

Protecting_the_protectors: _occupational_health_and_safety_of_h ealth_workers_in_Sierra_Leone_-_a_systems_analysis

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Abstract

Background

Health workers in Sierra Leone face significant occupational hazards, yet comprehensive data on their protection remains limited. This paper analyzes the current state of occupational health and safety (OHS) for health workers in Sierra Leone, identifies systemic gaps, and proposes evidence-based interventions.

Methods

The researcher conducted a mixed-methods situational analysis across 54 healthcare facilities in five provinces, involving surveys with 60 health workers, key informant interviews with policymakers and implementing partners, and document review. Data were collected using structured questionnaires and observation checklists.

Results

Only 44.4% of facilities had designated OHS responsible personnel. Infection prevention and control programmes existed in most facilities, but hand hygiene compliance was low (32% in tertiary settings). Needlestick injury prevalence ranged from 60–66% across studies, with only 40–45% reporting incidents. Personal protective equipment supply was inconsistent, and only one facility had a compensation scheme. Immunization coverage for hepatitis B was inadequate, particularly for cleaning staff. Nearly 50% of peripheral health unit staff work without salaries, compounding OHS vulnerabilities.

Conclusion

Sierra Leone's health workers face substantial occupational risks amidst a fragile health system. Strengthening OHS requires policy reform, sustained investment in protective measures, health workforce stabilization, and robust reporting systems. The mpox outbreak demonstrates the urgent need for comprehensive health worker protection.

1 Introduction

Health workers constitute the backbone of any health system, yet they operate in environments that routinely expose them to biological, chemical, physical, ergonomic, and psychosocial hazards (Zoker et al., 2023). Globally, over 59 million people work in healthcare facilities, and the 2006 World Health Report highlighted a crisis-level shortage of health personnel in 57 countries, calling for the protection of the health workforce (Sesay et al., 2026).

The COVID-19 pandemic amplified these vulnerabilities, with health workers facing unprecedented risks of infection, violence, and psychological distress. In Sierra Leone, the 2014–2016 Ebola virus disease outbreak claimed the lives of 257 health workers, devastating an already fragile health system (TEPHINET, 2019). The current mpox outbreak, which has spread to all 16 districts, further underscores the urgent need for comprehensive health worker protection (ReliefWeb, 2025).

Sierra Leone's health system faces chronic challenges: severe human resource shortages (4 doctors per 100,000 population), inequitable distribution favoring urban areas, and a workforce where nearly 50% of peripheral health unit staff work without salaries (Pieterse and Saracini, 2026; Ministry of Health and Sanitation, 2015). The then Ministry

of Health and Sanitation (now Ministry of Health) employs approximately 10,000 health workers across over 1,300 facilities, yet occupational health and safety (OHS) remains inadequately addressed.

The World Health Organization and International Labour Organization have developed a 13-element framework for national occupational health programmes for health workers (Sesay et al., 2026). These elements include policy development, responsible personnel, occupational health services, joint committees, training, risk assessment, immunization, incident reporting, diagnosis and treatment, information systems, compensation, research, and environmental hygiene. This paper uses this framework to analyze Sierra Leone's current OHS situation and identify pathways for improvement.

2 Methods

2.1 Study design and Setting

This mixed-methods situational analysis was conducted between September and December 2020 across 54 healthcare facilities in five provinces: Western Area (Urban and Rural), North-West, Northern, Southern, and Eastern. Facilities included 4 tertiary hospitals, 15 secondary hospitals, 30 primary health units, 5 community health worker sites, 4 private facilities, and 2 association-owned facilities.

2.2 Data collection

Quantitative data were collected using a structured questionnaire developed specifically for this study (supplementary questionnaire). The questionnaire was designed to assess OHS infrastructure, policies, training, personal protective equipment (PPE) availability, incident reporting, immunization coverage, and compensation mechanisms among health workers. The questionnaire was administered to 60 health workers across all cadres.

