

RISK IDENTIFICATION PROCESSES AND HEALTH SAFETY CULTURE: EVIDENCE FROM PUBLIC HEALTH WORKERS IN LAGOS STATE OWNED HEALTHCARE FACILITIES

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Abstract

The study explored the nexus between risk identification processes and health safety culture among public health workers in Lagos State-owned healthcare facilities. It examines how effectively identifying risks can contribute to a safer work environment and enhance the overall health safety culture within these institutions. The study adopted a structured questionnaire, with data collected from 179 respondents. The study employed a cross-sectional survey design cum double sampling comprised of purposive and convenience. The research utilised both qualitative and quantitative methods to gather evidence from healthcare professionals, highlighting the common risks encountered in their work and the strategies employed to mitigate them. The data analytical techniques employed were descriptive and inferential statistics. Findings from the study revealed a rank order analyses for both risk identification processes and health safety culture; while showcased a positive but low nexus between risk identification processes and health safety culture among public health workers in Lagos State owned healthcare facilities. The individual relationship portrayed between risk identification processes and health safety culture was negatively correlated and statistically insignificant ($\beta = -.113$, $p = .465$). The study suggested that robust risk identification processes are crucial in fostering a proactive health safety culture, reducing workplace hazards, and improving patient care. The study underscores the importance of continuous training, resource allocation, and management commitment in sustaining a culture of safety in public healthcare facilities

Key Words: Risk Identification, Safety Culture, Health Safety, Public Workers, Lagos State

Introduction

Risk management in healthcare encompasses intricate clinical and administrative frameworks, protocols, procedures, and reporting hierarchies that are specifically devised to identify, monitor, evaluate, alleviate, and avert potential hazards to patients (Adejuwon, et al., 2019). Adeoye, et al. (2022) assert that comprehensive risk management in healthcare necessitates the initial identification of the many forms of risks, such as prescription errors, slips and falls, infections, chemical hazards, physical hazards, and workplace violence. Adepoju & Esan (2023) stated that risk identification in healthcare is the proactive recognition and reduction of possible harm to patients, staff, and the organization. Hence, it is imperative to have efficient coordination in order to reduce, supervise, and manage the likelihood or consequences of an unfortunate incident (Abel, et al., 2023).

Capochi (2018) asserts that healthcare institutions owned by Lagos State should prioritize the effectiveness of risk identification measures in order to maintain a culture of health safety, where safety is valued by everybody. The combination of public health policies, facility management, and staff engagement is essential in this setting. The objective of this study is to evaluate the risk identification process as well as the safety culture among health care workers in Lagos owned healthcare facilities owned by the Lagos State government. Over the past few years, risk management in Nigeria has garnered increased everyday focus from both employees and employers. By law, employers are obligated to safeguard the lives of workers in order to demonstrate sufficient worker engagement in productivity at the workplace.

Literature Review

Conceptual Review

Risk Identification Process

Risk identification is a systematic procedure that involves identifying, documenting, and understanding possible dangers that could affect a project, organization, or any planned endeavours (Adepoju & Esan, 2023). This technique entails systematically identifying uncertainties or events that, if they occur, could have both positive and negative impacts on organizations. The purpose of risk identification is to create a comprehensive list of potential hazards for the purpose of analyzing, evaluating, and effectively managing them (Adeoye, et al., 2022). Adejuwon, et al. (2019) propose that the process of risk identification usually entails brainstorming, analyzing past data, conducting interviews, and utilizing expert knowledge to identify prospective hazards. Risk identification is a proactive activity aimed at safeguarding an organization's assets and reducing financial losses (Lawal, et al., 2023). It is employing measures to decrease the occurrence and seriousness of unforeseen events, minimize the consequences of legal claims, and foster a culture of high dependability (Adepoju & Esan, 2023).

Risk identification in the healthcare sector, is a systematic approach to identifying, evaluating, and, if necessary, mitigating risks to patients, visitors, staff, and organizations (Capochi, et al., 2018). In the healthcare industry, risk identification entails determining the specific circumstances in which hazards are present and the capacity to recognize and pinpoint them. The scope of risk identification in healthcare encompasses critical areas such as the Intensive Care Unit (ICU), Operating Room (OR), Emergency Room (ER), Coronary Care Unit (CU), General Administration (GA), and Medication Administration (MA). These areas are of utmost importance for identifying risks in relation to the culture of healthcare safety (Trichilli, et al., 2021).

