

## Special Lecture in Angeles University (2019 / 1 / 12)

Topics: How to make a healthy community resilient against disaster.

Venue: Angeles University Foundation, School of Public Health (Angeles, Philippines)

On Jan, 12, 2019 (Sat), Prof. Shinichi Egawa in Disaster Medical Science Division made a special lecture in the School of Public Health, Angeles University, Philippines.

Angeles University Foundation and IRIDeS, Tohoku University has Memorandum of Agreement on Academic Exchange. This lecture has been organized once in a year for consecutive five years to promote collaborative research and education. The audience is graduate students of public health nurse, midwife and teachers in Public Health and Education. Prof. Egawa focused on the basic knowledge of disaster medicine using answer pads for bilateral active participation.

Prof. Egawa explained the disaster risk as a calculation of hazard & exposure x vulnerability / coping capacity and indicated how to reduce the risk. The disease prevention can be a metaphor of disaster risk reduction. Prof. Egawa explained the basic structure of Sendai Framework as “know your risk”, “reduce your risk” and “prepare to act”.

In the second part, Prof. Egawa focused more on research topic using two simulation models. The medical needs in Great East Japan Earthquake can be simulated using system dynamics software. The complex phenomenon can be the sum of simple interaction of multiple factors. Another example is the Ebola Virus Disease in West Africa. The people’s mindset was simulated using agent based simulation software. Even the disease has no established treatment method, the education of healthcare workers with appropriate knowledge and personal protective equipment can control the outbreak. Additionally, maintaining the educational status within the community can reduce the outbreak.

The concept of risk reduction is also effective in the radiological disaster in Great East Japan Earthquake and Ebola virus outbreak. Without being panic, the understanding and managing of the risk is the key action for problem solution.

The lecture was evaluated in real time using answer pads. The 68% of audience gave “very interesting” and 24% gave “interesting” (total 92%).



Prof. Egawa giving a lecture



Audience actively participating using answer pads

Shinichi Egawa (Disaster Medical Science Division)