

Simulated outbreaks

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A 28-year-old nurse comes to the Emergency department with fever. She also has a headache and generally feels unwell. Her symptoms have been going on for about a day. She has just returned from Sierra Leone where she was working in a front-line treatment centre. She took malaria prophylaxis during her stay. You immediately suspect Ebola. You stop for a second and think about the risk of infection spreading. Are you sure that you know what to do? If you are not completely sure, then do you know where you could find out? Are you confident that all your team would know what to do?

If you are scratching your head at the moment and wondering what you might do, then don't worry – you are not alone and help is at hand. Foote et al have done a fascinating study of how prepared healthcare professionals are for scenarios like the one above. (1) They ran mystery patient drills in New York hospitals to test the preparedness of staff and the robustness of protocols. They were interested in finding out how quickly patients were masked and isolated when serious infectious diseases were suspected. They used patient scenarios that suggested measles or Middle East Respiratory Syndrome (MERS) – but the principle of mystery patients could be used in a range of infectious diseases.

Most healthcare professionals and institutions performed well – most patients were masked and isolated, and for the most part this happened quickly. But there was variation. Not all protocols were followed to the letter and masking and isolation was delayed in some institutions. However, the research team did develop a toolkit to help other hospitals carry out similar drills and to discover areas where they need to improve.

Infectious diseases are a common cause of ill-health. Thankfully the most serious infectious diseases are rare. But this rarity can be a double-edged sword – it means that healthcare professionals will lack experience of caring for affected patients. Learning directly from patients is also dangerous – healthcare professionals can become infected themselves.

E-learning is likely to be a good and safe way of learning the knowledge needed to care for patients with dangerous infectious diseases. Simulation is a good way of learning how to put your newfound knowledge into action. It is also safe – for both the doctor and the patient.

References

1. Foote MM, Styles TS, Quinn CL. *Assessment of Hospital Emergency Department Response to Potentially Infectious Diseases Using Unannounced Mystery Patient Drills — New York City, 2016. MMWR Morb Mortal Wkly Rep 2017;66:945–949.*

