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### Assessing Knowledge and Usage of Personal Protective Equipment among Hotel Employees in Calabar Municipality, Nigeria

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#### Abstract

The study investigated the level of awareness, availability and the utilization of Personal Protective Equipment (PPE) among hotel employees in Calabar Municipality. A mixed- method design was employed for the study, combining quantitative surveys with qualitative interviews and supplemented by observational checklist to verify real time workplace safety practices. The study population comprised 249 duly registered hotels in Calabar Municipality, from which 25 hotels (10%) were sampled. Respondents included hotel staff across various departments such as kitchen, reception, maintenance and housekeeping. Data were collected using structured questionnaire and checklists, with 186 staff members selected based on the criterion of having worked in that hotel for a minimum of two years. Hypothesis was tested using the Pearson Product Moment Correlation (PPMC). Result indicated a weak positive correlation between PPE availability and utilization ( $r = .36$ ,  $n=7$ ,  $p>.05$ ), suggesting that the relationship was likely due to random chance and not a real connection, hence statistically was not significant. The study also revealed low awareness of job related hazards, low PPE awareness, limited availability and poor utilization of PPE among hotel staff with significant departmental differences. These findings highlight the gaps in occupational health and safety practices within hotels, which may increase the risk of injury and infection among certain groups of workers. Therefore the study recommends regular trainings on occupational hazards and the provision of adequate PPE across all hotel departments in Calabar Municipality to enhance safety culture and protect workers' health.

**Keywords:** Hazard, Safety, Personal Protective Equipment, Hotels, Calabar Municipality

#### Introduction

Personal Protective Equipment (PPE) is designed to be worn on different parts of the body, such as the head, eye, face, ear, nose, hand, foot and body to protect against workplace hazards. Workplace hazards are categorized into physical (noise, dust, and slippery floors), biological (bacteria, virus, and fungi), chemical (detergents, cleaning liquids) or mechanical hazards (injuries by machineries or working tools).

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Personal Protective Equipment is considered an important barrier to occupational exposures especially when engineering and administrative controls are not feasible or have proven insufficient. A hotel is a home away from home for guests, providing a comfortable environment and services that make visitors welcome. Hotels also offer employment to large number of people who are often required to work long hours in various roles as receptionist, housekeepers, bar attendants, maintenance staff, laundry attendants, security personnel, among others. Like any other workplace, the hotel environment is susceptible to variety of hazards. Thus, safety which is the act of protecting the body from harm, injury or accidents has become one of the core requirements for the effective operation of hotels. The use of Personal Protective Equipment such as face mask, eye goggle, gloves, aprons, safety shoes and helmet is vital to protect the workers and reduce occupation related injury and infections among hotel staff.

The benefits of using PPE while working are enormous in preventing accidents and deaths. However, in reality many workers still do not use PPE due to lack of awareness, negative attitude towards its use, poor availability and inadequate supervision by the management (Delfahedah, 2022). Recent studies have shown that about 65% of industrial workers experience a high rate of injuries as a result of poor compliance with PPE requirements while at work (Schroder, Huang, Ellis, Gisbon & Wayne, 2016). International Labour Organisation (ILO) reports that, annually there are approximately 317 million workplace accidents including falls, slips and machinery related incidents (Abdalla, Yu & Nandi, 2018) and that about 160 million new cases of occupational diseases are recorded each year due to exposure to hazardous working conditions (Tadese & Isreal, 2016). Studies have also found that, failure to use PPE is a major factor contributing to workers' exposure to risks that can lead to accidents and illnesses, especially when other safety controls are ineffective. Therefore, more than 90% of workplace accidents, injuries, infections and deaths can be avoided by implementing appropriate safety measures and ensuring the use of PPE (International Labour Organisation, 2014).

Despite these well documented benefits, the level of awareness and adherence to PPE use remains particularly low in developing countries, where occupational safety is often not given adequate attention. Although occupational accidents are a global public health problem, they are more severe in developing countries where health and safety considerations at industrial levels are not a priority and the use of safety measures is often regarded as a burden. Awareness of PPE tends to increase during public health crises but may not be sustained in developing countries and refresher training programs are often inconsistent. Studies across workplaces in developing nations show that knowledge of PPE is insufficient and that lack of management policies and supervision negatively affects its use in many sectors (Khoshakhlagh, Malakoutikhah, Park, Kodnouieh, Boroujeni, Bahrami & Ramezani, 2024). Consequently, workers in developing countries are more frequently exposed to occupational hazards than those in other parts of the world (Savalia, Mchul & Bhavesh, 2021). In Addis Ababa in Ethiopia, numerous occupational injuries and fatalities have been reported in the building and construction industry due to poor compliance with PPE use (Tadese et al., 2016).

