Cross-Sectional Assessment of the Safety Culture in the Public Health Sector of Akwa Ibom State of Nigeria

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ABSTRACT

Different organizations explore ways to promote safety. A key reflection of the state of safety in an organization is the safety culture. This study was conducted to assess the safety culture in the public health sector of Akwa Ibom State of Nigeria. Using a stratified random sampling technique, the data was gathered using a questionnaire and analyzed using descriptive statistics and correlation. The findings from the study showed that the safety culture in the public health sector in Akwa Ibom State is moderate, with strengths in formal safety policies, rules, teamwork, and reporting mechanisms. However, there are significant weaknesses in training, incident learning, leadership communication, and maintaining a pressure-free work environment. This is indicative of gaps in practical implementation of some of the expectations for a positive safety culture. It also showcases limited demonstration of safety commitment by the leaders in the public health sector. The findings from the study align with common public sector challenges, such as limited budgets, bureaucratic delays, and limited manpower. By prioritizing training, incident analysis, and leadership communication, the organizations in the sector can enhance their safety culture and improve workers and patients' safety. To drive positive safety culture in the public health sector, the researchers recommend enhancement of training programmes, strengthening of incident learning process, improvement in leadership communication, increase in number of workers to reduce job stress, involvement of workforce in safety programmes, sustenance of a culture of continuous improvement, and increased investment in healthcare sector by government and governmental agencies.

Keywords: Safety Culture, Safety Climate, Accident, Public Health, Safety Training, Social identity

INTRODUCTION

Nigeria faces a lot of public health challenges. For instance, over 200,000 people die from food-borne illness annually [1] though prevention of incidents is a key concern of different organizations and sectors [2]. While many organizations utilize different strategies to drive elimination or reduction in incidents, creation of a culture of safety is valued and taken as a paramount way of driving sustained good safety performance [2, 3]. As [4] noted, a resilient safety culture has a strong positive relationship with safety performance. While there is a close relationship between safety culture, safety climate, and safety performance, the exact relationship varies as attitudes towards safety culture and safety climate varies, just as the tools for measuring or evaluating safety performance [2].

According to [5], safety culture is most commonly referred to as "the result of individuals and groups' beliefs, attitudes, competencies, and behaviour patterns. It defines the commitment to and the style and efficiency of an organization's safety and health (S&H) management." Closely related to safety culture is safety climate which

[6] considered as a more superficial perspective. According to [7], it refers to how individuals in an organization or sector view workplace safety rules, procedures, and practices. The difference between safety culture and safety climate, as [6] noted, is that safety culture relates to an organization's set of values while safety climate refers to the effect of environmental and organizational factors on these values. Therefore, safety culture is a fundamental concept in enhancing the safety performance of an organization or sector and aims at creating the environment where workers are aware of hazards and the strategies in place to prevent accidents [8-11].

There are various indicators of an organizational safety culture [4]. Despite the claim by an organization, the

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presence of the indicators are effective means of measuring the safety culture of the organization or sector [4, 12]. The implication is that to assess safety culture, one has to assess the different elements that contribute to building a resilient safety culture.

The indicators vary among researchers. However, many researchers are consistent in the following elements: hazard recognition programme, effective safety response attitude, provision of necessary resources to manage safety concerns, awareness on recognized safety concerns, safety training, the quality of safety communications, the safety climate at the workplace, the perception of safety management values and practices in the organization, the institutional strength of the internal safety services, risk response attitude, and commitment to continuous improvement in safety performance [4, 12]. Achieving these elements requires building effective alignment between employees' and employers' elements of safety [11].

A positive safety culture in an organization or business or social sector requires proper implementation and deployment of the required safety standards [12]. This requires the employers communication of the safety standards and the workers strict compliance with the safety standards, not only to ensure their own safety, but also the safety of others [11, 12]. Safety culture is, therefore, important in creating the atmosphere where safety is valued, potential for errors is removed, and a culture of trust and mutual care is fostered [12]. Such a culture typically drives a climate of shared learning, hazard identification and eliminations, mutual support in problems solving, alignment of work practices with required standards of performance, and the creation of the atmosphere with reduced potentials for mistakes [12].