Qualitative data were gathered through key informant interviews with 25 stakeholders, including policymakers from the Ministry of Health and Sanitation, Ministry of Labour and Social Security, WHO, WAHO, and international NGOs (CRS, WHH, GOAL, DFID, USAID, JICA). Document review encompassed national policies, guidelines, circulars, and audit reports.

2.3 Ethical considerations

Ethical approval

for the study was obtained from the Sierra Leone Ethics and Scientific Review Committee (SLESRC). All data involving human participants were collected in accordance with the relevant ethical guidelines and regulations of the Sierra Leone Ethics and Scientific Review Committee (SLESRC). Written informed consent was obtained from all participants prior to their participation. Participation was voluntary, and participants were informed of their right to decline participation or withdraw without consequence. Confidentiality and anonymity were maintained throughout the data collection, management, and analysis processes, and the collected data were anonymized.

2.4 Data analysis

Quantitative data were analyzed using descriptive statistics. Qualitative data from interviews and document review were thematically analyzed to identify patterns and triangulate findings.

3 Results

3.1 Policy and regulatory framework

Sierra Leone's primary OHS legislation remains the Factories Act of 1974, which applies predominantly to industrial settings and does not specifically address healthcare facilities (Government of Sierra Leone, 2024). The proposed Occupational Safety and Health Act, which would extend coverage to all workplaces, has been drafted but not enacted.

A National Occupational Safety and Health (OSH) Policy does not exist, nor is there a specific sectoral policy for health worker protection as seen in Table 1. The Workmen's Compensation (Amendment) Act of 1962 provides for compensation for work-related injuries and diseases but does not explicitly cover health workers and lacks a national list of occupational diseases.

Table 1
Summary of policy and regulatory gaps

Sn	Element	Current Status	Gap
1	OHS Act	Factories Act (1974) pending revision	Does not cover healthcare settings
2	National OHS Policy	None	No overarching framework
3	Health Sector OHS Policy	None	No specific protection for health workers
4	Occupational Diseases List	None	No recognition of occupationally-acquired infections
5	Compensation Framework	Workmen's Compensation Act (1962)	Ambiguous coverage for health workers
Source: Author's review, 2020			

3.2 Leadership and accountability

Table 2 shows that only 44.4% of surveyed facilities had designated personnel responsible for staff health and safety. An Occupational Health Unit was present in only one facility (1.9%), with infection control units assuming OHS functions in most settings. At the national level, the Directorate of Environmental Health and Sanitation houses an Occupational Health Unit with limited capacity and resources (Government of Sierra Leone, 2024).

A Quality Management Unit was not present in any surveyed government facility, representing a significant gap in systematic quality and safety oversight.

Table 2
OHS leadership and accountability (N = 54)

Indicator	Availability n(row%)		
	Yes	No	Total
Designated OHS responsible personnel	24(44.4)	30(55.6)	54 (100.0)
Occupational Health Unit present	1(1.9)	53(98.1)	54 (100.0)
Quality Management Unit present	0(0.0)	54(100.0)	54 (100.0)
Health and Safety Committee	0(0.0)	54(100.0)	54 (100.0)
Written Health and Safety Policy	0(0.0)	54(100.0)	54 (100.0)
<i>Note: Values are n(row%). Source: Author's research data, 2020</i>			

3.3 Occupational health services and resources

Healthcare facilities demonstrated significant deficiencies in occupational health service delivery. Clinics for non-communicable disease (NCD) prevention were not conducted in most facilities (85.2%) as seen in Table 3. Health records were maintained by only 40.7% of institutions. Specialized services including nutrition, dental, gynecology, and eye clinics were largely absent.

Table 3
Occupational Health Services availability (N = 54)

Service	Facilities Providing n(row%)		
	Yes	No	Total
NCD prevention clinics	8(14.8)	46(85.2)	54 (100.0)
Staff health records	22(40.7)	32(59.3)	54 (100.0)
Nutrition/dental/gyn/eye clinics	1(1.9)	53(98.1)	54 (100.0)
Wellness activities (yoga, meditation)	6(11.1)	48(88.9)	54 (100.0)
<i>Note: Values are n(row%). Source: Author's research data, 2020</i>			

3.4 Personal protective equipment (PPE)

PPE availability was highly inconsistent across facilities, with "only when available" being the norm rather than a guaranteed supply. Gloves were the most commonly supplied PPE (96.3% of facilities), with limited availability of aprons, gowns, and face masks as seen in Table 4. Despite availability issues, 90.7% of health workers reported wearing PPE when working (Table 5).

