Infodemic and Risk Communication in the Era of CoV-19

In the last day of 2019, clusters of pneumonia cases with unknown origin in Wuhan, China, were reported to the China's National Health Commission.[1] One week later, a new coronavirus (CoV) was isolated which is now called CoV-19 and is currently recognized as a public health emergency of international concern.[2] Fifty-nine days after the first case (February 27, 2020), CoV-19 has reached 52 countries, with 82,785 infected cases, from which 2817 deaths were reported.[3]

During an epidemic, early diagnosis and treatment of infected cases and protection of healthy ones is of high concern,[4] but countries have to face new challenges in controlling epidemics in the 21st century, which include new lifestyle and fast transportation which cause global spread of diseases; needs for new control tools as traditional tools such as quarantine is no more acceptable for populations; ensuring equitable access to care; and "infodemics," which is defined as a rapid spread of all kinds of information concerning a problem such that the solution is made more difficult.[5] Infodemic is an uprising challenge as the popular use of social media and communication technologies is rising.[6] CoV seems to be a true social-media infodemic compared to previous viral outbreaks. However, SARS and MERS caused worldwide panic, and fears around CoV-19 have been particularly exaggerated by social media. It has led to the spread of disinformation at exceptional speeds, creating an environment of amplified uncertainty that has fueled anxiety and racism in person and online.

Using an agent-based model, which predicts the spread of an infectious disease based on the behavior of populations, Brainard and Hunter found that reducing the amount of harmful advice circulating online by just 10% or making at least 20% of the population unable to share fake advice, reduced the severity of disease outbreak.[7] All the abovementioned reasons affirm the emergency and importance of Risk Communication (RC).[8]

RC is a two-way, dynamic art–science process and evolves as the outbreak develops. RC should be used as a strategy to minimize the spread of epidemics by filling the gap which is always felt between what experts think people need to know and what people want to know.[9] The main element of RC is a trust-based communication which is focused on community risk perception. The goal of RC is minimizing fear by making uncertainties clear as much as possible, in order to help the community become ready for changes in its routine life in time of epidemics.[10] RC comprises three elements: first, talk of what you know and what you do not know honestly and clearly; second, listen to the community when talking about their fears and perceptions; and third, management of rumors and infodemic as quickly as possible.

Trust and accountability is key to an effective RC. Without trust, there would be no success as people would not follow the given messages.[10] In order to build trust, there should be in-time, easy-to-understand, transparent, and accessible services which are disseminated by multiple platforms and acknowledge uncertainty.

The WHO defined a plan for RC and Community Engagement (RCCE) about CoV-19, which divided countries into the following three categories: countries without a case, countries with one or more cases, and countries with ongoing CoV-19 transmission. Iran, 9 days after the detection of the first case, with 245 cases and 26 deaths belongs to the third category. In this category, the main goals are as follows: maintaining trust by listening and designing a RC plan based on community risk perception, empowering, ensuring ongoing and complete support, and monitoring and evaluation. The basic steps to obtain these goals are as follows: designing a RC system with community engagement experts, health education experts, and social science experts; coordinating partners to ensure information transfer in time and through different channels; communicating with the community and transfer proper messages, regularly; engaging community by a two-way communication plan; addressing uncertainty by monitoring the risk perception of the community; and capacity building by in-time training and distribution of RCCE guidelines.[11]

Altogether, in the epidemic of CoV-19, the main prevention measure is self-care. Effective self-care needs clear information which can be transferred to the public through a trust-based RC. Every country should design an RC plan and an epidemic control plan as infodemic always shows up in crisis and is hard to control if ignored.

Atefeh Vaezi,
Shaghayegh Haghjooy Javanmard[1]

From the Department of Community and Family Medicine, School of Medicine, Isfahan University of Medical Sciences, [1]Applied Physiology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:
Dr. Atefeh Vaezi,
Department of Community and Family Medicine, School of Medicine, Isfahan University of Medical Sciences, Hezarjerib St., Isfahan, Iran.
E-mail: atefehvaezi83@gmail.com

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Access this article online	
Quick Response Code:	Website: www.advbiores.net
	DOI: 10.4103/abr.abr_47_20

How to cite this article: Vaezi A, Javanmard SH. Infodemic and risk communication in the era of CoV-19. Adv Biomed Res 2020;9:10.

Received: 27 February 2020; **Revised:** 27 February 2020; **Accepted:** 28 February 2020; **Published:** 02 March 2020