

Research Article

Do Occupational Safety and Health Environment Influence Work-Related Risks in Arab World?

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Abstract: The industrial sector in Arab countries has witnessed a great development over the last few decades. However, the sector experiences high occupational risks that have caused workers a lot of anxiety and suffering. This review of literature focuses on the impact of occupational safety and health measures on risks in the work environment to determine the role of governmental and non-governmental bodies in the application of occupational safety and health measures in the workplaces. It also reviews how risks and accidents can be controlled through adherence to occupational safety and health measures in the work environment. This effort can help to familiarize employees with the policy of application of occupational safety and health procedures in the performance of their work, thus reducing loss of lives and resources and boosting productivity. It was found that the previous studies have varied their objectives and results in terms of safety and occupational health. However, the studies did not provide detailed analyses of the application of occupational safety and health in reducing work-related risks.

Keywords: Occupational safety, work environment, health procedures.

Introduction

Today, the world is witnessing tremendous technological advances in various areas. The most prominent of these advances has been evident in industries at different levels, given the importance of industry in economic development of various societies. The modern technology helps industrial enterprises to meet the needs of individuals and communities. Despite the significant progress made in the field of industry and technology, the work environment is still surrounded by threats to the health and safety of workers. The International Labor Organization's estimates of 2017 showed that there are two million people dying each year due to the nature of their work, and that 160 million people in the world are suffering from work-related illnesses. According to the estimate, 270 million work-related accidents occur every year across the world.

Good occupational safety and health arrangements protect people against risks of accidents and diseases inside and outside the workplace. Therefore, all individuals must be fully aware and convinced of the value of concepts and principles of occupational safety and health in order to avoid accidents at homes, public places, and industrial establishments. Occupational safety and health of employees are amongst the most important issues that must be greatly considered in any establishment (Al-Muganni, 2006). They help to develop the national economy because unsafe working environment leads to many health risks that affect productivity. Healthy employees contribute effectively to improving performance, and unhealthy working conditions may adversely affect workers' health and thus reduce productivity (Al-Rimawi,

2016).

Despite the improvements in technology, risk management will continue to be one of the most important pillars of production. The protection of human resources and the provision of an appropriate working environment contribute greatly to economic growth (Al-Tayeb, 2009). The industrial sector has witnessed a great development over the last few decades. However, the sector experiences high occupational risks that have caused workers a lot of anxiety and suffering. Also the governmental and non-governmental bodies make less effort to take possible measures and precautions to alleviate the suffering of workers and make the workplaces healthy, safe and risk-free (Al-Hamdani, 2009).

This review aims to ascertain whether the application of occupational safety and health measures have an impact on the risks in the work environment, and determine the role played by internal and external bodies in the application of occupational safety and health measures in the work environment. This review also aims to shed light on the risks of accidents and diseases in the work environment and how to control them through adherence to occupational safety and health measures. It is hoped that this paper will contribute to enrich the information in the field of occupational safety and risk management.

Occupational Safety and Health

Occupational Safety and Health is defined as a science that is concerned with maintaining human health and safety by providing a safe working environment free from causes of

accidents, injuries or occupational diseases. It involves a set of procedures, rules and regulations within a legislative framework aimed at protecting people from the risk of injury and providing protective measures against loss or damage of property (Magda, 2015; Al-Rimawi, 2016). Occupational safety and health system is a means of protection against work place related accidents, which may lead to injury or damage of property. Measures are taken to protect the three components of production; labor force, machinery, and work environment (Arabiyat et al., 2013). Alli (2008) defines occupational safety and health as a science that involves identifying and monitoring risks that occur among the workers or even caused by the workers themselves in the work environment. Workplace risks pose a threat to the safety of workers and the environment in general.

The objectives of occupational safety and health include; 1) protection of production components from loss and damage resulting from accidents and risks in the work environment by minimizing the risks; 2) training employees in terms of safety rules and procedures to perform their duties effectively, thereby reducing the risks and raising the morale of employees in the performance of their work to increase productivity; 3) providing measures to reduce the level of accidents and risks, which can result in damage of machinery, equipment and raw materials (Al-Habel & Ayesh, 2012). This information is not limited to the material aspects of the work, but also extends to the feelings of employees (Abbas, 2011).

Occupational safety and health measures are vital, looking at the multiplicity of risks and their diversity as well as the extent of the loss of life and property that may result from accidents in organizations. Occupational safety and health measures are necessary to provide proper work system through provision of an appropriate working environment for workers. Another important issue is to keep records for employees about any injuries, accidents, illnesses or risks that may occur in the work environment so as to reduce the impact of accidents and occupational diseases (Abdel Moneim, et al., 2008).

