

# Clarification of the Concept of Risk Communication and its Role in Public Health Crisis Management in China

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## ABSTRACT

Risk communication plays a very important role in the prevention of public health crisis events and has been considered by the World Health Organization (WHO) to be 1 of the main functions of an emergency public health crisis. However, it is a relatively new research field in China, so many people have mistaken understandings of risk communication. This article will describe the concept and importance of risk communication and briefly introduce the role of risk communication in public health crisis management. It also provides information for the prevention of public health crisis events in the future.

**Key Words:** China, crisis management, public health, risk communication

In the history of mankind, there have been many major public health crises such as the occurrence and prevalence of diseases, which have had a great impact on international health, economic and social stability, and threatening global public health security. At present, China faces many diseases, including traditional infectious diseases, chronic diseases, and mental diseases. The threats of these diseases coexist, and multiple health factors have combined to cause complicated situations. Some major public health crises may occur frequently, causing a very serious impact on people's health and social security. Risk communication plays a very important role in the prevention of public health crisis events<sup>1</sup> and has been considered by the WHO to be 1 of the main functions of an emergency public health crisis.<sup>2</sup> Risk communication is a relatively new research field in China, so many people have mistaken understandings of risk communication. This article will describe the concept and importance of risk communication and briefly introduce the role of risk communication in public health crisis management. It also provides information for the prevention of public health crisis events in the future.

Risk is the possibility of harm to people's physical health and life safety. It exists everywhere, and it is uncertain and can threaten human survival and development at any time. The WHO defines risk as the possibility of a dangerous negative result or a factor that increases the possibility of such a result.<sup>3</sup> The concept of international risk communication originated in the 1970s, mainly to solve the problem of toxic hazardous waste disposal and related information exchange.<sup>4</sup> International experience shows that, in the areas of public health and environmental health, risk communication is an important way to

assist cooperation, share resources, and contribute to policy formulation and crisis resolution. The WHO believes that risk communication is already an important part of a complete risk management system.

In a larger sense, risk communication is a process of exchanging information and opinions between individuals, organizations, and institutions. It is a process of resolving conflicts, encouraging both parties or even multiple parties toward communication and shared decision-making, public participation, and collaboration among multiple government departments.<sup>5</sup> Some people believe that risk communication is the cooperation and communication only between government departments and the media and the public, and that it is only 1-way communication for health education or the dissemination of information about health risks, while ignoring the idea of 2-way communication. However, risk communication is the main link connecting the 2 fields of risk analysis and risk management, and depends on interaction and exchange of information. It requires relevant units to exchange information and opinions on risk-related factors and make decisions together. Only in this way can risk communication help risk evaluators, managers, and other relevant parties to better understand the risks and related issues.

Risk communication is an important factor in risk management. In addition to feedback on the transmission of risk information, it also includes cognitive risk, participation risk, building trust, and reaching a consensus. Risk communication is not a risk promotion by risk managers but a process of mutual communication. It is the whole process of communication and interaction among all stakeholders and their participation in risk assessment and risk management.

From the perspective of risk communication, different departments and personnel have different understandings of crisis events and prevention methods. If there is no communication between the different units or personnel, conflicting information may lead the public to panic and even lose trust in the government, which will adversely affect the control of public health crisis events. Public health emergencies in recent years (such as the Ebola virus outbreak in West Africa in 2014-2015, Zika syndrome in 2015-2016, and the yellow fever epidemic in many countries in Africa in 2016) demonstrate the main challenges and deficiencies in communication risk in epidemics and other health emergencies.<sup>6</sup>

Risk communication has gradually developed into an important part of risk management and decision-making in the field of environmental and occupational health.<sup>7,8</sup> Risk communication is also an important part of the entire process of public health crisis management. It plays an important role in improving the handling of crisis events, strengthening the authority of the government and the health sector, improving public sentiment, and enhancing social stability. In order to improve the ability to prevent and control crisis events and reduce the damage caused, it is very important for the relevant government departments to regard risk communication as the core of public health crisis management. Due to the uncertainty and contingency of risk, risk communication of public health crisis events needs to follow the principle of openness and transparency.

Referring to the research on public health crisis and risk communication with foreign countries, most of the research is concerned only after the crisis event has occurred. From the perspective of crisis communication, the issue is how to reduce public concern and anxiety through healthy communication, how to reduce or eliminate social concerns, and how to address the negative impacts on population health, social stability, and economic development. These studies regard risk communication as a tool for resolving crises, while ignoring the functions and roles of risk communication in the whole process of information exchange and decision-making before, during, and after public health crisis events.<sup>8</sup>

Taking China as an example, after the severe acute respiratory syndrome (widely known as SARS) epidemic in 2003, risk communication began to gain attention in China and began to be applied in the management of public health crisis events.<sup>9</sup> In recent years, risk communication has played an increasingly important role in the effective prevention and control of public health crisis events in China, especially in China's prevention and control of influenza A (H1N1), human infection with H7N9 avian influenza, and the Middle East respiratory syndrome, commonly referred to as MERS.<sup>10-12</sup> In these events, the theory and principles of risk communication have been applied effectively. At present, risk communication in China mainly refers to the communication work conducted by organizations or institutions to inform the public regarding health risks that may be caused by emergency crisis events. The most important thing

is the risk communication work for the media or the risk communication work carried out by the media to inform the public.

At present and in the future, China and the world still face the threat of public health crises caused by traditional diseases and new or emerging infectious diseases. Due to the constant risk of uncertainty, government departments and personnel involved in public health activities need to have a deep understanding of the definition and connotation of risk communication, and need to strengthen risk communication with external units, especially with other government departments, which means strengthening information exchange and cooperation between departments. Such improved communication will promote the decision-making during crisis events and help develop effective measures to promote the sustainable development of the management of public health crisis events.

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### Conflict of Interest

The authors have no conflicts of interest to declare.

### Funding

This work was supported by the Australia Awards – Endeavour Scholarships and Fellowships (Ref MS17-001548).

### Acknowledgments

We gratefully acknowledge the help of English teacher Duncan Frewin from Griffith University, Australia, who has put forth considerable time and effort into his professional writing services for this paper.

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