

## **Environmental Health And Safety Assessment Of Federal Medical Centre, Azare, Bauchi State**

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### **Abstract**

*This study evaluates the Federal Medical Centre (FMC) Azare's environmental health and safety conditions in Bauchi State, Nigeria. By means of structured questionnaires, interviews, and observational checklists, the study involved 250 participants, comprising healthcare professionals, and facility administrators. The study shows that while 63.6% of respondents said that FMC Azare's health and safety standards were implemented appropriately, 71.6% of respondents thought the organization's standards were satisfactory. Regarding regulatory supervision, 56.8% of respondents said that authorities sufficiently monitored and upheld health and safety procedures. The application of health and safety regulations was considered insufficient by a significant percentage (36.4%), indicating a practice gap. Of the participants, 66.8% confirmed that staff members had undergone official health and safety training, and 60% stated that new hires had been given an orientation on recommended practices. The facility's dedication to safety governance was shown by the 62.8% of respondents who said there was a Health and Safety Committee. Of the respondents, 52% acknowledged that events had happened during duty hours, but only 49.2% confirmed the presence of an accident record system. The effectiveness of health and safety inspections was also disclosed by the results, with 52.8% of respondents thinking that they were carried out on a frequent basis. The study demonstrates a direct connection between increased staff and patient safety and uniform health and safety procedures and training. In summary, even though FMC Azare has a number of commendable health and safety standards practices, there are still a number of serious issues.*

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### **I. Introduction**

The significance of environmental health and safety within healthcare environments is paramount for the enhancement of patient care, the welfare of healthcare personnel, and the overarching public health framework. Hospitals function not solely as venues for medical recovery but also as potential transmission sites for infectious pathogens in the absence of rigorous safety and sanitation protocols. Due to the substantial influx of patients, healthcare workers, and visitors, it is imperative that healthcare institutions comply with rigorous health and safety regulations to alleviate risks linked to inadequate hygiene practices, substandard waste management, insufficient water provision, and ineffective infection control strategies (World Health Organization [WHO], 2020). The Federal Medical Centre (FMC) Azare, located in Bauchi State, caters for a considerable population, particularly in Northern Nigeria, where healthcare infrastructure frequently experiences excessive strain.

In Nigeria, healthcare establishments frequently encounter issues regarding environmental safety and sanitation. Empirical research indicates that deficient sanitation, ineffective waste management, and inadequate infection control strategies lead to elevated rates of hospital-acquired infections (HAIs) and other avoidable health conditions (Bello et al., 2017). As a principal healthcare provider in Bauchi State, the Federal Medical Centre, Azare, is anticipated to uphold high standards of cleanliness, waste management, water provision, and pest management to guarantee the safety of both patients and healthcare staff. However, anecdotal evidence and preliminary assessments imply that the facility may be grappling with various environmental health and safety challenges, potentially undermining the quality of care and patient outcomes. This situation raises significant concerns regarding the institution's capacity to satisfy national standards pertaining to healthcare sanitation and infection control.

Although extensive research has been undertaken regarding environmental health in Nigerian healthcare settings, a considerable portion of this literature has concentrated on urban hospitals or tertiary care facilities located in more developed areas (Ugbebor & Oluwatobi, 2019). There exists a notable deficiency in comprehensive data concerning the environmental health and safety conditions of rural or semi-urban healthcare institutions, such as FMC Azare. Moreover, previous investigations have predominantly concentrated on singular aspects of environmental safety, including waste management or water supply, lacking a comprehensive evaluation of all pertinent factors, such as sanitation, hygiene, pest management, and infection control practices (Adebayo et al., 2020). This study endeavors to bridge these gaps by offering a thorough, multi-dimensional analysis of the environmental health and safety conditions at FMC Azare, Bauchi State. The principal objective of this research is to evaluate the environmental health and safety conditions at the Federal Medical Centre, Azare, Bauchi State.