Health Safety Culture

Establishing a health safety culture within the healthcare system is a crucial mechanism for enhancing the quality of care and advancing patient safety (Omoniyi & Bello, 2020). The World Health Organisation (WHO, 2023) defines healthcare safety as the absence of preventable harm to a patient during the healthcare process. In a similar vein the United States Institute of Medicine (IOM) considers healthcare safety to be a crucial element of quality of care, defining it as freedom from accidental injury. Moda, et al (2021) says that an organization's values, attitudes, perceptions, competencies, and behaviours are reflected in its health and safety culture. Furthermore, it demonstrates the organization's dedication to and emphasis on safety and health, as well as the efficacy of its safety management system (McGowan et al., 2023).

According to Abel, et al. (2020), health safety culture is determined by the actions of individuals within an organisation when they believe they are not being observed. By observing the behaviour of individuals, any discrepancies between the organization's stated attitudes and values towards health safety culture and the attitudes and values displayed by individuals can be identified. Moreover, a favourable health safety culture guarantees that all members of the organisation, irrespective of their position, collaborate towards achieving improved safety and health results (Arzahan, et al., 2022). Furthermore, the work environment, organisation, and job design exert a significant influence on the behaviour of the majority of individuals (Lawal et al., 2023).

Risk Identification Process and Healthcare Safety

An efficacious risk identification process and a robust health safety culture are essential components for safeguarding employee well-being and achieving overall organizational performance (Arzahan, et al., 2022). Efficient risk management is a fundamental aspect of a strong safety culture, whereas a positive safety culture can greatly improve risk management procedures (Mcgowan, et al., 2023). Furthermore, it is imperative for organizations to implement a comprehensive risk identification process in order to detect, investigate, and evaluate potential risks, including those pertaining to operational matters and employee well-being.

Capochi, et al. (2018) emphasize the critical role of a robust health safety culture in mitigating accidents and injuries within an organisation, particularly in the healthcare sector, where both patients and healthcare personnel are susceptible to hazards and dangers. Establishing and maintaining a culture of health safety is a multifaceted endeavour that necessitates effective leadership and management dedication to safety initiatives (Moda, et al., 2021).

It is crucial for organizations to involve employees in safety initiatives; to create a proactive risk identification process; a comprehensive approach that incorporates both numerical and human data should be used (Queen, et al., 2023). Additionally, engaging employees in safety initiatives by including them in safety committees and hazard reporting committees fosters a sense of ownership and responsibility, leading to improvements in safety (Omoyi & Bello, 2020). Nevertheless, imparting sufficient training to ensure personnel comprehend safety protocols would enable them to execute their tasks securely and foster a culture of ongoing enhancement by drawing lessons from near events and near misses (Lawal et al., 2022).

Theoretical Review

The Prospect Theory

Prospect Theory, created by Daniel Kahneman & Amos Tversky in 1979, is a psychological theory that explains how individuals make decisions in situations when there is uncertainty, especially when confronted with risks. According to the theory, individuals assess possible losses and profits in a distinct manner, resulting in consistent decision-making patterns. According to the hypothesis, individuals tend to be more responsive to losses than to equal gains. They usually place a higher value on losses, valuing them almost twice as much as gains (Jack, 1992). Integrating prospect theory into risk identification in organizations can improve management's comprehension and foresight into the decision-making patterns of stakeholders, such as employees, consumers, and regulators, during the process of identifying and managing risks (Trichilli, et al., 2021). Nevertheless, gaining a comprehension of the dynamics surrounding prospective losses would enable organizations to better explain risk identification strategies and promote the implementation of preventive actions (Chadee, et al., 2022). Moreover, it is essential to consistently assess and modify the risk identification procedures to accommodate shifting reference points, risk perceptions, and decision-making patterns within the organisation.

