test showed that the entire participation-based group significantly improved in the evaluations of the three indicators. Further comparisons will be presented.

Conclusions: A participation-based educational approach is more effective in the development of a position before the education.

Keywords: doctors; education; participation-based; strategies Prebosp Disast Med 2007;22(2):s16-s17

(14) Clinical Aptitudes of Emergency Medicine Residents in the Boarding of Stroke Victims

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Objectives: To construct, validate, and apply an instrument to evaluate the clinical aptitudes of the emergency medicine residents in the treatment of stroke patients.

Methods: An observational, cross-sectional study, authorized by the Local Committee of Investigation, was conducted in which the 31 residents evaluated themselves. The residents are a part of the three levels of the emergency medicine specialty of one of the seats of the Federal District. To develop the instrument, three real clinical cases of stroke patients were used. The content validity was obtained by the consensus of four out of four experts in emergency medicine and educative investigation. A pilot test of pre-degree, internal medicine doctors was conducted. The consistency was determined using the Kuder-Richardson test. The validated instrument was applied specifically in only one session, later determining the awaited answers by chance through the Perez-Padilla test. A non-parametric statistical analysis was conducted.

Results: The final version of the instrument consisted of 153 items distributed in 10 indicators. The consistency was 0.92. The maximum score was 124 and the minimum scorewas 44. Twenty-five answers were obtained by chance. The statistical analysis did not identify any differences between the academic degrees. The third-year residents obtained better qualifications for most of the indicators.

Conclusions: The constructed instrument is a suitable tool for use in evaluations. The educational process in this seat seems to promote a process of reflection and criticism for the residents.

Keywords: clinical aptitude; emergency room; instrument; residents; stroke patients

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(15) Evaluation of Just-In-Time Training Materials for "Dirty Bomb" Management

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Introduction: The purpose of this study is to determine how to train physicians for radiation emergencies.

Methods: Emergency medicine residency programs in New York City were selected for the study. The participants were given a scenario describing a patient who fled the scene of an explosion during which he was externally contaminated with radioactive material. They were asked to manage the patient with the help of training cards developed by the federal government, and then to comment on the cards through a survey.

Results: The participants were asked to critique the help-fulness of the training cards on a scale from 1 to 5 (1 = not helpful, 5 = very helpful). Overall, the participants rated the cards an average of 2.82. When asked in what format they would prefer to receive the radiation information, 98 of 244 (40%) participants responded that they preferred the Justin-Time training card ("Quick Card") with a reference manual. Twenty-two percent preferred a poster, 20% preferred the Quick Cards alone, and 16% preferred a personal digital assistant format.

The participants then commented on what material should be found on the Quick Cards and in a manual. Concerning radiation emergency educational formats, 49% chose case scenarios, 36% preferred lectures, and 7% equally preferred online modules and video presentations. Finally, respondents reported receiving only one lecture on disaster preparedness (general) during the past two years. Conclusions: The results of this study indicate the lack of formal education in the management of radiation emergencies that emergency medicine residents are receiving. It also shows that multiple, non-traditional formats can be used for effective training, such as Just-in-Time tools.

Keywords: education; emergency medicine; just-in-time; radiation; residents; training

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(16) General Medical and Welfare Measurement System for the Disabled/Elderly

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Widespread problems are common in the field of disaster medicine. This is true especially in providing support to disabled persons. This study examined these problems.

This study consists of three major components:

- 1. Operating an emergency medical and welfare support team for the medical/welfare facilities involved;
- 2. Establishing mobile and fixed support centers for people living in temporary housing; and
- Improving software systems, including a new version
 of triage tag/disaster records for the disabled/elderly,
 and developing new tools to support those with visual and/or hearing disabilities.

The tool for assisting the blind is called "My Kane System" (TNK company, Japan). It is a system used to help the blind differentiate the color of tape using different vibration frequencies, by which they can select the safe route.

Establishing a systematic support system for the disabled to use during disasters is important. A new, supporting non-governmental organization, called the Japanese Welfare Supporting Network System against Large Scale Disaster (nicknamed Thunderbird) was established in 2005.