# Occupational Hazards and Safety Practices Among Workers of Correctional Centers in Rivers State

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### ABSTRACT

The security of the prison personnel has just lately grown to be a serious problem. Because of the nature of the job, correctional guards often encounter perilous circumstances. While working as prison guards or transporting inmates, many correctional officers have suffered injuries or have been killed. However, administrators of correctional facilities now place a higher priority than ever on the physical and mental well-being of their staff. Examined workplace hazards and employees' opinions of safety procedures at the Nigerian Correctional Center in Rivers State. Four goals, four appraisal questions, and two hypotheses served as the appraisal's guiding principles. The appraisal used a hybrid approach that included quantitative and qualitative approaches. 205 employees of correctional facilities made up the appraisal's population, from whom 136 were selected using a multistage selection technique. Data were gathered using an interview guide and verified self-structured questionnaire with a reliability value of 0.903. Following the examiner's instrument administration, 132 fully completed copies of the instrument were retrieved, representing a 97% return rate. Data analysis techniques included percentage, mean, standard deviation, chi squares, and discourse analysis. The employees were exposed to a range of risks, including physical, biological, chemical, and psychological risks, with physical risks predominating, in congruent with the upshots. With a reactive approach to worker safety and hazard management, the correctional institutions' overall hazard control measures were subpar. However, the workers' safety procedures were generally sound, as evidenced by their high mean scores for pre-employment instruction, the use of personal protective equipment (PPE), and the availability of first aid kits at the workplace. In congruent with the appraisal's upshots, the penal system's culture has to alter in order to guarantee that safety is incorporated in everything done, from the top down, in order to avoid workplace accidents and safeguard the wellbeing of employees. The necessity for proactive efforts to prevent occupational perils, frequent periodic health checkups, and the replacement of hazardous compounds with less perilous ones are all recommended.

**Keywords:** Safety Practices, Correctional Centre, Workers, hazard, safety practice experience

### INTRODUCTION

Any community's ability to function depends on work. The capacity of a nation's labour to generate the income necessary for its residents' wellbeing depends on the workforce's health, education, and motivation levels (Prashar & Bansal, 2007). Work provides chances for earning a livelihood and providing for a family, but it also exposes workers to risks in the form of ergonomic, biological, chemical, psychological, and physical hazards that may upshot in workplace accidents, maladies, and maladies. Even though few people are aware of the severity of the problem, work-related maladies and injuries cause terrible human suffering and significant financial losses (International Labour Office, 2013). ILO (2013) said that since OH&S focuses on employees' health, safety, and well-being, it is a crucial component of human security. As an upshot, it is the employer's duty to provide a secure and healthy workplace.

The real cost of occupational sickness and injuries is typically far more than first anticipated, in congruent with ILO (2015). The total cost is estimated to be approximately 4% of global GNP, or around \$2.8 trillion, although it is hard to calculate the terrible impact on workers and their families in US dollars. The following regions in the globe have the highest compensation expenses for work-related maladies and injuries: Injury to the heart and blood vessels (16%), damage to the muscles and bones (40%) and accidents (14%) are the leading causes of mortality. brain (8%), mental (7%), and respiratory (9%) disorders. Skin conditions (3%) and cancer (3%) (ILO, 2012).

Due to rising industrialization and globalization, especially in developing countries with a lack of occupational health facilities, workplace injuries and maladies have rapidly grown in recent years. While occupational maladies are those that cannot occur without the conditions of the workplace, employment-related maladies are those that are not always caused by work but are instead exacerbated or increased by it. The term "work-related malady (WRD)" is defined more broadly in the document since it includes maladies caused by close contact with hazards at work (ILO, 2015). The International Labor Organization estimates that 2.3 million workingage men and women die on the job each year as an upshot of a sickness or accident. The global annual demise toll is now estimated by Hamalaimen et. al. (2017) of the Work Safety and Health to be 2.78 million, up from 2.33 million in 2014, with fatal accidents making up the remaining 13.7% of demises and work-related maladies accounting for the vast majority (2.4 million, or 86.3% of the total demise). It is estimated that over 7,000 individuals die every day from reasons connected to their jobs, with a thousand dying in workplace accidents and 6,000 dying from occupational maladies. In congruent with Hamalainen et. al. (2017), the projected 374 million incidents that did not upshot in fatalities constitute a significant rise.