The Safety-Climate Theory

Psychologists Dov Zohar and Yehuda Tarter first proposed the concept of safety climate in 1980. Their research highlighted the significance of organizational elements in influencing safety outcomes. They argued that employees' collective perceptions of safety play a vital role in understanding and improving workplace safety. The notion has subsequently emerged as a vital field of research in safety management, offering significant perspectives on the correlation between workplace culture and safety management (Katz-Naron, et al., 2005). Safety-climate theory is often used to assess safety culture and the way individuals in organizations view safety in their work environment (Moda, et al., 2021).

Within the health care industry, a secure environment has a direct impact on both the staff and patients. Patient safety involves the efforts to avoid, prevent, and improve adverse outcomes or injuries resulting from health care procedures (Arzahan, et al., 2022). Adverse outcomes include medical errors and accidents that arise from medical interventions, as opposed to complications related to diseases. They also encompass events stemming from equipment malfunction, failure to carry out intended actions (such as surgical events), and incidents involving medical devices, patient protection, and care (Moda, et al., 2021). Consequently, in order to promote a culture of health safety, healthcare organisations must implement safety regulations and protocols to prevent the financial consequences of adverse events and allocate resources towards the implementation of risk detection systems (Chadee, et al., 2022). This study is based on these two theories.

Empirical Review

Simsekler, et al. (2018) examined their work titled 'design for patient safety: a systematic-based risk identification framework; with empirical investigation. The study investigated a system-based approach, called the risk identification framework (RID model) designed to improve processes in risk identification. The study adopted multiple inputs that assist to enable proactive identification of innovative risks. This study evaluated potential value of RID model as applicable to practical healthcare situations. This study, by implications, created a positive result.

Simsekler, et al. (2019) evaluated the role of risk identification in patients' potential harms. The study x-rayed current risk identification techniques alongside health strength and limitations. With the Future Aviation Safety Team (FAST) as an approach, in better identifying patients' safety risks, the low-level maturity of safety management and safety culture were considered for well-structured integration. The study, having revealed some findings, proposed that future studies should provide evidence in the efficaciousness of integration and potential costs usually engaged in healthcare.

Adepoju & Esan, (2023) evaluated the effects of risk management on workers safety at the University of Medical Sciences teaching hospital, Ondo State, Nigeria. The study explored a quantitative research approach for data collection and analysis. The findings of the study revealed positive effects of risk management on workers safety. The study implication was that well designed risk management policy should be embraced and a systematic employee training should be embraced in order to promote healthy and safe working conditions for healthcare workers.

Research Methods

In attainment of the objectives of this study, a cross-sectional survey design was employed. The purpose of its adoption of this design was because it provided for the gathering of data from a number of subjects or events from identical timespan, and at a single point in time. This design came into force because it helps free the study from biases in a bid to produce the least margin of error with increased reliability in the accuracy of data gathered (Creswell, & Creswell, 2018). The population of the study is total number of public health workers in Lagos state owned health facilities. The registered public health workers represented the sampling frame, while the members were indeterministic. The study employed a double sampling technique comprised of purposive and convenience. For the purposive sampling technique, the respondents were selected on the basis of their expertise and judgments in the research instrument. For convenience sampling, public health workers specifically those in the general hospitals were engaged in their willingness and readiness.

However, two hundred (250) copies of the questionnaire were distributed among the registered public health workers, in four (5) divisional areas of Lagos specifically, Badagry, Ikeja, Island, and Ikorodu due to respondents' proximity and accessibility. Out of the total copies of the questionnaire distributed, one hundred and seventy-nine (179) copies were used for the data analysis after further scrutiny representing a response rate of seventy-two percent (72%). The research instrument adopted in this study was structured questionnaire and was drawn based on the research objectives related to the study focus. The questionnaire was structured such that the answer attained from the respondents provided resolutions to the studied problems. The questionnaire was self-developed with respect to the notable concepts and variables studied. The choice of the survey technique was due to fitness to the adopted research design, its economic nature, and simplicity in distribution (Sallies, et al., 2021).

The validity and reliability were ensured by ascertaining that face, construct and content validities were examined and certified appropriate for the study. For risk identification processes and health safety culture, content, construct, and criterion-related validity were observed. Content validity of the questionnaire was also observed from experts in risk management and health safety. For construct validity, specific form of knowledge, skills and ability was derived as supported by literature review. For criterion-related validity, some members of public health practitioners outside the selected participants were consulted for the exactness and confirmation of the research's instrument and outcome. The reliability of the research instrument was above the 0.70 Cronbach alpha results. The descriptive and

inferential statistics were adopted for data analysis. For the descriptive analysis, simple frequency percentage supported with tabular representation was adopted, while the inferential statistic employed were Friedman's rank test and simple regression technique.