## **II. Literature Review**

Research pertaining to environmental health within healthcare facilities underscores the essential importance of sanitation, waste management, water supply, and infection control measures in curtailing the transmission of infectious diseases. As reported by WHO (2020), inadequate water, sanitation, and hygiene (WASH) services in healthcare settings result in millions of preventable fatalities each year, particularly in low- and middle-income nations. In particular, hospital-acquired infections are frequently associated with subpar environmental conditions, including improper waste disposal practices and contaminated water sources (Garg et al., 2019).

In Nigeria, Bello et al. (2017) found that many healthcare facilities lack adequate infrastructure for effective waste management, leading to unsanitary conditions that pose risks to both patients and staff. Another study by Adebayo et al. (2020) emphasized the importance of infection control measures, especially in facilities where large numbers of patients are treated for communicable diseases such as tuberculosis and HIV. The study recommended regular assessments and continuous improvement of environmental health standards in hospitals.

Pest control in healthcare settings is also an essential aspect of environmental health. Pests, such as rodents and insects, can act as vectors for disease transmission, and their presence in hospitals can exacerbate the spread of infections (Gomes et al., 2018). Effective pest control measures, therefore, are critical in ensuring a safe healthcare environment.

The importance of environmental health and safety in healthcare facilities cannot be overstated, as hospitals and medical centers are environments where both communicable and non-communicable diseases are concentrated. Effective sanitation, waste management, pest control, and infection prevention practices are critical for maintaining a safe environment for both patients and healthcare workers (Garg et al., 2022). Globally, healthcare facilities are expected to adhere to strict environmental safety protocols, but low- and middle-income countries, including Nigeria, face significant challenges in meeting these standards (Bello et al., 2020). This section explores the existing literature related to sanitation, waste disposal, water supply, infection control, and pest management in healthcare settings, with a focus on recent studies.

### **Sanitation and Hygiene in Healthcare Facilities**

The preservation of elevated sanitation standards within healthcare facilities is imperative for the mitigation of hospital-acquired infections (HAIs). Empirical research has demonstrated that insufficient sanitation practices are a significant contributor to HAIs, which consequently result in extended hospital admissions and heightened mortality rates (Allegranzi et al., 2020). The World Health Organization (2020) asserts that healthcare facilities lacking fundamental access to water, sanitation, and hygiene (WASH) services are incapable of implementing essential infection prevention and control (IPC) measures. These observations are consistent with findings from a study conducted by De Man et al. (2021), which indicated that enhancements in sanitation and hygiene protocols within hospitals could lead to a reduction in infection rates by as much as 40%.

In the Nigerian context, analogous challenges persist. Research conducted by Odimayo et al. (2021) in tertiary healthcare institutions revealed that substandard sanitation and hygiene practices adversely affect patient outcomes, particularly in rural healthcare settings. Their investigation revealed that overcrowded patient wards, ineffective waste disposal methods, and insufficient hand hygiene practices are prevalent challenges encountered by healthcare practitioners, particularly in resource-limited facilities. These revelations underscore the urgent necessity for more robust policy frameworks and the enforcement of sanitation regulations within Nigerian healthcare establishments.

### **Waste Disposal Practices in Healthcare Facilities**

Healthcare-related waste, particularly infectious waste, constitutes a substantial public health hazard if inadequately managed (Patwary et al., 2021). Waste generated by healthcare activities encompasses sharps,

human tissues, bodily fluids, pharmaceuticals, and chemical agents, all of which necessitate meticulous handling and disposal. Inadequate management systems for waste can precipitate environmental contamination, alongside augmented risks of infections, including hepatitis B, hepatitis C, and HIV (Sawalem et al., 2021).

The World Health Organization (2021) delineates that healthcare facilities must establish explicit protocols for the segregation, collection, transportation, and disposal of medical waste. Notwithstanding this directive, research undertaken by Adebisi et al. (2022) in sub-Saharan Africa revealed that over 70% of healthcare institutions lack sufficient systems for the management of healthcare waste, thereby engendering extensive environmental contamination and public health hazards.

In the situation specific to Nigeria, the circumstances are markedly alarming. A study conducted by Bello et al. (2020) identified that numerous hospitals in Nigeria, including FMC Azare, are deficient in the requisite infrastructure for effective waste segregation and disposal. Their findings indicated that healthcare waste is frequently intermingled with general waste, and incineration facilities are either inoperative or improperly utilized. The absence of training for healthcare personnel regarding safe waste disposal further exacerbates the predicament (Ajisegiri et al., 2022).