Table 4
The type of PPEs supplied (N = 54)

Region	The type of PPEs supplied n(row%)			Total
	Gloves (sterile/non-sterile) aprons, long sleeved gowns, face masks	Aprons, gloves (sterile/non-sterile) face visors/shield, face masks	Face masks, gloves (sterile/non-sterile) gowns, aprons, others	
Eastern	10(90.9)	1(9.1)	0(0.0)	11(100.0)
North West	10(100.0)	0(0.0)	0(0.0)	10(100.0)
Southern	9(90.0)	0(0.0)	1(10.0)	10(100.0)
Western	13(100.0)	0(0.0)	0(0.0)	13(100.0)
Northern	10(100.0)	0(0.0)	0(0.0)	10(100.0)
Total	52(96.3)	1(1.9)	1(1.9)	54(100.0)
<i>Note: Values are n(row%). Source: Author's research data, 2020</i>				

Supply chain vulnerabilities were evident: no facility reported uninterrupted PPE availability throughout the year, and procurement was funded from general budgets rather than dedicated OHS allocations.

Table 5
Wearing of Personal Protective Equipment (PPEs) (N = 54)

Region	Do you wear PPEs? n(row%)		Total
	Yes	No	
Eastern	11(100.0)	0(0.0)	11(100.0)
North West	10(100.0)	0(0.0)	10(100.0)
Southern	9(90.0)	1(10.0)	10(100.0)
Western	10(76.9)	3(23.1)	13(100.0)
Northern	9(90.0)	1(10.0)	10(100.0)
Total	49(90.7)	5(9.3)	54(100.0)
<i>Note: Values are n(row%). Source: Author's research data, 2020</i>			

3.5 Infection Prevention and Control (IPC)

Most facilities had IPC programmes with trained teams, primarily nurses. However, a recent study (see Table 6) at Princess Christian Maternity Hospital (PCMH) found hand hygiene compliance of only 32% (Tengbeh et al., 2026). Compliance varied by cadre: nurses (37%), midwives (34%), doctors (27%), and nursing students (0%). Tengbeh et al. (2026) revealed that the highest compliance occurred during moments of self-protection (after body fluid exposure: 83%) rather than patient protection (before patient contact: 6%).

Identified barriers to IPC compliance included:

- Stockouts of hand hygiene supplies (liquid soap, alcohol-based hand rub)

- - Non-functional hand basins
- - Water supply interruptions
- - Understaffing and high workload
- - Lack of mentorship and orientation
- - Workplace culture (e.g., glove use substituting for hand hygiene)

Table 6
Hand Hygiene Compliance by Cadre at
PCMH in 2026

Cadre	Compliance Rate (%)
Nurses	37
Midwives	34
Doctors	27
Nursing Students	0
Overall	32
Source: Tengbeh et al., 2026	

3.6 Needlestick and sharps injuries

Multiple studies demonstrate alarmingly high rates of needlestick and sharps injuries (NSIs) among Sierra Leone's health workers. It was recorded in Table 7 that at Koidu Government Hospital, 66% of health workers reported experiencing NSIs, with only 45% reporting to authorities (TEPHINET, 2019). At Bo Government Hospital, 60% reported NSIs, with 40% reporting (Zoker et al., 2023). Injection needles caused most injuries (65%), and 33% occurred during sharps disposal (TEPHINET, 2019).

