

REVIEW OF STRATEGIES FOR IMPROVING SAFETY AND HEALTH IN NIGERIAN HUMAN WORK ORGANIZATIONS

Okere Loveday, Ph.D
Professor of Management (HRM)
Faculty of Administration and Management
Department of Business Administration
Ignatius Ajuru University of Education, Rumuolumeni
Port Harcourt, Rivers State, Nigeria.
E-mail: loveday.okere@iaue.edu.ng

And

Vera Iyere Brown
Faculty of Administration and Management
Department of Business Administration
Ignatius Ajuru University of Education, Rumuolumeni
Port Harcourt, Rivers State, Nigeria.
E-mail: veraiyerereginald@gmail.com

Abstract

Once the sources of harmful conditions on the job in Nigerian organizations are identified, strategies for improving occupational safety and health ratings can be developed. In line with this, this piece of research examined the necessary strategies to improve safety and health in Nigerian human work organizations. The study concluded that common to improve the ratings for both accidents and diseases in the physical work environment is the use of records. Also, many techniques can be used to improve the socio-psychological work environment which include career development, job redesign, quality circles, and organizational restyling. The study also recommended that Nigerian organizations should add stress discussion in the supervisory training programmes.

Key-Words: Strategies, Organization, Safety, Health, Management, Employees.

Introduction

Health and safety policies and programmes says Armstrong (2009) are concerned with protecting employees, and other people affected by what the company produces and does. Thus, the hazards arising from their employment or their links with the organization. Safety programmes deal with the prevention of accidents and with minimizing the resulting loss and damage to people and property. They relate more to systems of work than the working environment, but both health and safety programmes are concerned with protection against hazards, and their aims and methods are clearly interlinked. In the words of Okere (2019) occupational health programmes deal with the prevention of ill-health arising from working conditions. They consist of two elements: (1) occupational medicine, which is a specialized branch of preventive medicine concerned with the diagnosis and prevention of health hazards at work and dealing with any ill-health or stress which has occurred in spite of preventive actions, and (2) occupational hygiene, which is the province of the chemist and the engineer or ergonomist engage in the measurement and control of environmental hazards. The achievement of a health and safe place of work and the elimination to the extent possible of hazards to health and safety is the responsibility of everyone employed in an organization, as well as those working there under contract (Armstrong, 2009). But the onus is on management to achieve and indeed go beyond the high standard in health and safety matters required by the legislation. Thus, the achievement of the highest standards of health and safety in

the Nigerian workplace is the moral as well as the legal responsibility of employers. To evaluate the effectiveness of the strategies, ratings before they are implemented must be compared to those after they have been in effect. Because occupational safety and health ratings are so critical, and because they are required by Occupational Safety and Health Act (OSHA). A summary of strategies to remove the major hazards to safety and health, and improve those ratings is depicted in Exhibit 1.

Exhibit 1. Summary of Strategies for Improving Occupational Safety and Health

Physical Work Environment

Occupational accidents	Redesigning the work environment Setting goals and objectives Establishing safety committees
Occupational diseases	Measuring the work environment Setting goals and objectives

