Sustainability and Economic Resilience in the Context of Global Systemic Transformations

OCCUPATIONAL HEALTH AND SAFETY: AN ESSENTIAL COMPONENT FOR GUARANTEEING QUALITY OF LIFE

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Abstract: Quality of life is a complex concept, which includes physical and mental health, safety, financial stability and work-life balance. An organizational culture oriented towards prevention, respect and care for employees contributes directly to their well-being. Occupational safety and health (OSH) is a fundamental element of employee well-being and an essential factor for the sustainable development of any organization. A safe and healthy working environment contributes not only to protecting the life and health of workers, but also to increasing their productivity and quality of life. Despite legislative and technological advances, many sectors of activity still face challenges related to the effective application of OSH rules. Lack of resources, insufficient information or negligence can have serious consequences, both for the individual and the organization. OSH is not only a legal obligation, but also a moral responsibility of employers and employees. Implementing effective workplace protection measures helps prevent accidents and occupational diseases, thus reducing the economic and social costs associated with them.

Keywords: Occupational safety, occupational health, working conditions, quality of life, occupational health, social responsibility.

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1. Introduction

In a modern and responsible society, occupational safety and health (OSH) no longer represent merely legal obligations or norms imposed by authorities, but rather become fundamental elements for sustainable development, employee well-being, and the increase in quality of life. A safe and healthy work environment is key to maintaining a productive, motivated, and balanced workforce, with a positive impact on both the individual and the community.

Occupational safety and health aim to prevent workplace accidents and occupational diseases through a set of organizational, technical, and educational measures. An employee who works in a safe and risk-free environment is more productive, has higher morale, and is less exposed to stress or long-term health problems.

Furthermore, employers who invest in OSH avoid financial losses caused by accidents, absenteeism, staff turnover, or legal disputes. Thus, protecting the life and integrity of workers becomes a central pillar of social responsibility and economic efficiency.

2. Literature Review

The specialized literature reflects an increasingly complex approach to this issue, combining legal, economic, medical, and sociological perspectives. However, certain gaps are noticeable regarding the holistic integration of OSH into quality of life policies and modern organizational management.

Theoreticians such as Maslow (1943) based their theories on motivation and human needs on the idea of security as a fundamental necessity. In this sense, health and safety in the workplace are a concrete expression of fulfilling this basic level in the hierarchy of

needs. At the same time, the theory of social systems (Luhmann, 1995) [1] suggests that modern organizations must operate within predictable safety parameters to ensure internal stability and employee trust.

Another relevant theoretical framework is that of corporate social responsibility, which considers care for employees as an integral part of organizational sustainability (Carroll, 1991) [2]. From this perspective, OSH is not just a legal obligation but also a strategic investment in human capital.

Numerous studies highlight the correlation between safe working conditions and the level of job satisfaction or employee productivity. For example, the study conducted by Eurofound (2022) [3] shows that workers who benefit from a safe and healthy work environment report a superior general well-being and increased engagement in professional activities.

The dominant methodologies in the specialized literature are quantitative, based on standardized questionnaires [4], statistical and correlational analyses. However, some recent studies propose qualitative or mixed methods approaches to understand workers' perceptions of risks and how OSH influences the work-life balance. A major gap lies in the lack of longitudinal studies that track the impact over time of OSH interventions on the physical and mental well-being of workers. Furthermore, although there is extensive research on the legal framework and good practices in the field of OSH, the literature rarely treats this subject as an integral part of the concept of *quality of life*.

3. Methodology

The present paper aims to highlight the importance of occupational safety and health (OSH) as a fundamental element in ensuring the quality of life of employees. To this end, a mixed methodology was used, combining theoretical analysis with applied research. The research is exploratory-descriptive, with the aim of highlighting the role of occupational safety and health measures in creating a safe, productive, and employee wellbeing-oriented work environment. A review of the specialized literature, the current legislation, and relevant national and European statistics on occupational safety and health was conducted.

4. Results and Discussion

Quality of life is a complex concept that includes physical and mental health, safety, financial stability, and the balance between professional and personal life.

Work inherently implies the consumption of human labor. Under certain conditions, the pace or quality of this consumption can exceed the normal limits of self-generation and psycho-somatic balance, which manifests as accidents or illness.

The purpose of occupational safety and health (OSH) is to minimize the probability of an employee being injured or becoming ill while simultaneously creating comfortable working conditions for maximum productivity. [5]

To achieve its purpose, occupational safety and health relies on the existence and functioning of a well-founded multidisciplinary system of theoretical concepts, legislation, technical, socio-economic, organizational, hygiene, and occupational medicine measures and means.

Occupational safety and health (OSH) as a concept can be defined as a system of socio-economic, organizational, technical, curative, and prophylactic measures and means, which operate on the basis of legislative and normative acts with the aim of

ensuring safety, preserving health, and maintaining the working capacity of the employee during the work process.

