

ASSessment of Construction Firms Practice Toward Site Accident Reporting in Abuja

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ABSTRACT

This study aimed at assessing the practice of construction firms toward site accident reporting in Abuja. The study adopted a survey design approach using quantitative data with the aid of questionnaire as a means of data collection from 255 construction firms registered with Abuja Business Directory. Criteria were set for the construction firms assortment out of which 90 construction firms were selected by the use of snowball sampling technique in accordance to the set criteria. Relative Important Index (RII) was used to analyse the data collected. Findings from the study revealed that lack of safety commitment by management, no feedback, lack of any health and safety regulatory body, lack of time and lack of experience are the major factors that have high influence on the practice of site accident reporting. In addition to the study findings, it was revealed that the roles

Introduction:

Globally, the construction industry has been found to be among the most hazardous industry as stated by (HSE 2011; Manu 2012). Due to the dangerous activities carried out on the construction site, the health and safety (H&S) of construction workers is affected which leads to injuries, death and fatal accidents (Asan and Akasah, 2015).

Nigeria is among the countries that have high rate of occurrence of construction site accidents due to the fact that lack of reliable data makes it impossible to know the actual rate of occurrence of accidents in Nigeria (Agwu,

government play in ensuring that the construction firms report all injuries and deaths to the occupation health and safety office and ensuring that any construction firm who commits an offence against the provision of the regulation shall be liable to pay a fine or be imprisoned for a term were considered to be low. It was concluded that increasing awareness of health and safety in relation to site accident reporting will lead to reduction of under-reporting of accident on site as well as improving the safety performance of workers on site. It was recommended that government should set up a safety and health committee to inspect workplace after the occurrence of an accident and ensure that regulations regarding such should be enforced as well as ensuring that construction firms report accident to the set committee.

Keywords: *Under-reporting, site accidents, construction firms' practices, health and safety, roles of government.*

2014; Udo *et al.*, 2016). Over the years, accident data and reports on construction sites have not been officially documented in Nigeria and this has led to more worry by researchers on this issue on construction site accidents (Peter *et al.*, 2017). As stated by Kolo (2015), poor standard in the reporting of accident has led to deaths and permanent disabilities and this can be reduced or eliminated by government enforcing the available regulations to look into these accidents.

Accident under-reporting can be either an establishment accident under-reporting which is when an organization fails to report injuries happening at work to the appropriate regulatory authorities and employee accident under-reporting which is when a worker fails to report injuries at work to the employer (Laura *et al.*, 2017). As stated by Latino *et al.* (2020), reporting of occupational accidents exposes what incidents had taken place, and investigations to know the root cause of the accident is analyzed to reveal why the incident happened so that preventive plans are to be established and undertaken. Organization are expected to know significantly the measures to reduce the possibility of reoccurrence of

accidents, and procedures that are efficient in reduction of accident occurrence (Hale et al, 1991).

Andy (2007) carried out a research on an existing accident investigation and reporting system implemented by local companies in Malaysia to identify the critical causes of accident under reporting in Malaysia construction industry. The responses gotten from the respondents shows that human factors, organisation factors and time factors contribute mostly to the causes of under reporting construction site accident. Regulatory authorities are responsible for ensuring that all occupational accidents are to be reported and to ensure that organizations comply with health and safety regulations but unfortunately it is reported to be below standard in the Nigerian construction industry as stated by (Adetunji *et al.*, 2021). Due to the lack of accident report on construction site by construction firms to the ministry and the ministry's lack of supervision in relation to accident reports in Nigeria, this study seeks to assess the practice of construction firms toward site accident reporting in Abuja and propose strategies for enhancing their practice towards accident reporting which will lead to reduction of non-reporting of site accident as well as improve safety performance of workers on construction site. In order to achieve the aim of the study, the following objectives were formulated:

- i. To examine the factors influencing the practice towards reporting of site accidents by construction firms in Abuja.
- ii. To assess the roles of the government in regulating workplace occupational accidents reporting by construction firms in Abuja.

