



OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT IN THE YEMENI OIL COMPANIES FROM EMPLOYEES' PERSPECTIVE: CHALLENGES AND NEEDS

Ziad Mohammed Ali Habeeb*

Researcher scholar, Dr .BAMU - Aurangabad. *Corresponding Author

Prof. Dr. Sanjay N. Aswale

Research Guide, Vice-Principal & Head, Commerce, Shri Chhatrapati Shivaji College, Omerga.

ABSTRACT The Occupational Health and Safety Department faces multiple challenges that vary from country to country and from one sector to another. This paper aims to identify the challenges facing the Occupational Health and Safety Department and the needs required from the viewpoint of workers in the Occupational Health and Safety Department of Yemeni oil companies. The study used the open questionnaire, consisting of two parts, the first related to the challenges and the other related to the needs. The study concluded that there are challenges facing the Occupational Health and Safety Department in Yemeni oil companies that differ in the degree on their impact on the performance of the Occupational Safety and Health Administration. These challenges are assembled into ten main factors: administrative, financial, technical, legislation and laws, human resources, safety, and occupational health culture, technology, work environment, surrounding environment, and others. The study also have reached a number of needs that contribute to overcome the above challenges.

KEYWORDS : Occupational Health, Safety Management, Challenges, Needs

INTRODUCTION:

The oil industry is witnessing an increasing global growth and a very active trade movement, which has made most countries dependent on it as the main income of the state resources such as the Gulf countries and the oil countries in general. Because of this active movement, the workers are constantly increasing due to relatively high wages and incentives compared to other activities. Oil is one of the most high-risk activities. Due to the high professional mortality rate in the oil and gas extraction industry, there are concerns that rapid growth and new technologies may increase or change the nature of risks to oil and gas industry workers. [Mode and Conway, 2008]. The oil industry is facing many accidents, injuries, and occupational diseases, according to Mears and Yule (2009). The oil and gas industry worldwide is a highly risky industry due to the nature of the industry and its difficult working conditions.

Hence, the companies should study and analyze the reality of occupational health and safety management to identify the challenges and challenges that prevent their development and work the solutions necessary to develop and activate the role of occupational health and safety, so as to ensure the health and safety of workers and achieve well-being.

STATEMENT OF THE PROBLEM:

Oil and non-oil organizations face problems and challenges in the management of occupational health and safety, ranging from complex and uncomplicated problems and challenges, but the challenges and problems facing developing countries are more and more complex than the developed countries. Occupational health and safety are facing a number of challenges and problems. We must study and analyze the challenges facing this important sector and find appropriate solutions for its important role in preserving the assets and lives in this sector.

OBJECTIVES OF THE STUDY:

The objectives of this paper:

- To study the challenges facing the occupational health and safety management of Yemeni oil companies.
- To find out the required needs that contribute to the development of the Occupational Health and Safety Department in Yemeni oil companies.

RESEARCH METHODOLOGY:

This paper depends on the questionnaire as a study tool; which was distributed randomly to employees in the Health and Safety Department of the Yemeni oil companies. The study used open questions that allow the respondent the freedom to present his opinion and experience in the subject. In addition, the paper used the initial secondary sources and collected data through magazines, periodicals, books, the Internet, and other literature related to the study. Secondary sources are the questionnaire.

The questionnaire consists of two questions, the first one is list any

reasons or challenges you think they hinder the implementation of occupational health and safety procedures. In addition, the other is in your view, what are they require needs to implement and develop occupational health and safety. Next, discuss the challenges and needs mentioned by the respondents.

DATA COLLECTION AND ANALYSIS:

The exploratory search method is used in this paper. A simple random sample was used to obtain a representative sample. Five companies were deliberately chosen for this study due to a large number of workers working in these companies and their activity in the current situation with the existence of war. The sample included a group of OSH staff. The distributed questionnaires were of 60 while retrieved questionnaires are 49. The questionnaire consists of two parts, one of which is the challenges facing occupational health and safety management, and the other the most important needs that contribute to the development of occupational health and safety management. While secondary data was collected through journals, periodicals, books, manuals, the Internet, and other literature relevant to the study.

