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Risk Assessment of the Health and Safety Practices of Civil Servants in Uvwie LGA of Delta State, Nigeria

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Abstract*—Occupational health and safety (OHS) in Nigeria's public sector is often underdeveloped, exposing civil servants to preventable hazards. This study assessed OHS practices among civil servants from selected communities for the study in Uvwie Local Government Area (LGA), Delta State, combining risk perception with environmental monitoring. A descriptive cross-sectional survey was conducted with structured questionnaires. A purposive sample of 120 civil servants across administrative, educational, and healthcare sectors yielded 111 valid responses (92.5% response rate). Data were analyzed using descriptive statistics, risk grid analysis table and Pearson's correlation. Survey findings revealed gaps in policy awareness, PPE availability (constant access: 39.6%), and safety inspections (35.2%), despite 77.5% having received training. Correlation analysis indicated strong positive relationships between management commitment and safety compliance ($r = 0.812$, $p < 0.01$), PPE availability and compliance ($r = 0.754$, $p < 0.01$), and policy awareness and compliance ($r = 0.701$, $p < 0.01$). The study concludes that while OHS structures exist, implementation is inconsistent, with psychosocial stress (65.8% prevalence) under-addressed. Recommendations include periodic safety audits, uninterrupted PPE supply, policy visibility, and stress management programs.*

***Keywords*—** *Occupational Health & Safety (OHS), Health & Safety, Risk Assessment, Indoor Air Quality, Civil Servants, Workplace Hazard, Uvwie LGA, Delta State, Nigeria.*

I. INTRODUCTION

Health and safety in the workplace have gained increasing global prominence as organizations recognize the need to mitigate hazards that undermine employee well-being and productivity. This concern is particularly pronounced within the public sector, where civil servants perform essential administrative and governance functions that expose them to diverse occupational risks. In Nigeria, the well-being of civil servants is especially critical, as their health directly impacts the quality, efficiency, and reliability of public service delivery (Adeyemo, 2017). In Uvwie Local Government Area (LGA) of Delta State, civil servants frequently operate in environments where safety measures are poorly implemented or inconsistently enforced. As a result, they face a range of hazards including ergonomic strain, poor sanitation, inadequate ventilation, chemical exposures, and psychosocial stressors (Obasi & Asiegbu, 2019). These risks are compounded by limited awareness of safety protocols, insufficient risk assessment practices, and inadequate safety equipment.

Despite Nigeria's Labour Act and Occupational Health and Safety (OHS) policies being developed to safeguard workers, enforcement gaps remain significant, particularly at the local government level where administrative constraints and insufficient funding impede compliance (Umar, 2020). In many developing countries, including Nigeria, public-sector employees continue to encounter avoidable health risks due to inadequate training, insufficient supervisory oversight, and weak institutional safety cultures. These shortcomings underscore the importance of proactive risk analysis, which has become a globally recognized tool for identifying, evaluating, and minimizing workplace hazards (Holt, 2018). This approach is relevant in Uvwie LGA, where rapid urbanization and industrial expansion—typical of the Niger Delta—introduce additional environmental exposures such as noise, pollution, and stress-related disorders (Ibeneme et. al., 2022).

The broader environmental context of the Niger Delta exacerbates occupational risks due to pollution and ecological degradation associated with extractive activities. Civil servants working in this region therefore face unique challenges that require context-specific OHS interventions. Enhancing workplace safety not only promotes individual well-being but also contributes to improved productivity, reduced absenteeism, and alignment with global frameworks such as the Sustainable Development Goals (SDG 8), which emphasize safe working environments for all employees.

The literature supports the conceptual and empirical relevance of these issues. Health and safety practices encompass formal organizational procedures intended to prevent injuries, illnesses, and accidents while promoting employee welfare (ILO, 2019). Effective OHS management demands systematic hazard identification, risk assessment, control measures, and continuous employee training, supported by adequate personal protective equipment (Hughes & Ferrett, 2016; Cooper, 2000) Foundational theoretical models such as Heinrich's Domino Theory (Heinrich, 1931) and Reason's Swiss Cheese Model (Reason, 1990) provide insight into accident causation by emphasizing sequential chains of failure and the interplay of organizational weaknesses. These models highlight the complexity of workplace risks and the need for multilayered prevention strategies.

Studies further indicate that OHS challenges in public-sector institutions stem from resource constraints, weak implementation of safety policies, poor inspection regimes, and inconsistent compliance monitoring (Dike, 2020). Psychosocial risks, including job insecurity and mental stress, contribute to burnout and reduced work performance (Cox & Griffiths, 2017). Environmental conditions—such as temperature, humidity, and indoor air pollutants also significantly influence

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worker comfort and health, demonstrating the need for continuous environmental monitoring (Hayat et al., 2021). Empirical studies in Nigeria consistently reveal lack of access to PPE, inadequate OHS training, inconsistent enforcement of safety policies, and weak safety awareness among public-sector workers (Umar, 2020). Furthermore, the absence of systematic risk assessments often results in hazards being addressed after incidents occur rather than through preventive mechanisms (Holt, 2018).

Overall, existing literature shows that OHS in public-sector workplaces is influenced by interrelated factors spanning organizational behaviour, public administration, occupational health, and environmental science. Strengthening health and safety practices among civil servants in Uvwie LGA therefore requires comprehensive interventions, including improved policy enforcement, adequate resource allocation, enhanced safety culture, and routine hazard monitoring. These insights collectively highlight a critical research gap and justify the need for a detailed risk assessment of OHS practices among civil servants in Uvwie LGA.

