

Impact of occupational health and safety in construction



Abstract

The main aim of the research is to study the impact of occupational health and safety in construction industry. It will also aim at identifying the attitude of construction organisations as well as employees towards occupational health and safety in India. To support the research, survey questionnaire and a telephone interview was conducted. It helped it achieving objectives of the research.

The construction industry is a very dangerous industry. The performance of the industry in occupational health and safety is very poor. The standard of occupational health and safety is even worse in developing countries. In Indian construction industry OHS has never been given prime importance. Even though in India construction industry is significantly booming, there are no proper initiatives undertaken by the government to implement OHS rules and regulations. There are several initiatives taken by Government of India but they are still in their initial stages and need to be enforced.

The employers are concerned about completion of project rather than focussing on improving OHS of their employees. The industry has larger number of small and medium size firms and very few numbers of larger firms. Smaller firms lack resources to comply with proper OHS procedures. The workers are not provided with proper training and information about occupational health and safety hazards. Lack of awareness on OHS, sub-contracting system, use of traditional methods in construction, lack of proper personal protective equipments, low wages and labour-driven industry are

some of the important factors that have their impact on occupational health and safety in Indian construction.

The construction industry in developing as well as developed countries is one of the most significant industries in relation to the contribution to the GDP (Rantanen et al., 2004). Also it is having a significant impact on the health and safety of the people working in it. According to Haupt as cited in Rowlinson (2004), the construction industry has a poor record in relation to the health and safety of its worker. It is a known fact that workplace accidents are linked basically with unsafe behaviour. There is a positive correlation between safety climate on construction sites and worker's safe behaviour. The attitudes of workers on construction sites toward health and safety are widely influenced by their perception towards risk, health and safety rules and procedures; management (Mohamed and Ali, 2005). According to Larcher and Sohail (1999), occupational health and safety is a highly important area of concern in developing countries where Acts related to safety rarely exist with weak regulatory authorities that finds it difficult to implement it effectively. Also awareness towards occupational hazards is not at all or rarely perceived. The other factors that affect occupational health and safety in developing countries are lack of statutory regulations and legislations to protect workers in construction sector, standards maintained in corporate and government systems are low, inadequate infrastructure and high labour intensity (Mohamed and Ali, 2005).

Every year hundreds of accidents take place on construction sites resulting in severe injuries or even deaths. It is matter of concern that the same type of work related deaths, injuries and illnesses occur in the construction

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industries all over the world. The working life of construction workers is curtailed by several years due to the exposure to occupational health and safety hazards. The process of construction involves many hazardous activities such as working at height, manual handling, exposure to hazardous materials, frame erection, lifting operations, scaffolding, demolition works and groundworks. Falls and manual handlings are the important risks associated with injuries and long term disability in the construction industry (Gillen et al. 1997).

1. 1 Background study

According to study conducted by Holmes et al., (1999), that the occupational health and safety risks are mainly related to the nature of work, low standard of individual work practices, lack of knowledge, work pressure due to cost and time constraints. Rechenthin (2004) stated that, for a construction company to be consistently profitable, all its project must complete on time and within budget. But at the same time due to the nature of the high risk works undertaken by the construction companies results in high accident rates. Eakins (1992) stated that international research confirms that as compared to larger construction firms, smaller firms are poor in the implementation of occupational health and safety programmes. Henceforth, the rate of occupational injury is inversely proportional with the size of the organisation, i. e. smaller firm having higher injury frequency rates (McVitte et al. 1997).

As per Lingard and Rowlinson (2005), the construction industry consists of several SME's and small amount of large firms. These small and medium size firms lack professional occupational health and safety advisors in staff. They <https://assignbuster.com/impact-of-occupational-health-and-safety-in-construction/>

also lack knowledge and resources required to implement occupational health and safety management activities for example: training, performing risk assessments, routine inspections and audits. Moreover the expense due to involvement of expensive occupational health and safety advice and services may be considered as unnecessary. Due to high competitive construction industry with cost cutting pressures, the priorities related to occupational health and safety is likely to be low with small size construction firms.

According to Rantanen et al., (2004), nearly 2.4 billion people in the developing countries have to bear employment conditions, that don't even meet the basic occupational health and safety standards. Furthermore due to lack of work safety, excessive amount of work pressures, exposure to occupational physical, biological and chemical environment results to occupational diseases and injuries to an extent of 1.2 million fatalities per year.

1.2 Rationale for Research

This research studies the attitude of organisations in India, a developing country towards occupational health and safety. As per report of The Economic Times as cited in (Shenoy et al., 2000), size of the Indian construction industry is more than USD 25 billion. Due to large investment made in roads, railways, nuclear and other infrastructure areas, the construction sector of India is witnessing a high growth. After agriculture sector, construction sector is the largest employer in India, with more than 18 million people employed in it. In spite of all these advancement, the construction sector is still dependant largely on labour intensive operations

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as they are easily available at low cost. Also occupational health and safety of people working in construction are not given due attention by the organisations (Shenoy et al., 2005). According to a report published by Construction Industry Development Council (CIDC) India (2010), safety in the construction industry is a matter of concern all over the world. With an unorganised workforce, issues related to construction safety become the most vulnerable segment in India. With 18 million people employed in the construction sector within India, the issues related to safety are considerably important. The industry is highly labour intensive with a large amount of workers exposed to the risks of occupational health and workplace safety problems.