Results and Discussion of Findings

Analytical Descriptions of Participants Opinions

Table 1 Participants' Bio-Data Information

Variable	Response Label	Frequency	Percentages (%)
Gender	Male	52	29.1
	Female	127	70.9
Age	18 but less than 30	20	11.2
	30 but less than 40	79	44.1
	40 but less than 50	70	39.1
	50 but less than 60	10	5.6
Educational Qualifications	Bachelor Degree/HND	90	50.3
	Master Degree	57	31.8
	Doctoral Degree	16	8.9
	Professional Certificate	11	6.2
	Others	05	2.8
Years of Experience	Less than 5yrs	33	18.4
	5yrs but less than 10 yrs	72	40.2
	10 yrs but less than 15 yrs	48	26.8
	15 yrs & above	26	14.6

Source: Field Survey (2024)

The data presented in Table 1 provides insights into various demographic variables. These statistics offer a sight into the configuration of the surveyed population, allowing for valuable observations and implications. The gender distribution reveals it is highly skewed towards females, constituting 70.9 percent of the sample compared to 29.1 percent of males. This gender disparity might influence perspectives on various aspects, potentially affecting responses and attitudes towards the survey's subject matter. Regarding age demographics, the data illustrates high percentages with regard to those aged 30 but less than 40 years and 40 years but less than 50 years with 44.1 percent and 39.1 percent respectively. It was followed by those aged 18 but less than 30 years 11.2 percent while 5.6 percent was recorded for those aged 50 but less than 60 years. The responses from the participants are indications of the maturity encompassing their opinions regarding the subject matter. Educational qualifications showcase a notable distribution, with the majority (50.3 percent) holding a BSc/HND. This high percentage suggests a well-educated sample population, potentially indicating a higher level of expertise among respondents. For years of experience at work, those who had spent 5 years but less than 10 years dominated the circle. It was followed by those had spent 10 years but less than 15 years while 18.4 percent and 14.6 percent were recorded respectively for public health workers who spent less than 5 years and those who had spent 15 years and above.

Table 2: Participants' Bio-Data Information

Variable	Response Label	Frequency	Percentages (%)
Are you aware of the possible risks confronting you as a public healthcare worker?	Yes	165	92.2
	No	14	7.8
Hospital Management respond swiftly to some of the risks I encounter in the cause of my job	Not at all	10	5.6
	Sometimes	123	68.7
	Regularly	46	25.7
Are there health safety plans in place in your organization?	Yes	171	95.5
	No	8	4.5
Does Lagos State government/hospital management provide risk management guidelines for handling possible risks that can endanger my work?	Yes	167	93.3
	No	12	6.7
Is there insurance policy (s) for healthcare workers in your healthcare facility?	Yes	163	91.1
	No	16	8.9

Source: Field Survey (2024)

In Table 2, public health workers confirmed possible risks they were confronted with a 92.2 percent 'Yes' while 7.8 percent said 'No'. For risks associated with the health workers' job, hospital management is said to respond sometimes (68.7 percent), regularly (25.7 percent), and not at all (5.6 percent). For health safety plans, public health workers in Lagos State claimed 'Yes' with 95.5 percent responses, while 4.5 percent said 'No'. For confirmation of Lagos State hospital management providing risk management guidelines for public health workers, majority said 'Yes' by 93.3 percent response, while only 6.7 percent said 'No'. To confirm health insurance policies for public health workers, majority said 'Yes' by 91.1 percent response, while 8.9 percent said 'No'.