Furthermore, in congruent with ILO (2013), 1,000 people leave for work each day but never return because they passed away due to a work-related malady or accident. The topic of occupational accidents is always in the news owing to the severity and immediate nature of their effect, but work-related maladies may sometimes go unreported. WRDs usually go unreported because of their slow start or persistent character. For instance, the International Labor Organization (2015) stated that occupational and work-related disorders often go undetected, in contrast to workplace accidents. As an upshot, WRDs are often neglected in OH&S programs in favor of safety and accident avoidance. One of the few spectacular cases that garners widespread attention is the Bhopal Accident in India in 1984, which ensued in over 20,000 fatalities from injuries and maladies and had an estimated compensation cost of US\$500 million.

An issue with global health is occupational risk. Because of the affiliation amid job perils and chronic maladies, which account for more than 55% of yearly mortality, no country at this time does not express worry about these issues. Over two million people die each year from occupational risks or hazards, in congruent with a joint report by the World Health Organization and International Labor Organization (2021). The high occupational demise rate that everyone deplores. Additionally, it is asserted that all leaders believe no one should get ill or pass away while performing their duties. However, 2.2 million people per year pass away due to exposure to risk factors at work (WHO/ILO, 2021). These fatalities are brought on by many workplace risks, each of which is specific to a particular work setting.

Hazards are things or situations that may hurt you if you are exposed to them. When considering the potential effects on the general environment and the surrounding populations, hazards are defined as events or situations that occur at work or as an upshot of work-related activities (Ali, 2008). Achalu (2019) defines a hazard as anything that has the potential to upshot in harm, injury, property damage, poor health, or loss of life. In congruent with the ILO (2022), occupational hazards not only have a tendency to upshot in accidents and maladies, but they are also linked to lost skilled labor, equipment damage, and higher operating costs for businesses. Hazards in the workplace might be ergonomic, physical, chemical, biological, or psychological (Achalu, 2019).

Correctional institutions are government-run buildings where social criminals are housed, fed, instructed, rehabilitated, and given medical attention in preparation for a successful return to society. All types of professionals who work in prison are included in this group of employees, including nurses, force men, psychologists, caterers, pre-trial officers, bailiffs, case managers, probation officers, and bailiffs. In congruent with Fraser (2019), correctional facilities, primarily prisons, provide possibilities for rehabilitation and reintegration after release to the community in addition to providing secure custody and order for inmates. Effective prison administration and staff understand and encourage health and health care within a "healthy prisons" strategy in order to offer health care to inmates at a level comparable to that accessible in the community. (WHO, 2013)

Because they house people against their will with the goal of "contributing to public safety by actively encouraging and assisting offenders to become law-abiding citizens, while exercising reasonable, safe, secure, and human control" (Lambert et. al., 2010), correctional facilities may expose employees to a greater number of on-the-job risks. Front-line correctional officers (COs) are the staff members in charge of maintaining the facility's safety and security, keeping the prisoner population stable, and assisting with the convicts' rehabilitation (Bourbonnais et. al., 2015). The staff of the organizations that manage the institutions are at a high risk of physical assault and other types of physical abuse due to the nature of correctional facilities and the services they offer (Finey et. al., 2013). Stress and work discontent might upshot from situations that foster unease and persistent anxieties (Lambert et. al., 2010).