Studies have shown that, although workers are sometimes knowledgeable about PPE and are provided with adequate PPE, the rate of actual usage in the hotel industry remains low (Delfahedah, 2022). Safety measures including the use of PPE is viewed by about 35% hospitality workers, including those in hotels as unnecessary because they believe that the risks are not significant enough to justify strict compliance. The nature of hotel work demands speed and efficiency and the use of PPE is often perceived as an impediment that slows down work, therefore many workers prefer to take shortcuts without wearing protective equipment. In addition, lower rated hotels may lack budget to provide PPE for their staff (Delfahedah, 2022). However, the use of PPE is important in all industries, but holds particular significance in the hotel sector due to its highly public facing nature, where employees frequently interact with guests, handle food and work with cleaning agents and other potentially hazardous chemicals. Poor PPE usage among hotel workers can increase the rate of occupational accidents and the risk of disease transmission, leading to both public health challenges and reputational consequences for the hotel and broader tourism economy.

In Nigeria, while PPE is recognized as an important precautionary measure in healthcare and industrial sectors, its use remains inconsistent in the hospitality industry including hotels (Ozomata,

Osagiede & Onyebujoh, 2022). Similarly, in Calabar Municipality, which is widely considered the hub of tourism and hospitality in Cross River State, Nigeria, there is a growing concern about the level of awareness of occupational hazards associated with hotel work, as well as the availability and utilization of PPE among hotel employees who are frequently exposed to workplace risks. This situation raises questions about the extent to which hotel workers understand and implement safety measures necessary to protect their health and well being. However, few empirical studies have specifically examined PPE awareness, availability and utilization among hotel employees in Calabar Municipality. This limited research attention creates a significant knowledge gap in understanding workplace safety behavior within the hospitality sector. Therefore, this study aimed to investigate hotel staff awareness of occupational hazards, assess their knowledge and awareness of personal protective equipment (PPE), evaluate the availability and accessibility of PPE across departments, and examine the frequency of PPE use during routine tasks as well as the prevailing challenges in the usage of PPE with a view to proffering solutions.

### **Literature review**

The use of Personal Protective Equipment (PPE) represents the final stage in the hierarchy of hazard control methods. In the workplace, PPE plays an essential role in maintaining a safe working environment. The use of PPE has always been a mandatory aspect of safety regulations to prevent potential hazards that could cause injuries or illness. Personal Protective Equipment refers to items worn by an individual such as an employee or worker to minimize their exposure to workplace hazards (Health and Safety Executive, 2022). Employers have a fundamental responsibility to provide such protective equipment for their staff ranging from chefs to cleaners (Nationwide Paper, 2021).

Safety awareness is also essential in motivating workers to use PPE effectively. This awareness can be cultivated through various channels such as information sharing among colleagues, safety programs, posters, handbills, and through training sessions. Co-workers can significantly influence employee attitude and behaviour by providing safety information about job related risks and appropriate safety measures (Zhu, Dutta & Dai, 2021). Consequently, employees are more likely to adopt safe practices and make proper use of PPE when they observe their colleagues engaging in similar safety conscious behaviour (Ramos, Carvajal-Suarez, Trinidad, Quintero, Molina & Rowland, 2020).

Musonda, Lusenga and Okoro (2021) argued that the workers should be exposed to safety practices early and continuously in order to strengthen their safety culture and norms and to transform unsafe behaviour into safe behavior through reinforcement (Bermi, Menouni, Duca, Kestemont, Goddeis & Jaafari, 2021). Workers' first exposure to such safety practices often occurs during a training sessions (Bayram, Arpat & Ozkan, 2020). During safety training, employees are made to be aware of the specific hazards and risks present in their work environment (Anasuya, Krithi, Asish & Wright, 2022).

