A process-based model for effective and sustainable work safety analysis in Zimbabwe: A review

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Abstract

Ensuring work safety is a critical aspect of any organization's operations, as it directly impacts the well-being and productivity of employees. In Zimbabwe, like many other developing countries, work safety analysis is often overlooked or inadequately addressed, leading to a high number of workplace accidents and injuries. This paper proposes a process-based model for effective and sustainable work safety analysis in Zimbabwe, aiming to provide organizations with a systematic approach to identify and mitigate potential hazards. The proposed model incorporates various stages that organizations can follow to conduct work safety analysis comprehensively. These stages include hazard identification, risk assessment, control measures implementation, monitoring and evaluation, and continuous improvement. The model emphasizes on work environment, work design, worker, workplace relationships and work safety analysis in reducing accidents to As Low As Reasonable Possible (ALARP). The model is based on a systematic literature review of existing research on work safety in Zimbabwe and other countries. The review identified key factors that contribute to workplace accidents and fatalities, including lack of training, inadequate personal protective equipment, and poor communication. The proposed model addresses these factors through a series of steps, including stakeholder identification, risk assessment, and performance measurement. The model also emphasizes the importance of continuous improvement and learning, as well as the need for regular monitoring and evaluation to ensure its effectiveness. The review concludes by highlighting the potential benefits of the proposed model for improving work safety in Zimbabwe and other developing countries.

Keywords: Work safety analysis, Risk assessment, Hazard identification, Risk management and Accident prevention