Risk factors included:

- - Working in high-risk departments (surgery, maternity) (PR 2.8; 95% CI 1.1–7.09)
- - Lack of IPC training (training reduced NSI likelihood: PR 0.31; 95% CI 0.09–0.98)
- - Female gender (76% vs 59% in males)
- - Inadequate reporting systems and fear of stigma

Table 7
Needlestick Injury Prevalence and Reporting

Sn	Study Site	Prevalence (%)	Reporting Rate (%)
1	Koidu Government Hospital (TEPHINET, 2019)	66	45
2	Bo Government Hospital (Zoker et al., 2023)	60	40
3	Western Area PHCUs (World Health Organization, 2020)	Study ongoing	-
Source: TEPHINET, 2019; Zoker et al., 2023; World Health Organization, 2020			

3.7 Immunization

Hepatitis B vaccination coverage was inadequate, particularly for cleaning staff. It is seen in Table 8 that limited testing facilities for Hepatitis B antibodies were available (31.5%), and these were predominantly limited rather than abundant. No facility reported systematic immunization against influenza, typhoid, or measles.

Table 8
Availability of facilities to test for Hepatitis B antibodies in your institution (N = 54)

Region	Are there facilities available to test for Hepatitis B antibodies in your institution? n(row%)		Total
	Yes	No	
Eastern	3(27.3)	8(72.7)	11(100.0)
North West	2(20.0)	8(80.0)	10(100.0)
Southern	4(40.0)	6(60.0)	10(100.0)
Western	4(30.8)	9(69.2)	13(100.0)
Northern	4(40.0)	6(60.0)	10(100.0)
Total	17(31.5)	37(68.5)	54(100.0)
Note: Values are n(row%). Source: Author's research data, 2020			

Recent developments include the arrival of 75,000 mpox vaccine doses donated by the Democratic Republic of Congo through WHO coordination, though full coverage of all health workers remains a challenge (ReliefWeb, 2025). As Dr. George Ameh, WHO Representative, emphasized: "Every health worker vaccinated is one pillar strengthening the entire health system" (ReliefWeb, 2025).

Systems for reporting accidental blood exposures existed in only 38.9% of facilities (as seen in Table 9).

Table 9
Availability of a system for workers to report accidental exposures to blood and body fluids (N = 54)

Region	Is there a system for workers to report accidental exposures to blood and body fluids? n(row%)		Total
	Yes	No	
Eastern Region	6(54.5)	5(45.5)	11(100.0)
North West Region	2(20.0)	8(80.0)	10(100.0)
Southern Region	4(40.0)	6(60.0)	10(100.0)
Western Region	3(23.1)	10(76.9)	13(100.0)
Northern Region	6(60.0)	4(40.0)	10(100.0)
Total	21(38.9)	33(61.1)	54(100.0)
Note: Values are n(row%). Source: Author's research data, 2020			

3.8 Workplace violence and harassment

Barriers to reporting verbal abuse, harassment, and sexual violence included:

- - Deep-rooted power imbalances between perpetrators and victims
- - Fear of retaliation and backlash (reported by up to 90% in some regions)
- - Cultural and traditional barriers
- - Fundamental lack of belief that reporting would effect change
- - Ineffective governance structures
- - Inaccessible reporting mechanisms for people with disabilities

3.9 Health workforce context

The precarious employment status of many health workers compounds OHS vulnerabilities. Analysis across 10 districts found that just over half (50.6%) of peripheral health unit clinical staff work without salaries (Pieterse and Saracini, 2026; Ministry of Health and Sanitation, 2015). In Bonthe District, the unsalaried/salaried ratio was 66.8% vs 33.2%. The Western Area Urban district was the only area with a significantly larger salaried workforce (Pieterse and Saracini, 2026).

This "paradoxical surplus" of unsalaried health workers - estimated at 4,000–5,000 individuals - are in precarious employment awaiting payroll inclusion. Most are trained to auxiliary cadre levels, meaning their eventual payroll inclusion will not increase the skilled-health-worker-to-population ratio or substantially improve Universal Health Coverage (Ministry of Health and Sanitation, 2015).

3.10 Compensation and insurance

Only one facility (1.9%) reported having a compensation/insurance scheme for health workers. The minimum quantum mentioned was 500,000 New SLL or more per incident. The Workmen's Compensation (Amendment) Act (No. 32 of 1962), while providing a framework, does not explicitly cover health workers, and the national health insurance scheme does not include employment injury benefits for this population.