### *Theoretical Framework*

This study adopted the Theory of Planned Behavior (TPB) developed by Ajzen (1991) to predict and explain human behaviour. The TPB evolved from the Theory of Reasoned Action proposed by Fishbein and Ajzen and has been widely applied in studies examining behavioural intentions across various contexts (Sok, Borges, Schmidt & Ajzen, 2020). It provides a useful framework for understanding the determinants of safety related behaviour in the workplace (Watsi & Tarkang, 2021). The theory presumes that behavioural intentions are the most immediate predictors of actual behaviour. These intentions are influenced by attitude, subjective norms and perceived behavioural control (La Barbera & Ajzen, 2021). Attitude reflects an individual's positive or negative evaluation of safety practices based on their knowledge and feelings (Hussein, 2017). Subjective norm refers to perceived social pressure from supervisors and co-workers to comply with safety and health practices (Ham, Jeger & Ivkovic, 2015).

Perceived behavioural control represents the extent to which workers believe they have the ability and resources to perform certain safety behavior. Workers are likely to engage in safety and health practices when they believe that the necessary safety resources or equipment are available. However, even with a positive attitude toward safety and perceived social approval, they may fail to perform such behavior if the required equipment or resources are lacking (Hamid, Iraj, Mohammad, Habibeh & Alireza, 2019). The

Theory of Planned Behaviour has been widely applied in studies related to workplace safety and health behaviour (Lesdesma, Tos, Diaz-Lazaro, Norris, & Myers, 2013), as well as safety climate and safety behaviour (Baby, Madhu & Renji, 2021). However, most of these studies were conducted in developed countries where safety practices and procedures are effectively implemented. In contrast, limited research has applied the TPB in developing countries such as Nigeria. Based on its predictive validity, the TPB was adopted as the theoretical framework in this study to explain hotel workers' knowledge and practice of Personal Protective Equipment (PPE) use in Calabar Municipality, Nigeria.

## Study area

### Location and size

The study area is Calabar Municipality. It was created in 1976 and is located in the southern geographical region of Cross River State. Calabar Municipality lies between Latitudes  $4^{\circ}54'00''$  to  $5^{\circ}04'00''$  North of the Equator and Longitudes  $8^{\circ}18'00''$ E to  $8^{\circ}24'00''$ E of the Greenwich Meridian (Inah & Chukwudi, 2017). In the North, Calabar Municipality is bounded by Odukpani Local Government Area, to the East by Akpabuyo Local Government Area, to the South by Calabar South Local Government Area and to the West by Calabar River. It has a total area of 331.551sqkm (Digha, Amatari-Breford, & Ubaha, 2022). This is shown in Figure 1.

### Climate and vegetation

Calabar Municipality is a coastal town lying within the tropical region. It has humid tropical climate of about 1300mm – 3000mm of rainfall and  $30^{\circ}\text{C}$  mean annual temperature. It is characterized by two main seasons the rainy season (April – October) reaching its climax in June and September and the dry season, which is between November to March. The dry season is usually accompanied with harmattan wind blowing over the area (Eze & Efiong, 2010). The vegetation of Calabar Municipality is primarily dominated