II. Materials and Methods

This study adopted a descriptive cross-sectional survey design. The design enabled the researcher to assess the health and safety practices of civil servants across multiple public institutions in Uvwie Local Government Area (LGA), Delta State, Nigeria, and to evaluate their exposure to occupational risks

2.1. Study Area

The study was carried out in Uvwie LGA, located within the Warri metropolitan area of Delta State, Nigeria. Communities covered in this research included Ugbomro, Ekpan, Jakpa, Ugborikoko, and Effurun. These areas host numerous government-owned schools, hospitals, and administrative offices, where civil servants are actively employed. Figure 1 shows the map of study area.

2.2. Population of the Study

The study population consisted of civil servants working in government-owned public offices, schools, and healthcare facilities in Uvwie LGA. These individuals were chosen due to their daily exposure to workplace conditions and institutional safety systems, making them ideal subjects for a risk assessment study.

2.3. Sample Size and Sampling Technique

A total of 120 structured questionnaires were distributed using purposive sampling to civil servants working in selected government facilities across the five communities. Of the 120, 111 completed questionnaires were completed and used for analysis, giving a response rate of 92.5% and valid percent 100%.

The purposive sampling technique was chosen to specifically target individuals in sectors with routine administrative, educational, and healthcare functions settings where occupational health and safety concerns are most relevant.

2.4. Data Collection and Instruments

The primary instrument for data collection was a structured questionnaire. The questionnaire was divided into sections:

- Section A: Demographic information (age, gender, workplace, years of service, etc.)
- Section B: Knowledge and awareness of health and safety practices
- Section C: Self-reported health and safety behaviors
- Section D: Perceived occupational risks and reported incidents
- Section E (optional): Environmental exposures (e.g., ventilation, air quality perception)

Questionnaires were distributed randomly to civil servants across five locations: Ugbomro, Ekpan, Jakpa, Ugborikoko, and Effurun.

- Each location included at least one government facility (e.g., school, hospital, secretariat).
- Respondents were given 15–30 minutes to complete the forms online through the use of google form.
- Data collection spanned a period of 4 weeks.

2.5. Data Analysis

Responses from the 111 valid questionnaires were entered into SPSS (or Excel) and analyzed using:

- Descriptive statistics (frequency, percentages, mean, standard deviation).
- Cross-tabulations to compare awareness and risk across demographic groups.
- Charts and tables for data visualization.

2.6. Validity and Reliability

The questionnaire was reviewed by academic experts to ensure content validity. A pilot test involving 10 civil servants from a nearby LGA was conducted; revisions were made based on feedback. The reliability of the questionnaire was tested using Cronbach's Alpha, with values above 0.70 indicating good internal consistency.

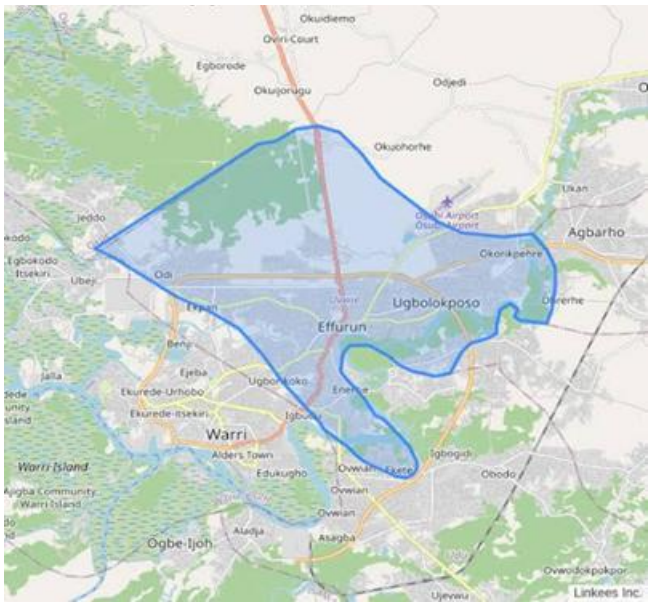

Figure 1: Map of Study Area.

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2.7. Ethical Considerations

Participants were fully informed about the purpose, scope, and objectives of the study prior to their involvement. Informed consent was obtained through a written consent form that outlined the voluntary nature of participation, the right to withdraw at any time without consequence, and the confidentiality measures in place. The form also assured participants that no names or identifying information would appear in the study and that all data would be used solely for academic and research purposes.

All responses were handled with strict confidentiality, securely stored, and not disclosed to any third party. As the study involved only questionnaire administration and non-invasive environmental observations, no physical, psychological, or emotional risks were anticipated.

III. Results And Discussion

3.1. Sociodemographic Representations of Respondents

This section presents the sociodemographic distribution of respondents who participated in the study, highlighting their gender, age, marital status and Educational level. Table 1 shows the sociodemographic nature of civil servants in Uvwie local government area.

3.1.1. Gender Distribution and Its Implications for Health and Safety Risk Assessment Among Civil Servants

The gender composition of respondents in this study as shown in Table 1 indicates that out of 111 civil servants surveyed, 49 (44.1 %) were male and 62 (55.9 %) were female. This slight dominance of female participants suggests a relatively balanced, yet female-leaning, workforce structure within the Uvwie Local Government Area's civil service. The cumulative percentage shows a complete data return, ensuring reliable representation across both gender groups.

