

## Japan-China Medical Communication Center: Guangdong Health Emergency Medical Team (2018/11/1)

Topics: How to make a heathy society resilient against diaster Venue: Tohoku University (Sendai, JAPAN)

On Nov. 1<sup>st</sup>, Guangdong health emergency medical team visited Tohoku University in Katahira Campus and Prof. Shinichi Egawa in Disaster Medical Science Division made a lecture about "How to make a healthy society resilient against disaster".

This team is more than 30 medical doctors from Guangdong Province related to health emergencies including disaster, outbreak and hazardous materials. They had visited National Center for Global Health and Medicine, Ministry of the Environment, St. Luke's Hospital, National Disaster Medical Center, Ministry of Health, Welfare and Labour, Miyagi Prefectural Office, Ishinomaki Public Health Center that play significant roles in disaster. In Tohoku University, Director of IRIDeS, Prof. Fumihiko Imamura lectured about Tsunami and its health impact including cause of death. Prof. Egawa lectured on the Sendai Framework, concept of disaster risk and research topics on simulation of medical needs after disaster, simulation of Ebola virus disease outbreak and correlation between life expectancy and disaster risk

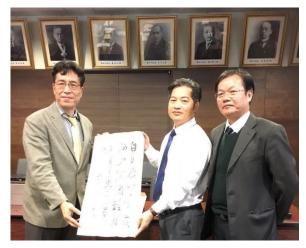
The doctors are related with public health and infectious disease. Disaster and disease have similarity in terms of risk reduction by reducing the hazard & exposure, reducing the vulnerability and increasing the coping capacity.

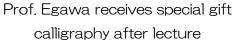
The medical needs will be different even a same hazard attack. If the building is vulnerable for earthquake, the collapse of building will create many injuries and rehabilitation demand. Japan, as well as China, is facing unprecedent aging of the society, and the medical needs after disaster will be non-communicable disease and locomotive syndrome. Simulation will give an insight of medical needs according to the properties of the community.

Prof. Egawa used agent based simulation to reproduce the Ebola virus disease outbreak. The model contains the factors that affect the mind and attitude of the people. We can simulate various scenarios by modifying the learning and forgetting period of general population on the standard precaution to prevent infection. If people easily forget the standard precaution, the outbreak is tremendous. On the other hand, if the people remember the important notion for a long time, the number of victims are quite small.

The life expectancy negatively correlates with disaster risk. Life expectancy is the total achievement of development including health. Even a disaster-prone country like Japan, the low vulnerability and high coping capacity make the nation resilient against disaster. Prof. Egawa is promoting disaster risk reduction in health sector through this opportunity by Japan-China Medical Communication Center.









Guangdong Health Emergency Medical Team

Shinichi Egawa (Disaster Medical Science Division)