Tracking the path of an outbreak with cognitive interviews

January 31 2020, by Ayleen Barbel Fattal

Jacqueline R. Evans and Ronald Fisher. Credit: Florida International University

An interviewing technique created by an FIU professor may help world health officials identify more people exposed to an infectious disease including the Coronavirus.

In response to an outbreak, contact tracing interviews are conducted to find out where an infected person has been and with whom they came in contact. Contact tracing is designed to prevent the spread of [disease] by

identifying those who may be infected and in turn requiring treatment or isolation.

The World Health Organization and Centers for Disease Control have guidelines regarding what information to gather during contact tracing interviews. However, no specific guidelines exist on how to ask questions to maximize the number of contacts an individual remembers.

Results from a recent study by FIU researchers point to the cognitive interview as an effective way to increase the number of contacts reported during contact tracing.

Originally developed by FIU psychologist Ronald Fisher to gather information from witnesses to crimes, the cognitive interview applies theories of social and cognitive psychology to increase the amount of information recalled during an interview.

For the study, which was part of FIU graduate Ali Mosser's dissertation, 128 participants were asked to imagine they were infected with meningococcal meningitis. Using either a control interview or the cognitive interview, participants were asked to report their contacts over the previous three days. The cognitive interview generated more contacts than the control interview.

"Simply asking an infected individual to generate a list of their contacts without additional mnemonics and/or multiple recall attempts is likely to yield an incomplete list. For example, imagine you are asked to list all 50 states—knowing all 50 states does not mean you can successfully report all of them in one attempt," said FIU psychologist Jacqueline R. Evans who is a co-author in the study.

Evans conducts research related to witness memory, investigative interviewing and best practices for questioning witnesses, including the

cognitive interview.

Contact tracing interviews can be used to identify exposure to a variety of infectious diseases including Ebola, Zika and sexually transmitted infections.

However, the authors point out the techniques most effective when interviewing someone about the flu may not be the most effective when interviewing someone with a sexually transmitted infection about their sexual and/or injection partners over the course of a year.

Evans recommends further research to determine the most effective techniques for enhancing recall in the various contact tracing contexts.

More information: R. Edward Geiselman et al. The cognitive interview: An innovative technique for questioning witnesses of crime, *Journal of Police and Criminal Psychology* (2008). DOI: 10.1007/BF02806548

Provided by Florida International University