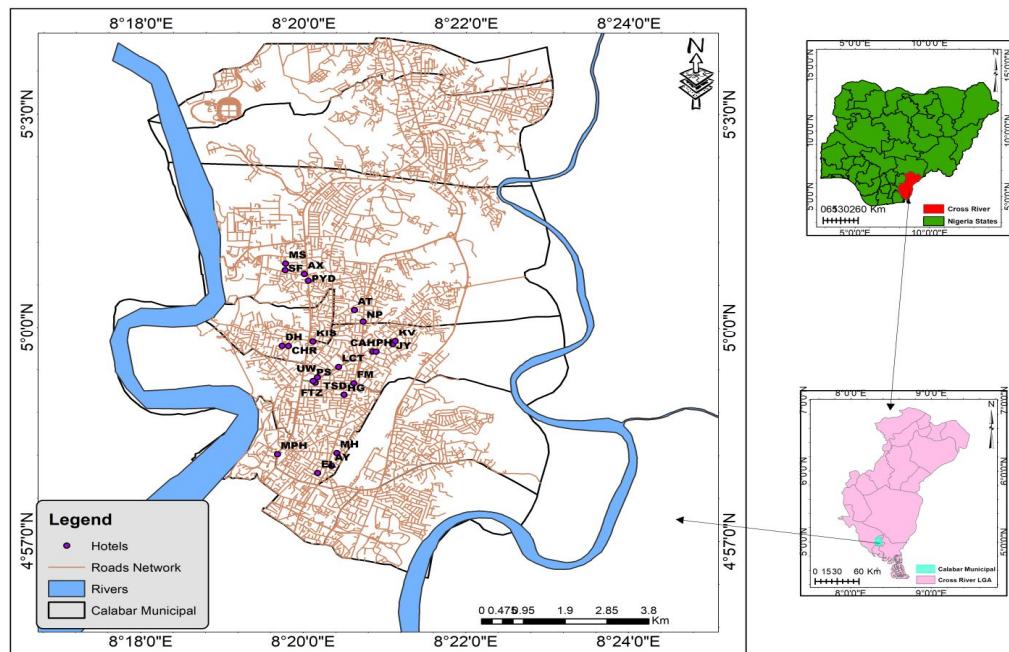


FIG. 1: Locations of the sampled hotels in Calabar Municipality

Source: Department of Geography and Environmental Science, GIS Laboratory, University of Calabar.

by mangroves and freshwater swamps. However, there have been slight changes in the forest cover of the area due to exploitation for various needs (Efiong, 2011). The climate and the vegetation of Calabar Municipality play a significant role in ecotourism attraction, as they provide a conducive environment for tourists'. Also, climate supports the survival of diverse plant species that are integral to traditional dishes, which further enhances the region's cultural tourism.

### *Tourism and Hospitality in Calabar*

The Calabar Festival and Carnival, alongside Calabar's historical connection to the slave trade and its significance as the former capital of Nigeria has cemented Calabar Municipality's reputation as a major tourism hub in Cross River State and Nigeria at large. The annual Calabar Festival and Carnival draw numerous visitors, who are often accommodated in the local hotels. This influx of tourists has led to the growth of the hospitality industry, with the establishment of many hotels equipped to provide safe and comfortable lodging. The history of hotels in Calabar Municipality traces back to the founding of the African Club in 1904 in Calabar. Later, the Metropolitan hotel emerged between 1967 and 1979 offering 150 rooms (Nsa, 2017). Presently there are approximately two hundred and forty-nine (249) registered hotels in Calabar Municipality (Cross River State Tourism Bureau, 2022).

### **Methods**

The study adopted a mixed method design, combining quantitative surveys with qualitative interviews and observations. This approach involved methodological triangulation drawing data from multiple sources including surveys, semi-structured interviews and through observation to enhance the validity and comprehensiveness of the findings on the awareness, availability and usage of PPE among hotel staff in Calabar Municipality (Robin, 2018). Structured questionnaire were administered to the workers in the hotels to assess the staff awareness of job related hazards, awareness of PPE to use, availability of PPE and compliance levels in the various departments in the hotels. Semi-structured interviews were conducted with the managers and the heads of the units in the hotels to explore the reasons for non-compliance with safety measures using a checklist. Also, direct observation and safety walk-through were conducted around the hotel premises during nighttime and weekends to obtain real life evidence of safety practices. These observations were carried out using a checklist to verify actual practices against those reported by the hotel staff. Data obtained from the study was analyzed using the Pearson's Product Moment Correlation to show the relationship between availability of PPE and usage in hotels in Calabar Municipality.

### **Sampling technique and sampling size**

The study population comprised 249 registered hotels in Calabar Municipality by the Cross River State Tourism Bureau. The sample size was determined using a 10% proportion of the total hotel population (249). This resulted to 25 hotels sampled within Calabar Municipality. The hotel staff were stratified based on years of service to ensure that respondents had adequate experience and understanding of workplace safety practices. Only employees who had served for at least two years in their respective hotels were included in the study. Also, within this group, participants were selected using simple random sampling to obtain a representative sample of 186 staff across 25 hotels in Calabar Municipality. This is shown in Table 1.

### **Hypothesis**

$H_0$ : There is no significant relationship between PPE availability and Utilization among hotel among hotel workers in Calabar Municipality.