LITERATURE REVIEW

This section provides a detailed discussion on the main theme of the aim and objectives of the study.

Factors Influencing the Practice Towards Reporting Off Site Accidents by Construction Firms

The underreporting of accident that occurs in the built environment challenges the effective management of safety in the construction as stated by (Leigh *et al.*, 2004). Reason for underreporting of incidence in

construction workplace differ, some are either done intentionally while others are not intentional due to lack of awareness. Under-reporting happens at different level ranging from the stakeholders, workers, supervisors and managers (Schofield *et al.*, 2013). Studies have shown that under-reporting of construction accident is a general problem globally Pearce *et al.*, (2005), but the problem varies from one country to another country depending on cultural differences and variation in reporting systems and legislation (Daniels and Marlow, 2005). As stated by Muawiya *et al.* (2018), the following are barriers to accident reporting on construction site; lack of time, lack of budget, unfair treatment to the workers, lack of employee knowledge on incident/accident reporting, no access to usable reporting method, lack of incentives to workers on incident/accident report, lack of management knowledge on incident/accident recording, lack of available safety managers in the Projects, lack of experience and lack of any health and safety regulating body. According to Gerry, (2016), the following are factors influencing accident reporting on site. These include; lack of management knowledge on health and safety, lack of access to usable accident reporting method, time pressure of reporting, availability of materials, lack of training, no incentives scheme, inadequate procedures of reporting, no regular enforcement, having difficulty in reporting and lack of management knowledge on accident reporting.

Health and Safety Challenges in the Construction Industry

The construction industry globally is characterized as a dangerous industry as stated by Khosravi *et al.* (2014) due to the kinds of activities carried out in the industry. Activities such as lifting and movement of heavy equipment, working on high rise buildings and other hazardous that are carried out by the workers results to injuries and accidents on site. Alhajeri, (2011) and Bashir, (2013) identified lack of compliance of safety regulations and act, lack of technical knowledge, poor site management, disobedience in working procedures and lack of cooperation and teamwork by construction workers are among the causes of accidents that

lead to high fatality rate of about 300 million as reported by International Labour Organisation (ILO, 2016). Construction activities are more labour intensive in developing countries like Pakistan, Ghana and Nigeria than the developed countries which result to more accidents on the construction sites (Al-Kilani, 2011). Also most of the construction firms are not enforced by their government to establish a management system for improvement of safety standards on sites. High cost of accidents are being incurred by the Nigerian construction industry as well as huge loss of finances due to the accident on site (Aniekwu, 2007). Due to poor regulations of H&S in the Nigerian construction industry as stated Umeokafor *et al.* (2014), the stakeholders and workers show no concern towards H&S and this results to high level of underreporting of accidents (Idoro, 2008). Mba and Hilda (2014) highlighted that there are less dependable data on accident cases in the Nigerian construction industry as a result of non-reporting of occupational accidents to the appropriate authorities. (Umeokafor *et al.*, 2014) emphasize that infringement of regulations plays a role in the poor state of health and safety in the Nigerian construction industry. Organizations do not report accidents due to the perception that they might be subjected to disciplinary actions by regulatory authorities (Federal Ministry of Labour and Employment, 2016).

Roles of the Government in Regulating Workplace Occupational Accidents and Accident Reporting in Construction Firms in Nigeria

The National Policy on Occupational Safety and Health developed in 2006 has been a driving tool for the advancement of Occupational Health and safety in Nigeria. The revised edition of the policy was necessitated by the need to align with the provisions of the ILO Occupational Health and Safety Promotional Framework Convention, 2006, (No. 187) and its accompanying Recommendation R197 (No.197). The Department of Occupational Safety and Health of the Federal Ministry of Labour and Employment is the Competent authority responsible for the laws and regulation governing Occupational Safety and Health and it is being

enforced by one government ministry, Department or Agency(MDA) or the other. The roles include:

- i. Establishment and Application of procedures for the notification of occupational accidents and diseases by employers, appropriate insurance institutions and others directly concerned in the production of annual statistics on occupational accidents and diseases.
- ii. Holding of enquires where cases of occupational accidents and diseases, work related ill-health, or any other injuries to health which arise in the course of or in connection with work appears to reflect situations which are serious.
- iii. Establishment and coordination of a National Incident Management System (NIMS) on occupational accidents, injuries, diseases, and death, so as to provide a data bank linked to National Health Information Management System (NHIMS). This will assist in providing information concerning occupational safety and health to all stakeholders for occupational safety and health services and planning in the country.