Socio-psychological Work Environment

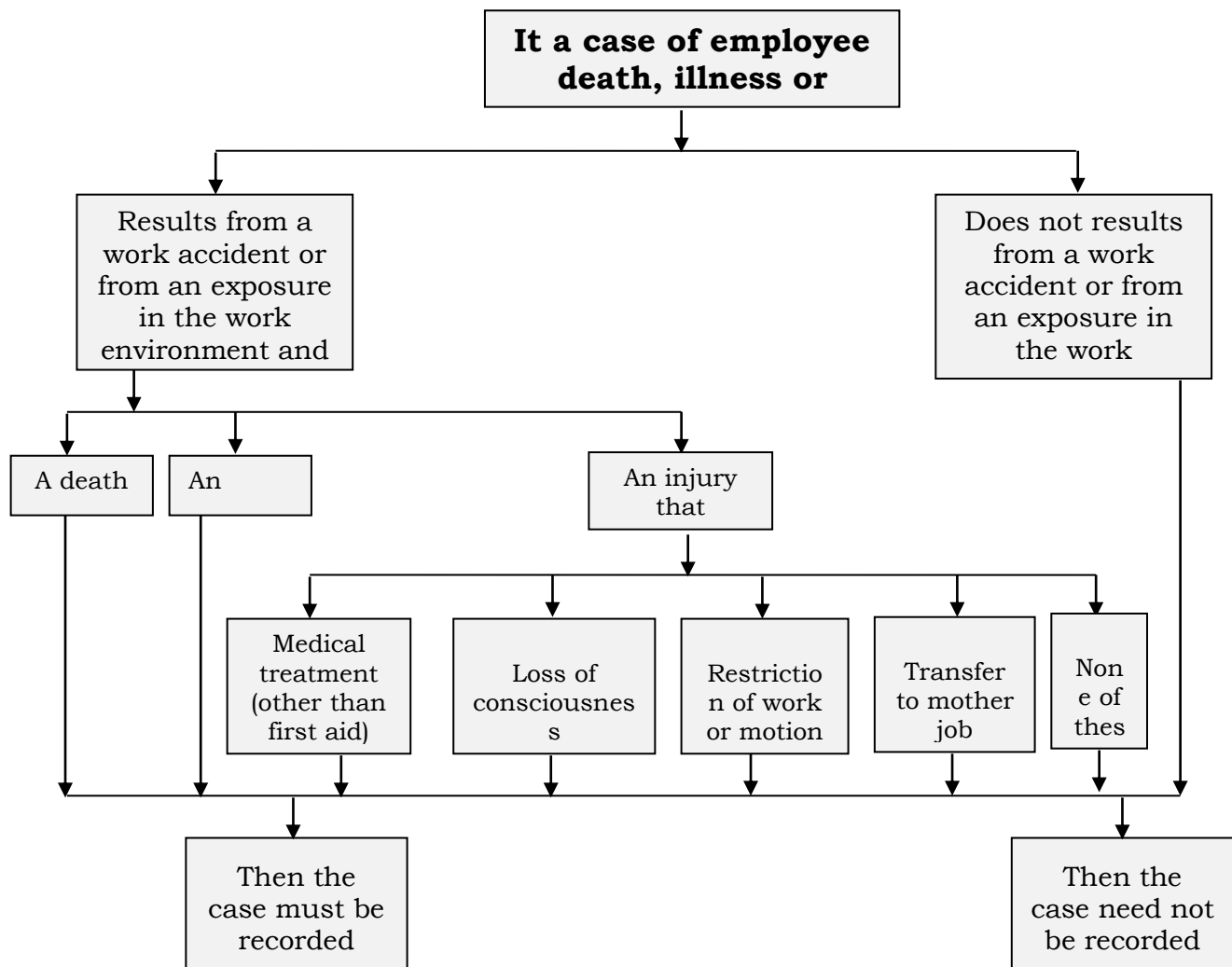
Quality of work life	Redesigning jobs Increasing participation in decision making
Organizational stress	Establishing organizational stress programs Establishing individual stress strategies

Strategies to be Used for Improving Occupational Safety and Health in the Physical Work Environment in Nigerian Organizations

Common to improving the ratings for both accidents and diseases in the physical Nigerian work environment is the use of records. These records help to assess where the organization is in terms of current incidences of accidents and diseases. They form a base line against which to compare and evaluate other specific strategies for workplace improvement (Okere, 2019). Because the process of gathering such data creates an awareness of the safety and health problems, data gathering is both a strategy for workplace improvements and a process that helps determine the effectiveness of other strategies (Taylor, 1980; Hilaski, 1981).

Safety and Health Rates

Safety and health rates are described in terms of their frequency, severity, and incidence. Organizations in Nigeria are required by Occupational Safety and Health Act (OSHA) to maintain records of the incidence of accidents and disease (illness) for comparison purposes; many organizations also maintain frequency and severity records of accident and illness (Okere, 2019). Exhibit 2 demonstrates Occupational Safety and Health Act (OSHA) guidelines for determining what type of accidents and illnesses that must be recorded.