Many researchers have studied safety cultures especially in high-risk industries to determine how it helps improve organizational safety performance [6]. For instance, [14] discussed a joint industry and United Kingdom's Health and Safety Executive research project on the assessment of safety culture in offshore environments while [15] assessed the perceptions of workers on some elements of safety culture practices on the chemical and radiation hazards at Malaysian radiation facilities. Similar assessments have also been conducted on the aviation sector and the oil and gas sector with outcomes that have triggered actions to address identified improvement opportunities to become more proactive [6]. A substantial amount of the study focused on the relationship between safety culture and climate and their effect on safety performance [6]. Numerous studies, particularly in high-risk sectors, have investigated how safety culture may assist an organization in improving its safety performance [14, 15]. However, unlike other sectors and industries, [6] reported that "the healthcare system is still in the early phases of growth regarding safety culture issues."

In Nigeria, there are limited studies on safety culture. In a study on the food industry, [6] noted, "In Nigeria, food safety culture is a complex subject due to Nigeria's heterogeneous and diverse nature, as demonstrated by its over 250 ethnic groups." Similar conditions are also applicable to public health sector.

Though safety culture is usually a relatively stable social construct that is gradually shaped over time by multilevel influences [16], it is dynamic across different organizations, geographical contexts, industries, and sectors [4]. According to [4], the safety culture in Nigeria is generally reactive. However, this may not be reflective of the different sectors or geographical areas as safety culture is not expected to be static across different sectors [4]. Considering the importance of the healthcare sector to the public and the role of good safety culture in enhancing safety [16], this study, therefore, was conducted on the public health sector of Akwa Ibom State, Nigeria, to enhance understanding of the safety culture in the sector, and provide information relevant to take necessary action to sustain or improve safety culture in the public health sector for public good.

Public Health Concerns in Akwa Ibom State

Akwa Ibom State is one of the 36 states in Nigeria with Uyo as the state capital. According to [17], "The urbanization process in Uyo has been quite informal. Having metamorphosed from the status of an administrative centre in 1905 to that of a 'third class township' and a district headquarter in 1919, Uyo attained the status of a provincial headquarters in 1959, a divisional headquarter in 1970 and finally a capital city in 1987. At its different stages of development, the city has been grappling with the issue of a master plan befitting her status." With the state capital having challenges with a master plan, it should not be expected that the rest of Akwa Ibom State, including public health sector, will not struggle with public infrastructure issues.

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In a study on the waste management sector in Akwa Ibom State, the researchers identified public health and occupational hazards affecting waste management officials "include risk of musculoskeletal disorders due to lifting and carrying of heavy loads and pushing pushcart, contaminated materials, and working in contaminated environment, contact with hazardous substances in the course of working with mixed waste, mechanical hazards due to unintentional contact with sharp items and working near moving parts of machinery/vehicles and psychological burden in working with waste and disrespect by members of the society. Common health risks associated with waste management in the study area included; cholera, diarrhea, nasal irritation, eye irritation, high temperatures in working environments causing dizziness, insect bites and musculoskeletal injuries. Mechanical hazards included cuts on hand, finger, thumb, or foot from broken glass or sharp objects and eye injury. Severe health complaints among the waste management officials in the study area include chronic back pain, chronic neck pain, chronic shoulder pain, eye injury, excessive heat and skin diseases" [18].

The public health sector is key in maintaining the safety and well-being of personnel. According to a study by Couth and Trois as cited by [18], the protection of human health and the environment is one of the major challenges facing developing countries of the world. Many activities of man are sources of public health threats in Akwa Ibom State. In a study, [19] identified environmental pollution as a major problem in Akwa Ibom State and other urban areas in Nigeria. This is a concern to the public health sector.