The connection between occupational safety and health and quality of life is very close, as a safe and healthy work environment has a direct impact on the physical and mental well-being of employees. This influences not only their performance at work but also their personal life and their general state of well-being. Here are some ways in which these concepts are interconnected:

- A safe workplace, where risks are properly managed, prevents accidents and occupational diseases, contributing to the maintenance of a healthy body. This has a direct effect on the quality of life, as employees do not face health problems that affect their personal and social lives.
- Occupational safety does not only mean preventing physical accidents but also creating a work environment where employees feel protected, respected, and supported. Such an environment reduces levels of stress and anxiety, which are important factors that negatively influence the quality of life.
- When employees feel safe at work, they are more motivated and engaged. A work environment that promotes physical and mental health leads to better performance and job satisfaction, which, in turn, improves their quality of life. Career satisfaction can also positively influence other aspects of life, such as interpersonal relationships and the feeling of personal fulfillment.
- Providing good working conditions, such as adequate breaks, flexible schedules, or access to resources for stress management, can contribute to a better balance between professional and personal life. Employees who have more time and energy for family and personal activities enjoy a higher quality of life.
- A workplace that cares about employee safety, implements health programs (e.g., health education programs for a healthy lifestyle), and minimizes occupational risks contributes to their long-term health. Thus, they will be less exposed to chronic diseases or serious accidents, which will lead to a longer and more active life.
- A workplace that prioritizes the safety and health of employees not only improves performance at work but also contributes to a more balanced and satisfying life.

Maintaining good worker health has a direct and measurable positive impact on the quality of life (Table 1), on productivity, and contributes to improving the sustainability of social security systems. Preventing workplace accidents or serious occupational diseases and promoting health throughout the entire professional life, starting from the very first job, is vital to allow for the longest possible period of activity for employees.

Effective OSH leads to	Which improves the quality of life through
prevention of workplace accidents and occupational diseases.	maintenance of physical and mental health; avoidance of pain, disability, and suffering.
safe and risk-free work environment.	reduction of work-related stress and anxiety; feeling of safety and protection.
workplace health promotion.	improvement of general well-being; adoption of a healthy lifestyle.
ergonomics and adequate working conditions.	prevention of musculoskeletal problems and physical discomfort; increased comfort at the workplace.
work-life balance.	more time and energy for personal and social life; reduction of burnout.
feeling of value and respect.	high morale and job satisfaction; improvement of self-esteem.
job security	financial stability and reduction of uncertainty
access to occupational health services.	early detection of health problems; appropriate medical intervention and support.

Table 1. Direct Link Between OSH and Quality of Life

Source: authored by the author

The safety of the worker during the work process is considered that state of the work system in which the possibility of accidents and occupational diseases is excluded.

Risk factors for accidents and occupational diseases are factors (characteristics, processes, phenomena, behaviors) inherent to the elements of the work system, which can cause, under certain conditions, work accidents or occupational diseases [6]. These factors are found at the level of each element of the work system. The most general classification criterion divides them into **inherent risk factors**:

- 1. the worker;
- 2. the work task;
- 3. the means of production;
- 4. the work environment.

During the period 2016–2020, numerous workplace accidents were recorded in the Republic of Moldova, a significant portion of which had serious consequences, including fatalities (Table 2). The analysis of the causes of these accidents highlights several determining factors, reflecting both working conditions and the level of compliance with occupational safety and health regulations.

OSH aims to protect workers against accidents and occupational diseases by:

- identifying and reducing risks in the workplace,
- promoting a safe and healthy work environment,
- training employees in preventive behavior.

OSH is not limited to legal compliance and represents more than just an administrative task. It is, without a doubt, an essential component of good business management. Experience demonstrates that every euro invested in OSH by an employer will generate a return of over two euros in the future. [8]

Years	2016	2017	2018	2019	2020	2021	2022	2023
Total, persons	371	448	503	493	419	553	518	576
Causes: • dependent on the worker	317	333	356	346	316	453	455	493
• dependent on the means of production	10	27	18	20	31	36	22	19
• dependent on the work task	37	33	79	88	46	35	24	27
• dependent on the work environment	8	55	50	39	26	29	17	37

Table 2. Victims of Workplace Accidents by Cause, Republic of Moldova for the Years 2016-2023

Source: National Bureau of Statistics of the Republic of Moldova. Statistical Form: Workplace Accidents. <u>https://statbank.statistica.md/</u>[7]

Avoiding losses and production interruptions, sick leave, equipment damage, and damage to the company's image, as well as avoiding administrative and legal costs, are just some of the potential benefits that businesses can gain from reducing the incidence of workplace accidents and occupational diseases.

To provide a clear picture of **the costs associated with workplace accidents and sick leave**, we can analyze these aspects from several perspectives: economic, social, and at the company level.

