# AWARENESS OF FIRE SAFETY PRACTICES AMONG HOTEL WORKERS IN ABEOKUTA SOUTH LOCAL GOVERNMENT AREA, OGUN STATE, NIGERIA

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### Abstract

The hospitality industries have been affected by fire outbreaks, which had led to a global outcry. In most hotels in Nigeria, fire safety practices have been neglected, hence, the frequent occurrence of fire mishaps. Moreover, it has been reported that carelessness and ignorance of employees on how to handle substances like gas and electric voltage led to fire outbreaks. Therefore, this study investigated the extent of awareness of fire safety practices among hotels workers in Abeokuta metropolis. knowledge of fire safety equipment available, and constraints to fire safety practices among hoteliers were the objectives that guided the study. A two-stage sampling technique was used. First stage in Abeokuta south LGA, there are 134 registered hotel, 10% of the registered hotels were randomly selected. That resulted to 14 hotels. The last stage is the random selection of one worker from each of these nine units (front office, human resource, housekeeping, kitchen, restaurant and bar, maintenance, store, security, and account unit) of the hotels. Therefore, a total of 126 respondents were selected. A structured questionnaire was used for data collection. Descriptive (percentage, frequency and mean) was used for data analysis. Results revealed that majority of the sampled hotels had fire extinguishers (83.7%) and ssprinklers (77.2%). Most of the respondents were aware that a copy of fire and emergency procedure is posted at conspicuous locations (86.2%) and enforcement of the No Smoking Policy in hotel premises (73.2%). Furthermore, financial problems (mean=2.70) and poor maintenance of fire safety equipment (mean = 2.08) were major constraints against utilization of fire safety practices. The study recommends that the management should continue to create awareness on fire safety practices to the employees through regular training. Lastly the management should maintain regular testing of fire safety devices such as fire alarm system, smoke detectors etc. at regular intervals.

Keywords: Fire, Hazard, Hotels, Safety practices, Awareness

### **1. INTRODUCTION**

The hotel industry is one of the largest industries in the world, one of the greatest employers globally, and its revenues contribute significantly to the economy of many countries. Its operations range in size, purpose, and cost, and it has the capacity to make people feel comfortable when they are away from their home (Khaksari, Lee and Lee, 2014; Ivica Batinic, 2013; Jennie, 2012). The main goal of the hotel sector is ensure that guests enjoy their stay, and this should include good safety in addition to excellent service (Marasigan and Borbon 2021 & Amin et all 2013). The protection of guests and property against dangers is always the hotel's top priority when providing guest service, and doing so is both morally and legally required and also opined that customer service is always prioritized around safety and security, and hotels have a moral and legal obligation to defend their visitors and property from harm (Amit Singh & Sandhya Mishra 2020; Jaswinder Singh 2015). In the hotel industry, safety refers to the prevention of injury to both guests and personnel as well as any damage to the items, equipment, and property already in the hotel (Amit Singh & Sandhya Mishra 2020), also noted that in order to protect people's health and wellbeing, safety refers to the control of risks and conditions that can cause them physical, psychological, or material harm.

Fire safety practices in the hotel require constant monitoring to limit the chance of a fire, using the provision of detection and alarm systems and well-practiced emergency and evacuation protocols in the case of a fire, For fire accident to occur in the hotel, heat, fuel and/or oxygen is required. Without any of these elements, it is almost infeasible for such accident to occur. Severally, due to carelessness and ignorance of hotel employees on how to handle substances like gas and electric voltage could led to fire outbreaks and eventually resulting into severe consequences such as destruction of hotel properties and can cause death. Therefore, Hotel fire risk assessment will help identify the chances that a fire may occur as well as any potential threats to guests and staff (Foskett & Paskins 2011).

Chow (2001) and Alao, Yatim, & Mahmood (2020). opined that in order to accomplish basic fire safety goals in hotels. there is the need to ensure that hotel guests are aware of and knowledgeable about fire safety procedures, it is important to provide them with proper training. Ample fire safety training for hotel staff and guests on how to prevent fire disasters by imparting pertinent knowledge and awareness of fire safety procedures, the ability to utilize fire safety equipment, and knowledge of any existing flammable elements in the hotel. The attitude of employees in hotel buildings is also impacted by ineffective policy execution and a lack of fire safety awareness, which has several detrimental effects on the hotel. Employee attitudes at work are influenced by their knowledge of workplace risks.