Exhibit 2. Occupational Safety and Health Act Guidelines for Recording Cases.

Note that these procedures are only designed to measure negative conditions in the physical environment. They can also be adapted for use in the psychological environment. Since personnel is generally responsible for safety and health, it is important for personnel to know how to compute safety and health rates.

Incidence Rate: This is most explicit in combining both illness and injuries, as shown by this formula:

$$\text{Incidence Rate: } \frac{\text{No of recorded injuries and illness} \times 1 \text{ million}}{\text{No of employee exposure hours}}$$

Suppose an organization had 10 recorded injuries and illnesses and 500 employees. To compute the number of employee by 40 hours and by 50 weeks, or $500 \times 40 \times 50 = 1\text{million}$. Thus, of this example the incidence rate would be 10.

Severity Rate: Severity rate reflects the hours actually lost due to injury or illness. It recognizes that not all injuries and illnesses are equal. Four categories of injuries and illnesses have been established: deaths, permanent total disabilities, permanent partial disabilities, and temporary total disabilities. Occupational Safety and Health Act (OSHA) assigned each category a specific

number of hours to be charged against an organization. The severity rate is calculated by this formula:

$$\text{Incidence Rate: } \frac{\text{No of recorded injuries and illness} \times 1 \text{ million}}{\text{No of employee hours worked}}$$

Obviously, an organization with the same number of injuries and illnesses as another but with more deaths would have a higher severity rate. However, because OSHA decided the assignment of hours charged for each type of accident and illness was arbitrary, it dropped the idea of using a severity rate.

Frequency Rate: This is similar to the incidence rate except that it reflects the number of injuries and illnesses per million hours worked rather than per year:

$$\text{Frequency Rate: } \frac{\text{No of disabling injuries} \times 1 \text{ million}}{\text{No of employee hours worked}}$$

Occupational Accidents

Hot and Andrews (1993) observed that the accidents aspect of the physical work environment concerns any immediate physical injury to workers, ranging from minor cuts and sprains to loss of limb or even life. Designing the work environment to make accidents difficult is perhaps the best way to prevent accidents and improve safety. Among traditional safety features found in the physical environment says Sanders (1992) are guards on machines, handrails in stairways, safety goggles and helmets, warning lights, self-correcting mechanisms, and automatic shutoffs. Sanders (1992) further said that the extent to which they actually reduce accidents depends on employee acceptance and use. For example, eye injuries will be reduced by safety goggles only if employees wear the goggles correctly. The effectiveness of any safety regulation depends on how it is implemented and whether compliance creates any conflict. If employees are involved in the decision making to improve safety, they are more likely to accept the change. Another way to alter the work environment and improve safety according to Armstrong (2008) is to make the job itself more comfortable and less fatiguing. This approach, generally referred to as ergonomics, considers changes in the job environment in conjunction with the physical and physiological capabilities and limitations of the employees. As a result, employees are less likely to make mistakes because of fatigue and tiredness. Ergonomics focuses on the physical and physiological, job redesign is primarily a psychological approach. However, not aimed primarily at accident prevention, it attempts to increase employee motivation and reduce boredom. The increased alertness and interest may mean fewer accidents. Accident prevention can also be seen as a function of how well people in an organization communicate and work together. For example, the personnel department says Dubeck and Sussor (1984) must work with supervisors and managers in the recording of accidents. Effective records produced by both groups can highlight the causes of accidents as well as their severity and frequency. This information can then be used in the selection of safety strategies and in the evaluation of their success. Accident rates computed from these records can be compared to the rates in other organizations, again revealing more effective safety approaches Hilaski (1982). Another strategy for accident prevention according to Okere et al (2026) is the use of safety committees. The personnel department can serve as the coordinator of a committee composed of several employee representatives. Where unions exist, the committee should have union representatives as well. Often organizations have several safety committees at the department level for implementation and administration purposes and one larger committee at the organizational level for policy formulation (Theland et al, 1985). Thus, the personnel department can be instrumental in accident prevention by assisting the supervisors in their training efforts and by implementing safety motivation programmes, such as contests and in-house communications. According to Okere (2019) many organizations display signs indicating the

number of days or hours worked without an accident. Many organizations display posters saying "Safety First" In safety contests, prizes or awards are given to individuals or departments with the best safety record. These programmes seem to work best when employees are already safety conscious and when physical conditions of the work environment provide no extreme safety hazards (Okere et al, 2006). Taylor (1980); Glicken (1982) narrated that many organizations have set up management by objectives programmes to deal with occupational health. The basic steps of these programmes include the following:

