

**Results:** From February 2005 to October 2006, 217 participants completed the program; 117 and 100 in the years 2005 and 2006 respectively. Pre- and post-educational test results were as follows: 19 out of 117 (16.3%) and 27 out of 100 (27%) participants failed the pre-educational test in the years 2005 and 2006 respectively, while the corresponding post-educational test failure results were 3.5% and 0% respectively ( $p < 0.05$ ).

**Conclusions:** A significant proportion of the participants (16.3% in 2005 and 27% in 2006) failed the pre-educational test, while the post-educational test failure rate improved significantly by dropping to less than 5%. Implementation of a continuing education program for EMS personnel on a regular basis may serve as a useful tool in facilitating skill and knowledge improvement.

**Keywords:** continuing education; EMS personnel; post-educational testing

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### (20) Efforts Toward Increasing the Awareness of Disaster Training and Research at a University in Turkey

M.H. Haberal,<sup>1</sup> A. Kut,<sup>2</sup> C. Ozcan,<sup>2</sup> I. Budakoglu,<sup>2</sup>  
A. Hatipoglu,<sup>2</sup> M. Coruh,<sup>2</sup> M. Haberal<sup>2</sup>

1. Baskent University, Ankara, Turkey

2. Turkey

A disaster due to natural, technological, or human-made hazards is destructive to people and their communities and sharply reduces social and economic well-being. Therefore, the strategy for improving disaster response should emphasize repairing and improving the social and economic status of those affected. There already are many successful programs and applications operating in Turkey. Unfortunately, trained healthcare providers equipped with appropriate knowledge, attitude, and behavioral skills regarding disaster management are lacking.

In 2006, Baskent University established a Center for Disaster Training, Research, and Implementation according to the legal regulations of the High Education Council in Turkey. The Mithat Coruh Quality Management Center collaborated with the University's Burn and Fire Disaster Institute on the establishment of this Center. The Center for Disaster Training, Research, and Implementation will train and integrate selected healthcare staff from the seven existing healthcare facilities at Baskent University. The staff will learn about disaster management topics; specifically, the preparation and dissemination of training guidelines and protocol for disaster-specific problems at the national level. The Center will collaborate with national and international disaster management centers. The successful training activities will be recommended to the University for integration into the pre-graduation program of certain educational tracks.

**Keywords:** disaster management; disaster training and research; education; Turkey; university programs

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### (21) One Center's Experience in First-Aid Training: A Case Study in Turkey

M.H. Haberal,<sup>1</sup> I. Budakoglu,<sup>2</sup> C. Ozcan,<sup>2</sup> A. Karaban,<sup>2</sup>  
A. Kut,<sup>2</sup> M. Haberal<sup>2</sup>

1. Baskent University, Ankara, Turkey

2. Turkey

**Introduction:** After the 1999 Marmara Earthquake in Turkey, the civil initiative in first aid resulted in many incidents of severe malpractice and insufficient care. In 2002, the Turkish Government published legislation on first aid that required all first-aid responders to be certified by governmentally-approved first-aid training centers. In response to this legislation, Baskent University established a First-aid Training Center in 2004.

**Methods:** This Center is staffed by first-aid trainers that have certified 47 people over the duration of six courses. The eight-day, nationally-standardized course program covers topics of first aid and training, with a focus on skill improvement. Both topics, first-aid and training skills, were assessed by a pre-test that determined the baseline knowledge-level of attendees. After the course, a post-test was administered, which measured the knowledge-level and skill development of attendees.

**Results:** The mean value of the pretest first aid scores of the students was  $80.1 \pm 1.0$ , while post test score were  $93.4 \pm 0.7$  ( $p < 0.05$ ). Of the students, a minimum of 89% were at a proficient level in 20 BLS steps. Regarding training skills, the mean value for the pretest scores was  $74.4 \pm 1.2$ , while post-test score was  $90.7 \pm 0.7$  ( $p < 0.05$ ). Of the attendees, a minimum of 61% were at the proficient level in 16 presentation skill steps.

**Conclusions:** Given that 96% of Turkey's population lives in potential disaster areas, the importance of training first-aid responders is obvious. Turkey will persist on this well-planned and successful project until the needs of the country are satisfied.

**Keywords:** education; first-aid training; Marmara Earthquake; Turkey

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### (22) Post-Graduate Fellowship in Emergency Medicine Disaster Preparedness: Providing Physicians with Special Training in Hospital-Based Planning and Public Health

C.C. Campbell,<sup>1</sup> K. Uraneck,<sup>2</sup> S.A. Kohlhoff,<sup>2</sup> B. Arquilla<sup>2</sup>

1. State University of New York, Downstate Medical Center,

Brooklyn, New York USA

2. USA

The significance of preparing a medical response to a disaster in the United States has become more apparent in light of a number of domestic events that have occurred in the past decade. Keeping with this trend of recent awareness, SUNY Downstate Medical Center, a large teaching hospital and medical school, and Kings County Hospital Center, a Level-1 trauma center in Brooklyn, New York have joined with the New York City Department of Health and Mental Hygiene to create a disaster preparedness fellowship for physicians. This particular program is unique because it prepares physicians to be a leading force in hospital-based planning and planning within public health agencies.