Correctional facility employees are subject to a variety of special workplace perils and hazards. In congruent with Fraser (2019), employees in correctional facilities must deal with a variety of physical, psychological, and ergonomic risks, such as inclement weather, physical assault, mental abuse, job overload, and lengthy shifts. All of those were deemed to be trying work situations (Evasti et. al., 2021). Prison employment is one of the top twenty most hazardous professions in Nigeria, in congruent with Achalu (2020).

Correctional administrators are more concerned than ever with the wellbeing and personal safety of their staff members. For prison officers, staff safety is a relatively new area of concern. Correctional employees often work in hazardous situations because of the nature of the job. While providing security or transporting prisoners, correctional officers continue to suffer injuries or fatalities (Stewart & Brown, 2011). In congruent with Bourbonnais et. al. (2015), 37% of COs working in correctional institutions (such as prisons and jails) report feeling stressed and burned out on the job. Compared to the predicted 19–30% of the working population overall, this is greater. In congruent with Lambert (2010), COs who exhibit signs of stress and burnout may lack commitment and motivation, which might lead to a decline in organizational commitment likewise an increase in unproductive attitudes and behaviors. Negative attitudes and actions jeopardize the rehabilitation of inmates likewise the safety and security of the prison. Helping prisoners commit crimes while they are incarcerated is an example of counterproductive behavior (Taxman & Gordon, 2009).

In the correctional facilities, workplace violence is also a common occurrence. In congruent with Ghaziri et. al. (2019), nurses who work in prisons and detention facilities are more likely to face workplace violence than nurses who work in general hospitals. Correctional professionals are most likely to suffer a high degree of workplace violence since they are supervising violent people, in congruent with Hu et. al. (2015). They continued by saying that seasoned criminals would resort to whatever means necessary to achieve their release, including biting, assaulting with weapons, and abusing staff. Worker safety in correctional facilities depends on adopting certain risk-reduction behaviors. As an upshot, physical risks like inclement weather, psychosocial risks like emotional abuse and physical attachment, ergonomic risks like prolonged standing and repetitive motion, and biological risks like bacteria, viruses, and fungi from unhygienic conditions are all present in correctional facilities.

Safety practices are established behaviors that people display to protect themselves from possible injury or risk. The primary goals of occupational safety procedures are to avoid accidents and to safeguard both employees and the environment. In congruent with Ali (2008), programs for workplace safety and health should focus on eradicating hazardous behaviors and unsafe or unhealthy working circumstances, which are to blame for the majority of occupational maladies and accidents. Engineering controls, the creation of safe work processes to reduce hazards, the substitution of safer materials for hazardous ones, administrative or organizational procedures, and the use of personal protection equipment are some approaches to do this.

The type of the numerous causative agents, their method of action, and the seriousness of the risk all affect how specific occupational hazards are averted (Achalu, 2020). The most recent ILO codes of practice or guidelines, the upshots of pertinent expert meetings called by the ILO, information from other competent bodies, and prescriptions for measures for the prevention and control of such hazards should all be taken into account by the competent authority (Ali, 2008). The company should evaluate the hazards before implementing any preventative or protective measures and address them in the order of importance.

However, engineering, administrative, isolation, personal protective equipment use, substitution, and elimination are the main methods for preventing and controlling occupational hazards. Every business, whether a manufacturing or service organization, must use more effective hazard control techniques like engineering before PPE, in congruent with ILO (2021). When alternative, more effective methods can't protect employees from peril exposure, PPE

should be used. This injunction only means that every firm must take steps to reduce or avoid the majority of the inherent risks linked with the workplace or the nature of labor in order to provide a safe working environment for all of its workers.

However, it is still unclear how the management and staff of correctional facilities carry out hazard control and prevention procedures. In congruent with a Scoping Literature Review conducted by Montoya-Barthelemy et. al. in 2022 to determine the occupational and environmental hazards of correctional settings, there were few to no appraisals that looked at exposures to or upshots related to diagnosable mental health conditions, musculoskeletal injuries, environmental hazards, medical or mental health staff, immigration detention settings, or regarding incarcerated workers among the 942 appraisals reviewed. Appraisals that were experimental, long-term, or based on unbiased data were very rare. There is a shortage of empirical data, particularly in Nigeria, on the occupational perils faced by staff members of correctional facilities likewise risk management techniques.