RESULTS AND DISCUSSION:

Section I: Challenges Facing the Occupational Health and Safety Department

Through the responses of the respondents, it's observed that many challenges facing the Occupational Health and Safety Administration in Yemeni oil companies were presented, and Table No. (1) summarizes the main challenges and their Sub challenges as follow:

Table No (1) Occupational Health and Safety Challenges

No	The main challenges	Sub challenges
1	Administrative	High management and managers
		Training
		Administrative Processes
		Evaluation and Follow-Up
		Documentation
		Organizational framework
		Change in the work environment
2	Finance	Participation
		There is no budget allocated
		Austerity in health and safety spending
		Provisions do not meet the requirements
3	Technical	Misuse of financial provisions
		Some Occupational health and safety requirements are not available
		The periodic evaluation of the equipment and machinery
		Weakness and shortness in the maintenance
		Purchase of inferior materials and tools

4	Legislative and Laws	Insufficient existing laws Legislations do not meet international standards Weak implementation of existing laws and regulations
5	Human resource	Experience Efficiency and skill Qualified Brain Drain Indifference and neglect Lack of knowledge and information Weakness in physical and mental abilities Staff habits and traditions
6	Occupational Health and Safety Culture	The absence of a health and safety culture at the country level Low awareness of the importance of health and safety Awareness and education programs are scarce Lack of scientific, informative and guidance materials.
7	Technology	Technological development Electronic devices Electronic systems
8	Work Environment	Workloads Work stress Work nature Infrastructure
9	The Surrounding Environment	The scarcity of media awareness The weak role of ministries concerned The scarcity of occupational health and safety issues by school curricula. Low health and safety culture among society as a whole Lack of interest in the management of occupational health and safety Negative customs and traditions of citizens
10	Others	Employers Medical care Weak influence of unions

Source : field survey

• Administrative challenges

Dominoes Heinrich's theory has been modified by researchers over the years and a greater emphasis is placed on management as an original cause of accidents. Management-based theories also define management's responsibility for causing accidents(Abdelhamid, (2000). Many researchers and those interested in the field of occupational health and safety (OHS) have focused on the pivotal role that managers play in improving the health and safety performance of workers and the work environment because they share the Occupational Health and Safety Department with direction and leadership (Flin et al. 2000; Zohar 2002). In addition, the role of senior management appears at all organizational levels and is a pillar in the development of occupational health and safety in business organizations (Frick 2013; Simola 2005).

1. High Management and Managers

High Management is behind every successful or failed work. The values, principles, and cultures of leaders and managers are reflected smoothly to subordinates. Through this study, it has been found that the administrative challenges to occupational safety and health-related to senior management include the following:

- Lack of interest in the management of occupational health and safety Most of the senior departments in Yemen's oil organizations do not care about occupational health and safety issues. They do not have adequate representation in the organizational structure. There is no specialized staff, and some are represented as management, department, or employee, often ineffective.
- Non-application of occupational health and safety regulations and procedures by managers. In some Yemeni oil organizations, occupational health and safety measures are not implemented by managers and decision-makers because managers do not feel the importance of occupational health and safety, neglect and indifference, and there is no interest in the employees of the organization and maintain their health and safety.

- Direct intervention by the higher authorities prevented the application of occupational health and safety. There is intervention by the higher management of occupational health and safety management, they do not give the administration full powers, and some work is done for reasons of flimsy, as well as interference in the policy of selection, recruitment and employment, and in programs and activities which reduces the efficiency and effectiveness of occupational health and safety management, health and safety departments in ministries and affiliated and non-affiliated organizations.
- Absence of the strategic vision of occupational health and safety management by the Ministry and its affiliated organizations and by the decision-makers, as well as no strategies, policies, plans or programs prepared in advance scientifically, but work at random does not amount to potential occupational risks.