Limited regulatory oversight on public infrastructures and utilities and enforcement by governmental agencies have also created avenues for public health threats. For instance, in a study on borehole water, a major source of drinking water, within Uyo metropolis, the researchers observed heavy metal concentrations in selected boreholes water and emphasized the potential health risks associated with these heavy metals, particularly as some were found to exceed the acceptable drinking water limits set by the World Health Organization [20]. Another researcher identified radiological emission risks within Akwa Ibom State [21]. In a study on the outdoor air quality in Uyo metropolis, [22] reported that the concentration for CO and SO_2 were above the 2007 US National Ambient Air Quality Standards (NAAQS) for CO and SO_2. These are public health threats and raises the need for a functional public health sector with effective actions by regulatory agencies.

There are also aquatic related public health threats in Akwa Ibom State. In a study, [23] identified health risk due to heavy metals accumulations in the tissues of *Callinectus latimanus* fish from Iko River, Eastern Obolo, one of the local government areas of Akwa Ibom State. In another study centred on human health risk assessment of polycyclic aromatic hydrocarbons in water samples around Eket metropolis, a major city in Akwa Ibom State, [25] found that people were exposed to carcinogenic risks as the dermal exposure calculated for both adults and children were higher than the United States Environmental Protection Agency's acceptable cancer risk and much higher for children, suggesting that children could be prone to cancer and needed to be monitored. Such monitoring required a reliable and functional public health sector. Similarly, in a study involving environmental monitoring and human health implications of potentially toxic elements in river water in Akwa Ibom State, a major source of drinking water particularly for those in the riverine areas of the state, [26] identified that the spatial mean concentrations of some potentially toxic elements (Mn, Cr, Ni, Cd, Fe and Pb) exceeded the permissible limits due to anthropogenic activities and seasonal influences. The researchers noted that the values for heavy metal pollution index also exceeded the threshold while comprehensive pollution index indicated moderate to heavy pollution [26]. The researchers also identified the hazard quotient values for Fe and Cr in children and adults, and hazard index values were higher than the threshold value [26]. Additionally, the daily chronic intake values for Fe and Cr were mostly higher than the oral reference dose of contaminant [26]. These findings showed that the river is not suitable for domestic use via ingestion. A similar study on borehole water in Okobo Local Government Area of Akwa Ibom State also indicated the water was unfit for drinking [27]. Since river water and borehole water are the major sources of drinking water in Akwa Ibom State [27, 28] and many other studies [28, 29] show the sources of drinking water available are of poor quality, there is the need for effective public health sector to handle water-borne health related issues and public health campaigns.

In terms of diseases requiring public health care attention, Akwa Ibom State stands out. For instance, [30] noted that Akwa Ibom State topped the human immune virus (HIV) prevalence rate chart with about 5.6% of its residents living with the virus, and was one of the six states in Nigeria that accounted for 41% of people living with HIV in Nigeria. HIV, therefore, is still a major contributor to the burden of disease in Akwa Ibom State and is particularly devastating because it affects the population in their most productive years [30].

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A study on the distribution of healthcare facilities in Akwa Ibom State, showed the lopsided distribution pattern of healthcare facilities and thus a threat to good access to high quality healthcare services [31]. In a study on public financial management and rural development in Akwa Ibom State, low investment in the public health sector was reported [32].This is indicative of the challenge of public healthcare delivery. Where there were healthcare facilities, poor management of healthcare wastes, another public health threat, was observed [33].

Some activities of nature have also contributed to the public health threat in Akwa Ibom State. For instance, [34] identified flooding as a public health challenge in Uyo, the Akwa Ibom State capital. The situation, as the researcher noted, is made worse by the indiscriminate dumping of refuse and poor drainage system in the city.

Past studies [35] indicated that public health practitioners, over the years, have struggled to leave a legacy of quality as a strategy for service efficiency, effectiveness and efficacy. Considering the high degree of public health threats in Akwa Ibom State, the need for such a legacy cannot be over-emphasized. Recognizing the impact of culture as an instrument for driving behavioural changes and indicating the state of an organization, understanding the safety culture within the public health sector can be a good avenue to know and communicate measures that should be put in place to sustain existing good practices and improve on negative practice for public good, hence this study.