RESEARCH METHODOLOGY

The study adopted a survey design approach using quantitative data with the aid of questionnaire as a means of data collection to achieve the study's objectives. The data collected were analyzed with the use of Relative Importance Index (RII). RII was employed because it is the perception of construction safety professionals that was sought with the questionnaire.

The population for the study is made up of construction firms registered with the Abuja Business Directory with Abuja's business address. Since the study area is Abuja, then the 255 construction firms registered with the Abuja Business Directory and based in Abuja were considered for the study. The research population size is therefore 255.

The sampling frame for this study are the safety professionals in the various construction firms in Abuja. Criteria were set for the construction firms assortment out of which 90 construction firms which served as the

sample size were selected by the use of snowball sampling technique in accordance to the set criteria. 71 questionnaires were returned which represent 78.89% considered suitable for analysis of the result.

The questionnaire (designed on a five-point Likert's Scale format) is comprised of five sections. The first section addressed issues relating to the profile of respondents. The last four sections addressed issues relating to the research objectives respectively.

The Relative Important Index (RII) was employed for analyzing the collected data. This is to find out the factors that have high influence on the practice of construction firms towards site accident reporting as well as to find out about the roles government play in regulating workplace occupational accident and accident reporting. The decision rule adopted for the RII is summarized in Table 1.

Table1: Decision Rule for RII Analysis

Scale	Cut-Off Point	Interpretation	
5	0.81 - 1.00	Very High	Very Effective
4	0.61 - 0.80	High	Effective
3	0.41 - 0.60	Moderate	Fairly Effective
2	0.21 - 0.40	Low	Less Effective
1	0.00 - 0.20	Very Low	Not Effective

Source: Adapted and Modified from Shittu *et al.* (2016)

RESULTS AND DISCUSSION

Results and Discussion on Factors Influencing the Practice towards Reporting of Site Accidents in Abuja

In order to examine the factors influencing the Practice towards Reporting of Site Accidents in Abuja, Relative Importance Index was adopted. The result of the analysis is presented in Table 2.

Table 2: Results of Factors Influencing the Practice towards Reporting of Site Accidents in Abuja

S/No.	Code No.	Factors Influencing the Practice towards Reporting of Site Accidents	RII	Rank	Decision
1	B1	Lack of safety commit-met by management	0.79	1st	High
2	B14	No feedback	0.78	2nd	High
3	B4	Lack of any health and safety regulatory body	0.78	2nd	High
4	B9	Lack of time	0.78	2nd	High
5	B3	Lack of experience	0.77	5th	High
6	B2	Lack of Budget	0.76	6th	High
7	B13	Loss of Benefits	0.75	7th	High
8	B19	Complicated reporting system	0.75	7th	High
9	B6	Lack of available safety managers in the project	0.74	9th	High
10	B8	Lack of employee knowledge on accident reporting	0.74	9th	High
11	B10	Lack of management response on report	0.74	9th	High
12	B21	Concern over job security for reporting	0.73	12th	High
13	B5	Lack of management knowledge on health and safety	0.71	13th	High
14	B12	Lack of access to usable accident reporting method	0.71	13th	High
15	B18	Time pressure of reporting	0.71	13th	High
16	B22	Availability of materials	0.69	16th	High
17	B11	Lack of training	0.68	17th	High
18	B15	No incentives scheme	0.68	17th	High
19	B20	Inadequate procedures of reporting	0.67	19th	High
20	B16	No regular enforcement	0.66	20th	High

