EMS Providers' Ability and Willingness to Respond to Bioterrorism

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Abstract: Introduction: Previous studies have found that public health systems within the United States are inadequately prepared for an act of biological terrorism. As the COVID-19 pandemic continues, few studies have evaluated bioterrorism preparedness of Emergency Medical Services, even in the accelerating environment of biothreats. Methods: This study utilized an Internet-based survey to assess the level of preparedness and willingness to respond to a bioterrorism attack and identify factors that predict preparedness and willingness among Nebraska EMS (Emergency Medical Services) providers. The survey was available for one month in 2021, during which 190 EMS providers responded to the survey. Results: Only 56.8% of providers were able to recognize an illness or injury as potentially resulting from exposure to a CBRN agent. The provider Clinical Competency levels range from a low of 13.6% (ability to initiate patient care within his/her professional scope of practice and arrange for prompt referral appropriate to the identified condition(s)) to a high of 74% (the ability to respond to an emergency within the emergency management system of his/her practice, institution and community). Only 10% of the respondents are both willing and able to effectively function in a bioterror environment. Discussion: In order to effectively prepare for and respond to a bioterrorist attack, all levels of the healthcare system need to have the clinical skills, knowledge, and abilities necessary to treat patients exposed. Policy changes and increased focus on training and drills are needed to ensure a prepared EMS system which is crucial to a resilient state. EMS entities need to be aware of the extent of their available workforce so that the country can be prepared for the increasing threat of bioterrorism or other novel emerging infectious disease outbreaks. A resilient nation relies on a prepared set of EMS providers who are willing to respond to biological terrorism events.

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