2. Training

Training is one of the most important tools that help organizations and individuals to address the deficiencies in the information and skills necessary to perform the work properly and develop and update the information and skills, but the process may be accompanied by some training mistakes lost by the content, but training in oil companies in terms of occupational health and safety does not do contribute actually to the success and development of occupational health and safety departments due to the marginalization of training in occupational health and safety issues and training those who are not related to occupational health and safety in occupational health and safety issues. Also sometime training is based on personal relationships and the establishment of favoritism.

3. Administrative Processes

Integration, coherence, and coordination between the work of the departments among them are one of the fundamentals of successful work, and the origin of the administrative processes serialization between them and therefore in this study shows that the processes that the oil organizations for hinder the application of which Failure to follow the requirements of health and occupational safety in the administrative processes (recruitment - transport - and others). Moreover when preparing the specifications for the purchase of machinery, equipment, devices, materials, and stationery do not take into account the requirements and requirements of occupational health and safety.

4. Evaluation and Follow-Up

One of the features of effective administrative work is monitoring and evaluation and This process is important and central to development. Evaluation is one that obligates individuals and organizations to implement and corrects the path and failure to implement. The process of evaluation and follow-up is an obstacle to the success of occupational health and safety management in oil organizations because of the lack of field visits for monitoring and inspection by organizations and ministries and poor management performance in addressing deficiencies in occupational health and safety. In addition to a weak response to inspectors and control officials by the organization and its employees. Lack of periodic assessment of occupational health and safety procedures and requirements.

5. Documentation

Most respondents agree that there are separate parts of the regulations and administrative models that differ from one organization to another, but most of the Yemeni oil organizations lack paper or electronic documentation proving occupational health and safety operations. For example, there are no strategic and operational plans for the management of occupational health and safety in organizations, records of accidents, injuries, and occupational diseases, forming of occupational accidents and injuries, administrative forms that reflect applicable laws and regulations, a record of the competencies and skills of workers in the field of occupational health and safety.

6. Organizational Framework

Through the questionnaire, it appeared that the institutional framework in most oil organizations is unclear and serial, and there is an overlap in the tasks, powers, and job sites that cause some kind of difference and conflict between the competent and non-competent authorities, and they interfere in the work of the administration by the supervising authorities.

7. Change in the work environment

According to (Siegrist et al. 2004) recently, organizational and

administrative change and the nature of work have led to new risks to occupational health and safety, such as psychological, social, and mental. The change or the management of the change is considered a source of risk, whether the change is related to individuals, machines, equipment, or mechanisms for carrying out the work unless the change is based on scientific and progressive foundations. Some respondents see that one of the challenges facing the occupational health and safety department is change, transportation, and promotion of employees. Sometimes the management loses an efficient person and provides an inefficient person, as well as a change in the way the work is executed without progressive steps that lead to disasters due to the lack of experience and skill

8. Participation

Of the principles of modern managerial is participation, in recent years researchers and those interested in the administration have focused on participation due to its effective role in performing business because it motivates individuals to implement what they have done or suggested. Some respondents indicate that absenteeism or marginalization of the role of workers in participation and decision-making regarding occupational health and safety negatively affects their psyche and enthusiasm and generates indifference and weak interest.

Finance Challenges

As it is known to all that money is one of the most important engines of the work, when it is provided the requirements of materials, machinery, and personnel and other things required for the success of any work, However in its absence, some challenges the study and found The most important, there is no budget for occupational health and safety in most oil organizations and austerity and fear of spending on occupational health and safety and there are no enough allocations.

Technical Challenges

The materials and tools used in the production processes play an important role in the health and safety of the workers, either to help to maintain them or to be excessive in their harm and with the presence of these substances and machines causing the risk, there are some personal protection tools to protect individuals. But there is some problem the most important are occupational health and safety requirements are not available, such as personal protective equipment and the lack of periodic evaluation of the equipment, machinery, and equipment used in the establishment. In addition, weakness and shortness in the maintenance of machines, equipment, and devices for work. Also, the purchase of inferior materials and tools that do not meet the minimum occupational health and safety requirements.