This distribution bears notable implications for the assessment of occupational health and safety risks, especially in the context of public administration workspaces. From an occupational health perspective, gender is not only a biological determinant but also a social and structural factor that can influence risk perception and behavior, compliance, and exposure (see, e.g., gender-sensitive approaches to OHS). Gender differences in occupational exposures and risk are well-documented: women and men may be exposed differently even within the same job role (e.g., repetitive tasks, psychosocial stressors), and these differences can shape safety outcomes (Schlünssen et. al., 2023).

Specifically, gender can influence:

- risk perception and response behavior,
- compliance with safety regulations,
- exposure to specific hazards, and
- access to safety training and resources.

Studies have shown that women often report higher compliance with personal protective equipment (PPE) and may perceive risk differently than men (Schlünssen et. al., 2023). Moreover, the safety climate itself may be perceived differently by men and women: for example, in industrial settings, women report more concerns about ergonomics, whereas men may underreport risk or engage in riskier safety behaviors (AlMousa et. al., 2022). Gender-inequality in working conditions (e.g., job insecurity, psychosocial stress) also contributes to differential health outcomes (Campos-Serna et. al., 2013).

TABLE 1: Gender of Respondents

Gender	Frequency	Valid Percentage	Cumulative Percentage
Male	49	44.1	44.1
Female	62	55.9	100.0
Total	111	100	

3.1.2. Age Distribution and Implications for Health and Safety Risk Assessment

The age distribution in Uvwie LGA civil service workforce—with most employees clustered in the 36–45 (30.6 %), 46–55 (27.1 %), and 26–35 (24.3 %) age groups as shown in table 3 suggests a predominantly middle-aged, experienced cohort. Research shows that age is positively associated with better safety perception and compliance: in a Ghanaian industrial workforce, older workers demonstrated higher safety perception, more compliance with procedures, and fewer accidents than younger counterparts (Gyekye et. al., 2009).

At the same time, younger workers often have less access to occupational health and safety (OHS) services and lower OSH awareness, possibly due to their employment conditions—temporary contracts, smaller companies, or lack of representation (Dragano et. al., 2018). This aligns with your observation that younger civil servants may be more vulnerable due to limited safety experience.

Regarding older staff, the literature also supports increased vulnerability: older workers (e.g., 55+) have been found to perceive greater health risk and are more likely to suffer from chronic or musculoskeletal conditions (Jones et. al., 2013). In particular, high physical demands disproportionately elevate the risk of musculoskeletal injury for middle-aged to older workers, underscoring the need for targeted interventions (Smith et al., 2014).

Finally, demographic studies note that age diversity matters for safety climate: age correlates significantly with safety behavior and perception, with some research observing a U-shaped pattern, where middle-aged workers may be less compliant or participative than both younger and older groups (He et. al., 2023). Table 2 presents the age distribution of respondents.

TABLE 2: Age Distribution of Respondents

Age	Frequency	Valid Percentage	Cumulative Percentage
18-25	11	9.9	9.9
26-35	27	24.3	34.2
36-45	34	30.6	64.8
46-55	30	27.1	91.8
56 and above	9	8.1	100
Total	111	100	

3.1.3. Marital Status and Its Implications for Health and Safety Risk Assessment Among Civil Servant

Among the civil servants surveyed as presented in Table 4, 64% were married and 36% single, suggesting that most employees carry family obligations, which likely shape their occupational behaviour and health risk profiles. Existing research indicates that marital status is linked to risk tolerance:

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single individuals tend to display higher risk-taking propensity than married ones, who are comparatively more risk-averse, possibly because of family responsibilit (Irma 2021). Married workers often report lower work-family stress and better family functioning than their single counterparts (Tan et. al., 2014). Conversely, single

employees sometimes face greater psychosocial stress due to social isolation or imbalance between work and personal life (Mishra et. al., 2024). Furthermore, the demands of family life among married workers can exacerbate role conflict, increasing stress and affecting mental wellness (Yan et. al., 2022). These studies support your finding that OHS policies should be sensitive to marital differences—promoting work–life balance, providing stress-management resources, and accommodating both mental-health needs and risk-aversion behaviour.

TABLE 4: Marital Status Distribution of Respondents

Marital Status	Frequency	Valid Percentage	Cumulative Percentage
Single	40	36.0	36.0
Married	71	64	100
Divorced	0	0	
Widowed	0	0	
Total	111	100	

3.1.4. Educational Qualification of Respondents and its Impact on Health and Safety Practices

Respondents workforce's high educational attainment — with 90.1% tertiary qualifications nd none reporting below secondary education — suggests a strong capacity for understanding and applying technical and policy-level information. Research indicates that higher education levels are positively associated with stronger risk perception and more deliberate behavioral responses: individuals with more advanced education tend to better interpret and respond to complex risk information (Wei et. al., 2025).

In occupational settings, several studies show that workers with higher education perform better on safety metrics: education level positively correlates with safety participation, safety consciousness, and knowledge of safety procedures (He et. al., 2023). In construction work, for instance, more educated workers are more logical and cautious in their decision-making, translating to better compliance with safety rules (Chan et. al., 2023).

Moreover, workforce safety climate studies suggest that education improves peer relationships and communication about safety: employees with higher education levels tend to have better coworker perception and are more willing to engage in safety participation (He et. al., 2023). Higher-educated workers also often hold more positive attitudes toward safety factors compared to less educated ones (Ahadzi et. al., 2021). Table 5 shows respondents highest educational attainment.