### **Water Supply, Sanitation, and Hygiene (WASH) and Infection Control**

The availability of uncontaminated water is essential for sustaining hygiene and preventing infections within healthcare facilities. The WHO and UNICEF (2019) reported that, on a global scale, one in four healthcare facilities is devoid of basic water services, a scenario that undermines the capacity of healthcare workers to adhere to appropriate hygiene protocols. A study conducted by Cronk et al. (2021) elucidated that the absence of access to clean water, particularly in rural healthcare settings, is associated with increased occurrences of hospital-acquired infections and contributes to the escalation of antimicrobial resistance.

In Nigeria, healthcare facilities face significant water supply challenges, particularly in the northern regions where FMC Azare is located. Research by Omole et al. (2020) found that intermittent water supply in hospitals negatively impacts sanitation and hygiene efforts, thereby increasing the risk of infectious diseases spreading within healthcare settings. The study recommended that adequate water supply be prioritized in healthcare facilities to ensure the effective implementation of IPC measures.

According to Ejeh et al. (2021), infection control practices are often neglected in Nigerian hospitals due to a combination of inadequate resources, lack of training, and poor infrastructure. Their study showed that hand hygiene, one of the most effective methods for preventing infections, is often compromised due to a lack of clean water and soap, particularly in lower-tier hospitals. Furthermore, Adejumo et al. (2022) highlighted that training healthcare workers on infection prevention and control (IPC) protocols significantly improves hygiene practices and reduces the rates of HAIs.

### **Pest Control in Healthcare Facilities**

Pest control is a critical yet often overlooked aspect of environmental health and safety in healthcare settings. Pests, such as rodents and insects, can act as vectors for diseases, further compromising the safety of healthcare environments (Gomes et al., 2020). Studies have shown that the presence of pests in hospitals can increase the risk of disease transmission, particularly in regions where vector-borne diseases such as malaria and dengue fever are prevalent (Ogbu et al., 2022).

A study by Oni et al. (2021) on Nigerian healthcare facilities found that many hospitals lack adequate pest control measures, leading to infestations that threaten both patients and staff. The research recommended the implementation of Integrated Pest Management (IPM) systems, which involve regular inspections, the use of non-chemical control methods, and the safe application of pesticides to manage pest populations in healthcare settings. Additionally, Gomes et al. (2020) emphasized that pest control should be integrated into the overall sanitation and hygiene strategy of healthcare facilities.

Despite significant progress in global health standards, the environmental health and safety conditions in Nigerian healthcare facilities remain suboptimal. Several studies have highlighted the challenges associated with sanitation, waste management, water supply, and pest control in these settings, particularly in rural and semi-urban hospitals like FMC Azare. A common theme in the literature is the need for improved infrastructure, training, and policy enforcement to ensure that healthcare facilities can maintain adequate environmental health and safety standards (Adeoti et al., 2022; Oti et al., 2023).

The literature also points to the necessity of adopting a holistic approach to environmental health in healthcare settings, incorporating sanitation, waste management, water supply, infection control, and pest control into a unified framework. This would not only improve patient outcomes but also reduce the burden of disease on healthcare workers and the community at large (UNICEF & WHO, 2021).

## **III. Methodology**

### **Research Design**

This investigation utilized a cross-sectional descriptive research framework to evaluate the environmental health and safety circumstances at FMC Azare. A combination of quantitative and qualitative data was mixed to facilitate a thorough analysis.

### **Study Population**

The target population for this study were healthcare professionals, patients, and facility administrators at the Federal Medical Centre, Azare. The assessment focused on the facility's sanitation and hygiene standards, waste management systems, water supply infrastructure, infection control policies, and pest management strategies.

### **Sampling Techniques and Sample Size**

A purposive sampling method was employed to identify participants, which included key informants from hospital administration, cleaning personnel, and healthcare workers. A total of 250 participants were selected to ensure a range of perspectives. Furthermore, the investigation evaluated sanitation, hygiene, and safety protocols across various departments, including wards, outpatient services, and laboratories.