Furthermore, the practices of hazard control measures and the degree of exposure to hazards are not covered in the body of existing literature. The sole appraisal that was conducted (Ghaziri et. al., 2019) only focused on nurses and only included sex as a factor, leaving out many other employees of correctional facilities. Other appraisals (Isenhardt & Hostettler, 2020; da Silva Venâncio, 2021) that are available looked into inmate violence and its effects on burnout in correctional staff. This gap led the examiner to decide that it would be worthwhile to look at occupational perils and experiences with safety procedures among staff members of the Nigeria Correctional Center in Rivers State.

# 1.3 Aim and Objectives of the Study

This appraisal is aimed at investigating Occupational hazard and experiences of safety practices among workers of Nigeria correctional centre in Rivers State. The specific objectives of the appraisal will include:

- 1. Identify the prevalent occupational hazards in correctional centres in Rivers State
- 2. Ascertain the hazard experiences of workers in correctional centres in Rivers State

## 1.5 Hypotheses

Two hypothesis will be tested at 0.05 alpha level of significance

1. There is not significant association amid prevalence of hazards and safety practices of correctional workers in Rivers State.

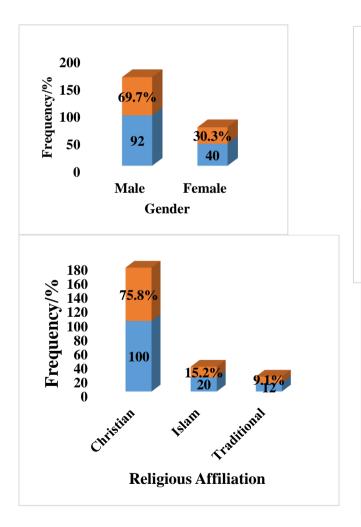
# **METHODOLOGY**

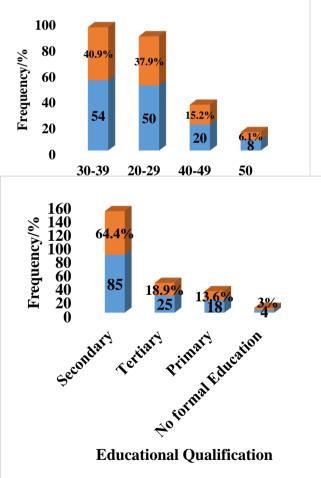
The correctional amenities in Rivers State will be the subject of this descriptive, cross-sectional appraisal. But the appraisal will use both quantitative and qualitative approaches. The 205 employees of River State's five correctional amenities will make up the appraisal's population (Niger Delta Peace Initiative, 2022). Both men and employees in the prisons in the state of Rivers are included in this demographic. A minimum sample size of 136 was utilized, which corresponds to 66.3% of the total workforce working in Rivers State's correctional amenities. A proportional stratified random selection approach combined with an incidental sampling technique will be used to choose the participant. The proportional sample method will be

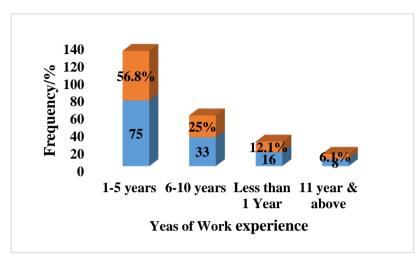
utilized to choose 66.3percent of the total workforce at each correctional facility. The real participants will be determined using the accidental sampling approach. This suggests that the examiner used the instrument to collect data from the correctional staff who were present at the prison on the day of the visit until all copies had been made. Every health center will go via this procedure. In this appraisal, data was gathered using two devices. The first one was a examiner-structured survey poll with two (2) components called the Occupational Health Hazards and Safety Practice Survey poll (OHSPQ). An interviewing guide was the second tool. Twelve partakers were appraised using the interview guide to get qualitative data. Open-ended questions were used via the interview to elicit information about the partakers' experiences with hazards and safety precautions. The quantitative statistics was analyze using statistical software from the SPSS (version 25). However, for the data assay, percentage, mean, and standard deviation was used. To analyze the partakers' demographic traits, percentage was utilized.

