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Knowledge, Perception, and Capacity Regarding Emergency Risk Communication: A Cross-Sectional Survey of 429 County Health Emergency Response Staff in Chongqing, China

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Emergency risk communication is the strategy used to provide information that allows an individual, stakeholders, or an entire community to make the best possible decisions during a crisis emergency event.¹ Appropriate and targeted emergency risk communication can help to reduce the health impact of public health emergencies and promote personal safety and social stability.² The idea of emergency risk communication has been around for a long time and has long been a strategic target for many worldwide organizations and societies.³ Although emergency risk communication started late in China, the real practice of it started from 2003, right after the outbreak of severe acute respiratory syndrome (SARS). In current practice, however, public health service agencies lack the awareness and means of risk communication, bringing varying degrees of negative effects to the prevention and control of public health emergencies.⁴ Moreover, it has been suggested that improvement of the knowledge, attitudes, and behavior of the public health workforce can help the public respond to crises, reducing the likelihood of rumors and misinformation and demonstrating good leadership.⁵ Thus, keen awareness and a rich knowledge of emergency risk communication may motivate the public health workforce to better manage public health emergencies.

Under these circumstances, a large-scale survey conducted through stratified cluster random sampling was developed to evaluate health emergency response staff in terms of their knowledge, perception, and capacity of emergency risk communication. From August 2014 to October 2014, a total of 433 county health emergency response staff from the emergency systems in 19 counties in Chongqing, China, were asked to complete an anonymous questionnaire that included 4 aspects: respondents' demographic details, general cognitive situation of emergency risk communication, quiz on emergency risk communication knowledge, and capacity questionnaire of emergency risk communication (including 2 dimensions: "major risk communication skills" and "ability to communicate with different people"), the items of which were a typical 5-level

Likert item. Descriptive and inferential statistical methods as well as multivariate factor analyses were applied to assess the participants' knowledge, perception, and capacity of emergency risk communication. All statistical analyses were performed by using SAS version 9.3 (SAS Institute Inc, Cary, NC).

A total of 429 valid questionnaires were obtained, with 99.1% efficiency. Overall, 39.1% of the participants were not familiar with the concept of emergency risk communication. Although 87.6% believed that emergency risk communication was extremely useful and 53.2% felt that it was extremely necessary to carry it out, attitude evaluation showed that only 24.9% were extremely willing to undertake it. Staff younger than 30 years (adjusted odds ratio [AOR] = 5.641, 95% confidence interval [CI]: 1.309-24.304), with over 20 years of service (AOR = 5.487, 95% CI: 1.552-19.393), working in the Health and Family Planning Commission (AOR = 4.277, 95% CI: 1.738-10.525), and participating in emergency risk communication work (AOR = 2.151, 95% CI: 1.146-4.035) were even more willing to take on this task. The average score of 8 items for county health emergency response staff was 3.6 ± 0.2 for the quiz of emergency risk communication knowledge. The higher the position held (AOR = 1.257, 95% CI = 1.019-1.552), the better the communication knowledge of the respondent. The average score of 12 items for the capacity questionnaire of emergency risk communication was 2.1 ± 1.0 . Among the scores of 2 dimensions, "major risk communication skills" was the lowest (1.9 ± 1.1) and "ability to communicate with different people" was the highest (2.2 ± 1.2). Professionals who had a bachelor degree or higher (AOR = 2.165, 95% CI: 1.241-3.775), held an intermediate professional title (AOR = 4.414, 95% CI: 1.776-10.966), and participated in risk communication work (AOR = 4.265, 95% CI: 2.265-7.998) had a better capacity of emergency risk communication.

Chongqing, China, adopted the idea of emergency risk communication in the emergency response to public health events years ago. It has become an essential part

of the work of public health emergency and major event security and has been integrated into the health emergency response mechanism. As shown by the discussion above, our research generally demonstrates that there is a shortage of knowledge about emergency risk communication, a lack of positive attitude toward it, and a lack of capability of health emergency response staff in Chongqing, China. Ambiguity in responsibility has always been a prominent issue that hinders further improvement in emergency preparedness capacity for public health works in China. Furthermore, emergency risk communication work is in the beginning stages. Therefore, it is urgent to reinforce training to enhance people's awareness of emergency and their response capacity.

Our study did have a bias because it relied on a non-validated questionnaire and capacity and knowledge were self-reported, which are closely related to personal feeling. Even so, we believe that this theme will encourage more scholarly engagement in the study of this problem. At the same time, we hope that these findings are helpful in providing the basis for relevant departments to formulate policies and to promote the development of emergency risk communication in the People's Republic of China.

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Validation Study of the World Health Organization and Pan American Health Organization Hospital-Based Disaster Preparedness Questionnaires in Nepal

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The World Disaster Reduction Campaign on Safe Hospitals has raised awareness of the need for hospitals and health facilities to remain safe and functional in disasters.¹ Here we report the findings of our study that explored differences in results provided by 2 validated questionnaires in Nepal. Twin earthquakes recently hit the country, and the lack of preparedness among the majority of hospitals was evident in the response phase.

This cross-sectional study was carried between April 2014 and May 2014 in 9 hospitals that were included on the basis of highest patient flow. One selected hospital chose not to participate, citing lack of approval from their ethics committee. Interviews were conducted with hospital directors or chiefs of

disaster response teams (wherever applicable), except for one hospital where the questionnaire was self-administered.

Functional aspects of hospital preparedness were studied by using the World Health Organization (WHO)-Europe and Pan American Health Organization (PAHO) validated questionnaires. While comparing functional aspects of the WHO and PAHO questionnaires, 8 components were identified as similar in nature. Post-disaster recovery was found only in the WHO questionnaire and as a result was not included in the analysis. Questionnaires were designed and well accepted to determine the functional ability of hospitals during a disaster and to identify areas that need improvement.^{2,3}