THEORETICAL/CONCEPTUAL FRAMEWORK

The theoretical/conceptual underpinning of this study is based on the social identity theory. The theory was propounded by Henri Tajfel and John Turner in 1979 and provides a framework for understanding how individuals form and maintain their social identities [36, 37]. According to [37], "The social identity approach proposes that belonging to social groups provides individuals with a definition of the group (i.e., a social identity), and a description and prescription of what is involved in being a group member (i.e., the group's norms)." Individuals have a need to form positive identities for themselves, and so form and maintain these identities through social comparison with others [36]. This means that when individuals perceive they belong to a group, they reduce uncertainty around how to feel and act by iteratively developing and refining assumptions [36, 38]. The implication is that by so doing, the individuals in the group members construct subconscious "prototypes" of the typical member, and try to conform to the prototype of the group they belong [37-39].

Based on this social identity theory, it is expected that where there is robust safety culture with very visible indicators, members of the group should be steered by the assumptions they deduce about the prototypical member(s) and the expected behaviours the members should exhibit. However, in modeling the prototypical behaviour, group member assumptions can be validated or challenged based on attainment or otherwise of the behavioural outcomes [38]. Therefore, through social identification, members of the group would typically redefine their self-concept and identity to be based less on idiosyncratic qualities and more on ideal group characteristics [40]. This implies that as members of the group recognize their group membership as central to their identity, they would be guided less by their own existing values and norms [39]. This forms the basis of the expectation that if safety culture is working effectively in the public health sector, workers in the sector should share similar experiences and likely hold similar social identities and as noted, create collective perspectives, expectations, thoughts, feelings, and norms [41].

Study Design and Instrument

Study Design: This study utilized a cross-section design. According to [42], cross-section designs are used to examine and compare single variables across multiple subgroups that are similar in other characteristics. Since this study aimed to test the different aspects of safety culture among various organizations in the same sector, the cross section design was considered appropriate. Similar to the observation of [42, 43], the design enabled collection of data on different elements of safety culture at one point in time reducing any long wait period or lag in data collection efforts, thus enhancing cost-effectiveness and brevity in the data collection process compared to other research designs .Though the cross-section design focuses on collection of data within a particular time, it is not expected to affect the validity of the research conclusion since organizational culture, as previously noted, is typically a relatively stable social construct, gradually shaped over time by multilevel influences [16, 39]. The implication is that safety culture is not expected to change drastically within weeks or months making cross-section design suitable.

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Study Population: Population is the set of individuals of interest to the researcher [44, 45]. The study population refers to the group of individuals to which the researcher can legitimately apply the research conclusions [44]. The composition of the study population affects the generalization of the study conclusions to the target population [44]. The study population for this research was the workers in the public health sector in Akwa Ibom State of Nigeria.

Selection Criteria: Sample refers to a set of individuals selected to represent the study population [44]. The sample can be selected from an accessible population which is a portion of the study population [44, 45]. The locations and organizations selected for the study were the public health institutions in two (Uyo and Eket senatorial districts) out of the three senatorial districts in Akwa Ibom State. With no significant cultural, social or political variations among the three senatorial districts in Akwa Ibom State, it was considered that collecting data from two out of the three senatorial districts was representative. Workers on duty were the accessible population. Thirty four (34) workers were sampled for the study.

Sampling Technique: The sample composition impacts the generalizability of the results to the study population [34]. To achieve rich data for the study, a stratified random sampling technique was adopted to select respondents to increase sample representativeness. Though random sampling was used to select the respondents for the study, the sampling was done among the different sets of workers in the sector to ensure the workers selected for the study were representative of the different cadres of workers in the public health sector. The outcome of the sampling was as follows: office worker (administrative staff, clerks, etc.) - 12 (35%); technical workers (nurses and laboratory technicians) - 10 (29%); organizational leaders (departmental heads, supervisors, directors, and managers) - 8 (24%); and others (e.g., public health officer, pharmacists) - 4 (12%). The sample size of 34 was considered sufficient to test the safety culture in the sector since culture is a relatively stable social construct [16, 39] and is not expected to vary among individuals in the same sector.

