Free Papers Theme 5: Education-2 Educational Courses

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

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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

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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; Peason 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

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Currently, the increased threat of terrorism coupled with

possible natural disaster and public health emergencies supports the need to incorporate bioterrorism preparedness and response material into the curricula for every health professional school in the United States. It is clear that a main barrier to healthcare preparedness is a lack of coordination across the spectrum of public health and healthcare communities and disciplines. In order to assure a unified and coordinated approach to preparedness, benchmarks and standards must be consistent across healthcare disciplines and public health. The most basic level is education.

To date, the focus of bioterrorism preparedness and response training has been on the education of the existing healthcare workforce. With the realization that the entire healthcare workforce will need to become more educated regarding terrorism and emergency preparedness, and an understanding that this must be a constant effort, recent attention has focused on the healthcare student. Students' needs differ from those of practitioners, and it is incorrect to assume that continuing education is directly applicable to student education. There is a fundamental difference between educational competencies and occupational competencies between students and practitioners. It also is important to recognize that to assure proper preparedness, there must be a clear connection between departments of public health and all other healthcare entities. To this end, public health students were included in the creation of competencies and have shown that non-clinical practitioners can, and indeed, must be included in this process.

A process is described and a list of emergency preparedness core competencies for healthcare professions and their applicability to medical, dental, nursing, and public health students is presented. While this set of competencies was designed using these disciplines, they easily may be adapted to other healthcare disciplines. The only variations would be in the assignment of proficiency levels and the decision of whether the clinical competencies are appropriate. The core competencies that are presented have been divided into the following four categories, which represent broad subject areas and the separation of the competencies related to direct patient care: (1) emergency management principles; (2) terrorism and public health emergency preparedness; (3) public health surveillance and response; and (4) patient care for disasters, terrorism and public heath emergencies.

Keywords: education; emergency; health care; preparedness; professionals; students
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Do We Need an Emergency Medical Training Center of Excellence?

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There is a manifest need for emergency medical training services in Eastern Europe and the former Soviet Union. The process of accession into the European Union has generated significant improvements in the healthcare systems of the countries commonly referred to as the "East European Eight" (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia).

However, these countries must continue to work together to further improve their healthcare systems. For this purpose, every year, the project of the Rallye Rejviz attracts an increasing number of emergency medical service professionals to Zlate Hory—a small Czechoslovakian town near the Polish border. Building on existing experience, this study aims to bring international emergency teams together in the non-threatening environment of the Jeseniky Mountains in the Czech Republic to compare performances and exchange information about techniques and approaches, while building friendships and opportunities for cross-border cooperation. During the eight consecutive years of the Rallye Rejviz project, the concept of an International Center of Excellence, which would serve members from around the world, was developed. Several indicators suggest the Center would be beneficial and widely supported, including: (1) the successful eight-year tradition of the Rallye Rejviz (RR) with annual events, such as RR, Rescue Jesenik Conference, and the Helpers Trophy for children; (http://www.rallye-rejviz.cz/) (2) skilled experts on the Advisory Board of the RR, with existing background in the RR Sports Club and cooperating subjects; (3) an existing location (The Bohema Resort http://www.bohema-zlatehory.cz/); (4) very good strategic and geographic position of the place; (5) the support of the Olomouc region; and (6) the support of important scientific and business subjects.

The target clientele of the proposed facility would include doctors, nurses, paramedics, health care administrators, and medical school students and faculty seeking training in state-of-the art emergency medical training practices and procedures. Participation in the program would not only augment the professional skills of those individuals, but also encourage the dissemination of emergency medical training-related knowledge to colleagues at their home institutions. The Center will also serve as a training ground for first-aid education of Fire Brigade, local military assets, and volunteer groups like the International Red Cross and other relief agencies. The quiet location in beautiful nature with a big potential of sports and free time activities is a guarantee of good results of rehabilitation and recondition of the attendants.

Keywords: Czech Republic; emergency medical services; International Center of Excellence; Rallye Rejviz, training
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Emergency Medical Services Education and Challenges in Iceland

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The objective is to give an overview of the education and continuing education for the emergency medical technicians (EMTs) in Iceland. Topics will include how education is structured and made accessible for those who live in rural and remote areas. The challenges facing the future of the emergency medical services (EMS) education also will be made explicit.