

## Free Papers Theme 5: Education-2 Educational Courses

### Participatory Training Program of Capacity Building in Emergency and Disaster Preparedness in Yanbian, China

O. Lee,<sup>1</sup> C. Li,<sup>2</sup> D. Brahmhatt,<sup>3</sup> W. Jones,<sup>3</sup> S. Wang<sup>4</sup>

1. Red Cross College of Nursing, Korea
2. Yanbian University, China
3. Johns Hopkins University, Baltimore, Maryland USA
4. Hallym University, Korea

The training program in Yanbian, Jilin Province, China, was conducted through a collaborative partnership with Mercy Corp., the Department of International Health, Johns Hopkins Bloomberg School of Public Health, and the Nursing Research Institute of Yanbian University in support of the United Nations Development Programme (UNDP)-sponsored project entitled Poverty Alleviation and Humanitarian Assistance in the Tumen River Area, which is adjacent to North Korea. Before launching the program, a survey and field assessment were done that identified a large knowledge and skill gap between city hospitals and rural clinics, and a lack of disaster preparedness, even after the outbreak of severe acute respiratory syndrome (SARS).

The program was divided into three phases fostering full participation from January 2003 to January 2005. Each phase followed four steps: (1) needs assessment/planning; (2) curriculum development/customizing; (3) implementing; and (4) evaluation.

The first phase consisted of a 10-day workshop to train 30 trainers from eight countries in the Yanbian area as key partners. In the second phase, 300 doctors and nurses from eight counties participated in a five-day workshop consisting of lecturing, arranging, and evaluation by the participants from the first phase. Between the first and second phases, the researchers and local lecturers published a Chinese textbook on Emergency and Disaster Preparedness, which was the first in China. The third phase was a two-day workshop for approximately 900 rural doctors who dealt with emergency cases. Since the educational background of rural doctors varies from elementary school to bachelor's degrees, another five-day train-the-trainers session was conducted for 32 rural doctors prior to the main sessions, with the curriculum and language customized to meet their educational levels. Remarkably, the participants of each session expressed >90% satisfaction of the training and materials, and showed a significant improvement between pre-test and post-test scores. Participants were involved positively during Morning Recap (recapitulation) time and role-play. Throughout the training program, strong cooperation and participation was seen between Yanbian governmental officials and participants. In conclusion, small control and large autonomy motivates a strong partnership and sustainability in emergency care.

**Keywords:** disaster preparedness; education; emergency; Japan; knowledge; training

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### Comprehensive Evaluation of Critical Thinking Skills and Attitudes of Paramedic Students in an Emergency Medical Services Program

Patricia Padjen

University of Wisconsin Hospital and Clinics, Madison, Wisconsin USA

**Introduction:** There had been no evaluation of improvement in the critical thinking (CT) skills and attitudes of students who participate in paramedic education and training at the University of Wisconsin Hospital and Clinics (UWHC). No mechanism has existed to obtain student input.

**Objective:** To determine if there were longitudinal changes in CT skills and attitudes during paramedic education and training of: (1) associate degree students after their theoretical component of training, and after their student ambulance ride-a-long experience; and (2) fire department students after their theoretical component of training, ambulance ride-a-long experience (minimum 16 of 24 shifts), 3-month probation, and 6-month probation.

**Methods:** A mechanism was developed to obtain feedback from paramedic students related to the improvement of their CT skills and attitudes that are related to this process.

There were five research questions for this study: (1) Did the paramedic education and training improve the California Critical Thinking Skills Test and the California Critical Thinking Dispositions Inventory scores?; (2) What was the paramedic student feedback as to the impact of the paramedic education/training on the development and/or improvement in CT skills or attitudes?; (3) What changes or modifications, or revisions should be made to the paramedic program/curriculum based on the CT test results?; (4) What changes, modifications, or revisions should be made to the CT testing?; and (5) What changes, modifications, or revisions, should be made to the paramedic program/curriculum based upon paramedic student input?

The qualitative and evaluation problem solving methodologies were utilized to complete this study. The inferential statistical analysis included: *t*-tests; Pearson product moment correlation statistics; group mean; median; and standard deviation.

**Conclusion:** Researchers found that CT skills improve until the six-month probation period when there is a decline in CT skills. In the literature, there also is a decrease in knowledge and skill retention for advanced cardiac life support training and pediatric advanced life support training after six months.

**Keywords:** attitudes; critical thinking (CT); education; evaluation; paramedic students; training

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### Core Competencies for Terrorism: Disaster and Public Health Emergency Preparedness Education for Health Profession Schools

D. Markenson; C. DiMaggio; I. Redlener

National Center for Disaster Preparedness, Mailman School of Public Health, Columbia University, New York, New York USA

Currently, the increased threat of terrorism coupled with