Research Instrument: Data collection was done using questionnaire. The questions were phrased to enhance the respondents' understanding of the objective of each question. The questionnaire was designed to obtain objective perspective of the respondents on each of the elements that is reflective of safety culture using a five-point Likert-type scale (Strongly disagree = 0; Disagree = 1; Neutral = 2; Agree = 3; Strongly Agree = 4). The number of questions was limited to 11. The questions were worded such that "Strongly disagree" indicated negative relationship between applicable variable whereas "Strongly agree" indicated a positive relationship. The 'Neutral' option was given for those without sufficient information to justify an opinion, and were indifferent to the subject, or thought the positive and negative points were about equal. The questionnaire design limited respondents to just the research subject and comprised concise closed-ended questions for easy statistical analysis. According to [6], there is no final consensus in the literature on how to effectively measure safety performance, a concept related to safety culture. Thus, the selection of questions for the questionnaire was based on the elements that many researchers have identified as indicators of safety culture.

Procedure: Participation in the study was voluntary. Ethical consideration for the study included well-informed consent and data confidentiality. Each respondents consented to participate in the study before being issued the questionnaire.

Data Analysis: Descriptive statistics and correlation were identified as suitable for this study and were used to analyze the data obtained for the study. These methods consist of graphical and numerical techniques for summarizing data for easy understanding.

Ethical Approval: The rights of the questionnaire respondents to withdraw from the study at any time, without the need to provide any justification, was communicated. No form of inducement or incentive was offered to the study participants. The questionnaire did not contain the names of the respondents or their organizations as part of the effort to maintain the confidentiality of the research participants.

RESULTS

Figure 1 shows a summary of the job categories/levels of the questionnaire respondents. The data for others included personnel such as public health officers and pharmacists.

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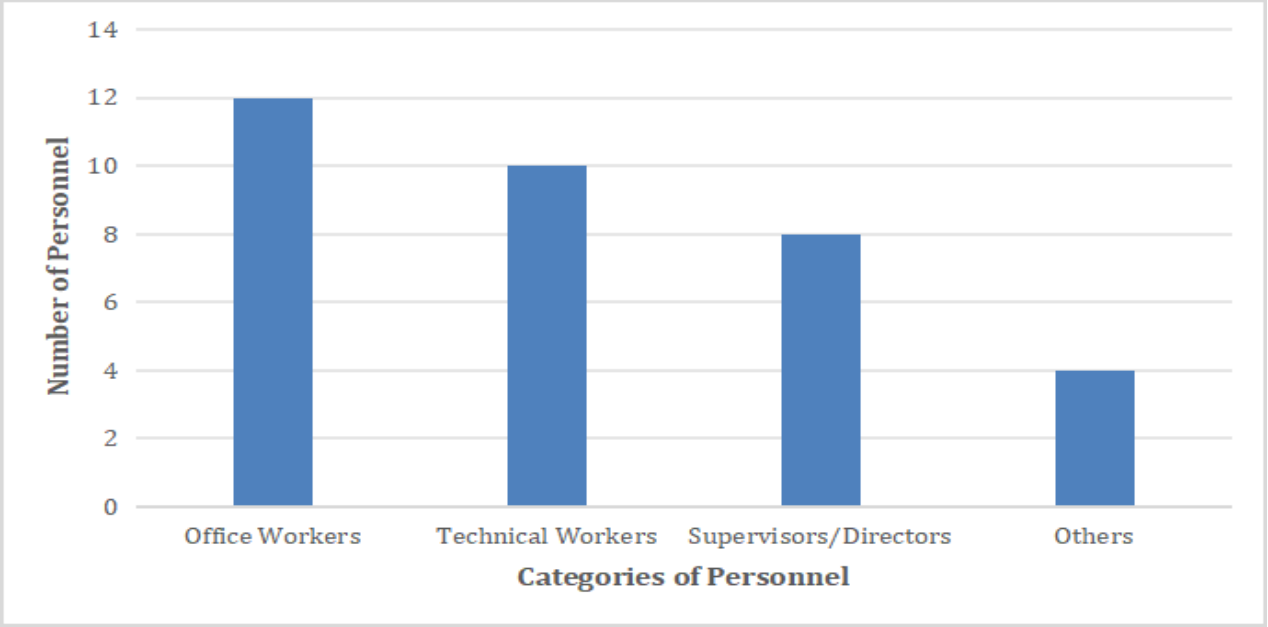