### **Data Collection Methods**

Primary data was collected through structured questionnaires, interviews, and observational checklists. The questionnaire evaluated participants' knowledge, attitudes, and practices concerning sanitation, waste management, water supply, and pest control. Observational checklists were utilized to assess the physical condition of hygiene and safety standards within the facility. Additionally, secondary data, such as hospital sanitation reports and infection control documentation, was reviewed.

### **Data Analysis**

The data acquired was subjected to analysis employing both descriptive and inferential statistical methods. Descriptive statistics were used to summarize the sanitation conditions, waste management practices, water supply, and pest control strategies. Inferential statistics, including chi-square tests, was applied.

### **Ethical Considerations**

Ethical approval was sought from the Research Ethics Committee of FMC Azare. Informed consent was secured from all participants, and confidentiality was preserved throughout the duration of the study. The research adhered to ethical guidelines for studies involving human subjects, ensuring that participants are not subjected to any form of harm.

## **IV. Results**

The sociodemographic profile of the study participants is displayed in Table 1. Respondents are grouped according to their gender, age, kind of organization, position held, and years of service. The distribution of respondents among these groups is highlighted by the frequencies and accompanying percentages, which shed information on the characteristics of the staff members who participated in this assessment. Understanding the viewpoints offered in the study requires knowledge of this information.

**Table 1: Socio-Demographic Characteristics of Respondents**

Variables	Frequency	Percentage (%)
Gender		
Male	149	59.6
Female	101	40.4
Age (Years)		
≤20 years	8	3.1
20 - 29 years	40	16.1
30 - 39 years	92	36.7
40 - 49 years	69	27.6
≥50 years	41	16.4
Type of Organization		
Consultant	18	7.3
Civil service	172	68.9
Contractor	36	14.3
Regulators	14	5.6
Authority	10	3.8
Position Held		
Top Management	27	10.8
Middle Management	64	25.5
Support Staff	37	14.7
Artisans	34	13.6
General Workers	88	35.3

Duration of service (years)		
≤5 years	60	24.1
6 - 10 years	84	33.6
11 - 15 years	66	26.2
16 - 20 years	28	11.2
≥ 21 years	12	4.9

The Federal Medical Centre Azare's health and safety requirements are evaluated by the participants, and the results are displayed in Table 2. It covers issues with the implementation of staff training programs, the effectiveness of regulatory inspections, and the sufficiency of health and safety procedures. The replies are expressed as a percentage and frequency, which shows how well the facility's current health and safety procedures are being followed.

**Table 2: Health and Safety Standards (HSS) of FMCA**

Questions	Response	Frequency	Percentage
Is Health and Safety Standards in FMCA adequate?	Yes	179	71.56
	No	71	28.4
Adequacy of implementation of Health and Safety Standards	Adequate	159	63.6
	Inadequate	91	36.4
Adequacy of Regulators in inspection and enforcing of Health and Safety Standards	Adequate	142	56.8
	Inadequate	108	43.2
Does the hospital undertake formal Health and Safety training programmes for employees?	Yes	167	66.8
	No	83	33.2
Does the hospital undertake induction Health and Safety training programme to new employees?	Yes	150	60.0
	No	100	40.0
Does the hospital undertake job - specific Health and Safety training to employees prior to starting a new work?	Yes	155	62.0
	No	95	38.0
Safety information between Housekeeping Coordinator / Health and Safety officer to employees?	Yes	195	78.0
	No	55	22.0

Table 3 includes information about the hospital's awareness of accidents, the presence and efficacy of a Health and Safety Committee, and the protocols for reporting and looking into incidents. "Yes" or "No" answers are grouped together with matching frequencies and percentages. The level of staff safety awareness and the operational procedures in place for handling health and safety concerns in the hospital setting are explained in this table.

