International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2019): 7.583

A Study on the Health Hazards and Precautions for Extreme Summer Climate among Construction Workers in Ernakulam

Revathy S

M. Phil Scholar, Gandhigram Rural Institute (Deemed to be University) Centre for Applied Research, Dindigul, Tamil Nadu, India

Abstract: ***The construction industry is one of the major growing industries in Kerala.The potential impact of extreme climate change on the construction workers has received limited attention to the mainstream. Kerala is one of the major stateswhich engaged in construction work in the rural as well as urban areas. Nowadays, outdoor construction workers face extreme summer heat problems in the construction sites. Extreme summer climate changes adversely impact the safety and wellbeing of the workers. The heat related illness is leading to higher level mortality in Kerala. Since it affects the marginalised population, there is very less discussion and attempt to address this issue. This paper focuses on the health issues and what are the precautions taken by the construction workers in extreme summer climate.***

Keywords: Extreme Summer Climate, Health Hazards, Construction Workers

1. Introduction

The construction industry is one of the stable and growing industries in 21st century. Meantime, climate change is one among the most visible environment concerns of the world. This climate change has the potential to affect the human healthespecially workers from construction industry.In Kerala, Ernakulam is one of the major construction hubs in the state. Most of the large scale constructions are concentrated within or near the Kochi urban agglomeration in the Ernakulam state. Nowadays, most of the construction workers are vulnerable to heat stress because of extreme summer climate and also they are engaged in heavy outdoor works.Due to this summer heat stress, construction workers face an increased heat related illness and deaths.

2. Research Methodology

Objectives

- To understand the social status of the construction workers.
- To study the health problems of the construction workers during the extremely hot climate.
- To understand the prevailing precautions for subsidising the health hazards of extreme summer climate.

Type of Study: Descriptive research design

Sampling Design: Random sampling to know in detail

Sample Size: 60 Employees from three different construction work sites in the Ernakulam district

Research Instrument: Closed and open ended structured questionnaire was circulated among the construction workers.

Data Collection Method: Primary data, which was collected through structured interview schedule, as well as secondary data.

Data Analysis Tool: Microsoft Excel

3. Data Analysis

1) 58% of the respondents were middle-aged people
2) 50% of the respondents suffer from allergy and sleeplessness due to the summer heat. This led to fatigue and physical comfortability, thus they were unable to complete their working hours.
3) When they were not physically well, they paused their work for some time and continued with their work. They reached out to medicines only when the sickness was acute.
4) They mostly opted for self-treatment and home remedies when they fell into illness. If the self-treatment does not work, they normally consult the doctors in the Government hospitals.
5) 68%of them have received awareness about various health hazards through news outlets and other social media. This awareness has helped them to take precautions as well as to help others who have not received any awareness.
6) Most of them are aware of the Government order not to work between 11:00am-3:00pm during the extreme climate situations but they still work during those hours.
7) Since most of them do not take sufficient amount of water, they have agonized with fatigue and Urinary Tract Infection.
8) Even though they are aware of the safety measures to be taken during their work, they mostly ignore it.
9) Most of the construction sites provide pure drinking water to the workers while some lack these facilities.
10) The workers are given regular and sufficient intervals to drink water and take rest, while at some worksites the workers are given intervals only at certain times.
11) Most of the construction sites lack toilet facilities and the workers are forced to go out in open spaces.
12) Majority of the construction sites follow regular working hours while some of them don't.

Licensed Under Creative Commons Attribution CC BY

13) Different facilities like cold water and shade areas are provided to the workers at many worksites. Some of them provide of them only.
14) Most of them do not take precautions to prevent heat illness, while some of them take salted lime water and use dresses that cover the body.
15) When they feel fatigued during work, they move to a shaded area and take rest for a while. If a colleague feels ill, they encourage him to drink more water and move him to a shaded area.
16) Trade unions help the workers a lot by properly interfering in their social issues and also provides financial assistance to them. The trade unions have a positive outlook towards their work.
17) Due to the hard and tiring work, they often have to stay away from social gatherings.
18) The rough working environment affects some of their sexual life up to a limit while it adversely affects others.
19) The changes in the working hours have affected their family life up to a limit.
20) They do not get time to spend their leisure times with their colleagues.

4. Suggestions

Construction workers face serious health hazards like allergies, dehydration, Urinary Tract Infection and fatigue during their work. The following are some ofthe suggestions to help the construction workers.

- Provide clean toilet facilities at all construction sites.
- They should be given awareness classes on the increasing health problems during extreme summer.
- They should be provided with pure drinking water, shade areas and cooling systems.
- They should be given financial assistance and the Government should make concentrate on the welfare part of these workers and implement sufficient social security measures.
- Regular working hours should be followed at the construction sites.
- Measures should be taken to make sure that the changes in working hours do not adversely affect the workers.
- During extreme heat, caps and dresses that completely cover the body should be provided to them.
- Masks and sun creams should be given to them.
- The government order on working hours should be strictly followed in every Work site.

5. Conclusion

The study findings show that the construction workers have a high challenge of heat-related discomfort and illness during summer months. Various strategies should be adopted to prevent illness from extreme heat such as drinking cold water, sprinkling their face with water, resting in the shade. Employers should make sure the safety of their employees. The Government should take a serious look upon the various problems of the construction workers and adopt required means for their advancement.

References

[1] Mines Occupational Safety and Health Advisory Board, 1997)
[2] Moumita Sett & Subhashis Sahu ―Effects of occupational heat exposure on female brick workers in West Bengal, India.2013
[3] Construction Industry Council (CIC). Guidelines on Site Safety Measures for Working in Hot Weather. Hong Kong: Construction Industry Council (2008)
[4] Yildirim, K., Koyuncu, C., and Koyuncu J. _Does Temperature Affect Labour Productivity: Cross-Country Evidence. Applied Econometrics and International Development, 9(1), pp. 29-39. (2009).

Licensed Under Creative Commons Attribution CC BY