This hypothesis was tested using Pearson's Product Moment Correlation (PPMC) Statistics. The formula is given as:

$$r = \frac{1/n \sum(X - \bar{x})(y - \bar{y})}{\delta x \delta y}$$

Where:

r	=	Correlation coefficient
I	=	constant
N	=	Number of variables
x	=	Independent variables (PPE Availability)
y	=	Dependent variable (PPE Utilization)
$\delta x, \delta y$	=	Standard deviation of x and y

Table 1: Sampled hotels and the number of respondents

Name of hotel sampled	Abbreviation in map of study area	Samples drawn
Metropolitan Hotel	MPH	21
Monty Suites	MS	16
UG WIS	UW	18
Hogis	HG	12
Country Home Resort	CHR	6
Dannic Hotel	DH	4
Pyramid	PYD	8
Axari Hptel	AX	7
Calabar Habour	CAH	10
Jorany	JY	9
Channel View	CV	7
Five Two Zero Hotel	FTZ	8
Marian Hotel	MH	10
Freeman Hotel	FM	2
Adsuit	AT	13
Keves and Inn Suites	KIS	3
Suites Franphinias	SF	4
Penuel Hotel	PH	2
Kal Vegas	KV	3
Le Chateau	LCT	4
Pearl Suites	PS	6
AB Armany	AY	5
Etaval	EL	4
Treasureland	TSD	2
Noble Place Hotel	NP	2
Total	25 Hotels	186

Source: Fieldwork, 2024.

## Results

Data on levels of hotel staff awareness of job related hazards is presented in Table 2. The data indicate that overall awareness was generally low, with 33.33% of respondents reporting awareness of hazards such as slips and falls, while merely 3.76% recognized skin irritation as a common hazard in their work environment. Data on the level of awareness of Personal Protective Equipment (PPE) is presented in Table 3. Findings reveal that 47.84% of the workers were not aware of PPE, while 12.90% were uncertain. Departmental differences were observed with the kitchen staff demonstrating highest level of PPE awareness (16.13%), whereas staff in departments such as laundry, purchasing and accounts showed no awareness. In terms of availability, aprons and protective gowns were the most commonly available PPE reported by 38.71% of the respondents. In contrast, ear plugs and ear muffs were rarely available and reported by 1.61% of the workers, as presented in Table 4.

Table 2: Hotel staff awareness of job-related hazards

	Burn by hot liquid or solid			Falling from height			Slip and fall			Cut by sharp objects			Skin irritation			Biological hazard			Fire and electrical hazard		
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	
Kitchen	9	4.84	0	0	7	3.76	12	6.45	0	0	0	0	0	0	15	8.06					
Reception	0	0	0	0	13	6.99	0	0	0	0	0	7	3.76	0	0						
Maintenance	0	0	5	2.69	0	0	3	1.61	0	0	0	0	0	0	8	4.30					
Security	0	0	0	0	6	3.22	0	0	0	0	0	4	2.15	0	0						
Restaurant	6	3.22	0	0	8	4.30	5	2.69	0	0	0	0	0	0	3	1.61					
Housekeeping	0	0	6	3.22	7	3.76	0	0	5	2.69	0	0	0	0	0	0					
Laundry	2	1.07	0	0	4	2.15	0	0	2	1.07	0	0	0	0	3	1.61					
Bar	0	0	0	0	5	2.69	8	4.30	0	0	0	0	0	0	3	1.61					
Purchasing/Account	0	0	0	0	3	1.61	0	0	0	0	0	2	1.08	4	2.15						
Management	0	0	0	0	7	3.76	0	0	0	0	0	0	0	0	7	3.76					
Gardening	0	0	0	0	2	1.07	2	1.07	0	0	0	3	1.61	0	0						
Total	17	9.14	11	5.91	62	33.33	30	16.13	7	3.76	16	8.60	43	23.11							

Source: Fieldwork, 2024.

The frequency of PPE usage across the departments is presented in Table 5. Overall, PPE was reported as always worn by 10.75% of the respondents and never worn by 32.24%. Usage patterns varied considerably across departments. PPE was more frequently used among kitchen staff (15.05%) and maintenance (5.37%), while a notable proportion of employees reported never wearing PPE, particularly in reception (9.14%) and housekeeping (7.53%). Further details are illustrated in Figure 2, which presents the major challenges identified as contributing to poor PPE usage in the sampled hotels in Calabar Municipality. The most prominent challenges reported by the respondents include lack of awareness (38%), limited availability (20%), weak enforcement (17%), discomfort (15%) and guest discomfort (10%). The relationship between PPE availability and utilization was investigated using Pearson Product Moment Correlation Coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. From the result, there was a weak, positive correlation between the two variables ( $r = .36$ ,  $n=7$ ,  $p>.05$ ). This means that there is no significant relationship between PPE availability and utilization across the sampled hotels.

