عنوان مقاله:

Safety Risk Assessment in Medical and Paramedical Education Laboratories

محل انتشار:

فصلنامه آرشیو بهداشت حرفه ای, دوره 5, شماره 2 (سال: 1400)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

Background: Considering the reported positive effects of risk management practices and monitoring them by conducting risk assessments and achieving safety improvements, this study was conducted to assess the risks in the educational laboratories of Qom University of Medical Sciences. Methods: This cross-sectional study was conducted in ۱۳ medical and paramedical educational laboratories. To assess safety conditions in the laboratories, a comprehensive safety checklist was developed, and in order to assess the risks of laboratories, a method called FMEA was used. Two trained occupational health and safety experts evaluated the laboratories understudy, identified the hazards, completed the relevant checklists, and subsequently ranked them based on severity, occurrence, and detection. Finally, a comparison was made based on the calculated Risk Priority Number (RPN) for each hazard. Results: In general, the fire hazards and electrical hazards of ۵۴% of the laboratories have been accompanied by normal risk (RPN< ۷۰), and nearly ۸% of the laboratories had critical fire and electrical risks, including chemistry and immunology laboratories. In the case of equipment hazards, nearly ۶۰% of the laboratories had critical or semi-critical risk levels. It is indicated that health exposure hazards were the most important hazards compared to the other ones. So that ۶۱.۵% of the laboratories had critical risk, and ۱۵.۳ % of them categorized as semi-critical risk. The highest RPN allocated to the biochemistry and chemistry laboratories (RPN>۲۵۰). Conclusion: The results of this study showed that in general, three types of hazards, including health hazards, equipment, and material storage, should be given priority.

کلمات کلیدی:

Risk assessment, Safety Hazards, Failure mode & effects analysis (FMEA), Laboratory, Risk assessment, Safety Hazards, Failure mode &, effects analysis (FMEA), Laboratory