TABLE 5: Highest Educational Qualification

Educational Qualifications	Frequency	Valid Percentage	Cumulative Percentage
Primary	0	0	0
Secondary	0	0	0
Tertiary	90	90.1	90.1
Others	11	9.9	100.0
Total	111	100	

3.2. Demographic Distribution of Surveyed Populations

3.2.1. Years of Employment and its Implications on Health and Safety Practices

Among the 111 civil servants surveyed as shown in Table 6, 39.6% reported 11–20 years of experience and 32.4% had 6–10 years, together accounting for over 70% of the workforce. Research indicates that employees with longer tenure tend to have greater practical knowledge of workplace hazards, stronger familiarity with safety protocols, and higher compliance with occupational health and safety (OHS) procedures. Conversely, newer employees (less than 5 years of experience) often require foundational training, supervision, and structured orientation to minimize exposure to risks (He et. al., 2023).

The presence of both experienced and newer staff provides opportunities for peer mentoring, refresher programs, and targeted risk management initiatives, which have been shown to improve overall safety culture, promote knowledge transfer, and enhance proactive risk mitigation. This balanced experience mix supports the development of an inclusive and proactive workplace safety environment.

TABLE 6: Years of Employment/Service

Length of Employment	Frequency	Valid percent	Cumulative percent
Less than 1 year	11	9.9	9.9
1-5 years	20	18.1	28
6-10 years	36	32.4	60.4
11-20 years	44	39.6	100
More than 20 years	0	0	
Total	111	100.0	

3.2.3. Department/Unit of Employment

The 111 respondents were distributed across multiple departments, with Administration (25.2%) and Health (24.4%) being the most represented, followed by Education (18.0%), Finance (8.1%), Work (9.0%), Agriculture (7.2%), and Environment (8.1%). Departmental distribution influences exposure to occupational hazards, as administrative staff often face ergonomic, sedentary, and psychosocial risks, whereas employees in Health, Agriculture, or Environment encounter biological, chemical, and field-based hazards (Kwon et. al., 2021). These variations emphasize the need for department-specific OHS strategies that combine administrative and field-based interventions, supporting inclusive risk management and promoting a comprehensive workplace safety culture. Table 7 shows the various departments/units of respondents.

TABLE 7: Respondents current department of employment

Department/Unit	Frequency	Valid percent	Cumulative percent
Administration	28	25.2	25.2
Health	27	24.4	49.6
Education	20	18.0	67.6
Finance	9	8.1	75.7
Work	10	9.0	84.7
Agriculture	8	7.2	91.9
Environment	9	8.1	100.9
Total	111	100.0	

3.3. Level of Awareness and Compliance of Civil Servants in Uvwie LGA with Health and Safety Regulations and Protocols

3.3.1. Familiarity with Workplace Health and Safety Policies

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Among 111 civil servants surveyed as shown in Table 8, 46.0% reported being very familiar with organizational health and safety policies, 31.5% were somewhat familiar, and 22.5% were not familiar at all. While a majority demonstrate awareness, nearly one-quarter of respondents lack sufficient understanding, highlighting gaps in communication, training, or policy dissemination. These findings underscore the need for structured and continuous health and safety education, including onboarding, routine workshops, and visual reminders, to enhance compliance and foster a culture of safety across all departments. This pattern mirrors findings in other sectors — for instance, only ~52% of healthcare workers in Nigeria "always" comply with safety procedures, often due to inadequate training and equipment (Aluko et. al.,2016). Continuous, structured education such as onboarding, regular workshops, and refresher programs has been shown to improve both awareness and compliance in various organizational contexts (Mtikitiki et. al., 2025).

TABLE 8: Familiarity to health and safety policies in respondents organizations

How familiar are you with workplace health and safety policies in your organization?	Frequency	Valid percent	Cumulative percent
Very familiar	51	46.0	46.0
Somewhat familiar	35	31.5	77.5
Not familiar	25	22.5	100.0
Total	111	100.0	

3.4. Factors Influencing Workplace Health and Safety Implementation

3.4.1. Training on Health and Safety Practices

Of the 111 civil servants surveyed, 77.5% reported receiving health and safety training, while 22.5% had not. The high level of participation reflects organizational efforts toward capacity building and preparedness, enabling employees to identify hazards, follow safety protocols, and respond effectively to emergencies (Kwon et. al., 2021). However, the untrained minority represents a potential vulnerability, highlighting inconsistencies in training delivery across departments and the need for systematic coverage (Aluko et. al., 2016). Studies suggest that gaps in OHS training can reduce compliance, increase workplace accidents, and undermine overall safety culture (Coca et. al., 2025). Ensuring continuous, inclusive, and department-wide training is therefore critical to achieving uniform adherence to safety protocols and fostering a proactive and comprehensive workplace safety environment (Mtikitiki et. al., 2025). Table 9 shows respondents response.

TABLE 9: Respondents response on training on health and safety practices

Have you received any training on health and safety practices?	Frequency	Valid percent	Cumulative percent
Yes	86	77.5	77.5
No	25	22.5	100.0
Total	111	100.0	

3.4.2. Effectiveness of Health and Safety Training

Among the 111 civil servants as presented in Table 10, 36.0% rated their health and safety training as very effective, 27.1% as moderately effective, 14.4% as not effective, and 22.5% indicated the question was not applicable. While most employees benefited from training, concerns remain regarding quality, relevance, and accessibility. Similar studies indicate that the effectiveness of OHS training is highly influenced by its interactivity, contextual relevance, and alignment with departmental hazards (Kwon et. al., 2021). Research also shows that interactive and periodically updated training improves comprehension, safety compliance, and practical application of procedures (Aluko et. al., 2016). These findings underscore the need for department-specific, continuous training strategies that ensure a safer, more prepared, and engaged workforce.