Figure 1: Summary of the categories of public health personnel that participated in the assessment

Table 1 shows a summary of the number of responses to each of the questions on the safety culture assessment questionnaire.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1. My organization has a safety policy	0	2	4	18	10
2. My supervisor, manager or director demonstrates commitment to safety	2	4	8	14	6
3. We work as a team to ensure safety is maintained in my organization	0	4	6	16	8
4. The workforce are directly involved in maintaining safety	2	4	10	12	6
5. There are safety rules and procedures in my organization	0	0	4	16	14
6. My organization is committed to personnel training to enhance safety compliance	4	8	10	8	4
7. In my organization, we have a culture of sharing and learning from incidents	6	8	10	8	2
8. My organizational leaders regularly share safety messages and communications	2	6	10	12	4
9. My organization encourages reporting of unsafe conditions, unsafe acts and accidents	0	4	6	16	8
10. In my organization, accidents are promptly investigated to determine root causes to prevent recurrence	2	6	10	12	4
11. At my workplace, we work in a relaxed atmosphere - there is no pressure for production or company business at the expense of safety	6	8	8	8	4

Table 1: Summary of the number of responses to each of the safety culture assessment questionnaire

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Table 2 shows the summary of the percentage of responses to each of the safety culture assessment question.

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
1. My organization has a safety policy	0.0%	5.9%	11.8%	52.9%	29.4%
2. My supervisor, manager or director demonstrates commitment to safety	5.9%	11.8%	23.5%	41.2%	17.6%
3. We work as a team to ensure safety is maintained in my organization	0.0%	11.8%	17.6%	47.1%	23.5%
4. The workforce are directly involved in maintaining safety	5.9%	11.8%	29.4%	35.3%	17.6%
5. There are safety rules and procedures in my organization	0.0%	0.0%	11.8%	47.1%	41.2%
6. My organization is committed to personnel training to enhance safety compliance	11.8%	23.5%	29.4%	23.5%	11.8%
7. In my organization, we have a culture of sharing and learning from incidents	17.6%	23.5%	29.4%	23.5%	5.9%
8. My organizational leaders regularly share safety messages and communications	5.9%	17.6%	29.4%	35.3%	11.8%
9. My organization encourages reporting of unsafe conditions, unsafe acts and accidents	0.0%	11.8%	17.6%	47.1%	23.5%
10. In my organization, accidents are promptly investigated to determine root causes to prevent recurrence	5.9%	17.6%	29.4%	35.3%	11.8%
11. At my workplace, we work in a relaxed atmosphere - there is no pressure for production or company business at the expense of safety	17.6%	23.5%	23.5%	23.5%	11.8%

Table 2: Summary of the percentage of responses to each of the safety culture assessment questionnaire

DISCUSSION OF FINDINGS

The results of the study indicated that the safety culture in the public health sector of Akwa Ibom State has not matured to the level of maintaining positive score on all the elements for measuring safety culture. While the sector showed positive performance in some areas, it was moderate in others and negative in some.