## 1.1 Statement of Problem

Despite Despite the fire safety measures put in the hotel, fire still remain a threat to hotels industry, especially high-rise hotel structures, which have a greater risk of fire due to features like great height, complex structure, diverse functions and so forth (Hassanain, 2009). In most hotels in Nigeria, fire safety practices have been neglected, which has contributed to the frequent occurrence of fire disaster in the hotel (Makanjuola, Aiyetan & Oke A. E. 2009). According to Tolofari (2010), a disaster management expert, state that the annual number of fire outbreaks in Nigeria is estimated to be around 7000, with over 1000 fatalities as a result. Over \$250,000,000 is lost yearly in Nigeria as a result of fire disasters, as also noted by Wakili (2013). The fact that fire outbreak rates are rising is a glaring sign that prevention efforts are required as technology advances. According to the Ekpoma fire department's statistics, 112 fire outbreaks took place in the municipality of Ekpoma between January 2011 and January 2012. According to the Ekpoma fire department (2012), 51% of these fires happened within hotels, costing an estimated 37 million shillings. In Chicago, USA, in 2006, a survey on high-rise building safety emergencies and evacuation procedures found that the majority of occupants had no idea where a fire exist and fire extinguishers were located. The results confirmed the necessity of continuing emergency and evacuation protocols in high-rise hotels (Bread, 1989). In order to meet their performance goals, they determined that open plan compartments in hotel building, fire protection designs were essential.

Hotel owners have a responsibility to take all reasonable precautions to keep their visitors safe. Fires can destroy the hotel's assets and ruin it reputation, but it also has the potential to seriously hurt or even kill hotel workers, visitors, and even paying customers. Lack of maintenance and poor fire safety measures were the primary factors contributing to the spread and severity of fire incidents (Makanjuola et. al., 2009; Hassanain 2009). The attitude of employees in hotel buildings is also impacted by ineffective policy execution and a lack of fire safety awareness, which has several detrimental effects on the hotel. Employee attitudes at work are influenced by their knowledge of workplace risks (Amit Singh & Sandhya Mishra 2020; Jaswinder Singh 2015). Therefore, it is imperative to assess how well the hotel buildings' fire safety policies are understood, implemented and level of awareness. Hence, this study aimed to assess awareness of fire safety practices among hotels workers in Abeokuta south local government area, ogun state.Nigeria.

## 1.2 Objectives of the Study

The objective of the study was to assess awareness of safety practices against fire hazard among hotels workers in Abeokuta metropolis, Ogun State. Specifically, the study sought to identify the:

- a. Identify of the fire safety equipment available in the study area.
- b. Assess the awareness of fire safety practices among hotels workers in the study area.
- c. Examine constraints to fire safety practices in the study area

## 2. LITERATURE REVIEW

According to Abhishek Chauhan, Ankit Shukia, and Pradeep Negi (2018), safety and security considerations are extremely important in the hospitality sector because this sector is heavily reliant on customer relationships with hotels. When a guest has a security issue while staying at the hotel, it makes them unhappy and causes cognitive dissonance.

Safety involves protecting both employees and guests within hotel property from potential death and injury, such as fire outbreak, accidental slips, falls, cuts, and burns, as well as preventing related property damage, also noted that in order to improve safety, many hotel companies have installed electronic locks, fire sprinklers, smoke detectors, and closed circuit televisions (Jaswinder Singh 2015). In the light of the above a prior understanding of fire sources is necessary for developing fire safety measures and planning in/around a hotel building (Whole Building Design Guide (WBDG), 2017). The source of fire in a hotel building can be natural, man-made, and incidental fire. In order to establish a balanced design that would protect hotel properties and potential guests, hotel building code standards and other design methods like fire safety measures must be incorporated. The WBDG (2017) suggested combining design standards, site criteria for ease of access and evacuation, and an experienced fire protection engineer at every level of the design of hotel structures against fire dangers. Hotel firefighting involves three consecutive steps: activating the hotel alarm system or alerting the fire department, helping occupants who need to leave the building, and making an effort to put out the fire. In the same vein, Groner (2016), "fire safety in buildings" relates to fire prevention, protection, limiting the spread of fire and smoke, and promoting a quick and safe evacuation of the occupants during fire events. Ranchi (2013), asserts that fire safety in the building is a way to reduce the possibility of human casualties as a result of fire disasters (Shokouhi et al., 2019).

Amit Singh and Sandhya Mishra (2020) noted that safety awareness should be a continuous program in the hotel establishment. Various protocol and Standard Operating Procedure (SOP) have been developed, but for it to be effective a lot of work is required, including awareness, training, and review of procedure for the hotel staff. According to Alao et al (2020) the degree of fire safety awareness and knowledge among hotel staff, managers, owners, as well as potential guests, can contribute to improving the safety of the hotel and its surroundings.