Descriptive Analysis of Research Variables

Table 3: Risk Identification Processes

Variables	Scale Level					Mean	Std Dev.
	SD	D	U	A	SA		
	1	2	3	4	5		
Group approaches (such as workshops, seminar, conferences, etc.) are necessary to enhance public health workers' capacities to properly identify health challenges (brainstorming)	1.1	0.0	0.0	51.4	47.5	4.44	.619
Expert judgment is required for healthcare workers' drives towards public health workers' safety (expert opinions)	0.0	0.0	3.4	69.8	26.8	4.23	.498
Health risk survey is required for healthcare workers' knowledge design of health challenges (health risk survey)	0.0	0.0	3.4	82.1	14.5	4.11	.409
Public healthcare workers are trained to	0.0	0.0	0.0	64.8	35.2	4.35	.479

identifying causes and possible effects of health risks (health risk cause and effects)							
Public health documentation review is necessary for possible health risk identification (health documentation review)	0.0	0.0	0.0	66.5	33.5	4.34	.473
Historical health risk information will aid public health workers' knowledge of health issues (health risk information)	0.0	1.1	0.0	78.8	20.1	4.18	.464
Health risk checklist is required by public health workers to be able to identify possible health challenges currently invoke (health risk checklist)	0.0	0.0	4.5	70.9	24.6	4.20	.501

Source: Researchers' Computations, (2024)

In Table 3 (Fig. 1), survey items projecting the risk identification processes include *group approach, experts' opinions, health risk survey, health cause & effect, health documentation review, health risk information, and health risk checklists*. The responses from the participants that participated in this study showcased that majority, in references to group approach (98.9%), experts' opinions (96.6%), health risk survey (96.6%), health cause & effect (100%), health documentation review (100%), health risk information (98.9%), and health risk checklists (95.5%) all agreed. For contrasting view, the followings were noticed for the survey items group approach (1.1%), experts' opinions (0%), health risk survey (0%), health cause & effect (0%), health documentation review (0%), health risk information (1.1%), and health risk checklists (0%). For participants views expressing their indecision, the followings were recorded – group approach (0%), experts' opinions (3.4%), health risk survey (3.4%), health cause & effect (0%), health documentation review (0%), health risk information (0%), and health risk checklists (4.5%). The mean scores and that of standard deviation agreed with the results. The outcomes imply that risk identification processes plainly indicate the identical decisions regarding all subject areas in the distribution.

Figure 1: The Graphical Model Explains the Risk Identification Process among Selected Public Health Workers in Lagos State Owned Healthcare Facilities

