



Roles of Construction Organizations in Revitalizing Occupational Health and Safety of the Nigerian Construction Industry

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ABSTRACT

Occupational accidents have been ravaging the Nigerian construction industry, the sector accounted for 39.24% of the whole occupational accidents between 2014-2016. The effects of occupational accidents can be noticed in the productivity of the construction organizations, making the sector contribute to only 4% of the GDP of the Nigerian economy. Therefore, the need to strengthen health and safety in construction sites is indispensable. This study aimed to explore the roles of construction organizations in revitalizing the health and safety of the Nigerian construction industry. The questionnaire was used to solicit information for this study. The 300 questionnaires were distributed and 247 were returned, representing 82.33 percent, therefore, considered for the analysis of the study. SPSS software was used in the analysis of the study. The finding of the study revealed that among the top three methods considered essential to revitalizing occupational health and safety are; education and training on health and safety, compliance with health and safety regulation and laws, and enforcement of health and safety rules on the employees. The study recommends more commitment toward health and safety from construction organizations, professionals, government agencies, and employees.

Keywords:

Accident; Construction industry; Health;
Occupation; Safety.

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1. Introduction

The significance of exemplary health and safety is beyond doubt to anyone who has encountered the effects of health and safety negligence. Those that suffer most are the victims and the bereaved. Nevertheless, all lose from bad health and safety: organizations and clients. Nations and society, in general, cannot abscond from the £ billion loss annually to occupational accidents [1]. At the global level, 3.94% of Global GDP were lost yearly as a result of occupational accidents [2], in European Union, an estimated sum of 476 billion Euros was spent on construction occupational accidents in 2017 [3]. Similarly, in the USA, construction occupational accidents cost between \$250 to \$360 billion yearly [4]. Meanwhile, in the UK, £1.2 billion was spent in the construction industry for injuries in 2017/2018 [5]. Also, the estimated figures of 118 occupational accidents were investigated in the

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Malaysian construction industry in June 2019 [6], whereas, in Singapore, the figure of major injuries was 121 [7]. In comparison with other sectors of the economy, the construction industry accounts for the highest rate of occupational accidents across nations [8–11].

Furthermore, 80–90 % of the occupational incidence in the workplace was ascribed to the unsafe behaviour of employees [12]. Also, 84–94% of the entire accidents were due to the unsafe behaviour of workers [13]. Badly structured, poorly led, inefficiently organized, and deficiently funded health and safety systems can do more damage. A substantial loss brought by occupational accidents brings a negative effect on economic growth and places a burden on society and organizations. Therefore, health and safety is a strong predictors of economic growth, by improved savings and investment in human capital.

Furthermore, it is essential to provide organizations with an insight into the costs of occupational accidents at work and raise awareness of the financial advantages of occupational safety and health. Organizations that are investing in functional prevention policies to keep and promote the health and safety of the workplace achieve noticeable results like reduction in employees turnover, curtaining expenditures arising from absenteeism, greater client satisfaction, improved motivation of employees, better quality, and improved organization image [14]. In a healthy and safer workplace, these positive impacts can also be fortified by encouraging employees to adopt healthy and safer lifestyles targeted at improving their overall state of health and safety. By removing unnecessary and preventable costs and improving productivity, organizations will eventually increase their performance and shareholder value [15–18].

Some construction firms are already recognizing the advantages of prevention as it reduced the absenteeism of employees, increased productivity, and improved employees retention [19]. Similarly, medium-sized organization directors are required to support themselves in understanding the legal obligations and also to recognize financial benefits accrued from the prevention of occupational accidents [20]. Also, employers are required to evaluate and control wide different types of hazards to protect the health and safety of their employees. Although, some organizations have a framework that they are applying to arrange their prevention activities [21].

Unidentified hazards cause harm, therefore, there is a need for the identification of hazards associated with work activities in the workplace. Also, an organization must familiar with hazards and focus on the important hazards. The following measures will support an organization in the prevention of occupational accidents: (1) look at what might potentially be likely to cause harm, (2) inquire workers and their representatives what they noticed that might not immediately be obvious to an organization, (3) consultation with professional organizations on the useful guidance on health and safety hazards, (4) check manufacturers' leaflet or instructions for chemicals and equipment as they might be very useful in clarifying hazards and pinpoint safe work procedures and putting them in proper perspective, (5) Have a look back at work-related accident records as it provides assistance to recognize less noticeable hazards. (6) consultation with websites of relevant organizations on health and safety for additional information on particular topics regarding health and safety and (7) consideration for best practice guidelines developed by reputable organizations.

The construction industry in Nigeria provides infrastructural development as well as employment generation. However, the activities of the industry like other nations associated with hazards. The sector reported the highest figure of occupational accidents between 2014-2016 as illustrated in (Figure 1) [22]. The effects of occupational accidents can be noticed in the productivity of the construction organizations likewise the H&S of the employees. The H&S is important due to substantial consequences on the organizations, employees, and the nation in general. The need to revitalize the occupational health and safety of the Nigerian construction industry is essential. This is to prevent occupational accidents and increase the productivity of the construction industry. This

study, therefore, presented the roles of the construction organization in revitalizing the occupational health and safety of the Nigerian construction industry.