3.11 Healthcare waste management

In this work, waste management practices revealed significant deficiencies:

- - **General waste:** 74.1% disposed by dumping into ground/pits
- - **Recyclable waste:** 72.2% disposed in pits
- - **Infectious/clinical waste:** 61.1% incinerated, 38.9% buried
- - **Soiled clothes:** 51.9% decontaminated with TCL
- - **Expired drugs:** 37.0% returned to Medical Stores Department
- - **Mercury-containing waste:** 55.6% reported "no such waste collected"
- - **E-waste:** 74.1% stored but not disposed

Private waste management companies and municipal council collection were minimally utilized. The Ministry of Health's Integrated National Waste Management Policy provides a framework, but implementation remains weak, with large collections of infectious waste observed accumulating at some facilities.

4 Discussions

4.1 Systems strengths and weaknesses

The assessment reveals a health system where occupational health and safety for health workers remains critically underdeveloped. While Sierra Leone has made progress in establishing an IPC framework and recently responded to mpox with vaccine donations, fundamental OHS infrastructure is absent (ReliefWeb, 2025; Government of Sierra Leone, 2024).

Strengths identified include:

- - IPC programmes exist in most facilities with trained teams
- - Health worker safety is increasingly recognized as a priority
- - International partnerships provide some support (e.g., mpox vaccines)
- - A degree of OHS awareness among health workers

Critical weaknesses include:

- - No comprehensive OHS policy or legislation for health workers
- - Inadequate leadership and accountability structures
- - Chronic underfunding of OHS programmes
- - High NSI prevalence and low reporting rates
- - Inconsistent PPE supply
- - Low immunization coverage
- - Precarious employment status of many health workers
- - Weak compensation mechanisms
- - Insufficient WASH infrastructure

4.2 The role of health workforce conditions

The finding that nearly half of peripheral health unit staff work without salaries is a critical determinant of OHS vulnerability (Pieterse and Saracini, 2026; Ministry of Health and Sanitation, 2015). Unsalaries workers may be less likely to report injuries, less able to advocate for safety improvements, and subject to greater psychological stress. Their precarious position undermines the development of a safety culture where workers feel empowered to report hazards without fear of retaliation.

The concentration of health workers in urban areas (63% of wage bill spent in Freetown or regional capitals) creates inequities in rural access to OHS services and a demoralized rural workforce more vulnerable to occupational hazards (WHO, 2016).

4.3 NSIs as a sentinel indicator

Needlestick injuries represent a sentinel indicator of OHS system failure. The high prevalence (60–66%) and low reporting rates (40–45%) observed across studies reflect systemic problems: inadequate training (IPC training reduced NSI risk by 69%), poor PPE availability, high workload, and ineffective reporting systems (Zoker et al., 2023; TEPHINET, 2019).

The WHO Framework on Health Worker Safety emphasizes that incident reporting should occur in a blame-free environment. Our findings suggest the opposite: fear of retaliation, power imbalances, and cultural barriers prevent reporting. This creates a hidden burden of occupational disease and undermines evidence-based intervention.

4.4 Hand hygiene (HH) as a proxy indicator

Tengbeh et al. (2026) reported that hand hygiene compliance of 32% at a tertiary maternity hospital aligns with low rates observed in other sub-Saharan African settings (21% in a systematic review). The pattern of higher compliance during moments of self-protection rather than patient protection suggests that health worker education may be more effective when framed around mutual protection - protecting oneself and one's patients.

The identified barriers - water supply interruptions, stockouts, understaffing - reflect broader health system weaknesses that require coordinated investment in WASH infrastructure, supply chain management, and workforce planning.

4.5 The Covid-19 and mpox context

The COVID-19 pandemic exposed the fragility of health worker protection globally. In Sierra Leone, the subsequent mpox outbreak has demonstrated that health systems remain vulnerable to emerging infectious diseases (ReliefWeb, 2025). The donation of 75,000 mpox vaccine doses by DRC through WHO represents a positive development, but health workers require not just vaccines but comprehensive protection: consistent PPE, robust IPC systems, post-exposure management, and compensation for occupational disease.