### 4.1 Results

# 4.1.1 Demographic features of the partakers







**4.1.2** Assay of Study Questions

Study Question 1: What are the

prevalent occupational hazards in Correctional Centre in Rivers State?

Table 4.1: Descriptive assay of the prevalent occupational hazards

		Hazards	Mean	Std. D	Remark
Physical		Exposed to excessive cold weather		.808	Agreed
	Hazards	Exposed to hot weather	3.02	.725	Agreed
		Exposed to unbearable threshold of noise	2.96	.842	Agreed
		Exposed to perils of slips and falls	3.32	.634	Agreed
		Exposed to sharp objects	3.31	.839	Agreed
		Exposed to car accidents	3.39	.615	Agreed
		Grand Mean	3.32	.557	Agreed
Chemical Hazards		Exposed to chemical constituents like solvents, vapours, smokes and fumes	2.14	1.099	Disagreed
		Exposed to use of latex gloves		1.018	Disagreed
		These chemicals are sometimes inhaled, ingested or spills on my skin	2.44	.943	Disagreed
		Exposed to chemicals that flammable, poisonous and corrosive	2.42	.917	Disagreed
		Exposed to strong chemicals like disinfectants and degreasers	2.52	.977	Agreed
		Grand mean	2.42	.830	Disagreed
	Biological Hazards	Grand biological hazard experiences of the partakers	2.44	.702	

	Exposed to infectious agents	2.29	1.067	
	Exposed to mosquitoes/insect bites	2.85	.984	
	Exposed to human excreta	2.54	1.175	
	Exposed to used hypodermic needles (needle stick)	2.50	.953	
	Exposed to snake bite	1.85	.929	
	Grand Mean	2.44	.702	Disagreed
Ergonomic Hazard	Grand ergonomic hazard experiences of the partakers			
	Stand for a long time	2.61	1.047	
	The workstation is poorly lightened	2.55	1.168	
	Experience frequent repeated movement	3.48	.599	
	Bend often time	3.67	.575	
	Grand Mean	3.51	.573	Agreed
Psychosocial	My workload is excessive	3.43	.712	
Hazards	I am certainly talked down by the public	1.92	1.001	
	There is no opportunity for promotion	3.30	.707	
	I do not get sufficient sleep	3.33	.778	
	I am bullied/harassed by senior colleagues	2.23	1.163	
	I am bullied/harassed by inmates	3.15	.904	
	Grand Mean	3.52	.502	Agreed

The grand mean values in table 1 allow for the conclusion that ergonomic and psychosocial risks are more common than physical perils in correctional amenities.

A high grand mean of 3.51 indicates that ergonomic risks such standing for extended periods of time, making frequent, repetitive motions, and bending are common among employees at correctional centers. This shows that because of the nature of their employment, employees of correctional amenities may be at risk for getting musculoskeletal problems.

With a grand mean of 3.52, psychosocial risks are also common. This means that personnel at correctional amenities are under a lot of stress due to their workload, prospects for advancement, and bullying or harassment from both colleagues and prisoners. This shows that staff members at correctional amenities may struggle with mental health conditions including PTSD, sadness, and anxiety.

Additionally, common, with a grand mean of 3.32, are physical risks. This implies that employees at correctional amenities run the peril of suffering bodily wounds as an upshot of exposure to cold and hot weather, slips and falls, sharp objects, and automobile accidents.

However, with grand means of 2.44 for biological hazards and 2.42 for chemical hazards, respectively, they are less common. This shows that although if staff members at correctional amenities are less likely to be exposed to biological and chemical risks such infectious maladies, mosquito bites, and chemical exposure, they should still take steps to avoid any possible harm.