In construction industry the fatal accidents rate is comparatively four to five times higher than the manufacturing sector. In India 165 per 1, 000 workers get injured while working on construction sites. Further the report states that the workers are exposed to several hazardous substances having the potential to cause serious occupational health diseases such as asbestosis, silicosis, poisoning etc. According to International Labour Organisation (2005), the rate of accident among industrial workers is highest with 4 per 1000 and the major contributor for this is the construction industry.

International Labour Organisation (2005) report also estimated the number of deaths in India due to accidents at work as 40, 000 in 2001 and 2, 62, 000 dying from work related diseases. Thus if construction is held responsible for one sixth of the total, then the death of the Indian construction workers can be estimated up to 60, 000 each year.

According to Damodaran (2006) ' safety in construction is in the bottom of list of priorities of builders, contractors and engineers. While the monetary loss heads the list, loss of man-hours and material progress are equally irreparable when scaffolding fails, a roof collapses or a fatal accident takes place at site of work, the human life is irreplaceable'. The construction companies in India have experienced that when a worker loses his life due to an accident on the site, there is a sudden downturn in the morale of the working force. It affects the spirit of working and the progress of work. It is only after some accidents takes place, the company begins to take safeguards. As labour is very cheap and unorganised, having little or no knowledge of their rights, the companies find it convenient as well as profitable using manpower rather than machineries. Though getting a job in the construction industry helps poor labours to get out of poverty, due to presence of high occupational health and safety risk it can drive them back into insolvency.

1. 3 Research aim and objectives

1. 3. 1 Aim of the research

The aim of this research is to study the impact of occupational health and safety in construction industry, whilst exploring the attitude of organisations and employees toward occupational health and safety in Indian construction industry.

1. 3. 2 Objectives

The above mentioned aim will be achieved with the help of the following objectives:

1. To explore the issues impacting health and safety with the focus on occupational health and safety in the construction industry.
2. To investigate occupational health and safety hazards and its impact in construction industry
3. To investigate the implementation of occupational health and safety in the Indian construction industry whilst;

Exploring the attitude of employees and construction organisations toward occupational health and safety in India.

Investigating the impact of existing occupational health and safety rules and regulations on the Indian construction industry.

1. 4 Research methodology

The adopted research methodology will be divided into primary and secondary research. In primary research, questionnaires survey and a telephone will be conducted. This will help in understanding and identifying the perception of the management and the employees toward occupational health and safety in Indian construction industry. In secondary research, literature review will be carried out in order to understand the factors affecting occupational health and safety such organisational culture, climate and government policies. It will also help in identifying different occupational health and safety hazards and its effect on construction projects.

1. 4. 1 Primary research

Primary research such as questionnaires survey and telephone interview will help in achieving the main objectives of the research. Data will be collected <https://assignbuster.com/impact-of-occupational-health-and-safety-in-construction/>

from clients, contractors, managers, site engineers and supervisors who play an important role in the construction industry. The data collected through the telephone interview will help in supporting the findings from survey questionnaire.

1. 4. 2 Secondary research

Secondary research will be carried out through literature review. The data will be collected through electronic databases, journals, websites, magazines, books and conference papers. These data will help in identifying the issues and factors influencing occupational health and safety in the construction industry.

1. 5 Limitations of the research

The most significant limitation to this research is the time constraint. Due to limited availability of time, the research cannot be conducted in depth.

Provided more time, it could be possible to visit India and collect more data available on occupational health and safety in the Indian construction industry.

As the research is carried out from United Kingdom, the collection of secondary data is limited to the information available on websites.

Limited research has been carried out in India related to occupational health and safety in the construction industry. As such, there is less availability of data to support this research.

The other constraints can be that some companies may not be reluctant in providing the right information. During telephone interview there may be <https://assignbuster.com/impact-of-occupational-health-and-safety-in-construction/>

possibilities that the interviewee give diplomatic or misleading answers. Also the size of the company can influence the answers of the interviewee.

Also the answers provided by the respondents may be influenced by the size and location of the company.

1. 6 Structure of dissertation

The dissertation will be divided into various chapters. Chapter 2, 3 and 4 will be part of literature review. An overview of the chapters included in this research thesis is as shown below.

Chapter 1 – Background study and rationale for research

This chapter will provide an overall of overview of the research. It will consist of background study, aim and objectives and also the rationale for the research. It will also give an overview of the research methodology to be conducted in order achieve the desired aim and objectives.

Chapter 2 – Factors affecting health and safety on construction sites

This chapter narrates the factors influencing health and safety on construction such as sub-contracting systems, organisation's structure, size, location, personnel and incentive factors.

Chapter 3 – Introduction to OHS and detail description of OHS hazards

This chapter will provide detail description of occupational health and safety including safety culture, human behaviours and different OHS hazards.

Chapter 4 – OHS in the Indian construction industry

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This chapter will investigate the current scenario of OHS in the Indian construction industry. It will also explore the government rules and regulations related to OHS and their influence on the construction industry.

Chapter 5 - Research methodology

This chapter will provide a brief outline of the different research methods available and the adopted research methodology.

Chapter 6 - Analysis and interpretation of the survey

This chapter will include analysis of data collected through questionnaires survey and the telephone interview with help of charts, figures and tables.

Chapter 7 - Conclusion and recommendations

This chapter will include the summary of the research findings as well as recommendations related to the research.