Influence of Occupational Safety and Health Environment on Work-related Risks

Risk is defined as conditions that occur in the work environment, which can lead to ill-health accidents. Hazards exposure may result in injuries, malfunction of machinery or equipment, destruction or loss of materials. Risks exist in most work environments, and by identifying these risks and taking the necessary precautions, better work environments can be created (Ashtewy, 2003). The wide range of risks and their types are related to all aspects of human activities in contemporary life. The constant search to achieve relative safety is one of the indicators that reflect the advancement and human civilization on a global level (Abaza, 2003).

Several studies have been conducted on the impact of occupational safety on work-related risks in Arab countries, but there is still the need to establish more comprehensive conclusion regarding this phenomenon. For instance, Jerie

(2012) assessed the exposure of workers occupational hazards in the work environment in Mentori University, Algeria. The study concluded that workers need to be guided by an established policy concerning safety occupational health issues. The findings further showed that they need an established policy for the application of occupational safety and health. Ghassan (2017) also evaluated the risks associated with occupational health their association with the socio-demographic characteristics of workers in cement factories in Najaf – Iraq. The study found that the greatest risk was psychosocial risk and the lowest risks reported were safety measures and protective equipment. Also there was no statistically significant correlation between the degree of total risk and the demographic characteristics of the participants. The study recommended educating employees on occupational safety measures.

Al-Habel and Ayesh (2012) also evaluated the effectiveness of occupational safety and Health measures in scientific laboratories of the Palestinian university in the Gaza Strip. The study showed that the commitment of senior management has a moderate effect on the implementation of the safety procedures. It also concluded that the employees did not receive sufficient training on the use of occupational safety and health. Bankole and Ibrahim (2012) determined impact of health education on occupational health. The results showed that there is a significant relationship between occupational safety and health of the workers. The findings also showed that there is a significant difference between the exposure of workers who undergo training on occupational safety and health training in occupational hazards and those who do not undergo any training on this area. The study training in occupational safety and health leads to reduction of risks.

In addition, Kwaider (2009) examined the role of industrial security training in preventing work injuries and occupational diseases in the Cable Industry Corporation in Sikra, Algeria. The study showed that the training in the field of industrial security contributed to the prevention of occupational accidents and occupational diseases. The study also indicated that the development of methods of preventive education in the field of industrial security contributed to the prevention of injuries and accidents in the work environment.

Hadar (2012) examined the role of occupational safety and health standards in improving the performance of workers in small and medium enterprises in Algeria. The study found that occupational safety and health standards play a significant role in improving the performance of workers. Another study conducted by Cudjoe (2011) evaluated occupational safety and health practices on the performance of workers. The study concluded that there is a need to hold periodic meetings of employees to raise awareness. The study identified the attitude of workers and management toward occupational safety and health and the conditions experienced by workers in the workplace. The findings indicated lack of interest of senior management in the implementation of occupational safety and health measures. The study concluded that occupational safety

and health measures, if properly applied, can significantly reduce risks in the workplace.

Said (2015) determined the effectiveness and impact of applying occupational safety and health measures in the performance of employees in Khartoum Teaching Hospital – Sudan. The study found that the commitment of senior management had a high impact on the application of occupational safety and health measures and the provision of safety rules and procedures in the work environment. According to the study, provision of personal protective equipment affects the average performance of workers. Jubara's (2016) study focused on occupational safety and health procedures from the perspective of workers in the electricity sector in Gaza using the global standard of Occupational Health and Safety Assessment Series (OHSAS). The study concluded that there is a need to provide organizations with enough materials to implement occupational health and safety procedures.

Conclusion

This paper collates that valuable information regarding occupational safety and health emerged from the previous studies conducted in Arab countries. It has been established that workers need to be guided by an established policy concerning safety occupational health issues. This indicates the deficiency of established bodies in Arab countries which are responsible for policy making regarding occupational health and safety. It is evident that the commitment of senior management in the organizations has a moderate effect on the implementation of the safety procedures. There is lack of interest of the senior management in the implementation of occupational safety and health measures. The commitment of senior management of organizations can contribute greatly to the application of occupational safety and health measures

Studies established that employees who undergo training on occupational safety and health training are more exposed to safety rules than those who did not undergo such training. Training in occupational safety and health leads to the reduction of risk, prevention of occupational accidents and diseases. Since occupational safety and health standards play a significant role in improving performance, there is a need to raise awareness among the employers, as well as the employees.

In sum, a lot of the studies reviewed revealed the influence of occupational safety and health measures such as the application of occupational safety and health regulations, professional supervision, provision of occupational safety and health tools and equipment, employee training, and senior management commitment to reduction of occupational safety and health risks.

Occupational safety and risk management should be of great concern to all authorities and entities. All governmental and non-governmental establishments should contribute to achieving high level of safety in the industries to boost production. Attention should be paid to the development of

occupational safety and health plans, and the problems faced by workers. Establishment of a specialized department for the management of occupational safety and health within each organization can also help greatly. Future efforts may focus on determining the extent of employees' exposure to occupational injuries and occupational diseases.

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