Legislative and Laws

One of the most prominent problems and challenges facing occupational health and safety in the Republic of Yemen, in general, is the legal problem since the Yemeni legislator did not care about occupational health and safety issues in the laws in force and was limited to few pages in the Yemeni Labor Law issued in 1995 and represents the basics, principles, rights. The occupational health and safety administration primarily focuses on regulations, laws, standards, and guidelines for guiding and improving the performance of the OSH system in organization (Gallagher et al. 2003).

The most important legal problems that emerged through the questionnaire of this study are Lack of existing laws in the field of occupational health and safety, The absence of a specific law or regulation for each activity separately (oil - construction - factories - hospitals ... etc.) and There is no law on compensation for occupational injuries. In addition, there is no published list of occupational diseases and appropriate compensation and the weakness of legislation and laws in occupational health and safety and the weakness of the deterrent character of the law against violators.

Human Resource Challenges

Some studies and theories indicate that the factor is the cause of accidents and injuries and occupational diseases and that the bulk of the challenges come from the factor like. The behavior model casts blame on human beings for occupational accidents and injuries, with human error likely due to different environmental conditions. But humans are blamed only for their insecure behavior (Hughes, 2007). , while other studies say otherwise, this study found some impediments to occupational health and safety in the oil companies and workers as the weakness of the employee's relationship with internal and external bodies concerned with occupational health and safety, the complacency and leniency of the employees of the organization with

occupational health and safety measures, Lack of awareness of employees for the importance of occupational health and safety, Lack of knowledge and weak information with require, elements, means, and procedures of occupational health and safety, Weak physical and mental abilities, Lack of experience among workers in the field of occupational health and safety, customs and traditions of employees and a weak response to inspectors and control officials.

Occupational Health and Safety Culture

Culture plays an important role in shaping the knowledge of individuals, organizations, communities, and countries, and vice versa. The absence or decline of culture on the subject of what causes problems and things that vary between large, medium, and small. The culture of occupational health and safety is one of the most important cultures that must be built within individuals, the absence of a culture of occupational health and safety has an impact on individuals, organizations, communities, and countries either in the form of injuries, accidents, occupational diseases or disasters to the organization or the environment, In this study shows that there is a weak of a culture of occupational health and safety due to low occupational health and safety culture among officials and employees of the facility and lack of awareness of the harmful effects of hazardous substances (chemical, physical, oil, etc.) on the health and safety of workers. In addition to the lack of scientific and informational materials and lack of in-house guidelines.

• Technology Challenges

In recent decades, technology has contributed to the development of business exponentially, so that today it has become an indispensable resource in the business environment, contributing to the level of all sectors and jobs. With this development, it was accompanied by a set of challenges such as complex hardware, different programs, the scarcity of qualified workforce, the skill to deal with it, the quality of education and training, and others. The occupational health and safety sector was affected negatively and positively like any other sector, but the developing country faces more challenges than others in occupational health and safety than others, due to the technology infrastructure in these countries and the quality and strategy of education and training. The Republic of Yemen is among these countries that suffer from challenges in occupational health and safety linked to technology, including the oil sector.

Modern devices, equipment, and laboratories are a major factor to rely on in bringing about a renaissance in the field of occupational health and safety especially in developing countries that lack the basics of the field, but the availability of these devices and programs is very important and the ability of the oil sector to purchase devices or equipment or hire them from intermediary organizations. The biggest challenge is who works on these machines, equipment, and laboratories? And how to maintain it?

• Work Environment

The European Foundation published (2007), work-related stress is one of the most common reasons for absenteeism from workers. The oil industry is characterized by work stress due to the length of the working period, which often reaches 12 hours per day 7 days per week in most organizations, which causes difficult stress on the employee to endure for long periods, causing accidents, occupational injuries or mental or psychology illnesses in the future.

A work environment in which you engage in bad behaviors such as bullying, harassment, and related mental health problems. Most managers work under conflicting job pressures resulting from a persistent sense of urgency, excessive workload, conflicts in the work environment, fragmented work, organizational confusion, and constant pressure to improve performance and rationalize spending and reduce costs (Työterveyslaitos 2013).