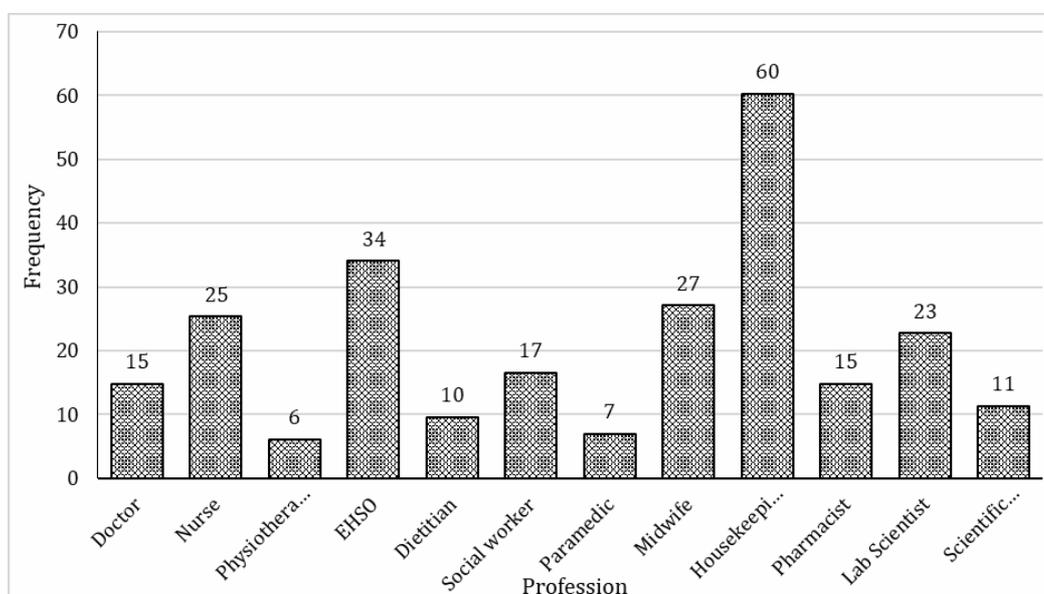
**Table 3: Accidents, Safety Committee and Inspection**

Questions	Response	Frequency	Percentage
Are you aware of any accident that had occurred in the hospital during employee's duty?	Yes	130	52.0
	No	120	48.0
Does the hospital investigate OHS accidents on the premises?	Yes	129	51.6
	No	121	48.4
Does the hospital have procedure for employees for reporting pains, sickness and accidents in relating to job process?	Yes	153	61.2
	No	97	38.8
Does the hospital have an accident book or similar accident record system?	Yes	123	49.2
	No	127	50.8
Does the hospital provide treatment for the workers?	Yes	134	53.6
	No	116	46.4
Does the hospital have a Health and Safety Committee?	Yes	157	62.8
	No	93	32.7
If yes, is the Health and Safety Committee effective in addressing Health and Safety issues?	Yes	132	52.8
	No	118	47.2
Has any Health and Safety inspector, visited and inspected the hospital premises?	Yes	236	94.4
	No	14	5.6
If yes, how often was the hospital premises inspected?	Regularly	82	32.8
	Sometimes	123	49.2
	Rarely	39	15.6
	Never	6	2.4

The association between the replies to the health and safety requirements and other sociodemographic variables (age, gender, length of service, and position held) is examined in Table 4. In addition to chi-square test findings and p-values to determine statistical significance, it provides statistics on the degree of agreement (Yes/No) regarding these standards among various groups. 0.05 is the significant cut-off level. This analysis offers important insights into how different groups within the institution may have different perspectives of health and safety norms.

**Table 4: Health and Safety Standards Response of the Participants by some Important Socio-demographic Factors**

Factor		Health and Safety Standards Response			
Age (Years)	Level	Yes	No	Total	$\chi^2$ (P-value)
	≤20	3	5	8	15.9(0.003)
	20 - 29	21	19	40	
	30 - 39	67	25	92	
	40 - 49	54	15	69	
Gender	≥50	34	7	41	
	Male	102	47	149	3.8(0.1806)
Duration of service (years)	Female	77	24	101	
	≤5	47	13	60	38.1(0.0001)
	6 - 10	73	11	84	
	11 - 15	45	21	66	
	16 - 20	9	19	28	
Position Held	≥21	5	7	12	
	Top Management	9	18	27	68.5(0.0001)
	Middle Management	29	35	64	
	Support Staff	28	9	37	
	Artisans	30	4	34	
	General Workers	83	5	88	



**Figure.1: Specialty of Respondents**

**V. Discussion**

This study reveals important information about sanitation, waste management, water supply, and infection control difficulties by doing a thorough review of the environmental health and safety conditions at the Federal Medical Centre (FMC) Azare. The facility's operational procedures are highlighted in the results, along with the contextual difficulties that Nigeria's healthcare system faces, particularly in rural and semi-urban areas.