TABLE 10: Respondents response on effectiveness of health and safety training

If yes, how effective was the training in enhancing your understanding of health and safety?	Frequency	Valid percent	Cumulative percent
Very effective	40	36.0	36.0
Moderately effective	30	27.1	63.1
Not effective	16	14.4	77.5
Not applicable	25	22.5	100
Total	111	100.0	

3.4.3. Perceived Management Commitment to Workplace Safety

Among the 111 civil servants, 22.5% strongly agreed and 38.7% agreed that management is committed to workplace safety, totaling 61.2% positive perception. However, 24.4% were neutral and 14.4% disagreed, indicating some doubt or perceived inconsistency in leadership engagement. Studies indicate that perceived management commitment strongly influences employee safety behavior, compliance, and reporting of hazards (Kwon et. al., 2021). Visible, proactive, and consistent leadership actions such as regular inspections, budget allocation for safety, and participatory safety committees have been shown to enhance safety culture, strengthen adherence to protocols, and reduce workplace accidents (Aluko et. al., 2016). These findings suggest that reinforcing leadership engagement is critical for fostering a robust and sustainable organizational safety culture. Table 11 presents the perceived management commitment to safety in the workplace.

TABLE 11: Respondents response on management commitment a safe environment

Do you believe that management is committed to maintaining a safe work environment?	Frequency	Valid percent	Cumulative percent
Strongly agree	25	22.5	22.5
Agree	43	38.7	61.2
Neutral	27	24.4	85.6
Disagree	16	14.4	100.0
Strongly Disagree	0	100.0	
Total	111		

3.5. Current Health and Safety Practices and Policies Implementation and Evaluating the Effectiveness of Reducing Occupational Risks

3.5.1. Visibility of Safety Guidelines and Policies in the Workplace

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Among the 111 civil servants, Table 12 shows that 58.6% confirmed that safety guidelines are visibly posted, while 27.0% reported the absence of such postings and 14.4% were unaware. Although over half of employees recognize posted safety information, the notable proportion lacking visibility or awareness highlights inconsistencies in policy implementation and communication. Research indicates that visible and accessible safety signage significantly improves hazard awareness, compliance with safety procedures, and overall safety culture (Kwon et. al., 2021)). Effective occupational risk mitigation therefore requires clear, regularly updated, and strategically placed safety postings to reinforce protocols and ensure that all staff are adequately informed (Aluko et. al., 2016).

TABLE 12: Respondents response on visibility of policies

Are there safety guidelines or policies visibly posted in your workplace?	Frequency	Valid percent	Cumulative percent
Yes	65	58.6	58.6
No	30	27.0	85.6
Don't know	16	14.4	100.0
Total	111	100.0	

3.5.2. Frequency of Reviewing or Receiving Updates on Health and Safety Policies

Among the 111 civil servants, 24.3% reported receiving health and safety policy updates monthly, 26.2% quarterly, 28.8% annually, and 20.7% never received updates as shown in Table 13. While some employees are regularly informed, nearly one in five lack any updates, highlighting gaps and inconsistencies in communication across departments. Frequent, structured, and uniform dissemination of OHS policies is critical for maintaining awareness of occupational risks, reinforcing compliance, and fostering a proactive safety culture (Zara et. al., 2023; Otitolaiye et. al., 2025). This finding underscores the need for continuous, well-organized, and department-wide communication strategies to ensure all staff remain informed, engaged, and compliant with workplace health and safety protocols.

TABLE 4. 12: Respondents response on review policies.

How often do you review or receive updates on health and safety policies?	Frequency	Valid percent	Cumulative percent
Monthly	27	24.3	24.3
Quarterly	29	26.2	50.5
Annually	32	28.8	79.3
Never	23	20.7	100.0
Total	111	100.0	

3.5.3. Regularity of Safety Inspections in the Workplace

Among the 111 civil servants, 35.2% reported that safety inspections are conducted regularly, 30.6% occasionally, 20.7% said no inspections occur, and 13.5% were unaware. While most employees experience some level of inspection, over one-third lack consistent monitoring, reflecting gaps in oversight, communication, and compliance. Studies indicate that regular and systematic safety inspections are critical for identifying hazards, enforcing protocols, and mitigating workplace risks (Kwon et. al., 2021). Evidence also shows that standardized, well-resourced, and clearly communicated inspection procedures enhance adherence to safety policies and foster a proactive workplace safety culture (Aluko et. al., 2016). These findings underscore the importance of implementing consistent inspection protocols across all departments to strengthen overall occupational health and safety management. Table 14 presents the data from respondents.

TABLE 14: Respondents feedback on the regularity of safety inspection in their workplace

Are there regular safety inspections conducted in your workplace?	Frequency	Valid percent	Cumulative percent
Yes, regularly	39	35.2	35.2
Yes, occasionally	34	30.6	65.8
No	23	20.7	86.5
Don't know	15	13.5	100.0

3.5.4. Perception of Emergency Exits and Evacuation Procedures

Among the 111 civil servants, Table 15 shows that 29.8% strongly agreed and 33.3% agreed that their workplace has adequate emergency exits and evacuation procedures, while 36.9% disagreed. Although a majority (63.1%) expressed confidence in emergency systems, over one-third reported dissatisfaction, indicating gaps in infrastructure, signage, drills, or staff training. Research shows that well-planned emergency preparedness—including clearly marked exits, routine evacuation drills, and staff training—is essential for effective hazard response and minimizing injuries during workplace incidents (Kwon et. al., 2021). Studies also highlight that regular evaluation and improvement of emergency systems strengthen employee confidence and overall workplace safety culture (Aluko et. al., 2016). These findings underscore the need for government offices to invest in emergency infrastructure, conduct regular drills, and provide continuous training to enhance preparedness and safety compliance.