The mpox experience also highlights the importance of vaccinating all health workers - not just clinical staff but cleaners, ambulance drivers, and laboratory technicians - recognizing that all who step into healthcare spaces face occupational risk (ReliefWeb, 2025).

4.6 Human resources for health and OHS

The severe shortage of skilled health workers (4 doctors per 100,000 population) is compounded by inefficient deployment: 63% of the wage bill supports staff in urban areas (WHO, 2016). The presence of a large unsalaried workforce represents both a burden (precarious employment) and an opportunity (additional human resources if integrated properly).

4.7 Comparison with regional context

Sierra Leone's OHS challenges are not unique but occur in a context of extreme resource constraints. In Ghana and Nigeria, similar studies have found low HH compliance (8.2% and 29%, respectively) (Tengbeh, et al., 2026). However, Sierra Leone's unsalaried workforce crisis - with an estimated 4,000–5,000 staff awaiting payroll inclusion - is exceptional and adds a dimension of worker vulnerability that makes OHS improvements particularly challenging (Bai-Sesay, 2024).

4.8 Opportunities for reform

Despite these challenges, several opportunities exist:

Policy Reform

The pending Occupational Safety and Health Act could, if enacted, extend coverage to healthcare settings and establish clear responsibilities for worker protection (Government of Sierra Leone, 2024). This should be accompanied by a sectoral policy for health worker OHS.

Regulatory Enforcement

The Directorate of Occupational Safety and Health (formerly Factory Inspectorate) has technical capacity that could be deployed to healthcare facilities, though inspectors may require specialized training for the healthcare context (Government of Sierra Leone, 2024).

Training and Capacity Building

The establishment of degree programmes in Environmental and Public Health at universities and other tertiary/higher educational institutions (TEIs/HEIs) in Sierra Leone represents progress. These programmes should be expanded and linked to in-service training for health facility managers.

WASH Infrastructure

Investment in WASH services in healthcare facilities would address multiple barriers to IPC compliance simultaneously (Tengbeh et al., 2026).

Employment Security

Resolving the unsalaried workforce issue would reduce worker vulnerability and enable greater investment in training and safety culture.

4.9 Recommendations

Based on the WHO-ILO 13-element framework and our findings, it is recommended that:

4.9.1 Policy and governance

- - Enact the Occupational Safety and Health Act with specific provisions for healthcare settings
- - Develop a National OHS Policy and sectoral policy for health workers
- - Identify designated OHS personnel at national and facility levels
- - Establish joint labour-management health and safety committees

4.9.2 Resources and infrastructure

- - Allocate dedicated OHS budgets at national and facility levels
- - Ensure consistent PPE supply through improved supply chain management
- - Invest in WASH infrastructure in all healthcare facilities
- - Establish OH units in all major healthcare facilities

4.9.3 Education and training

- - Integrate OHS training into pre-service curricula
- - Provide ongoing IPC and OHS training with emphasis on reporting systems
- - Train all health workers in Post-Exposure Prophylaxis (PEP) procedures and proper sharps disposal

4.9.4 Reporting and surveillance

- - Establish non-punitive incident reporting systems for NSIs, exposures, violence

- - Collect and analyze OHS data as part of routine DHIS2
- - Develop a national registry of occupational diseases and injuries

4.9.5 Workforce stabilization

- - Integrate unsalaried health workers into the payroll
- - Deploy health workers equitably across districts
- - Provide rural incentives to reduce urban concentration

4.9.6 Health worker protection

- - Ensure vaccination against Hepatitis B and other vaccine preventable diseases (VPDs) at no cost to employees
- - Include cleaning staff in vaccination programmes
- - Make Hepatitis B antibody/antigen testing widely available
- - Establish clear PEP protocols and ensure medicine availability

4.9.7 Compensation and insurance

- - Extend compensation coverage to health workers explicitly
- - Include employment injury benefits in national health insurance
- - Develop a national list of occupational diseases

4.9.8 Research and evaluation

- - Support research on OHS interventions and implementation
- - Monitor key indicators (NSIs, immunization, HH compliance, violence reports)
- - Evaluate effectiveness of policy interventions

4.10 Study limitations

This study has several limitations. The sample of 54 facilities may not fully represent the 1,300 + health facilities in Sierra Leone. The cross-sectional design provides a snapshot rather than trends over time. Some data relied on self-reporting, introducing potential recall and social desirability bias. The 2020 timeframe predates the mpox outbreak, though subsequent developments are incorporated.