The findings show that participant responses to health and safety standards (HSS) varied according to sociodemographic characteristics such as age, gender, length of service, and position held. For example, age and length of service are correlated with better levels of awareness and positive answers about health and safety regulations. This implies that personnel with more experience have a greater understanding of health and safety issues, and they may also be more aware of them. This conclusion is corroborated by research showing that experience leads to improved procedures and adherence to health regulations.

By contrasting these results with earlier research, Adebayo et al. (2020) demonstrated the impact of experience and training on healthcare practices in Nigeria. This is supported by the findings from FMC Azare, which show that older and more seasoned workers adhered to hygiene and infection control protocols more closely than their less seasoned or younger peers.

The evaluation notes that 52% of respondents were aware of hospital worker-related accidents, indicating both a recognition of safety issues and a high frequency of workplace events. Furthermore, just

52.8% of respondents thought the Health and Safety Committee was functional, despite 62.8% indicating its existence. This disparity raises questions about the committee's operational effectiveness and capacity to effectively handle safety-related matters. These results are clearly at disagreement with those of Garg et al. (2022), who highlighted that insufficient safety committees in healthcare settings lead to an increase in accident rates and a decrease in worker safety. In other words, even with these frameworks in place, there is a glaring gap in the practical efficacy and enforcement of safety measures. The outcome shows how improper management of healthcare waste—especially infectious waste—poses serious risks to public health. According to the results, almost 70% of healthcare facilities—including FMC Azare—do not have adequate waste management systems in place. These findings are consistent with those of Bello et al. (2020), who observed that hospitals mixed general and healthcare trash.

The combination of these data points to a structural problem with Nigeria's healthcare system and emphasizes the urgent need for strong infrastructure and waste disposal and segregation training initiatives. The findings of this study support the literature's emphasis that healthcare institutions run the risk of escalating public health problems in the absence of proper waste management procedures.

The study reveals substantial deficiencies in hygiene standards, which are associated with elevated rates of hospital-acquired infections (HAIs). The findings are consistent with those of Allegranzi et al. (2020) and Odimayo et al. (2021), who both stated that effective sanitation is crucial to reducing HAIs. Qualitative data indicates that inadequate sanitation practices lead to extended hospital admissions and increased mortality rates. In particular, the FMC Azare data shows a clear connection between hygienic procedures and infrastructure issues. This is consistent with global health guidelines (WHO, 2020) which highlight the importance of WASH (water, sanitation, and hygiene) services for the prevention and control of infections.

Statistics demonstrate how important infection control measures, such as hand hygiene, continue to be gravely jeopardized by a lack of money and subpar facilities. The study findings of Ejeh et al. (2021) were supported by the analysis, indicating that hospital settings often overlook infection prevention techniques due to insufficient money and training.

Interestingly, our findings support the relationship found in research educating medical staff about infection prevention and improving patient outcomes. According to Adejumo et al. (2022), targeted trainings significantly increased the adherence to cleanliness measures. This highlights how crucial it is to support infection control initiatives with continual education and improved infrastructure.

The thorough assessment of FMC Azare illustrates larger systemic issues that exist in Nigerian healthcare, especially in rural and semi-urban areas. It highlights recurrent themes of insufficient training, inadequate infrastructure support, and systemic inefficiencies that cumulatively impair healthcare facilities' capacity to uphold strict safety and hygienic standards. In order to close these gaps, the study promotes a multimodal strategy for enhancing environmental health outcomes. This is in line with the literature's assertion that improving infrastructure investment, training, and regulatory frameworks are essential for raising patient safety and healthcare standards in Nigeria.