TABLE 15: Respondents view on adequate emergency exits in their workplace

Do you feel that your workplace has adequate emergency exits and evacuation procedures?	Frequency	Valid percent	Cumulative percent
Strongly agree	33	29.8	29.8
Agree	37	33.3	63.1
Disagree	41	36.9	100.0
Strongly disagree	0	0	
Total	111	100.0	

3.5.6. Availability of a Functioning First Aid Kit in the Workplace

Among the 111 civil servants, 58.6% reported the presence of a functioning first aid kit, 27.0% indicated no kit was available, and 14.4% were unaware of its existence. While most workplaces have this essential safety provision, over one-quarter lack it or have employees unaware of it, reflecting gaps in emergency preparedness. Studies emphasize that accessible, well-stocked, and regularly maintained first aid resources are critical for timely response to injuries and medical emergencies, reducing severity of incidents and reinforcing overall workplace safety culture (Kwon et. al., 2021). Ensuring first aid

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readiness complements emergency preparedness measures such as evacuation procedures and safety inspections, contributing to a comprehensive occupational health and safety management system (Aluko et. al., 2016). Table 16 presents the respondents response.

TABLE 16: Respondents response on the availability of first aid kit

Does your workplace have a functioning first aid kit?	Frequency	Valid percent	Cumulative percent
Yes	65	58.6	58.6
No	30	27.0	85.6
Don't know	16	14.4	100.0
Total	111	100.0	

3.7. Health and Safety Risks Among Civil Servants in Uvwie LGA

3.7.1. Stress and Anxiety Due to Workplace Conditions

Among the 111 civil servants, 38.7% reported experiencing stress or anxiety often, 27.1% sometimes, 16.2% rarely, and 18.0% never. Nearly two-thirds (65.8%) experience frequent or occasional workplace-induced stress, indicating significant psychosocial risks associated with workloads, ergonomics, safety provisions, and managerial support. Studies show that high levels of occupational stress can reduce job satisfaction, impair performance, and increase vulnerability to accidents and health problems (Kwon et. al., 2021). Evidence also highlights the importance of organizational interventions—such as workplace mental health programs, counseling services, workload management, and enhanced managerial responsiveness—in mitigating stress, improving employee well-being, and strengthening overall occupational health and safety culture (Aluko et. al., 2016).

3.7.2. Usage Frequency of Personal Protective Equipment (PPE)

Among 111 civil servants, 36.0% reported always using PPE, 34.2% sometimes, 22.6% never, and 7.2% indicated not applicable. While most employees use PPE to some extent, over one-fifth never do, reflecting gaps in supply, enforcement, risk perception, or training. Reliable PPE usage is strongly associated with a positive safety culture, proper training, and effective supervision (Khoshakhlagh et. al., 2024). Studies show that discomfort, poor fit, and low risk perception are common barriers to consistent PPE use (Atasoy et. al., 2024). In workplaces with weak supervision, PPE compliance drops significantly, underscoring the importance of enforcement and management commitment (Febriyanti & Widajati, 2025). Research in high-risk industries indicates that prior safety training is one of the strongest predictors of PPE use (Segway et. al., 2020).

Therefore, these findings highlight the need for role-specific PPE policies, consistent enforcement, and staff sensitization—including tailored training—to ensure that all employees, even in administrative roles, are adequately protected against workplace hazards.

3.7.3. Accessibility of Personal Protective Equipment (PPE)

Among the 111 civil servants, 39.6% reported that personal protective equipment (PPE) is always accessible, 14.4% sometimes, 26.2% rarely, and 19.8% never. Over 45% of employees experience irregular or no access to PPE, highlighting systemic gaps in supply, procurement, and enforcement. Studies indicate that reliable availability of PPE is critical for occupational safety, particularly in fieldwork or health-related tasks, and directly affects compliance with safety protocols and injury prevention (Kwon et. al., 2021). Evidence also emphasizes that institutional commitment, resource allocation, and active management oversight are essential for ensuring consistent and equitable PPE provision, thereby strengthening overall workplace safety culture (Aluko et. al 2016).

3.7.4. Experience or Witnessing of Workplace Accidents

Among the 111 civil servants, 73.0% reported having experienced or witnessed a workplace accident, while 27.0% had not. The high prevalence underscores the presence of significant occupational hazards—physical, environmental, and procedural—and suggests that safety incidents are frequent and observable. This raises concerns about the effectiveness of current controls, reporting systems, and hazard mitigation measures. Studies have shown similarly high rates of occupational injuries in comparable settings; for instance, research in Ghana found a 64.7% annual prevalence of non-fatal occupational injury among industrial workers (Asiedu et. al., 2024). In healthcare settings in Ethiopia, the prevalence of occupational accidents among janitorial staff was also reported to be 61% (Afework et. al., 2023).