The nature of work in the oil field is an ongoing challenge to occupational health and safety due to the nature of the worksites that are often in the desert under a high-temperature bike, and disturbing noise due to machinery, equipment, movement, and transportation. Some oil organizations face problems caused by the infrastructure of the business sites resulting from poor planning or implementation, such as the lack or weakness of central networks, negligence and lack of maintenance...etc.

• The Surrounding Environment

The Surrounding Environment challenges are the challenges that

affect all sectors of the state but vary from sector to sector because of the nature of the activity, but the state is responsible for the development of strategies, policies, and programs, and follow-up implementation and evaluation and the most important challenges to health and occupational safety in the Republic of Yemen, for example, The scarcity of media awareness of the issues of occupational health and safety, both audio and video of the state or the private sector and the weak role of ministries concerned with the application of occupational health and safety requirements. Moreover, the scarcity of occupational health and safety issues by school curricula at different levels of education. Also lack of interest in the role of occupational health and safety departments and departments in different ministries and sectors and low health and safety culture among society as a whole.

Other Related Challenges

Challenges Related to Employers : The interest and care of the employers (owners) in occupational health and safety is reflected in the work and the employees, both negatively or positively. In this study, obstacles related to the owners or their representatives are among the most important as weak awareness by employers of the importance of implementing occupational health and safety regulations and procedures, lack of knowledge of the direct and indirect costs of occupational health and safety, and indifference and indulgence.

Challenges Related to Health Care and its programs vary across countries, societies, and individuals, and is largely affected by social and economic conditions, as well as health policies in countries and the interest of the senior leadership in health care, Yemen is a country with health care in general and this is reflected in all sectors, including the oil sector. There are health insurance policies for individuals working in some organizations, but with low benefits and also do not include old-age and death insurance, among others.

Challenges Related to Unions and Federations Finally, according to the responses of the respondents, trade unions and federations do not play a role in occupational health and safety issues, but rather are limited to the demand for individual financial compensation often.

Section II: Needs of Occupational Health and Safety Department

The study identified the most important challenges facing the occupational health and safety management from perspective of concerned specialist in Yemeni oil companies. The most important challenges were presented from the employees' point of view. The paper has assembled these changes into correlated groups so that sorting would facilitate the process understanding and solution implementing. One of the most important ways to deal with challenges is knowing the causes that cause them and avoiding them, controlling them and identifying the needs that are required to overcome the challenges; so not to cause accidents, injuries, occupational diseases, machine and equipment damaging or environmental pollution. The study reached a set of necessary needs which will help to improve and activate the role of the Occupational Health and Safety Administration can be summarized as follows:

1. The Occupational Health and Safety Administration needs the support and attention of the top management, by establishing an integrated strategy for occupational health and safety and integrating it with the strategy of the company as a whole, and the senior leadership works to supervise the implementation and evaluation to ensure continuous improvement.
2. Provide adequate financial support and adopt a budget for occupational health and safety.
3. Providing technical support from devices, equipment, modern programs, and others that are required by the various work sites, and working to maintain and maintain them.
4. Adopting occupational health and safety legislation and regulations in accordance with recognized international standards, which provide best practices and protect workers, the work environment, and the surrounding environment from occupational accidents, injuries, and diseases.
5. Reconsidering the human resource working in the field of occupational health and safety in the oil companies, and adopting rehabilitation programs that help in improving the efficiency, skill, and experience of the old workers. It also provided the field with a group of workers with excellent qualifications, experiences, and skills that contribute to improving performance and overcoming human resource challenges.
6. Intensify the occupational health and safety education and awareness programs by targeting all employees, starting with the

senior leadership and ending with the auxiliary employment as well as the visitors and the related parties of the companies.

7. Introduce technology to the field of health, safety, and occupations and provide it with modern technological devices and programs, take advantage of technology in companies and work to integrate and link health systems with other systems in companies.
8. Improving the work environment, providing personal protection requirements, infrastructure, and improving a healthy work environment, which contributes to alleviating the workloads and pressures, and removing or alleviating factors that cause increased work environment disturbances.
9. Participation of the surrounding environment (Government & Society) in educational and awareness programs in a manner that contributes to creating public awareness among society as a whole, especially neighboring companies, and targeting them with intensive programs in occupational health and safety.
10. Those in charge of the senior leadership and workers in the field of occupational health and safety should target employers and owners and their equivalents with programs that raise their awareness of the importance of occupational health and safety and social, ethical, and legal responsibility towards workers and society. Providing health care for workers and those affected by the activities of companies, activating the role of trade unions and federations, and targeting senior leaders with awareness programs on occupational health and safety issues and the duty incumbent on them.

