.(2) Globally 60% of the work force constitute informal workers and are the most disadvantaged people which is aggravated by the weakly enforced labour laws.(3) Nearly 50% of the informal workers engage in non-agriculture work in Asia. Due to low level of literacy, lack of employment