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Misinformation about infectious diseases can be debunked

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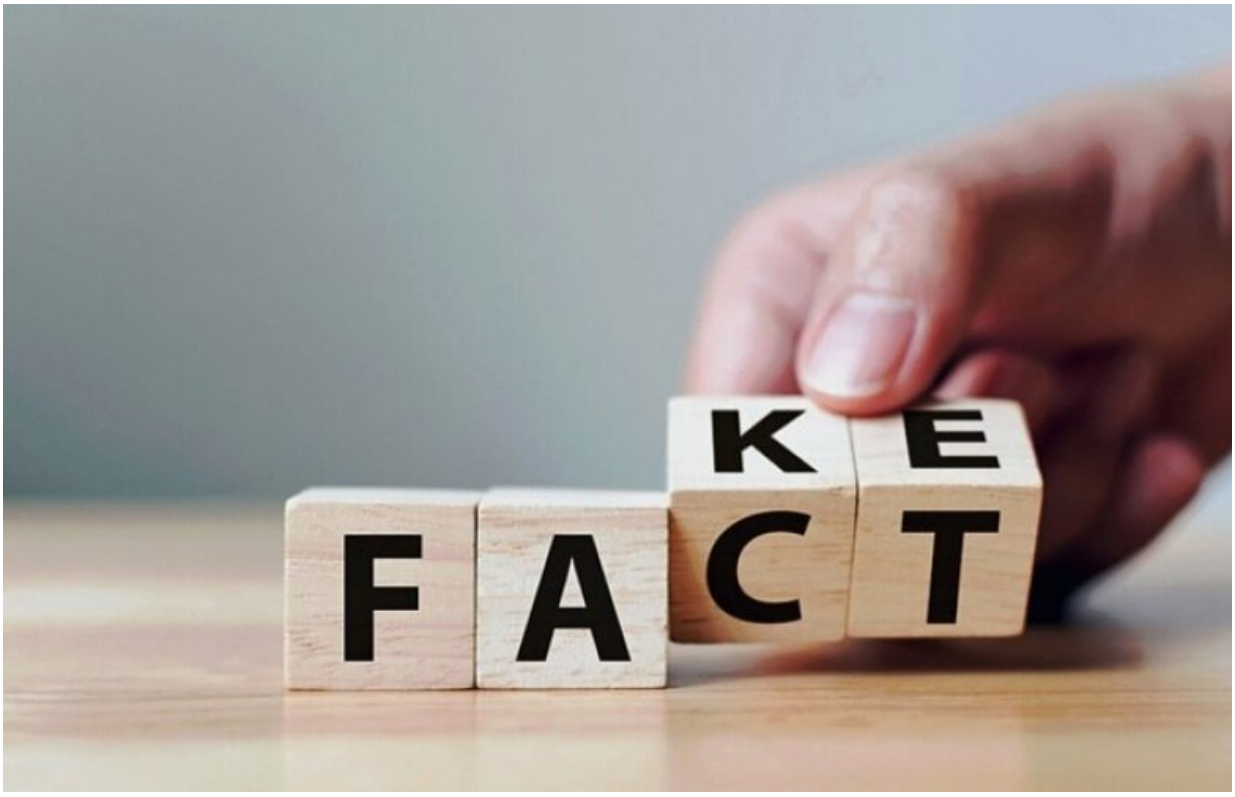

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According to a new doctoral thesis from Karolinska Institutet, misinformation about infectious diseases can be debunked most effectively by first stating the false information and then correcting it with the correct information. All studies in the thesis about risk

communication and misinformation in infectious disease outbreaks were conducted in Sierra Leone, focusing on Ebola, Typhoid and Malaria.

"My thesis is about risk communication and misinformation in infectious disease outbreaks—which happens to be quite a relevant topic with the ongoing COVID-19 pandemic and 'infodemic."

Using data that was collected during and directly after the Ebola outbreak in Sierra Leone, we looked at communication in an epidemiological way. We studied if being exposed to information sources, such as radio or religious leaders, was associated with for instance knowledge or misconceptions about Ebola.

My thesis also includes a qualitative study with Sierra Leonean journalists, who reported during the outbreak, to understand how they perceived their roles in these exceptional times.

The last study was a big randomized controlled trial (the Contagious Misinformation Trial), whereby we aimed to counter very common beliefs in misinformation about typhoid and malaria in Sierra Leone," says Maike Winters, doctoral student at the Department of Global Public Health.

What are the most important findings?

"We could see that people who were exposed to various information sources were more likely to have more knowledge about Ebola and to engage in protective behaviors. Unfortunately, at the same time, exposure to some information sources was also associated with increased misconceptions and risk behaviors.

With the Contagious Misinformation Trial, we showed that misinformation about infectious diseases can be successfully

debunked—which is great! We tested two types of debunking methods: one whereby we explicitly mentioned the misinformation and then debunked it, the other method involved only mentioning the correct information. Both methods reduced the belief in misinformation, but the first method (mentioning the misinformation and then debunking it), was in many ways more successful than only focusing on the correct information."

How can this knowledge contribute to improving people's health?

"The studies show the importance of good communication in infectious disease outbreaks. Very often, the major focus in an outbreak is on the biomedical part: increasing hospital capacity, testing, and tracing, development of treatments and vaccines.

Of course, these are all incredibly important components, but if people don't get the right information, don't find answers to their concerns or simply don't trust the outbreak response—they might not use the health services. Communication and addressing misinformation should be one of the core pillars of an outbreak response."

More information: 'Contagious (Mis)Communication: the role of risk communication and misinformation in infectious disease outbreaks'. Doctoral thesis defence: Maike Winters. news.ki.se/doctoral-thesis-defence-maike-winters

Provided by Karolinska Institutet