The upshots' implications for public health show that staff members at correctional amenities are subject to an array of occupational risks that might harm their physical and emotional well-being. The high frequency of ergonomic and psychological risks at work may put labourers at risk for musculoskeletal ailments, stress-related maladies, and mental health problems. The general efficiency of the correctional amenities may be impacted by the amplified absenteeism and declined production caused by these occupational risks.

The ramifications for public health also imply that there is a need for increasing focus on the security and well-being of inmates' employees. To guarantee that employees in correctional amenities are safeguarded from workstation perils, employers must adopt and enforce safety rules and regulations. Tuition programs for employees may also assist them in recognizing and avoiding workstation perils. Labourers at correctional amenities should also have access to healthcare services to address any health concerns that could develop as an upshot of their jobs.

The upshots' implications for public health show that a thorough strategy is required to address the occupational risks that staff members of correctional amenities experience. This may assist to boost production, safeguard the efficient operation of the correctional amenities, and promote the safety and health of employees.

**Appraisal Question 2:** What are the Occupational hazard experience of correctional centre labourers in Rivers State?

To address the above question, 11 correctional centre labourers were interviewed orally. Their feedback are presented below:

- 1. "In this place, we experience different kinds of hazards almost on daily basis. Me in particular, I have been attacked by inmates countless times. We work under harsh weather including in the night when the weather is very cold. Sometimes, the inmates attack with sharp objects. I fact, the hazard experiences is too numerous to mention."
- 2. "As a healthcare provider in the prison, I am constantly exposed to infectious maladies and bloodborne pathogens while providing clinical care to inmates."
- 3. "As a corrections officer, I am at risk of physical harm from inmate attacks, but also experience mental stress and trauma from dealing with violent and difficult individuals on a daily basis."
- 4. "Working in the kitchen, I am exposed to high heat and hazardous equipment that can cause burns and cuts if not handled properly."
- 5. "As a maintenance labourer, I am frequently exposed to chemicals and other hazardous materials while performing repairs and upkeep on prison facilities."
- 6. "Working in the laundry, I am at risk of respiratory issues from inhaling lint and dust particles, likewise physical strain from lifting heavy loads of laundry."

- 7. "As a counselor, I am at risk of verbal as well as physical assault from inmates who may become aggressive during therapy sessions."
- 8. "As a transport officer, I am at risk of vehicular accidents while transporting inmates to and from the prison, especially during inclement weather conditions."
- 9. "As a teacher in the prison education program, I am at risk of verbal as well as physical assault from inmates who may become agitated or disruptive during class."
- 10. "As a security supervisor, I am responsible for ensuring the safety of all prison staff and inmates, which puts me at risk of physical and psychological harm if something goes wrong."
- 11. "As a parole officer, I am at risk of physical harm from former inmates who may become violent or retaliate against me for decisions I make about their parole status."

# Thematic Assay of Feedback

Theme 1: Exposure to Infectious Maladies and Bloodborne Pathogens

Healthcare provider

Constantly exposed to infectious maladies and bloodborne pathogens while providing clinical care to inmates

### Theme 2: Physical Harm and Mental Stress

Corrections officer

Risk of physical harm from inmate attacks

Experience mental stress and trauma from dealing with violent and difficult individuals on a daily basis

## **Theme 3: Hazardous Working Conditions**

Kitchen labourer

Exposed to high heat and hazardous equipment that can cause burns and cuts if not handled properly

Maintenance labourer

Frequently exposed to chemicals and other hazardous materials while performing repairs and upkeep on prison facilities

Laundry labourer

At risk of respiratory issues from inhaling lint and dust particles, likewise physical strain from lifting heavy loads of laundry

# Theme 4: Verbal as well as physical Assault

Counselor

At risk of verbal as well as physical assault from inmates who may become aggressive during therapy sessions

Teacher

At risk of verbal as well as physical assault from inmates who may become agitated or disruptive during class

### Parole officer

At risk of physical harm from former inmates who may become violent or retaliate against them for decisions made about their parole status

### **Theme 5: Vehicular Accidents**

### Transport officer

At risk of vehicular accidents while transporting inmates to and from the prison, especially during inclement weather conditions

# Theme 6: Security and Safety

### Security supervisor

They are in charge of guaranteeing the security of all prison employees and prisoners, and if anything goes wrong, they run the possibility of suffering bodily and mental harm.