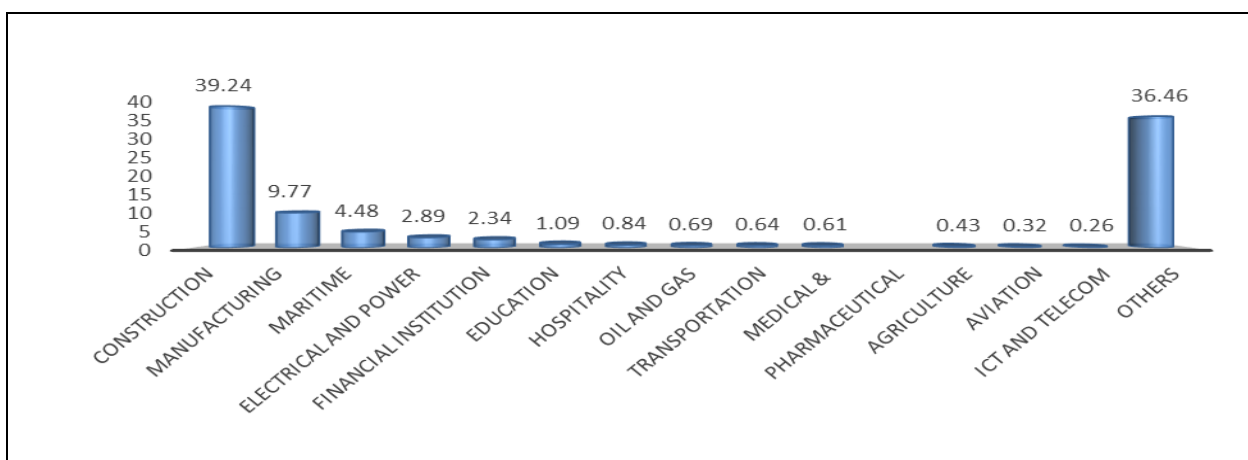


Fig. 1. Occupational accident classification by sector (2014 –2016) Source Federal Ministry of Labour & Employment, Abuja, Nigeria

2. Problems of Occupational Health and Safety in the Nigerian Construction Industry

Occupational accidents are under-reported in the Nigerian construction sites [22] and management commitments to the prevention of accidents remain poor [23]. Poor health and safety culture exist between building workers in the sector [24]. Enforcement systems of OHS are inefficient and regulatory agencies are poorly funded by the governments at all levels. Health and safety regulations are inadequate, therefore responsible for low health and safety performance [25]. The corruption level in the country is also a major problem contributing to the issues of OHS whereby the enforcement and regulatory agencies proved to be corrupt [26]. The authorities saddle with the obligations of the enforcement and implementation of health and safety laws have questionable characteristics, this prevents implementation of the legislation. Health and safety standard compliances are very poor by organizations and workers with the available laws.

Among the problems also include many employees not aware of their rights, especially those concerning their health and safety in the workplace [27]. Furthermore, many workers generally do not receive adequate protection against hazards in the workplace, therefore, these employees are at greater risk in the workplace [28]. Occupational health and safety policies and implementation in Nigeria are infants, fall below international standards along with best practices to protect the health and safety of personnel [27]. OHS insurance in many organizations is non-existence and where exists, they are not effective [29]. There are low training and job orientation program for construction workers, leaving them to apply their discretion to solve OHS challenges they might face in course of work. Also, OHS information is low and many organizations are not aware of health and safety laws related to the construction industry [30,31]. A study showed that only 5 % of buildings and civil engineering contractors are conversant with the provision of OHS and 25 % heard about the OHS act without knowing the composition [32]. Therefore, occupational accidents can equally be traced to a low level of awareness of H&S regulations. Also, organizational OHS-associated management efforts do not correspond with the extent of their activities. The awareness of design for safety and strict regulation present in Australia and Singapore which makes the construction industry accounts for the low fatality rate is lacking in the Nigerian construction industry [33].

3. Methodology

This study presents the roles of construction organizations in revitalizing the occupational health and safety of the Nigerian construction industry. 300 structured questionnaires structured were distributed to solicit information about revitalizing OHS of the Nigerian construction industry, and 247 were returned. The first part of the questionnaire the general information about respondents, while the second part focused on the revitalizing of OHS of the Nigerian construction industry. The respondents' selections of answers to the questions were prepared in a five-point Linkert scale from strongly disagree=1 to strongly agree=5. The collected data were analyzed with SPSS and Microsoft Excel. The Cronbach alpha of the data was 0.851 The result is within the acceptable value. The mean score of the data was computed and then ranked accordingly.

4. Results and Discussion

Table 1 below illustrates the result of the study in which education and training, compliance with health and safety regulation, and enforcement of health and safety rules were among important factors having the mean score value of 4.77 each, in which construction organizations' required to be considered in revitalizing occupational health and safety of the Nigerian construction industry. OHS education and training should focus on preventing injury and the need for easier access to broad and alternative learning experiences. There is a need for consistency in examining factors changing the current workplace, driving the effects of the trends for OHS, and making parallel changes in the education and training of workers and the site managers in the construction organization. Hazard control involves the education and training of workers and management [34]. Also, it includes engineering or design modifications, routine or administrative changes, offering of personal protective equipment, and changes in employees' behavior. Similarly, the increase in technical skills should be given priority by the organizations, and the governments can also support by providing training grants to the organizations [35].