Table 3: Hotel staff level of awareness of Personal Protective Equipment

Departments	Aware of PPEs		Not aware		Indeterminate		Total	
	F	%	F	%	F	%	F	%
Kitchen	30	16.13	12	6.45	1	0.54	43	23.12
Reception	2	1.07	13	6.99	5	2.69	20	10.75
Maintenance	14	7.53	2	1.07	0	0	16	8.60
Security	3	1.61	5	2.69	2	1.07	10	5.37
Restaurant	5	2.69	11	5.91	6	3.23	22	11.83
Housekeeping	2	1.07	14	7.53	2	1.07	18	9.67
Laundry	0	0	8	4.30	3	1.61	11	5.91
Bar	4	2.15	9	4.84	3	1.61	16	8.60
Purchasing/account	0	0	7	3.76	2	1.07	9	4.83
Management	12	6.45	2	1.07	0	0	14	7.52
Gardening	1	0.54	6	3.23	0	0	7	3.76
Total	73	39.24	89	47.84	24	12.90	186	100

Source: Fieldwork, 2024.

Table 4: Availability of Personal Protective Equipment in the departments

Departments	Face masks, dust masks, face shield		Apron,gown, high visibility vest		Hand gloves, heat resistant and cut resistant gloves		Hair net, cap and hard hat		Eye goggle		Slip resistant shoe, safety shoe		Ear plug, ear muff	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Kitchen	0	0	26	13.98	2	1.08	13	6.98	0	0	2	1.08	0	0
Reception	9	4.84	0	0	11	5.91	0	0	0	0	0	0	0	0
Maintenance	0	0	7	3.76	2	1.08	2	1.08	1	0.54	3	1.61	1	0.54
Security	0	0	4	2.15	0	0	0	0	0	0	6	3.22	0	0
Restaurant	0	0	15	8.06	3	1.61	4	2.15	0	0	0	0	0	0
Housekeeping	8	4.30	2	1.08	3	1.61	2	1.08	0	0	3	1.61	0	0
Laundry	0	0	5	2.69	4	2.15	0	0	0	0	0	0	2	1.08
Bar	0	0	8	4.30	4	2.15	4	2.15	0	0	0	0	0	0
Purchasing/ Account	6	3.22	0	0	3	1.61	0	0	0	0	0	0	0	0
Management	4	2.15	3	1.61	0	0	3	1.61	0	0	4	2.15	0	0
Gardening	0	0	2	1.08	2	1.08	0	0	3	1.61	0	0	0	0
Total	27	14.51	72	38.71	34	18.28	28	15.05	4	2.15	18	9.67	3	1.61

Source: Researcher's Fieldwork, 2024.

Table 5: Frequency and usage of Personal Protective Equipment across the departments.

Departments	Always		Often		Sometimes		Rarely		Never	
	F	%	F	%	F	%	F	%	F	%
Kitchen	9	4.83	28	15.05	6	3.22	0	0	0	0
Reception	0	0	0	0	1	0.54	2	1.08	17	9.14
Maintenance	4	2.15	10	5.37	2	1.08	0	0	0	0
Security	0	0	0	0	2	1.08	2	1.08	6	3.22
Restaurant	5	2.69	6	3.22	7	3.76	4	2.15	0	0
Housekeeping	0	0	1	0.54	1	0.54	2	1.08	14	7.53
Laundry	0	0	0	0	1	0.54	3	1.61	7	3.76
Bar	2	1.08	4	2.15	5	2.68	3	1.61	2	1.08
Purchasing/ Account	0	0	0	0	1	0.54	2	1.08	6	3.22
Management	0	0	0	0	4	2.15	7	3.76	3	1.61
Gardening	0	0	0	0	1	0.54	1	0.54	5	2.68
Total	20	10.75	49	26.34	31	16.66	26	13.98	60	32.24

