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# Injury and Death: Preventable Consequences of Neglecting Occupational Health in the Construction Industry

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#### Letter to the Editor

#### Introduction

The construction industry, as one of the main pillars of economic and infrastructural development of any society, has allocated a significant workforce. However, the dynamic and often unsafe nature of this industry has placed it at the top of the occupations with the highest rate of occupational accidents. Accidents such as falls from heights, falling objects, electrocution, and inhalation of harmful substances not only lead to the loss of life and valuable human capital, but also impose huge economic costs on the health and treatment sector and the insurance system<sup>1</sup>.

# Epidemiological analysis of accidents in the construction industry

A review of the available statistics on occupational accidents in the construction industry reveals a worrying picture of the current situation. The relative frequency of accidents resulting from falls from heights accounts for a significant part of these statistics<sup>2</sup>. This indicates a lack of compliance or ineffectiveness of safety measures related to work at height. Also, accidents caused by the lack of strength of temporary structures, electrocution, and collision with machinery are other major factors leading to injury and death. Analysis of the root causes of these accidents shows that factors such as inadequate training of workers, lack of effective supervision, use of substandard equipment, and time pressure to complete projects play a key role in their occurrence.

# The vital role of occupational health experts

Due to the constant changes and unpredictable nature of the environment, construction workshops require continuous specialized supervision by occupational health experts. These experts play a pivotal role in preventing accidents with their scientific knowledge in the fields of identifying harmful factors in the workplace (chemical, physical, ergonomic, and biological), assessing risks, and providing control solutions. Occupational health experts and inspectors are instrumental in conducting regular health screenings for workers. These screenings contribute to a range of positive outcomes, including reduced absenteeism, a decrease in workplace

injuries, fewer compensation claims, and enhanced overall health and well-being among the workforce.

# Legal or supervisory-executive gaps

The lack of proper implementation of safety laws and the lack of presence of occupational health experts (as inspectors or labor) can have various reasons. In Chapter 4 of the Labor Code of the Islamic Republic of Iran, laws related to technical protection and occupational health have been formulated, the legal provisions of which are written to protect and safeguard the workforce. At present, it seems that these laws are mostly applicable in manufacturing, service, and mining industries. Article 93 of the Labor Code is one of the main legal provisions, according to which, as well as the regulations of the Technical Protection and Occupational Health Committee, the employer is obliged to form a committee called the Technical Protection and Occupational Health Committee in the workshop for workshops with 25 workers. It is in accordance with this law that industries and mines with a high labor dimension usually have occupational health experts<sup>3</sup>; However, in most construction sites operating in cities, the number of active and continuous workers may be less than the number mentioned, so this could be one of the reasons for the lack of recruitment of occupational health workers by construction site employers. Other factors may also be involved in this weakness. Such as: the high number of uninsured workers in construction sites, the use of workers under the legal age, the lack of occupational health inspectors, the high dispersion of construction sites, and the lack of support from judicial bodies.

#### Conclusion

It seems that the high number of accidents in construction sites and the construction industry is due to the lack of active presence of occupational health experts and their failure to play their specialized role. Reviewing and updating laws and regulations, correct and precise implementation of the established laws, increasing the capacity and effectiveness of supervisory institutions (such as: increasing the number of occupational health inspectors, increasing the number of inspections), and also emphasizing the recruitment of occupational health experts in the covered sites, can be effective in reducing this number.



# **Keywords**

Occupational health, Injury, Construction industry.

# **Ethical Considerations**

Nothing to be reported.

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Nothing to be reported.

# **Conflict of Interest**

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