The program is designed to span either one or two years when it is combined with a Masters Program in Public Health. During that time, the fellow acquires expertise in numerous disaster-related topics. This is accomplished through participation in a variety of activities, ranging from acting as a physician and educator in the emergency department to working on disaster management and planning within local and national public health agencies.

The effectiveness of the fellow-designed, hospital-based plans are tested periodically using drills that have included several area hospitals as well as the New York City Fire Department Emergency Medical Service. In addition to obtaining this advanced level of training, individual fellows also focus on specific areas of interest, such as planning for radiological events or pediatric patients during a disaster.  
**Keywords:** disaster management; disaster preparedness; fellowship; public health

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### (23) Effects of Different Educational Modalities on 5th and 6th Grade Children: Earthquake Personal Protection Behavior Knowledge in Israel

*Y. Bar-Dayan,<sup>1</sup> A. Goldberg,<sup>2</sup> Y. Soffer<sup>1</sup>*

1. Israel Defense Forces Home Front Command, Or Yehuda, Israel
2. Ben Gurion University, Beer Sheva, Israel

The goal of this study is to assess how effectively child education modality improves the knowledge of fifth and sixth grade children regarding personal protection behavior during and immediately after an earthquake.

A questionnaire was distributed to 2,648 pupils from the fifth and sixth grades of 120 different schools in a nation-wide geographic distribution across Israel. The questionnaire included three multiple choice questions concerning personal protection behavior after an earthquake, five theoretical questions on earthquakes, and three questions on exposure to posters and attendance at earthquake drills or lectures. The effect of each education modality on the children's knowledge was analyzed.

Attending a drill improved the knowledge of the children by 20% ( $p < 0.05$ ). Attending a lecture improved the knowledge by 10% ( $p < 0.05$ ). Exposure to posters did not significantly change the knowledge. The age factor improved the knowledge of the children by 10% ( $p < 0.05$ ), which was unrelated to the educational modality used.

Earthquake drill attendance improves the personal life-saving behavior of fifth and sixth grade children. More of these educational programs should be conducted in order to improve the personal protection knowledge of fifth and sixth grade children following earthquake.

**Keywords:** child education; children; earthquakes; personal protection; questionnaire

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### (24) Evaluation of Emergency Procedures Applied by EMS Teams in Simulated Mass-Casualty Events: Analysis of Experiences of International Polish Championships in EMS Procedures

*P.G. Gula,<sup>1</sup> A. Trzos,<sup>2</sup> W. Hladki,<sup>2</sup> W. Bodzon<sup>3</sup>*

1. Specialist Hospital No. 5 in Sosnowiec, Sosnowiec, Poland
2. Jagiellonian University Medical College, Krakow, Poland
3. Institute of Emergency Medicine, Krakow, Poland

The Championships in Emergency Medical Services (EMS) Procedures, an annual international competition, has taken place in Poland since 2002. Every year, almost 80 advanced standard EMS teams (including one physician or paramedic) take part in the event. Aside from Poland, the competitors also come from Slovakia, Germany, Ukraine, Belarus, Serbia, Hungary, Turkey, Greece, and Israel.

During a three-day event, the teams perform about 10 simulated emergency scenarios. Their performances are evaluated according to international standard procedures by a team of judges. In both the 2004 and 2005 competitions, one of the scenarios involved a mass-casualty event. In 2004, the 56 teams were faced with a shooting incident at a disco, where about 15 people sustained various types of injuries. In 2005, the task was to rescue 11 children involved in a school bus accident. The judges considered the following: (1) ensurance of safety; (2) communication with the dispatch center; (3) assessment of the incident site; (4) organization of procedures on location; (5) triage; (6) cooperation with other emergency services and with other EMS teams; and (7) preliminary medical procedures. The average number of points scored by teams was similar in both scenarios and amounted to 50.6%, ranging between 0.0–80.8%, which was lower than the average for other the other simulations (60.2%).

This study indicates that even in simulated circumstances, the emotional burden on the teams is greater, and they are more prone to errors than during routine EMS simulations.  
**Keywords:** competition; emergency medical services; mass-casualty incident; Poland; simulation

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### (25) Beyond Cultural Competence: Culturally Responsive Emergency Care

*C. Spencer; F. Archer*

Monash University, Frankston, Australia

**Introduction:** Many health agencies use cultural competence to deliver appropriate care to patients from culturally and linguistically diverse (CALD) backgrounds. The aim of this paper is to challenge this definitional model and recommend a timely move beyond cultural competence.

**Methods:** A systematic literature review was conducted to identify models used for teaching cross-cultural care to healthcare professionals.

**Results:** Although the review identified various models for providing care across cultures, cultural competence was featured as an internationally prevailing model, which was adopted by the Australian National Health and Medical Research Council in 2006 for use in the Australian context.