OHS regulation targets to promote H&S in the workplace, it is the responsibility of the construction organizations to ensure compliance with these regulations. Organizations' prime responsibility for general construction sites operations should be planning and coordination of health and safety measures [36]. Similarly, improving OHS and meeting regulatory requirements must be considered important by the construction organizations [37]. Also, worker involvement in H&S activities, targeted at promoting safe behaviour and decision-making processes is equally important.

Furthermore, new worker induction when starting work in the organization is essential [38]. It must also include job area hazard awareness and safety rules particular to operation and the location of the work. This is generally done by describing the measures in the policy statement of health and safety, and the exhibiting of at least one sign describing details of the position of the facilities. Visualization can support site induction of workers, or establish new methods for understanding site hazards and awareness [39]. General inductions should include overall site health and safety and the use of personal protective equipment.

The construction organizations' communication structure on health and safety is important in the revitalizing of occupational health and safety of the Nigerian construction industry. Meanwhile, the factors that can hinder the improvement of health and safety communication like (1) education and language, (2) absence of harmony on health and safety requirements between employees and organization, and (3) employees' refusal to follow health and safety measures and regulations must be given proper attention. Excellent safety communication and safety climate produce opportunities for further improvement of OHS in the workplace.

Conducting a comprehensive on-site assessment to appraise how sound the site's protective system is functioning, including a review of occupational injury rates will support revitalizing occupational health and safety in the workplace [40]. Hazard Identification is conducted to identify undesirable activities that can lead to occupational accidents [41]. It is broadly accepted within the industry that the various methods of hazard assessment contribute significantly toward revitalizing occupational health and safety of complex equipment and operations. The preliminary stage of a project provides the utmost prospect to influence occupational health and safety. Therefore, hazard identification must be repeated to ensure new unknown hazards are not incorporated into the revised design [42]. The first phase of the hazard assessment is to recognize whether the hazards present can expose employees to the risk of injury, therefore, comprehensive hazard assessment is essential [43]. Applying the concept of knowledge management into a practical health and safety system provides key information to improving hazard identification [44].

A good investigation must be seeking to recognize all of the issues that joined to cause occupational accidents. It also provides a spotlight to be identified in the secluded organization's health and safety and challenge long-held assumptions concerning the manner they operate in practice [45]. Accidents investigation also provides a careful analysis of a specific set of conditions that result in an accident, offers a valuable understanding of the methods in which managers and employees perform their obligations, and how their inactions or actions contributed to an occupational accident.

OHS policy must state the general goals and a commitment to the prevention of occupational injury and continual improvement in OHS performance. The policy on health and safety in the organization must be well-defined and authorized by senior management. Organizations need to be concerned with accomplishing resilient OHS performance by managing their OHS hazards in accordant with their OHS policy. The first component of a model management system is policy, it is the foundation of the OHS and sets the path for the establishment to follow [46]. A well-articulated OHS policy provides a basis for the objectives in the management of occupational safety and health.

It is unequivocal that if sufficient resources are not provided for health and safety in the organization, acceptable risk levels cannot be sustained, and achieving revitalizing of occupational health and safety in the industry cannot be realized. An employer must allocate enough resources to accomplish the objectives outlined in the implementation plans of health and safety in the organization. Management at all levels in the organization must show their commitment towards OHS, leading through example and making sure that satisfactory resources concerning money, people, and time are allocated to OHS.

Table 1

Roles of Construction organizations in revitalizing occupational health and safety

Variables	Mean	Rank
Education and training of employees and other management teams on H&S	4.77	1
Compliance with health and safety regulations and laws	4.77	1
Enforcement of health and safety rules on the employees	4.77	1
Involve participation of employees on health and safety matters	4.62	4
Basic induction on health and safety for employees	4.62	4
Health and safety communication at all levels in the organization	4.54	6

Conduct a yearly review of health and safety	4.54	6
Hazard identification and prevention	4.54	6
Incidence investigation, reporting, and analysis	4.54	6
Formulation of a policy statement on health and safety for accidents prevention	4.38	10
Good records keeping of fatalities for future prevention of accidents	4.38	10
Allocation of adequate resources on health and safety	4.38	10
Conducting job hazard analysis	4.38	10

5. Conclusions

Revitalizing of occupational health and safety of the Nigerian construction industry is important as occupational accidents are associated with loss of lives, suffering, material wastage, and damage to construction equipment. The persistence of unsafe working conditions has served as a focus on the need to build a healthy and safe workplace and promote H&S culture. Health and safety are fundamental rights of every employee, only a healthy and safe workplace allows productive work and life. Measures and activities need to be taken to protect the lives and wellbeing of workers, participants in work processes, and the general public in the working environment. There is a need for collaborative efforts in the revitalizing of occupational health and safety in the construction industry.

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