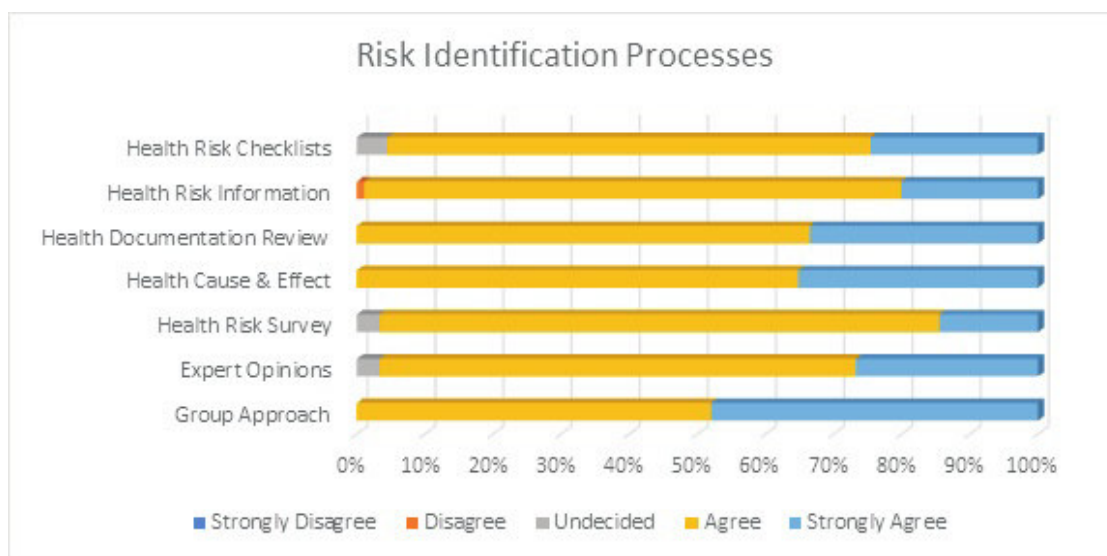


Table 4: Health Safety Culture

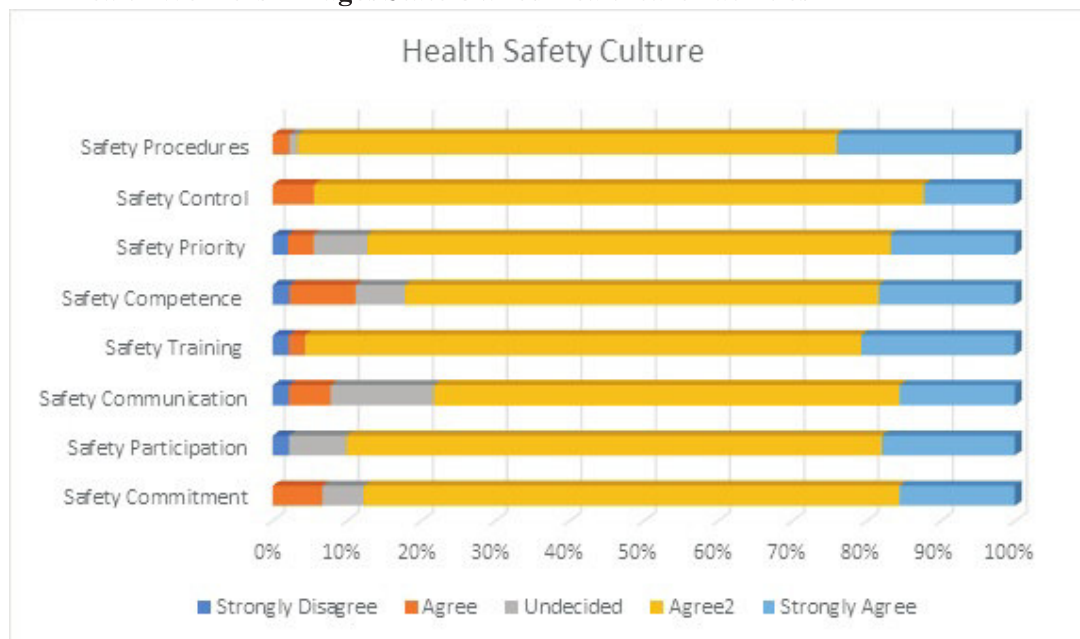
Variables	Scale Level					Mean	Std Dev.
	SD	D	U	A	SA		
	1	2	3	4	5		
Management of public healthcare facilities are committed to the safety of public health workers at all times (safety commitment)	0.0	6.7	5.6	72.1	15.6	3.97	.694
Public health workers are permitted to participate in the health safety procedures of most public healthcare facilities in Lagos State (safety participation)	2.2	0.0	7.8	72.1	17.9	4.03	.678
There are always effective communication systems between public health workers and public healthcare facilities managers for safety atmospheric conditions (safety communication)	2.2	5.6	14.0	62.6	15.6	3.84	.836
Health safety training for public health workers is always the priority of Lagos State health facilities Managers (safety training)	2.2	2.2	0.0	74.9	20.7	4.09	.701
Health safety competence is at the top agenda in Lagos State Healthcare facilities when seeking for the right health personnel to fill the gap (safety competence)	2.3	8.9	6.7	63.7	18.4	3.87	.893
Public healthcare facilities managers place priority on public health workers' safety even at the expense of some organizational activities (safety priority)	2.1	3.4	7.3	70.4	16.8	3.96	.760
Health safety control is on the mission statement of most Lagos State healthcare facilities for all public health workers (safety control)	0.0	5.6	0.0	82.1	12.3	4.01	.590
Health safety rules are always applied in the running and managing public healthcare facilities in Lagos State (safety procedures)	2.3	0.0	1.1	72.6	24.0	4.18	.555

Source: Researchers' Computations, (2024)

In Table 4 (Fig. 2), survey items projecting the health safety culture include *safety commitment, safety participation, safety communication, safety training, safety competence, safety priority, safety control, and safety procedures*. The responses from the participants that participated in this study showcased that majority, in references to safety commitment (87.7%), safety participation (90%), safety communication (78.2%), safety training (95.6%), safety competence (82.1%), safety priority (87.2%), safety control (94.4%), and safety procedures (96.6%) all agreed. For contrasting view, the followings were noticed for the survey items safety commitment (6.7%), safety participation (2.2%), safety communication (7.8%), safety training (4.4%), safety competence (11.2%), safety priority (5.5%), safety control (5.6%), and safety procedures (2.3%). For participants views depicting their indecision,

the followings were recorded – safety commitment (5.6%), safety participation (7.8%), safety communication (14%), safety training (0%), safety competence (6.7%), safety priority (7.3%), safety control (0%), and safety procedures (1.1%). The mean scores and that of standard deviation agreed with the results. The outcomes imply that health safety culture metrics plainly indicate the identical decisions regarding all subject areas in the distribution.