Overall, the deductive thematic assay of the data reveals the numerous and serious occupational risks that prison staff must deal with, including exposure to infectious maladies, physical harm, mental stress, perilous working conditions, verbal as well as physical assault, auto accidents, and security and safety risks. These upshots highlight the vital need for efficient risk handling techniques, tuition initiatives, and safety precautions to reduce the occupational risks that prison staff must deal with and to advance their health and wellbeing at work.

Table 4.2: Summary of the thematic assay

	Hazard	
Occupation	Type	Specific Hazard
Healthcare	Biological	Exposure to infectious maladies and blood-borne pathogens
Corrections	Physical and mental	Physical harm from inmate attacks and mental stress
Kitchen	Physical	Burns and cuts from high heat and hazardous equipment
Maintenanc		
e	Chemical	Exposure to hazardous materials during repairs/upkeep
	Physical and	Respiratory issues from inhaling lint/dust particles and physical
Laundry	respiratory	strain from lifting heavy loads of laundry
Counselor	Physical and mental	Verbal as well as physical assault from aggressive inmates during therapy sessions
Transport	Physical	Vehicular accidents during transport, especially in inclement weather

Education	Physical and mental	Verbal as well as physical assault from agitated/disruptive inmates during class
Security	Physical and mental	Physical and psychological harm while ensuring safety of staff and inmates
Parole	Physical	Physical harm from violent or retaliating former inmates

Table 4.3: Summary of identified hazards matrix experienced by the labourers based on profession

Theme	Health care provid er	Corre ctions officer	Kitch en labou rer	Mainte nance laboure r	Laun dry labou rer	Co uns elo r	Trans port office r	Te ac he r	Securi ty superv isor	Paro le offic er
Physical harm		X	X	X			X		X	X
Exposure to hazardous materials				X						
Exposure to infectious maladies	X									
Verbal/phy sical assault		X				X	X	X		X
Mental stress/trau ma		X							X	
Respirator y issues					X					
Vehicular accidents							X			X

Tables 2 and 3 provide an overview of the occupational perils related to different vocations in a prison context based on the upshots of the theme assay. The most frequent risks connected to each employment are shown in the first table, while each risk category is covered in greater depth in the second table.

The tables make it clear that prison staff must deal with an array of risks, some of which may be physical, biological, or psychological in character. While providing clinical care to prisoners, healthcare professionals run the risk of coming into contact with infectious maladies and blood-borne pathogens. Corrections officers get bodily wounds from assaults by inmates and endure emotional stress from working with challenging people every day. High heat and perilous equipment may cause burns and wounds on kitchen labourers. When maintaining prison facilities, maintenance staff are frequently exposed to chemicals and other perilous materials. Laundry employees have physical strain from carrying large loads of laundry and lung problems from breathing lint/dust particles.

During therapy sessions, counselors run the peril of verbal as well as physical abuse from prisoners. Transport police are vulnerable to car accidents when being transported, particularly in bad weather. During class, agitated/disruptive convicts verbally and physically abuse the educators. Security supervisors might suffer bodily and mental harm if anything goes wrong since they are tasked with safeguarding the security of all prison employees and prisoners. The potential of physical damage from aggressive or vengeful ex-offenders exists for parole officials.