1. Identifying existing hazards, based upon personnel records.
2. Evaluating the severity and risk of these hazards.
3. Implementing appropriate programmes to control, prevent, or reduce accidents (settling objectives).
4. Establishing a system for objectively assessing improvements and giving positive feedback for correct safety procedures.
5. Monitoring the progress of programmes against stated objectives and making revisions as needed.

Bureau of National Affairs (1986) effort to reduce accidents focused on the use of seat belts by employees on and off the job.

Occupational Diseases

More harmful and costly to organizations and employees than occupational accidents are occupational diseases. Because the causal relationship between the physical environment and occupational diseases is often far more subtle, it is generally more difficult to develop strategies to reduce their incidence. However, Corn (1979); Hoffman and Hobson (1984), suggested the following strategies (1) Record keeping, (2) Setting objectives, (3) Recognition, and (4) Educational programmes. Organizational approaches to health hazards are often determined by OSHA standards and requirements, unless of course, an organization chooses to ignore them (Hot and Andrews, 1993). One OSHA requirement says Okere et al (2026) is that organizations should measure the chemicals in the work environment and keep records on these measurements. The records must include the date, number of samples taken, length of period over which the sampling was done, procedure used, analytical method, the employees' names, Social Security numbers, job classifications, where the employees work in the organization, and the protective equipment used. Often a physician is involved in the process of gathering this information, but the responsibility for having the information lies with the organization. According to Schuler (1982); Schuler (1984), the organization is required to keep this information for as long a period as is associated with the incubation period of the specific disease, which could be forty years of medical surveillance of the environment. If the organization is sold, the new owner must assume responsibility for storing the old records and continuing to gather the required data. If the organization goes out of business, the administrative director of OSHA must be informed of the whereabouts of the organization's records.

Strategies to be used for Improving Occupational Safety and Health in the Socio-psychological Work Environment in Nigerian Organizations.

Many techniques can be used to improve the socio-psychological work environment in Nigerian organizations which include career development, job redesign, quality circles, and organizational restructuring (Okere, 2019; Okere et al, 2026).

Organizational Stress Management Programmes

Specific management programmes can be designed to improve the aspects of an organization causing stress, such as supervisors, work overload, the physical environment, the salary structure, and employee job security (Schuler, 1984). While it is unlikely that any organization would use all

of these programmes, many firms are using at least a few of them. Beer and Bhagat (1984) suggested the following steps to manage and reduce stress:

1. Crisis-counseling training sessions with the industrial relations staff.
2. Increasing the employees' general awareness of stress and what they can do about it.
3. Adding stress discussions to the supervisory training programme.
4. Adding a module on stress to middle-management programmes.
5. Offering offer – hours programmes such as workshops in the use of biofeedback, meditation exercises, and other relaxation techniques.

Individual Stress Management Strategies

Time management can be an effective individual strategy to deal with organizational stress. It is based in large part upon initial identification of an individual's personal goals (Susser, 1985). Other individual strategies that should be part of individual stress management include good diets, regular exercise, monitoring physical health, and building social support groups. Many large companies encourage workers to enroll in programmes of regular exercise and careful monitoring of their fitness and health. Wellness tests include measures of blood pressure, blood cholesterol, high density cholesterol, skin-fold evaluation of diet, life change events, smoking, drinking, and family history of coronary heart disease (Okere et al, 2026). Thus, firms can offer many activities or programmes to improve physical and socio-psychological work conditions. Selecting the most appropriate activity depends upon a thorough diagnosis of existing safety and health hazards. It also depends upon an assessment of past activities and those used by other companies.