Indicators of Positive Safety Culture: The study showed that most organizations sampled in the public health sector of Akwa Ibom State have safety policies, safety rules and procedures to govern their activities. This was indicated through 82.3% of the respondents agreeing or strongly agreeing that their organizations have safety policy, and 88.3% of the respondents confirming the presence of safety rules and procedures in their organizations. These high percentages indicate a strong formal framework for safety, typical in public health sector organizations due to regulatory requirements.

Other areas of positive safety culture centred on team involvement in maintenance of safety. 70.6% of the respondents either agreed or strongly agreed that they work as a team to ensure safety is maintained in their organizations and that their organizations encourage reporting of unsafe conditions, unsafe acts and accidents. This suggests a collaborative culture and openness to address safety issues. However, the high percentage (29.4%) of research participants that were indifferent to the question on workforce involvement in maintaining safety is indicative of the need for more awareness on organizations expectations to drive increased involvement of workers in entrenching safety ownership and culture.

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The high level of availability of safety policies and rules reflects regulatory compliance, a cornerstone of public sector health organizations. The positive culture of teamwork and incident reporting are reflective of the collaborative nature of healthcare, where staff rely on each other to manage patients' safety.

Indicators of Moderate Safety Culture: On some of the indicators of safety culture, the feedback from the respondents indicated average performance. For instance, only 58.8% of the research participants agreed or strongly agreed that their supervisors, managers or directors demonstrate commitment to safety. With 23.5% being indifferent and 17.7% either disagreeing or strongly disagreeing, there is indication of variability in supervisory behaviour. Recognizing the importance of leadership in driving desired behaviour, there is the great need for the leaders in the public health sector to demonstrate their commitment to safety directly and indirectly. They need to walk their talk and align their body language with their stand for safety so as not to create the climate that will allow unsafe behaviours to thrive.

Another area of variability is in prompt investigation of accidents to determine root causes to prevent recurrence. Though 47.1% of the respondents either agreed or strongly agreed that accidents are promptly investigated to determine root causes, having 29.4% of the respondents being indifferent shows that the culture of accident investigation does not transcend the entire public health sector and so there is inconsistent commitment to accident investigation. This may not be unrelated to the moderate demonstration of safety commitment by supervisors, managers or directors in the public health sector.

Indicators of Poor Safety Culture: On some of the indicators of safety culture, the feedbacks show poor compliance. For instance, only 35.3% of the research participants either agreed or strongly agreed that their organization is committed to personnel training to enhance safety compliance. With 35.3% disagreeing or strongly disagreeing and 29.4% being indifferent, this is a critical weakness, as training is essential for safety compliance in healthcare settings. This finding is consistent with the findings of a study on healthcare waste management among health workers in general hospitals in Southern Nigeria [24].

Also, only 29.4% of the research participants agreed or strongly agreed that there is a culture of sharing and learning from incidents, with 41.1% disagreeing or strongly disagreeing and 29.4% being indifferent. This indicates a gap in post-incident analysis and knowledge sharing. This may be connected with the moderate culture of leadership commitment to safety and timely accident investigation.

Another area that is reflective of a poor safety culture in the public health sector is in the area of working in an atmosphere devoid of pressure to pursue work demands at the expense of safety. As can be deducted from Table 2, only 35.3% of the respondents agreed or strongly agreed that there is no pressure to compromise safety while pursuing business objectives. With 41.1% either disagreeing or strongly disagreeing that the work place is devoid of pressure for production over safety and 23.5% being indifferent, the public health sector needs renewed focus to entrench a culture where safety is paramount and prioritized above other organizational objectives, The observation may not be unconnected to the variability observed on the supervisors, directors and managers commitment to safety and the limited resources and dilapidated infrastructure in the public health sector as reported in studies conducted in several local government areas across Akwa Ibom State [32, 33, 46 - 50]. Considering the role of leadership in creating a safe workplace, there is the great need for supervisors, directors and managers in the public health sector to demonstrate visible commitment to safety and personnel well-being above business objectives. The leaders need to also visibly show their commitment to work atmosphere devoid of undue pressure as such may make the workers prone to mistakes or exposed to the adverse consequences of work-related stress [51, 52].