These findings emphasize the need for comprehensive risk audits, stronger enforcement of safety regulations, and enhanced incident reporting mechanisms. Effective incident-reporting systems help organisations identify patterns, investigate near-misses, and prevent recurrence (Staff Writer 2024). Furthermore, investing in safety leadership and management commitment has been shown to reduce accident rates: assertive and proactive safety leadership correlates with significant decreases in workplace injuries (Mtikitiki et. al., 2025).

3.7.5. Types of Workplace Accidents Experienced or Witnessed

Among the 81 civil servants (73.0%) who experienced or witnessed workplace accidents, the most common incidents involved slips/falls and minor injuries such as cuts and bruises. Other reported hazards included fire, chemical exposure, and electric shocks, often occurring in combination. Slip and fall incidents were the most recurrent, consistent with the literature identifying slips/trips/falls as a leading cause of injury in many work environments (Patel et. al., 2015). Chemical, fire, and electrical hazards also underscore the need for improved PPE use, stronger safety supervision, adherence to SOPs, and stricter management of hazardous substances. Studies in Nigeria and other contexts similarly highlight electrical and fire risks as major workplace hazards, recommending robust controls and hazard management systems (Bello & Igboanugo 2017).

3.7.6. Reporting and Handling of Workplace Incidents

Among 111 civil servants, 29.7% reported that workplace incidents were fully addressed, 26.2% partially addressed, 17.1% not addressed, and 27.0% not applicable. While nearly one-third of incidents were handled thoroughly, over 43% received inadequate attention, revealing systemic gaps in safety response mechanisms. systemic gaps in safety response mechanisms. Barriers such as fear of retaliation, lack of

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feedback, and unclear reporting procedures often discourage incident reporting (Fekadu et. al., 2025). Investigations may be superficial or under-resourced, and many reports do not lead to actionable recommendations (Luikka et. al., 2018). Without a dedicated safety focal point, root-cause analysis and follow-up communication rarely occur, reducing trust in the system (Clare & Kourousis 2021). These findings highlight the urgent need for stronger accountability, designated safety officers, and more transparent follow-up to ensure that incidents are effectively learned from and prevented in the future.

3.8 Working Environment Conditions and its Impact on Workers

3.8.1. Perception of Overall Workplace Safety

Among 111 civil servants, 28.8% rated their workplace as very safe, 45.1% as safe, and 26.1% were neutral; no respondents considered their environment unsafe. While 73.9% feel generally safe, the 26.1% who are neutral suggest uncertainty or inconsistent practices in some departments. According to Lintanga & Rathakrishnan, (2024) perceived psychosocial safety climate including management commitment and communication strongly influences how safe employees feel in their workplace. Research also shows that workers' safety climate (i.e., their shared beliefs about safety) directly affects safety behavior and performance. NG et. al., 2025). Moreover, safety culture (the deeper organizational values and norms) plays a crucial role: when culture is strong, psychosocial risks are lower, and safety performance improves which suggests that neutral perceptions could signal underdeveloped or uneven safety culture (Naji et. al., 2021). Finally, neutral or ambivalent safety perceptions may reflect weak safety engagement or communication, underscoring the importance of consistent and visible safety practices (Minwalkulet, 2019).

3.8.2. Level of Concern for Health and Safety at Work

Among 111 civil servants, 75.7% reported being very concerned and 24.3% somewhat concerned about workplace health and safety, with no respondents indicating a lack of concern. This universal awareness reflects a high level of risk perception, likely informed by observed hazards, prior incidents, or exposure to workplace risks (Xia et. al., 2020; Priolo et. al., 2025). Studies in public-sector and civil-service contexts indicate that while civil servants are generally aware of occupational risks, their engagement with safety initiatives often depends on the presence of formal reporting systems, safety leadership, and accessible training programs (Ifeanyichukwu & Tafamel, 2013; Akinwale & Olusanya, 2016).

While concern can sometimes signal stress or reduced morale if safety issues remain unaddressed, it also represents a workforce capable of supporting compliance, hazard reporting, and proactive risk mitigation (Chaswa et. al., 2020; Giurgiu et. al., 2015). Empirical research in African public-sector settings, including studies on sanitation and healthcare workers, shows that high risk perception can enhance adherence to safety protocols and encourage reporting of hazards when organizational support and clear safety procedures exist (Temesgen et. al., 2025; Omisore et. al., 2023).

Overall, the findings highlight that civil servants' heightened concern for workplace health and safety can be leveraged through robust safety management systems, effective communication, and consistent training to foster a proactive and engaged occupational health and safety culture.

3.8.3. Perceptions of Most Concerning Workplace Health and Safety Risks

Among the 111 civil servants, the most frequently reported concerns involved physical injuries, ergonomic risks, and mental health or stress. Physical injuries alone were noted by 16.2%, combined physical and ergonomic risks by 14.4%, and complex combinations including poor air quality, stress, and other hazards by 13.5%. Fire hazards were highlighted by 9.9% of respondents. These findings indicate that slips, falls, ergonomic challenges, and psychosocial risks are widespread, consistent with evidence that office and administrative environments contribute significantly to musculoskeletal and stress-related occupational hazards (Kwon et. al., 2021). Studies also show that inadequate facility maintenance, poor ventilation, and limited mental health support exacerbate both physical and psychosocial risks in public-sector workplaces (Temesgen et. al., 2025; Aluko et. al., 2016). Fire hazards, though less frequent, further underscore the need for emergency preparedness measures, proper safety protocols, and staff training to mitigate risks (sciencedirect.com). Overall, these findings highlight the importance of integrated interventions including ergonomic programs, mental health support, environmental controls, and emergency readiness to foster a safe and healthy civil service workplace.