21	B17	Having difficulty in reporting	0.65	21st	High
22	B7	Lack of management knowledge on accident reporting	0.59	22nd	Moderate
23	B23	Fear of reprisal	0.27	23rd	Low
24	B24	Fatalistic attitude i.e. having the mindset that injuries are fact of life in construction site	0.00	24th	Very Low
25	B25	Others	0.00	24th	Very Low
		Average RII	0.65		High

Source: Researcher's Field Survey (2021)

From the literature review of this study twenty-five (25) factors influencing the practice towards reporting of site accident were identified and ranked by the respondents based on their level of influence with the use of Relative Important Index (RII). The analysis result in Table 2 shows that lack of safety commitment by management with a RII value of 0.79, no feedback, lack of any health and safety regulatory body, lack of time with RII value of 0.78, lack of experience with RII value of 0.77 are the major factors that have high influence on the practice of site accident reporting by construction firms in Abuja. The findings of this analysis indicates that about twenty-one (21) factors among the twenty-five factors (25) considered were having high influence because they fall between the RII value of 0.61-0.80 being the cut-off point for the high influence on construction firms practice. With an average RII value of 0.65, The results of Table 2 shows that all identified factors have a high influence on the practice of site accident reporting by Construction firms. This finding is in line with the research result of Rana (2021) and that factors that present barriers to reporting workplace occupational accident and contribution to non-report include; undue reporting policies, processes and procedures and lack of supervisory/ safety management personnel, lack of experience. Furthermore, the result of this research reveals that lack of employee knowledge on accident reporting, lack of management knowledge on

accident reporting, lack of time, lack of experience, complicated reporting system, lack of training, time pressure of reporting, inadequate procedures for reporting have high influence on the practice of site accident reporting, this confirms the result of a study carried out by Andy (2019) and Muawiyah *et al.* (2018) which revealed that lack of knowledge by both management and employees, lack of skill, lack of time, lack of adequate safety training program, lack of recognition of reporting system and lack of access to usable reporting system. This shows that the identified factors have a high influence on the practice of site accident reporting by construction firms. Therefore, to improve the practice of site accident reporting by construction firms, the above listed factors are to be addressed by providing the necessary solutions.

In order to access the roles of government in regulating workplace occupational accidents, accident reporting, Relative Importance Index was adopted. The result of the analysis is presented in Table 3.

Table 3: Results of Roles of Government in Regulating Workplace Occupational Accidents, Accident Reporting and Record Keeping

S/No.	Code No.	Roles of Government in Regulating Workplace Occupational Accidents	RII	Rank	Decision
1	D2	Establishment and Coordination of National Incident Management System (NIMS) on Occupational accidents, injuries, diseases and death in order to provide a data bank that will provide information concerning the occupation safety and health to the construction firms.	0.39	1st	Low
2	D4	Ensuring that the construction firms report all injuries and	0.39	1st	Low

		deaths to the occupation health and safety office.			
3	D7	Ensuring that the construction firm provide the information related to the accident during investigation.	0.39	1st	Low
4	D3	Ensuring that the construction firms keep record of all notifiable occupational accidents, injuries and occupational disease.	0.37	4th	Low
5	D5	Setting up a safety and health committee to inspect workplace after the occurrence of an accident.	0.36	5th	Low
6	D6	Holding of meeting to investigate the cause of accident occurrence.	0.36	5th	Low
7	D8	Providing recommendation to construction firms of the measures to be taken to prevent reoccurrence of accident.	0.36	5th	Low
8	D10	Ensuring that any construction firm who commits an offence against the provision of the regulation shall be liable to pay a fine or be imprisoned for a term.	0.35	8th	Low
9	D9	Ensuring that the construction firms make compensation for work related disabilities or death of workers.	0.35	8th	Low

10	D1	Ensuring that the construction firms establish and apply the procedures for the notification of occupational accidents.	0.34	10th	Low
		<i>Average RII</i>	<i>0.37</i>		<i>Low</i>