Sharing of safety messages and communications by leaders in the public sector is another area of concern. As depicted in Table 2, only 47.1% agreed or strongly agreed that their leaders regularly share safety messages and communications. 29.4% of the respondents were indifferent while 23.5% either disagreed or strongly disagreed. The lack of sharing of safety messages and communications might have contributed to the poor culture of safety training, sharing of lessons learned, and perception of the pressure to pursue business goals at the expense of safety.

The low commitment to training likely stems from resource constraints, a common issue in public sector

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healthcare [50]. The lack of incident learning suggests inadequate systems for documenting and sharing lessons, possibly due to bureaucratic inefficiencies. The pressure to compromise safety may be the consequence of high patient loads and staffing shortages prevalent in public health sector. This aligns with the observation of lopsided allocation of healthcare facilities [33].

CONCLUSION

The safety culture in the public health sector in Akwa Ibom State is moderate, with strengths in formal safety policies, rules, teamwork, and reporting mechanisms. However, there are significant weaknesses in training, incident learning, leadership communication, and maintaining a pressure-free environment. This is indicative of gaps in practical implementation of some of the expectation for an effective safety culture. It also showcases limited demonstration of safety commitment by the leaders in the public health sector. These findings align with common public sector challenges, such as limited budgets, bureaucratic delays, and overburdened staff in healthcare settings. By prioritizing training, incident analysis, and leadership communication, the organizations in the sector can enhance its safety culture and improve staff and patients safety.

RECOMMENDATIONS

The following are recommendations to drive improved safety culture in the public health sector in Akwa Ibom State.

Enhancement of Training Programmes: There is the need to develop regular, mandatory safety training for all staff. The leaders in the sector can partner with external organizations and non-governmental organizations to mitigate funding challenges. An alternative programme such as implementation of train-the-trainer programmes can also be adopted to build internal capacity, especially for technical and office workers.

Strengthening of Incident Learning Process: Leaders in the public health sector should establish a formal incident reporting and analysis system, with clear protocols for root cause analysis and dissemination of findings to drive continuous learning to prevent recurrence. Additionally, regular safety briefings can be adopted to share lessons learned and other safety communications to foster a culture of transparency and continuous improvement.

Improvement in Leadership Communication: In recognizing the role of effective leadership in driving the desired organizational culture, there is the need to train supervisors, directors, and managers to prioritize safety messaging, using channels like staff meetings, emails, and posters as well as social media handles. The leaders should be encouraged to model the desired safety behaviours, such as participating in safety drills, actively participating in safety communications, and taking prompt and visible actions to address reported concerns.

Reduction of Operational Pressure: The leaders in the public health sector should address staffing shortages by advocating for more hires or redistributing workloads to reduce work-related stress among the workers to prevent burnout. The leader should train the workers on time management to help them balance clinical and administrative duties without compromising safety.

Involvement of Workforce in Safety Programmes: The leaders in the public health sector should explore avenues to involve office workers in safety initiatives (e.g., administrative support for safety audits) to increase their sense of ownership. They should create cross-functional safety committees with representatives from all job levels to enhance cross-fertilization of ideas and involvement of diverse perspectives in how to involve and sustain positive safety culture in the public health sector. Organizational leaders should also explore renewed means to foster collaboration through team-building activities and inter-departmental safety drills.

Sustenance of Culture of Continuous Improvement: Leaders in the public health sector should periodically review and update safety policies to align with new learnings, latest legislation and regulations, and international standards (e.g., World Health Organization's guidelines for healthcare safety). The leaders should reinforce safety reporting culture through reward and recognition programmes for staff who report unsafe acts and conditions, take active part in safety improvements, champions safety awareness and training, and mentor

subordinates in safety initiatives.

Investment in Healthcare Sector: Government should invest more in the public health sector through adequate funding, provision of adequate facilities and equipment to address public need, adequate staffing of public health sector and provision of modern training to public health workers to enhance their competency and operational efficiency.

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