Hospital preparedness for chemical threats
- A pilot study among emergency medicine staff in Gothenburg, Sweden

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Abstract

Introduction: An impendent exposure to hazardous materials has become a reality worldwide. Increasing numbers of transportations with loaded chemical agents, the increasing risk of contamination due to an accident and the use of chemicals in conflicts or terror events, may all result in a disastrous outcome. These events should be managed medically. Hospital preparedness is an important component of a successful management of such events.

Aim: To identify hospital staff’s preparedness for chemical threats in Gothenburg, Sweden and to investigate how training affects the knowledge and the willingness to report to work during a chemical event. We also aim to compare the willingness of the Swedish healthcare staff to report to work, to that of the Israeli staff.

Method: A validated questionnaire for assessing knowledge and readiness to report to work in a chemical major incident, already used in Israel, was used to study the level of knowledge and readiness among Swedish emergency staff in Gothenburg.

Results: The overall level of knowledge was low. There was a positive statistically significant correlation between higher knowledge and participation in any chemical warfare (CW) training program (P= 0.000). Participation in any CW training program also showed positive and statically significant correlation to a higher willingness to report to work during a CW (P= 0.036).

Discussion: There is a need for improved knowledge concerning chemical threats and its management among the healthcare staff in Gothenburg. Such improvement may be obtained by initiation of training programs. Additional knowledge may also improve staff’s self-confidence to manage a CW event and report to work during such potential occurrence.
Conclusions: The emergency staff members should be offered regular educational opportunities, targeted to improve their knowledge and willingness to report to work during chemical events.

Key words: hospital preparedness, chemical events, report to work, knowledge.