Additionally, Oludare (2000) and Makanjuola et al. (2009) found that hoteliers, staff and guests have given fire safety procedures very little consideration. This might be the result of careless behavior and ignorance on the side of the building's owner, users, and staff (Ayodele, 2016, Hassan, 2017). It was also stressed that as a result of increasing awareness and safety consciousness, hotel employees' minds have begun to change. Fire and safety procedures are inseparable from each, because once there is fire occurrence, safety of life and property becomes paramount. Hotels have a higher risk when taking into account characteristics like height, complexity, and a range of functions (Hassanain, 2009; Ahrens, 2016). Therefore, it is essential to conduct a fire safety evaluation as soon as possible to stop the spread of a fire (Dechamps et al., 2011).

### **3. METHODOLOGY**

The study was carried out in Abeokuta South Local government Area, Ogun state, Nigeria. Abeokuta, which is the largest city and state capital of Ogun State in Southwest, Nigeria, and situated on the East bank of the Ogun River near a group of rocky outcrops in a wooded savanna; 77 kilometers north of Lagos by railway. Based on 2006 population figure, Abeokuta and its environs has a population of 449,088 inhabitants (NPC, 2006). It was founded in 1976, it borders Lagos state to the south, Oyo and Osun states to the north, Ondo state to the east and the republic of Benin to the west as neighbors. The ancient and mythical historical background of Abeokuta revolves around the Olumo Rock which is a monument of the belief in tribal unity for the native tribes, and also a symbol of potency and shelter. Abeokuta lies below the Olumo Rock; home to several hotels / hospitality industries, caves and shrines. Additionally, the town depends on the Oyan River Dam for its water supply which is not always dependable. The dam is situated in the Abeokuta North local government area of Ogun State in the West of Nigeria (about 20 km northwest of the state capital Abeokuta). The study area consists of hotels ranging from 1 star - 4 star, 10 rooms -200 rooms and above from which some were selected and located within Abeokuta metropolis, some of which are located around commercial

nerve centers of the city while few others are cited in popular destinations.

### 3.1 Sample Procedure and Sample Size

A two-stage sampling technique was used for the purpose of this study. The first stage is that In Abeokuta South LGA, there are 134 registered hotels. 10% of the registered hotels were randomly selected, that resulted into fourteen (14) hotels. The last stage is the random selection of one worker from each of these nine units (front office, human resource, housekeeping, kitchen, restaurant and bar, maintenance, store, security, and account unit) of the hotels. Therefore, a total of one-hundred and twenty six hotel workers were selected.

## 3.2 Measurement of variables

Primary data were collected using well structured questionnaire. Variables measured fire safety equipment available, the were awareness of fire safety practices among respondents and constraints to fire safety practices. The independent variable for the study, firstly, fire safety equipment available. A list of eight fire safety equipment were made available to the respondents. The respondents indicated yes or no as regards the availability. Frequency count and percentages were used to know the prevalence of each type of safety equipment. Secondly, constraints to awareness of fire safety practices, a list of eight statements were made available the respondents. to It was operationalized on a three points scale of very serious, serious and not serious. Frequency, percentage and mean scores were obtained. Thirdly, the dependent variable for the study was awareness of fire safety practices. A list of 21 statements were made available to the respondents using yes or no to indicate the awareness. Frequency count and percentages were used to know the level of awareness of the respondents for fire safety practices among the respondents.

### 4. Results and Discussions

Table 1: Fire safety equipment available Fire equipment

### Availability

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	Yes		No	
	F	%	F	%
Fire Extinguishers	103	83.7	20	16.3
Fire Blankets	71	57.7	52	42.3
Fire Hose Reels	70	56.9	53	43.1
Signage	64	52.0	59	48.0
Sprinklers	95	77.2	28	22.8
First Aid Kits	60	48.8	63	51.2
Emergency & Exit Signs.	63	51.2	60	48.8
Smoke Alarms.	33	26.8	90	73.2
Source: Field survey, 2020				

The result in Table 1, revealed that majority of the sampled hotels had fire extinguishers (83.7%), sprinklers (77.2%). While half of the hotels had fire blankets (57.7%), fire hose reels (56.9%), emergency and exit signs (51.2%). Less than half of the hotels had first aid kits, (48.8%). The results projected that possession of fire safety equipment ensures the safety of hotel workers and other occupants. Therefore, since the hotels in the study area had effective and efficient fire safety equipment, the management guarantee safety which is an integral parts of measures taken against fire incidence (Lo and Cheng, 2003; Santos-Reyes and Beard, 2001)