Results from Table 4.3 revealed that Establishment and Coordination of National Incident Management System (NIMS) on Occupational accidents, injuries, diseases and death in order to provide a data bank that will provide information concerning the occupation safety and health to the construction firms, ensuring that the construction firms report all injuries and deaths to the occupation health and safety office were ranked first with the same RII value of 0.39 were considered to be roles that government lack majorly in regulating workplace occupational accident, accident reporting and the roles they play were considered to be low in terms of regulation. Ensuring that any construction firm who commits an offence against the provision of the regulation shall be liable to pay a fine or be imprisoned for a term, ensuring that the construction firms make compensation for work related disabilities or death of workers, ensuring that the construction firms establish and apply the procedures for the notification of occupational accidents with RII value of 0.35, 0.35 and 0.34 respectively were discovered in this study to be the least roles of government that government lack in regulating workplace occupational accident, accident reporting keeping and their level of action were considered to be low. The roles of government as identified in this research has an average RII value of 0.37 which falls within the RII value of 0.21-0.40 signifies low level of action of government in terms of the roles the government play in regulating workplace occupational accident, accident reporting. This conform the findings of Omobolanle and John (2021) on ineffective legislations of H&S in Nigeria, heavy fines are not imposed on the construction firms that fails to comply with the set regulations, non-compliance of existing legislation relating to safety of workers. There should be enforcement of rules and regulation governing the H&S which

will in turn improve the H&S of construction workers relating to site accident reporting.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the result of the findings in this research reveals that the major factors influencing the practice of construction firms towards site accident reporting are: lack of safety commitment by management, lack of health and safety regulatory body, no feedback, lack of experience and lack of time which have high influence. Although, other considered factors in this study have high influence also. In addition to the conclusion of this study, the roles of government in regulating workplace occupation accident, accident reporting were considered to be low in terms of ensuring that provision of a data bank to provide information regarding occupational health and safety to the construction firms in relation to accidents, injuries and death. Ensuring that the construction firms report all injuries and deaths to the occupation health and safety office and ensuring that the construction firms report all injuries and deaths to the occupation health and safety office and other identified roles in this study are also concluded to have low level of action on the part of government as regards to the roles regulating workplace occupational accident, accident reporting. Therefore, in order to improve the practice of accident reporting by construction firms, establishment of health and safety regulatory body, enforcement of health and safety regulations relating to accident reporting, provision of knowledge and skills in relation to accident reporting, provision of incentives to encourage accident reporting are to be provided. Government should also ensure that construction firms report accident to the set committee and also ensure that they have an internal record keeping of reported accident. Heavy fines should be imposed on the construction firms that fails to comply with the set regulations, non-compliance of existing legislation relating to safety of workers.

Based on the findings of this study, the following recommendations are made:

1. In order to improve the practice of accident reporting by construction firms, establishment of health and safety regulatory body, enforcement of health and safety regulations relating to accident reporting, provision of knowledge and skills in relation to accident reporting, provision of incentives to encourage accident reporting are to be provided.
2. Government should Set up a safety and health committee to inspect workplace after the occurrence of an accident and ensure that regulations regarding such should be enforced.
3. Government should also ensure that construction firms report accident to the set committee and also ensure that they have an internal record keeping of reported accident.
4. Heavy fines should be imposed on the construction firms that fails to comply with the set regulations, non -compliance of existing legislation relating to safety of workers.

In view of the findings of this study, the following contribution to the body of knowledge are as follows; the study has increased the understanding of the factors influencing site accident reporting practice by construction firms. The study has increased to the understanding of the deficiency in regulating workplace occupational accident, accident reporting and record keeping by government in Nigeria.

The study provides possible areas in which further studies can be carried out and are as follows; Assessment of cost implication of under-reporting and under-recording of construction site accident and record keeping. The study was limited to construction firms in Abuja, further studies can be conducted in other states of the country.

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