Figure 2: The Graphical Model Explains the Health Safety Culture among Selected Public Health Workers in Lagos State Owned Healthcare Facilities



Test of Hypotheses

Friedman's Rank Test

This symbiotic analysis test, expressed by K, evaluates a universe that is regularly sampled and has the identical median. It presumes, in a hypothetical state where there is no impact, that the response variable follows a persistent distribution, necessitating at least ranked measurement (Eisinga ,et al., 2017). Data under this test is coordinated in a tabular representation with 'n' rows and 'k' columns. This test dictates if the combined rank consequences for each condition notably differ from the forecasted approximations (St. Laurent & Turk, 2013).

Ho¹: There is no rank order analysis for risk identification processes among selected public health workers in Lagos State owned healthcare facilities

Table 5: Results of Friedman's Rank Test on Risk Identification Processes among Selected Public Health Workers in Lagos State Owned Healthcare Facilities

S/N	Survey Items	Mean Rank	Rank
1.	Group approach	4.67	1
2.	Experts' opinions	3.86	4
3.	Health risk survey	3.53	7
4.	Health cause & effect	4.24	2
5.	Health documentation review	4.19	3
6.	Health risk information	3.69	6
7.	Health risk checklists	3.83	5

Source: Researchers' Computations, (2024)

Table 6: Chi-Square Results from the Friedman's Test

N	179
Chi-Square	75.033
Df	6
Asymp.sig.	.000

a. Friedman Test

The outcome of analysis from the above mark the existence of a statistically significant variance in risk identification processes [group approach, experts' opinions, health risk survey, health cause & effect, health documentation review, health risk information and health risk checklists; $X^2(6, n=179) = 75.033, p < 0.05$]. Importantly, careful examination of the mean estimations indicated a slopy layer in risk identification processes adopted among selected public health workers from group approach (4.67) to health cause & effect (4.24), to health documentation review (4.19), to experts' opinions (3.86), to health risk checklists (3.83), to health risk information (3.69), to health risk survey (3.53). The significance of these criteria making up the risk identification processes among selected public health workers were plainly ranked to give grounds for the above clarifications.

Ho²: There is no rank order analysis for health safety culture among selected public health workers in Lagos State owned healthcare facilities

Table 7: Results of Friedman's Rank Test on Health Safety Culture among Selected Public Health Workers in Lagos State Owned Healthcare Facilities

S/N	Survey Items	Mean Rank	Rank
1.	Safety Commitment	4.47	4
2.	Safety Participation	4.45	5
3.	Safety Communication	3.99	8
4.	Safety Training	4.84	2
5.	Safety Competence	4.29	7
6.	Safety Priority	4.39	6
7.	Safety Control	4.50	3
8.	Safety Procedures	4.91	1

Source: Researchers' Computations, (2024)

Table 8 Chi-Square Results from the Friedman's Test

N	179
Chi-Square	46.180
Df	7
Asymp.sig.	.000

a. Friedman Test

The outcome of analysis from the above mark the existence of a statistically significant variance in health safety culture [safety commitment, safety participation, safety communication, safety training, safety competence, safety priority, safety control, and safety procedures; $X^2(7, n=179) = 46.180, p < 0.05$]. Importantly, careful examination of the mean estimations indicated a slopy layer in health safety culture adopted among selected motorists from safety procedures (4.91) to safety training (4.82), to safety control (4.50), to safety commitment (4.47), to safety participation (4.45), safety priority (4.39), safety competence (4.29), to safety communication (3.99). The significance of these criteria making up the health safety culture among selected public health workers were plainly ranked to give grounds for the above clarifications.

H₀³: Risk identification processes have no significant effect on health safety culture among public health workers in Lagos State owned healthcare facilities.