Research Method Adopted

The study reviewed past research works in the areas delved into to obtain information. The information gathered was qualitatively analyzed to suit the study.

CONCLUSIONS

The health of workers in Nigerian organizations will become increasingly important in the years ahead. Employers are becoming more aware of the cost of ill health and the benefits of having a healthy workforce. Common to improving the ratings for both accidents and diseases in the physical work environment is the use of records. Also, many techniques can be used to improve the socio-psychological work environment which include career development, job redesign, quality circles, and organizational restyling.

RECOMMENDATIONS

The following points are recommended to improve safety and health in Nigerian organizations.

1. Nigerian organizations should add stress discussion in the supervisory training programmes.
2. To evaluate the effectiveness of the strategies, ratings before they are implemented must be compared to those after they have been in effect.
3. Personnel should know how to compute safety and health rates.
4. Severity rate should reflect the hours actually lost due to injury or illness.
5. Design the work environment to make accidents difficult.
6. Establish a system for objectively assessing improvements and giving positive feedback for correct safety measures.
7. Implement appropriate programmes to control, prevent, or reduce accidents.
8. Organizations should measure the chemicals in the work environment and keep records on the date, number of sample taken, length of period over which the sample was done, procedures used, analytical method, the employees' names, Social Security numbers, job classifications, where the employees work in the organization, and the protective equipment used.

9. Many techniques can be used in Nigerian organizations to improve the socio-psychological work environment such as career development, job redesign, quality circles, and organizational restyling.
10. Specific programmes can be designed in Nigerian work organizations to improve the aspects of organizations causing stress, such as supervisors, work overload, the physical environment, the salary structure, and employee job security.
11. Time management should be encouraged as individual strategy to deal with organizational stress. Also, other individual strategies to manage stress include good diets, regular exercise, monitoring physical health, and building social support groups.
12. To select the most appropriate activity in improving safety and health in Nigerian organizations should depend upon a thorough diagnosis of existing safety and health hazards.

REFERENCES

- Armstrong, M. (2009): Handbook of human resource management practice. London.
- Beer, T. A. and Bhagat, R. S. (1984): Stress and human cognition. New York: Wiley.
- Bureau of National Affairs (1986): Workplace wellness and seat belts. Bulletin to management.
- Corn, M. (1979): An inside view of OSHA compliance. Personnel administrator, 42.
- Dubeck, J. B. and Susser, P. A. (1984): Hazard communications: new disclosure burdens on management. Personnel administrator.
- Glicken, M. D. (1982): Managing a crisis intervention programme. Personnel Journal, 292 – 296.
- Hilaski, H. J. (1982): Understanding statistics on occupational illness. Monthly labour review, 25 – 29.
- Hoffman, J. J. Jr. and Hobson, C. J. (1984): Physical fitness and employee effectiveness. Personnel administrator, 101 – 103.
- Hot A. and Andrews, H. (1993): Principles of health and safety at work. London: IOSH publishing.
- Okere, L. (2019): Human resource management. Port Harcourt, Sambiz publication.
- Okere, L.; Okere C. and Njoku, C. (2026): Discussion on health, safety and welfare: A protective approach for human resources in organizations. Proceedings of first international conference of Department of Business Administration, Ignatius Ajuru University of Education, Port Harcourt.
- Saunders, R. (1992): The safety audit. London Pitman.
- Schuler, R. S. (1982): Occupational health in organizations: Strategies for personnel effectiveness. Personnel administrator, 47 – 56.
- Schuler, R. S. (1984): Occupational health in organizations: A measure of personnel effectiveness. St. Paul: West.

Susser, P. A. (1985): Update on hazard communication. *Personnel administrator*, 57 – 61.

Taylor, H. M. (1980): Occupational health management-by-objectives. *Personnel*, 58 – 64.

Thelan, D. S. Ledgerwood, D. and Walters, C. F. (1985): Health and Safety in the workplace: A new challenge for business schools. *Personnel administrator*, 37 – 46.