Table 2: Awareness of fire safety practices among respondents	Y	Yes	No	
Awareness of fire safety measures.	F	%	F	%
A copy of the "Fire and Emergency Procedures" posted in a conspicuous location.	106	86.2	17	13.8
Understanding and knowledge of the contents of the "Fire and Emergency Procedures."	89	72.4	34	27.6
Recognition of all possible fire risks associated with an activity or process.	97	78.9	26	21.1
Elimination of possible risks associated with an activity by controlling sources of ignition	77	62.6	46	37.4
Properly managing combustible and flammables	91	74.0	32	26.0
Regularly observing emergency evacuation routes.	52	42.3	71	57.7
Regularly observing fire extinguishers,	66	53.7	57	46.3
Regularly observing emergency exit lights.	58	47.2	65	52.8
Immediately report any missing firefighting equipment or any other problems discovered.	84	68.3	39	31.7
Encourage occupants to actively participate in fire drills that are conducted regularly.	74	60.2	49	39.8
Regularly observe the lobby, corridors, stairwells, and keep them clear of obstructions.	53	43.1	70	56.9
Regularly observe all exits to keep them clear of obstructions at all times.	48	39.0	75	61.0
Report any tampering with the fire alarm, smoke detection and suppression systems.	86	69.9	37	30.1
Regularly observe fire doors to make certain they are closed at all times.	78	63.4	45	36.6
Report inoperable doors to Physical Plant or the respective maintenance offices.	70	56,9	53	43.1
Inspect offices in search of overloaded circuits.	44	35.8	79	64.2
Inspect office frayed or damaged electrical cords.	58	47.2	65	52.8
Inspect office improperly used extension cords.	44	35.8	79	64.2
Inspect office improperly used appliances.	58	47.2	65	52.8
Forbid the use of candles or any other open flame devices for any purpose in the hotel.	50	40.7	73	59.3
Enforce the "No Smoking Policy" in hotel facilities.	97	78.9	26	21.1
G				

Source: Field survey, 2020

The results in Table 2 show the awareness of fire safety practices among respondents in the study area. The results revealed that majority of the respondents were aware of the copy of the Fire and Emergency Procedures posted in a conspicuous location (86.2%), enforcement of the No Smoking Policy in hotel premises (78.9%), proper management of combustible and flammables (74.0%), recognition of all possible fire risks associated with an activity or

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process (73.2%), understanding and knowledge of the contents of the Fire and Emergency Procedures (72.4%), report of any improper tampering with the fire alarm, smoke detection and suppression systems (69.9%), regular observation of emergency and exit lights (68.3%), while less than half of the respondents were aware of regular observation of emergency and exit lights (47.2%), inspection of abused appliances (47.2%), regularly observation of the lobby, corridors, stairwells, and ensuring they are clear of obstructions (43.1%), regular observation of emergency evacuation routes (42.3%), regular observation of all exit routes to keep them free of obstructions at all times (39.0%) and inspection of offices in search of overloaded circuits (35.8%). Thus, awareness, safety consciousness and fire safety practices cannot be separated from each other (Hassassnain, 2009, Ahrens, 2016).

Table 3.	Constraints	to awareness	of fire	safety r	oractices
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Constraints	Very serious		Serious		Not a serious problem		Mean- values	Rank
	F	%	F	%	F	%		
Financial problem.	86	69.9	37	30.1	0	0.0	2.70	1st
Excessive use of combustible	9	7.3	86	69.9	28	22.8	1.85	6th
materials in the notes								
Outdated fire safety technology	12	9.8	33	26.8	78	63.4	1.46	7th
Poor maintenance of fire safety equipment	42	34.1	49	39.8	32	26.0	2.08	2nd
Lack of installation of fire safety devices	35	28.5	57	46.3	31	25.2	2.03	3rd
Locked doors due to the security reasons.	34	27.6	51	41.5	38	30.9	1.97	4th
Lack of training of hotel staff	16	13.0	78	63.4	29	23.6	1.89	5th
Blocking of fire safety systems	22	17.9	60	48.8	41	33.3	1.85	6th

Source: Field survey, 2020

Table 3 shows the results of the constraints to fire safety practices among the respondents in the study area. Financial problems (mean=2.70) ranked first among the constraints identified. Poor maintenance of fire safety equipment (mean=2.08) and lack of installation of fire safety devices (mean=2.03) ranked 2nd and 3rd respectively. Inadequate training of hotel staff (mean=1.89), blockage of fire safety systems (mean=1.85), excessive use of combustible materials in the hotels (mean=1.85) and outdated fire safety technology (mean=1.46). ranked 5th, 6th and 7th respectively. This implies that these constraints often impede the safety practices against fire incidents as opined by Cowlard et al. (2013).

### 5. Conclusion and Recommendations

Conclusively, most of the hotels workers were aware of types of fire safety devices present in the hotels, again they are also aware of the fire safety practices against fire hazard in the hotel although they were constrained by finance, lack of maintenance of the fire safety device. It was recommended that the management should continue to create awareness on fire safety practices to the employees through regular training.

Lastly the management should maintain regular testing of fire safety devices such as fire alarm system, smoke detectors etc. at regular intervals.

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