The social costs: according to statistics, it is estimated that over 2.3 million deaths occur annually worldwide due to work-related accidents and occupational injuries, a figure comparable to the number of victims in a war. The International Labour Organization estimates that, annually, over 313 million workers suffer accidents resulting in temporary incapacity for work, and approximately 160 million cases of occupational diseases occur. Approximately 6,400 deaths occur daily as a result of workplace accidents and occupational diseases, and around 860,000 workers are injured at work daily. [9]

A more in-depth examination of **the economic cost** of workplace accidents further highlights the importance of this issue:

According to a report by the International Labour Organization (ILO), work-related accidents and illnesses lead to an annual loss equivalent to 4% of the global Gross Domestic Product (GDP). [10]

In the European Union, according to Eurostat and EU-OSHA:

- It is estimated that workplace accidents and occupational diseases cost the European Union economy over EUR 476 billion annually (approximately 3.3% of the EU's GDP).
- A serious accident can cost the employer between EUR 10,000 and EUR 50,000, depending on the severity.
- Over 3.9 million working days are lost annually due to accidents and occupational diseases. [11]
- An accident resulting in absence >3 days costs an average of EUR 8,900 per employee.
- The average medical leave generates costs between EUR 150 and EUR 300 per day (costs borne by the employer and the state). [12]

At the company level, the costs of workplace accidents can include: Direct Costs:

- Employee medical treatment
- Compensation for temporary or permanent disability
- Fines, legal damages, or penalties (if the accident was the employer's fault) Indirect Costs:
 - Time lost for investigations
 - Recruitment and training costs for a replacement
 - Decreased team productivity
 - Increased insurance premiums
 - Loss of image and low morale.

Other Associated Costs:

- Psychological and moral costs for the employee and family
- Negative image for the employer (damaged reputation)
- Legal costs (if litigation occurs).

In Table 3, we can observe the dynamics of expenses related to workplace accidents in the Republic of Moldova over the last 8 years (reflected in national statistics), and their breakdown by categories of direct expenses.

Table 3. Expenses Related to Workplace Accidents in the Republic of Moldova for
the Years 2016-2023, Thousands of Lei

Years	2016	2017	2018	2019	2020	2021	2022	2023
Expenses Related to Workplace Accidents, Total, Thousands of Lei	11767.9	6951.8	5908.7	3501.1	4808.0	4324,6	4828,3	9138,8
 payments according to medical leave certificates 	1789.9	2591.8	3415.4	2797.3	1786.9	2160,1	2421,9	2997,7
- payments for compensation of damages	95.7	921.3	487.1	55.3	412.5	84,0	71,6	642,6
 payments for one-time allowances in case of reduced work capacity or death of the employee 	1440.2	2563.3	599.7	637.9	1574.5	922,6	1186,6	4756,1
- value of damaged machinery and tools, damaged buildings and constructions, and other expenses	8442.1	875.4	1406.5	10.6	1034.1	1157,9	1148,2	787,4

Source: National Bureau of Statistics of the Republic of Moldova. Statistical Form: Workplace Accidents. <u>https://statbank.statistica.md/[13]</u>

Occupational safety and health (OSH) systems offer advantages for businesses, in addition to being their legal and social obligation.

An organizational culture oriented towards prevention, respect, and care for employees contributes directly to their well-being. For example, the proper equipping of the workplace, regular OSH training, reduced exposure to risk factors, and the promotion of a healthy lifestyle lead to a decrease in the risks of illness and an increase in job satisfaction. Thus, the employee feels valued and safe.

Businesses consider that OSH prevents workplace accidents and occupational diseases, but it also constitutes an essential element of their success.

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Figure 1. Benefits of the good OSH

Source: http://europa.eu [8]

OSH constitutes an essential element of a business's efficiency. An effective Occupational Safety and Health Management system:

- helps demonstrate that the business is socially responsible,
- protects and enhances brand image and brand value,
- helps maximize worker productivity, improves employee loyalty to the business,
- builds a more competent and healthier workforce, reduces costs and periods of work interruption,
- allows businesses to meet customer expectations regarding OSH and encourages the workforce to remain active for longer.

For the organization and operation of an effective OSH Management System within any organization, we could formulate some recommendations that, in our opinion, are very important:

- Commitment and leadership to improve OSH,
- Investments in prevention and safety training,
- Effective OSH policies and procedures,
- Ergonomic assessments of workplaces,
- Proactive risk assessment programs,
- Effective risk control measures,
- Continuous monitoring and review processes of OSH management systems,
- Psychological support for employees and stress management in companies,
- Trained and competent workers.

Any company can enjoy significant advantages by investing in OSH. Simple investments can increase competitiveness, profitability, and employee motivation. Implementing an OSH management system provides an effective framework for preventing or minimizing accidents and illnesses and increasing the quality of life of employees. In other words, OSH is a pillar of quality of life, not just a set of administrative rules.

5. Conclusions

A safe and healthy workplace not only prevents accidents and occupational diseases but also significantly contributes to a better, more balanced, and more satisfying life. Occupational safety and health are fundamental pillars of a modern, responsible society oriented towards individual well-being. Ensuring safe and healthy working conditions contributes not only to the prevention of accidents and occupational diseases but also to increased productivity, employee morale, and, consequently, to the improvement of their quality of life.

It is essential for employers and employees to be aware of the importance of complying with safety regulations, to be properly informed and trained, and for authorities to monitor and support the implementation of these measures. A culture of prevention must become a standard, not an exception.

In a safe and healthy work environment, the employee is protected, valued, and motivated, which leads to a positive organizational climate and sustainable development. Therefore, investing in occupational safety and health is a direct investment in people, in the quality of life, and in the future of the entire society.

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