Source: Researcher's Fieldwork, 2024

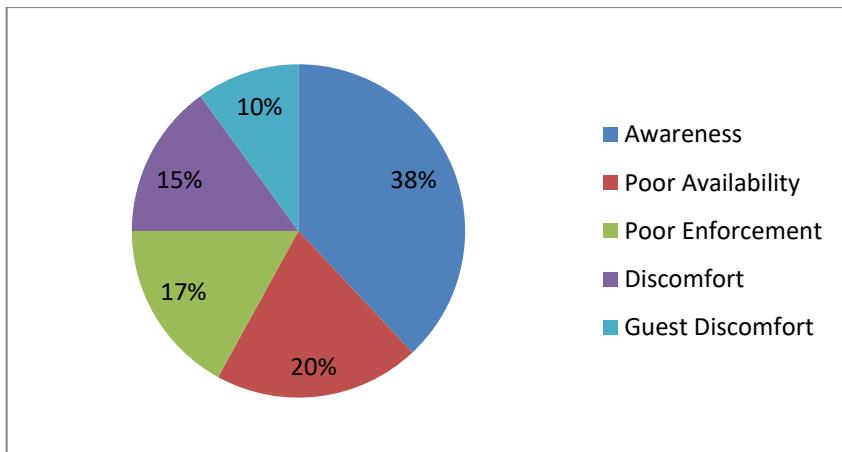


FIG. 2: Challenges in usage of Personal Protective Equipment  
Source: Researcher's Fieldwork, 2024.

### Discussion of Findings

The findings of the study reflect the reality of hotel operations, where staff are exposed to multiple types of hazards, yet awareness remains limited. This aligns with Agunos, Cruz, Illescas and Gumasing, (2022) who observed that hospitality workers face diverse occupational hazards, including physical, chemical, biological, ergonomic and psychosocial risks. In particular, the housekeepers in hotels in Calabar Municipality are frequently exposed to such hazards but often lack adequate awareness. This is consistent with the study of Siaw, Khayiya and Mugambi (2019), which reported that only 13.7% of housekeepers in hotels in Eastern Ghana were informed of potential hazards associated with their work. This finding suggests that insufficient awareness and training may place hotel workers at a greater occupational risk, underscoring the need for targeted safety interventions, improved training programs and consistent provision of personal protective equipment.

This study further revealed departmental differences in PPE awareness, availability and utilization. Staff in the kitchen and maintenance departments demonstrated greater awareness of PPE and had more consistent access to items such as aprons, gowns and hairnets. These findings are supported by food safety and occupational health literature, which note that kitchen often receive more management attention, inspections and training due to hygiene regulations and visible health risks (Onyeaka, Ekwebelem, Eze, Onwuka, Aleke, Nwaiwu & Chionuma, 2021). Consequently, PPE use in the kitchen and maintenance departments was more frequent, underscoring the link between availability, training and utilization (Tessema & Sema, 2021). These findings highlight a significant gap in safety culture and enforcement of PPE policies in hotels in Calabar Municipality and demonstrate the applicability of the Theory of Planned Behaviour in explaining workers attitude toward safety. There is a clear need to adopt a more holistic safety culture that extends beyond food handling areas to include all departments. Therefore, interventions aimed at improving PPE use should focus on awareness campaigns to enhance positive attitude, management led enforcement to strengthen social norms and adequate provision and training to improve behavioural control.

### Conclusion

The findings of this study have significant implications for the achievement of the United Nations Sustainable Development Goals (SDGs), particularly SDGG 3 on Good Health and Well being and SDG 8 on Decent Work and Economic Growth. The low awareness, limited availability and poor utilization of PPE among hotel workers in Calabar Municipality highlight gaps in occupational health and safety that undermine efforts to ensure healthy lives and promote wellbeing for all (SDG 3). Moreover, enhancing workplace safety practices aligns with SDG 8, which emphasizes the promotion of safe and secure working environment for all workers. Developing a holistic safety culture that extends beyond food handling departments to include all categories of staff supports decent work, enhances job satisfaction and

contributes to sustainable productivity in the hospitality sector. Thus, PPE use and safety management in hotels within Calabar Municipality should be strengthen to improve workers well being and promote sustainable tourism development.

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