5 Conclusions

Health workers in Sierra Leone face substantial occupational hazards in a health system characterized by inadequate policy, insufficient resources, and a precarious workforce. The high prevalence of needlestick injuries (60–66%), low hand hygiene compliance (32%), inconsistent PPE availability, and absence of comprehensive compensation mechanisms are sentinel indicators of system failure.

The mpox outbreak and memory of Ebola underscore the catastrophic consequences of failing to protect health workers. As Dr. James Squire noted: "Our health workers are our greatest asset. If we lose them, we lose everything" (World Health Organization, 2020).

Strengthening OHS for health workers requires a comprehensive approach: policy reform, dedicated resources, workforce stabilization, training, reporting systems, and research. Sierra Leone has an opportunity to learn from past emergencies and build a health system that protects those who protect the population. The donation of mpox vaccines represents positive momentum, but health worker protection must be sustained through systemic change rather than episodic interventions.

The health worker who rushes toward danger without hesitation, as Fatmata described, deserves a system that ensures their safety (World Health Organization & International Labour Organization, 2020). Protecting health workers is not merely a matter of occupational justice - it is essential to achieving Universal Health Coverage, pandemic preparedness, and health system resilience.

Abbreviations

COVID

Corona Virus Disease

CRS

Catholic Relief Services

DFID

Department for International Development

Dr

Doctor

GOAL

An International Non-Governmental Organization

GoSL

Government of Sierra Leone

HH

Hand Hygiene

ILO

International Labour Organization

IPC

Infection Prevention and Control

JICA

Japan International Cooperation Agency

MoH

Ministry of Health

MoHS

Ministry of Health and Sanitation

MLSS

Ministry of Labour and Social Security

Mpox

Monkey pox

NCD

Non-Communicable Disease

NGOs

Non-Governmental Organizations

NSIs

Needlestick Injuries

OH

Occupational Health

OHS

Occupational Safety and Health

OSHA

Occupational Safety and Health Act

PCMH

Princess Christian Maternity Hospital

PEP

Post-Exposure Prophylaxis

PHCU

Primary Health Care Unit

PPE

Personal Protective Equipment

USAID

United State Agency for International Development

VPDs

Vaccine Preventable Diseases (VPDs)

WAHO

West Africa Health Organization

WASH

Water, Sanitation and Health

WHH

Welthungerhilfe

WHO

World Health Organization

Declarations

Ethics Approval and consent to participate

Ethical approval for the study was obtained from the Sierra Leone Ethics and Scientific Review Committee (SLESRC). All data involving human participants were collected in accordance with the relevant ethical guidelines and regulations of the Sierra Leone Ethics and Scientific Review Committee (SLESRC). Written informed consent was obtained from all participants prior to their participation. Participation was voluntary, and participants were informed of their right to decline participation or withdraw without consequence. Confidentiality and anonymity were maintained throughout the data collection, management, and analysis processes, and the collected data were anonymized.

Consent for publication

Not applicable.

Availability of data and materials

Quantitative data were collected using a structured questionnaire developed specifically for this study (supplementary questionnaire). The questionnaire was designed to assess OHS infrastructure, policies, training, personal protective equipment (PPE) availability, incident reporting, immunization coverage, and compensation mechanisms among health workers. The questionnaire was administered to 60 health workers across all cadres.

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Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

The corresponding author ABG contributed to the conceptualization, literature synthesis, methodological design, BPS assisted ABG with the analysis, interpretation of the findings, and SEK assisted ABG with the preparation and approval of the manuscript.

Conflict of Interest

The authors declare no conflict of interest.

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