3.8.4. Recommended Measures for Improving Health and Safety

Among 111 civil servants, 20.7% prioritized mental health and stress management, 15.3% recommended regular training, another 15.3% suggested training combined with emergency response and safety inspections, 26.2% supported comprehensive interventions including ventilation and routine checks, and 22.5% advocated the most robust package encompassing training, PPE access, emergency preparedness, ventilation, mental health support, and inspections. These findings demonstrate strong recognition of multi-faceted workplace risks and a preference for integrated, systemic occupational health and safety strategies addressing both physical and psychosocial well-being. Research highlights that effective OHS interventions in public-sector settings require a combination of ergonomic programs, mental health support, PPE availability, emergency preparedness, and regular training to reduce incidents and enhance compliance (Kwon et. al., 2021; Aluko et. al., 2016). Evidence also suggests that integrated interventions addressing both physical hazards and psychosocial risks improve employees' perception of safety, engagement, and overall workplace well-being (Temesgen et. al., 2025).

3.8.5. Risk Analysis of additional suggestions

Such a multi-level, integrated strategy aligns with international best practices: organizational interventions that address psychosocial risk factors (through participatory risk assessments, mental health support, and work-design changes) are strongly recommended to reduce emotional distress and

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improve health outcomes (WHO, 2022). Evidence further shows that combining physical (ergonomic), environmental (ventilation), and psychosocial interventions yields more sustained improvements in worker health than isolated programs. Montano et. al., 2014). Systematic reviews of workplace health interventions highlight the effectiveness of integrating change in organizational structure, training, and environment for prevention of musculoskeletal, chemical, and psychological risks (Pieter et. al., 2019.

Specific engineering controls such as installing or upgrading ventilation systems, improving ergonomic design of furniture and equipment, and reducing chemical exposure — are supported by studies recommending adjustments to the physical work environment to mitigate both environmental and ergonomic risks (Deady et. al., 2024). Additionally, enhancing leadership commitment, clearly assigning safety officers, strengthening enforcement mechanisms, and institutionalizing regular audits and reporting protocols are consistent with best-practice OHS management frameworks (Anderson et. al., 2019). Finally, integrating comprehensive mental health strategies into HSE plans — including preventative, promotive, and rehabilitative interventions — has been shown to reduce stress and burnout, especially when part of an organizational-level approach (Pinhatti et. al., 2024).

3.9. Pearson Correlation Coefficient Analysis

The strength of relationships between key workplace health and safety factors were analyzed from the survey results. These correlations illustrate how different aspects of health and safety practices are interrelated among civil servants in Uvwie LGA.

Strong positive correlations highlight critical behavior-policy-infrastructure linkages: familiarity with policies strongly predicts PPE use ($r = 0.95$), PPE access drives usage ($r = 0.98$), and first aid kit availability boosts perceived safety ($r = 0.94$). High correlations between stress levels and safety concern ($r = 0.89$) underscore the impact of psychosocial risks, while policy reviews correlate with perceived management commitment ($r = 0.93$), emphasizing leadership's role. Findings suggest that routine training, visible safety infrastructure, updated policies, and mental health support are essential for effective HSE implementation and a confident, compliant workforce.

Strong positive correlations in this study (e.g., familiarity with policies → PPE use; first aid kit availability → perceived safety; stress → safety concern; policy reviews → perceived management commitment) are consistent with broader evidence. For instance, previous work has shown that greater OHS knowledge and safety culture strongly predict PPE use (Khoshakhlagh et. al., 2024). Elevated job stress is also frequently associated with reduced perceptions of safety culture and poorer safety-related behaviors (Sani et. al., 2024). Furthermore, a positive organizational safety climate especially leadership commitment to safety is positively linked to adherence to protective measures (Di Giampaolo et. al., 2024).

IV. Conclusion

This study reveals that OHS practices among civil servants in Uvwie LGA are moderately established but hindered by limited awareness and inconsistent implementation of government OHS regulations and workplace safety policies. Despite a generally educated workforce and some exposure to training, many employees remain unfamiliar with nationally mandated requirements on hazard control, PPE use, incident reporting, and routine safety inspections factors that significantly affect compliance. Safety infrastructure is inadequate in many offices, reflecting gaps in meeting government-mandated standards and contributing to preventable incidents such as slips, falls, and minor injuries. Organisational lapses, including irregular enforcement of statutory inspections and poor communication of regulatory duties, further reduce adherence to required safety practices. Psychosocial risks, especially work-related stress, were also prominent and linked to heightened safety concerns, underscoring the need for regulations to more explicitly address mental well-being. Overall, strengthening awareness and enforcement of government OHS regulations, improving policy dissemination, and enhancing safety infrastructure and training are essential for improving safety culture and reducing occupational risks within the civil service.

V. Recommendations

1. Improve Policy Awareness: Conduct regular OHS policy briefings and distribute simplified policy summaries to all employees to improve familiarity.
2. Expand Safety Training Coverage: Implement mandatory refresher safety courses tailored to departmental hazards to strengthen knowledge retention.
3. Ensure Adequate Safety Infrastructure: Provide and maintain PPE, first aid kits, safety signage, and emergency exits across all departments.
4. Institutionalise Regular Inspections: Establish scheduled safety inspections and policy reviews to ensure compliance and identify emerging risks.
5. Address Psychosocial Risks: Introduce workplace wellness initiatives, stress-management programmes, and confidential mental health support systems.

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