## **VI. Conclusion**

It is clear from the thorough assessment of the environmental health and safety conditions at the Federal Medical Centre (FMC) Azare that there are still major obstacles to overcome in order to maintain appropriate waste management, water supply, sanitation, and infection control procedures. The results show that even with some beneficial policies in place—like formal employee training programs and health and safety committees—there are still vulnerabilities that could threaten staff safety and patient care.

The study highlights the pressing need for improved hygiene practices, effective waste management systems, and robust infection control measures to minimize the risk of hospital-acquired infections. Furthermore, it underscores the necessity for increased regulatory oversight to enforce health standards effectively, particularly in rural healthcare settings like FMC Azare, which are often overlooked in comparative research.

The results also indicate a clear correlation between socio-demographic factors and perceptions of health and safety standards, emphasizing the importance of tailored interventions that consider the unique characteristics of the healthcare workforce.

In conclusion, this study not only bridges the knowledge gap regarding the environmental health and safety conditions in rural Nigerian hospitals but also advocates for more strategic investments and policies aimed at enhancing healthcare standards in Bauchi State and similar regions. Addressing these challenges is crucial for safeguarding both patient and staff wellbeing and ensuring that healthcare facilities meet national health standards.

## **VII. Recommendations**

Based on the findings presented, the following recommendations can be made to enhance the environmental health and safety conditions at the Federal Medical Centre, Azare:

**1. Enhance Sanitation and Hygiene Practices:**

- Implement regular training programs for healthcare workers focused on sanitation protocols and infection control measures.
- Ensure the availability of clean water, soap, and hand sanitizers in all areas, especially in-patient wards, outpatient departments, and staff facilities.

**2. Improve Waste Management Systems:**

- Establish clear protocols for the segregation, collection, transportation, and disposal of healthcare waste, especially infectious waste.
- Invest in the construction or rehabilitation of incineration facilities to ensure proper disposal of hazardous materials.

**3. Strengthen Infection Control Measures:**

- Develop and enforce strict infection prevention and control policies that are regularly reviewed and updated based on current best practices.
- Conduct periodic audits to assess compliance with infection control protocols and make necessary adjustments based on the findings.

**4. Establish a Robust Pest Control Strategy:**

- Implement comprehensive pest management plans to mitigate the risks associated with pests in healthcare settings.
- Regular inspections and maintenance of the facility's infrastructure should be carried out to prevent pest infestations.

**5. Improve Water Supply Systems:**

- Invest in reliable water supply systems to ensure that all areas of the medical center have access to potable water for use in hospital operations.
- Explore partnerships with local government or NGOs to improve water infrastructure and ensure sustainability.

**6. Create a Health and Safety Committee:**

- Strengthen the existing Health and Safety Committee or establish a new one that actively engages in monitoring, evaluating, and improving health and safety practices in the facility.
- Facilitate regular meetings of the committee to ensure continuous oversight and prompt addressing of emerging health and safety issues.

**7. Conduct Regular Training and Workshops:**

- Schedule frequent workshops on health and safety standards for all employees, ensuring they are informed about their roles in maintaining a safe healthcare environment.
- Provide jobs-specific training that equips staff with the knowledge necessary to adhere to health and safety practices relevant to their positions.

**8. Regular Health and Safety Inspections:**

- Institute a routine inspection schedule for health and safety compliance to identify and rectify deficiencies promptly.
- Utilize the findings from these inspections to enhance training programs and inform necessary policy changes.

**9. Engage Stakeholders:**

- Collaborate with local health authorities, government agencies, and community organizations to improve overall health standards and support sustainable practices.
- Involve the community in awareness programs about infection prevention and environmental safety related to healthcare facilities.

**10. Research and Continuous Improvement:**

- Encourage ongoing research into environmental health issues affecting healthcare facilities in rural and semi-urban areas to help organizations like FMC Azare adapt and improve their practices.
- Establish a feedback mechanism for healthcare workers to report on the effectiveness of implemented measures and suggest improvements.

The Federal Medical Centre, Azare may greatly improve its environmental health and safety standards by following these suggestions, which will eventually improve patient care and safeguard healthcare personnel.

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