Table 9: Simple Regression Results for Risk Identification Processes vs Health Safety Culture

Table 9.		Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.055 ^a	.033	-.003	3.498	.003	.537	1	177	.465
a. Predictors: (Constant), Risk Identification Process									
b. Dependent Variable: Health Safety Culture									
ANOVA ^a									
Model		Sum of Squares		Df	Mean Square	F	Sig.		
1	Regression	6.571		1	6.571	.537	.465 ^b		
	Residual	2166.155		177	12.238				
	Total	2172.726		178					
a. Dependent Variable: Health Safety Culture									
c. Predictors: (Constant), Risk Identification Process									
Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		
		B	Std. Error				Beta	Lower Bound	Upper Bound
1	(Constant)	35.342	4.622		7.646	.000	26.221	44.464	
	Risk Identification Process	-.113	.155	-.055	-.733	.465	-.418	.192	
a. Dependent Variable: Health Safety Culture									
Source: Researchers' Computations, (2024)									

From the Table 9 results of the regression analysis presented above, it is clear that there is positive relationship between risk identification processes and health safety culture. The model also shows the variations experienced by the dependent variable that could be explained by the independent variable (R square) which shows that risk identification processes are responsible for about 3.3 percent of variance in health safety culture. This means that 96.7 percent of the health safety culture enjoyed among selected public health workers in Lagos State owned healthcare facilities comes from other factors other than the predictor used in this model (*risk identification processes*). The generalisation of the results (Adjusted R square) indicates that true -0.3 percent of the variation in health safety culture is explained by risk identification processes (*group approach, experts' opinions, health risk survey, health cause & effect, health documentation review, health risk information, and health risk checklists*). This result is almost close to reality as the difference between R Square and Adjusted R Square is not high.

The standard error fit, which is a measure of the precision of the model, shows how wrong the statistical outcomes could be at 3 percent if one uses this model to make real life predictions. The above result is statistically insignificant as seen in the ANOVA table (*p-value = 0.465*) as it is greater than the 0.05 confidence interval used in this study. A value greater than 1 show that F-ratio yield an efficient model but 0.537 F-ratio indicates that this model is not very efficient.

Discussion of Findings

This study approved the nexus established between risk identification techniques and health safety culture among selected public health workers in Lagos State owned healthcare facilities. The outcomes from hypothesis one signifies that 'group approach' was ranked first. This was followed by 'health cause & effect', health documentation review', 'experts' opinions', health risk checklists', 'health risk information', and 'health risk survey'. This outcome is in alignment with earlier studies (such as Adejumo, et al., 2019; Adepoju & Esan, 2023; Simsekler, et al., 2018) who emphasized that probable risk identification processes are critical to enhancing the healthcare safety culture around and within the organizational settings.

The second hypothesis indicated that 'safety procedures' was ranked highest, followed by 'safety training', 'safety control', 'safety commitment', 'safety participation', 'safety priority', safety competence', and 'safety communication'. This outcome is in alignment with earlier studies (such as Arzahan, et al., 2022; Lawal et al., 2023; McGowan, et al., 2023) who noted a favourable health safety culture guarantees that all members of the organisation, irrespective of their position, collaborate towards achieving improved safety and health results

The outcomes from hypothesis three showcased that risk identification processes have a positive but very low relationship with health safety culture among public health workers in Lagos State owned healthcare facilities; thereby invalidated the null hypothesis. The study's outcomes supported earlier studies (such as Capochi, et al., 2018; McGowan, et al., 2023) that addressing these risks effectively can enhance operational health efficiency, reduce healthcare disruptions, and facilitate overall sustainability in health safety culture

Conclusion and Recommendations

The study confirmed the nexus between risk identification processes techniques and health safety culture among public health workers in Lagos State owned health facilities. The study recommended that routine risk assessment within healthcare facilities to be able to identify potential hazards. This should be integrated into daily operations with cutting edge guidelines. However, there should be implementation of digital tools for current risk reporting and tracking. The healthcare management should enhance training and awareness programme on health-related activities. The regulator should thus ensure regular review and feedback mechanisms for possible incident reviews and periodic safety audits. Government on their part, should develop policies and procedures, which are standardised across all Lagos State owned healthcare facilities.

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