Analysis of health, safety and environmental risks in Tehran Police Park

Introduction: This study evaluates the health, safety, and environmental conditions in urban parks, specifically focusing on Tehran Police Park, using the Failure Mode and Effects Analysis (FMEA) methodology.

Material and Methods: Data were collected through library and field studies, along with reviews of reports, documents, and journals, to identify potential hazards and their consequences. The Risk Priority Number (RPN) for each factor was calculated based on severity, probability of occurrence, and detection probability.

Results and Discussion: The results highlight the need for immediate management strategies to mitigate or control these hazards. The study also compared the FMEA results with periodic evaluations conducted by Tehran Municipality's health center, demonstrating that FMEA is an effective and modern method for identifying and preventing future risks in urban spaces. The research underscores the importance of integrating FMEA into urban planning to create safer and more sustainable environments. By addressing these risks, urban experts can enhance the quality of life for city residents and ensure the long-term sustainability of urban parks. The study concludes that FMEA can serve as a valuable tool for urban planners and policymakers in identifying potential hazards and implementing preventive measures. This approach not only improves the safety and health standards of urban parks but also contributes to the overall well-being of the community.

Conclusion: The findings emphasize the need for continuous monitoring and proactive management to maintain the safety and environmental quality of urban green spaces. Ultimately, the study advocates for the adoption of FMEA as a standard practice in urban park management to prevent accidents and enhance public health and safety.

Keywords: risk assessment, urban parks, FMEA methodology, Tehran Police Park