# **4.1.3: Test of Hypothesis**

**Hypothesis 1:** There is not substantial affiliation amid prevalence of hazards and safety practices of correctional labourers in Rivers State

Table 4.5a: Summary of frequency assay on the affiliation amid prevalent hazards and safety practices

		Overa partal	Total			
		N	R	O	A	
Overall prevalent	SD	1	3	14	1	19
occupational hazards in correctional centres	D	2	2	3	0	7
	A	7	21	62	4	94
	SA	1	3	7	1	12
Total		11	29	86	6	132

Table 4.5b: Summary of Chi Square assay on the affiliation amid prevalent hazards and safety practices

	Value	df	Phi	Cramer's V	P.Val
Pearson Chi-Square	5.847a	9	0.210	0.122	.755

The frequency of occupational risks in correctional amenities is shown in Table 5a by profession, hazard category, and particular hazard. It demonstrates that physical and mental hazards are most common, and that violent prisoners' verbal as well as physical assault is the most common particular risk.

The upshots of a chi-square tests examining the affiliation amid partakers' general safety measures and the frequent occupational risks in correctional amenities are shown in Table 5b.

No substantial correlation amid the two variables was discovered by the chi-square tests (p >.05). Cramer's V (0.122) and the phi coefficient (0.210) show that there is only a marginally positive correlation amid the variables. The tables therefore imply that while occupational perils are common in correctional amenities, they do not substantially affect the partakers' overall safety habits.

### 4.2 Discussion of Results

The conclusion that inmates in Rivers State are exposed to an array of perils at work is in line with the upshots of numerous other appraisal. For instance, Yang et. al.'s (2018) appraisal discovered that American correctional officials were subjected to an array of physical and psychological risks, such as violence, exposure to infectious maladies, and stress. Similar to this a study by Ezeonwumelu et. al. (2019) discovered that Nigerian prison staff were exposed to psychological hazards like stress and burnout in addition to physical, chemical, and biological perils. The discovery that mental stress is a common risk factor among inmates is also in line with other appraisals that found high thresholds of job-related stress among inmates (e.g., Chang & Lu, 2019).

Previous appraisals support the conclusion that Rivers's correctional center employees regularly encounter an array of hazards. For instance, Jafari et. al.'s (2020) appraisal discovered that Iranian prison employees were subjected to psychological risks such job instability and a lack of social support, in addition to physical, chemical, and biological perils. Similar to this, Zhou et. al.'s (2018) appraisal discovered that Chinese correctional officers faced an array of risks, such as exposure to infectious maladies, assault, and high thresholds of stress associated to their jobs. The discovery that mental stress is a common risk for those who work in correctional amenities is also in line with other appraisals (such as Brough et. al., 2017).

### 5.2 Conclusion

In congruent with this report, there is a reactive approach to safety and hazard handling and personnel at Rivers State's correctional centers are exposed to an array of working perils. Although the labourers' safety procedures are generally good, there is room for improvement in areas like prompt clinical attention and the substitution of hazardous materials. Despite the frequent risks, there was no conclusive evidence linking them to safety procedures. These upshots demonstrate the necessity for proactive actions to protect the security of prison staff, and more appraisal is required to determine the most efficient methods for hazard reduction in prisons.

### 5.6 Recommendations

Here are four suggestions based on the appraisal's conclusions and ramifications:

The handling of the correctional center and the government should place a high priority on the safety of the inmates by taking proactive steps to prevent hazards from occurring, providing the labourers with the resources and assistance they need to ensure their daily safety and wellbeing, and fostering a culture of safety from the top down.

Labourers in correctional amenities should get regular tuition to help them understand the value of safety procedures and how to utilize PPE to effectively prevent and manage workstation perils.

In correctional amenities, it should be encouraged to replace perilous substances with less perilous ones, and it should be routinely checked for health problems brought on by occupational exposure.

Any events that occur should be thoroughly investigated right away, and the necessary steps should be made to stop them from happening again. To lessen the negative effects of workstation perils on employees' health, effective and prompt clinical care should be offered.

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