CONCLUSIONS:

This paper discussed the occupational health and safety challenges and needs facing the Occupational Safety and Health Administration in Yemeni oil companies. The study revealed a set of challenges, the most important of which are: administrative challenges such as lack of attention of senior management and managers, weakness and quality of training, lack of evaluation and follow-up, lack of documentation, overlap and confusion, organizational framework, change in the work environment, and ascarcity of the participation of the parties concerned. The study also revealed challenges due to financial, technical factors, legislation and laws, human resources, OSH culture, technology, work environment, surrounding environment, others. The paper addressed all the challenges and requirements and has recommended a set of the provision and needs that will contribute to the activation and development of occupational health and safety departments in oil companies of Yemen. it also helps to mitigate factors affecting the health and safety of workers and the work environment. Furthermore, the study recommend:

1. Yemeni oil companies must continuously analyze the challenges facing HSE and to find the necessary solutions.
2. Make the necessary changes in the occupational health and safety sections to ensure the efficiency and effectiveness of management.
3. Providing the required requirements mentioned previously.

REFERENCES:

1. Abdelhamid, T. S., & Everett, J. G. (2000). Identifying root causes of construction accidents. *Journal of construction engineering and management*, 126(1), 52-60.
2. Centers for Disease Control and Prevention. (2008). Fatalities among oil and gas extraction workers—United States, 2003-2006. *MMWR: Morbidity and mortality weekly report*, 57(16), 429-431.
3. EU-OSHA (2007) Expert Forecast on Emerging Psychosocial Risks Related to Occupational Safety and Health. European Risk Observatory Report. European Agency for Safety and Health at Work. Luxembourg: Office for Official Publications of the European Communities.
4. Flin, R., Mearns, K., O'Connor, P., & Bryden, R. (2000). Measuring safety climate: identifying the common features. *Safety science*, 34(1-3), 177-192.
5. Frick, K. (2013). Work environment dialogue in a Swedish municipality—strengths and limits of the Nordic work environment model. *Nordic journal of working life studies*, 3(1), 69.
6. Gallagher, C., Underhill, E., & Rimmer, M. (2003). Occupational safety and health management systems in Australia: barriers to success. *Policy and Practice in Health and Safety*, 1(2), 67-81.
7. Hughes, P. and Ferrett, E., (2007) "Introduction to Health and Safety in Construction", Second Edition. Butterworth-Heinemann, Elsevier.
8. Kauppinen, T., Mattila-Holappa, P., Perkiö-Mäkelä, M., Saalo, A., Toikkanen, J., Tuomivaara, S.,... & Virtanen, S. (2013). Työ ja terveys Suomessa 2012.
9. Mearns, K., & Yule, S. (2009). The role of national culture in determining safety performance: Challenges for the global oil and gas industry. *Safety science*, 47(6), 777-785.
10. Mwombeki, F. K. (2005, May). Occupational health and safety challenges in construction sites in Tanzania. In *The W99 Triennial International Conference, Rethinking and Revitalizing Construction Safety, Health, Environment and Quality* (pp. 778-789).
11. Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., & Peter, R. (2004). The measurement of effort-reward imbalance at work: European comparisons. *Social science & medicine*, 58(8), 1483-1499.
12. Simola, A. J. (2005). Turvallisuuden johtaminen esimiestyönä: Tapaustutkimus pitkäkestoisesta kehittämissankkeesta lapivienmistä teräksen jatkojalosteustaassa.
13. Zohar, D. (2002). Modifying supervisory practices to improve subunit safety: a leadership-based intervention model. *Journal of Applied psychology*, 87(1), 156.