

Guidelines to Designing Generic Protocol for Responding to Chemical, Biological, Radiological and Nuclear Incidents

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Abstract : Introduction: The awareness of using chemical, biological, and nuclear agents in everyday industrial and non-industrial incidents has increased recently; release of these materials can be accidental or intentional. Since hospitals are the forefronts of confronting Chemical, Biological, Radiological and Nuclear(CBRN) incidents, the goal of the present research was to provide a generic protocol for CBRN incidents through a comparative review of CBRN protocols and guidelines of different countries and reviewing various books, handbooks and papers. Method: The integrative approach or research synthesis was adopted in this study. First a simple narrative review of programs, books, handbooks, and papers about response to CBRN incidents in different countries was carried out. Then the most important and functional information was discussed in the form of a generic protocol in focus group sessions and subsequently confirmed. Results: Findings indicated that most of the countries had various protocols, guidelines, and handbooks for hazardous materials or CBRN incidents. The final outcome of the research synthesis was a 50 page generic protocol whose main topics included introduction, definition and classification of CBRN agents, four major phases of incident and disaster management cycle, hospital response management plan, equipment, and recommended supplies and antidotes for decontamination (radiological/nuclear, chemical, biological); each of these also had subtopics. Conclusion: In the majority of international protocols, guidelines, handbooks and also international and Iranian books and papers, there is an emphasis on the importance of incident command system, determining the safety degree of decontamination zones, maps of decontamination zones, decontamination process, triage classifications, personal protective equipment, and supplies and antidotes for decontamination; these are the least requirements for such incidents and also consistent with the provided generic protocol.

Keywords : hospital, CBRN, decontamination, generic protocol, CBRN Incidents

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