

being verbal only, 5.4% being physical, and 48.7% constituting both verbal and physical attacks. Only one minor staff injury was observed. The mean age of violent individuals was 43 (range 16–87) years with men representing 76%. Of the patients, 32.5% had a psychiatric diagnosis, 9.4% had various medical problems, and alcohol was involved in 64.3% of the cases. Dispatchers did not inform the ambulance staff about possible violence in 51.5% of the cases. Police were present in 76.3% of cases, and were considered efficient in all but 2.5%. Of the violent patients, 63% only needed verbal support, 31.5% had to be restrained, and police used handcuffs in 42%. Drugs were used in 26% of the cases, most often diazepam, haloperidol, and phlegomazine.

**Conclusions:** The incidence of violent events in EMS in Slovakia is relatively low, with virtually no injuries to EMS staff. Alcohol is the main cause of violent behavior. Most patients can be managed by reassurance. In many situations, police assistance is considered effective.

**Keywords:** emergency medical services; prehospital; responder risks; violence; violent patients

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### (N66) Emergency Medicine as a Specialty in Iran: The Experience of Strategic Management Plan Development of Emergency Department in a University General Hospital

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**Introduction:** The medical system in Iran recently has begun to implement emergency medicine as a specialty training system. This study introduces the first experience of the design and implementation of a strategic management plan in the Imam Hossein University General Hospital, which has an annual patient load of 150,000 patients.

**Methods:** A team including six assistant professors, one assistant, an intern (as educational client), a nurse, a head nurse, and a hospital supervisor was composed. Data were gathered via the RAND method, in which data are collected through questionnaires accompanied by summaries of articles, followed by distribution, marking, redistribution of marked materials, and the finalization of the above-mentioned in a group discussion.

The mission statement was established and extracted by means of the “SWOT” method. After a situational analysis, the proposed strategy was offered in accordance with the institutional situation.

**Results:** Overall, the main strategies included: (1) emergency management; (2) research branch; and (3) educational branch. The strategies for emergency management included: (1) integrating emergency service care providing units (moving from a divided “specialty-based care” to two subdivisions of the emergency department: acute and sub-acute care); (2) objective-oriented strategies in resource

allocation by business plan design; (3) university-level development strategies; and (4) facilitation of emergency medicine implementation of Iran, implementing legislative, insurance funding, and special pricing system at the national level. University level development strategies included: (1) integrating other hospitals under coverage of the University Health System; and (2) a special collaboration plan with city emergency medical services.

Other than strategies, special challenges both at the “intra-hospital” and “outside” levels shall be presented.

**Conclusions:** The introduction of Emergency Medicine as specialty care in the general settings must include well-defined strategies that can manage the challenges of integrating divided emergency care in a coordinative, developmental plan. Legislative and administrative policies at the national level are key factors to guarantee survival of these systems.

**Keywords:** emergency management; Iran; RAND method; strategic plan; training system

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### (N67) Are Polish Rescuers Prepared for the Wide Implementation of Automated External Defibrillators?

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The aim of the poster is to evaluate the basic life support-automated external defibrillator (BLS-AED) skills provided by the rescuers of the National Fire and Rescue System. There were 158 rescuers representing various types of rescue organizations, as well as volunteer professionals that participated in the study (representing 40 rescue units). The group that evaluated the results included experienced physicians, nurses, and paramedics all being advanced life support (ALS) and BLS-AED instructors. The following skills were evaluated: initial assessment, ventilation, chest compressions, and AED use. The quality of the BLS-AED was correlated with the professional experience of the rescuers and frequency of training. The results demonstrated an overall, good theoretical background, yet insufficient practical skills.

**Keywords:** advanced life support; automated external defibrillator; basic life support; emergency medical services; Poland; rescue workers

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## Oral Presentations—Pandemics

### Comparing Training for Dealing with Pandemic Influenza to Performance Assessment

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**Introduction:** Comprehensive training and realistic drills are important components of the preparedness for pandemic influenza. This study investigated the quality of training programs for health professionals for pandemic

influenza and compared the relationship between the training to performance assessment of admitting a suspected avian influenza patient.

**Methods:** The quality of different components of the training programs of all general hospitals to manage pandemic influenza outbreak was evaluated, utilizing a standardized evaluation tool. The results of the evaluations were compared to performance assessments of admitting and treating a suspected avian influenza patient.

**Results:** Significant correlations were found between all components of the training programs to the performance assessment. High correlations were found between the comprehensiveness of the training with the achievements in the performance assessment. Medium correlations were found between the contents of the training and designating personnel for the training with the achievements in the performance assessment. A low correlation was found between the training materials to the performance assessment.

**Conclusions:** Training medical personnel is an important component in maintaining preparedness for pandemic influenza. The comprehensiveness of training programs appears the most important element. Benchmarks of training programs were identified and can be utilized to promote preparedness for pandemic influenza.

**Keywords:** avian influenza; health professionals; pandemic influenza; pandemics; training

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### Do Standard Operating Procedures for Pandemic Influenza Relate to Performance Assessment?

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**Introduction:** The first step toward achieving hospital preparedness for pandemic influenza is the development of standard operating procedures (SOPs), as they enable the planning of the response, prepare the infrastructure, and train the medical teams.

**Methods:** The SOPs developed by hospitals for pandemic flu were evaluated using a standardized evaluation tool. The quality of the SOPs was compared to the performance assessment of admitting a suspected avian influenza patient.

**Results:** Moderate correlations were found between the evaluation scores of the SOPs and the scores achieved in the performance assessment. The components of the SOPs that significantly correlated with the performance assessment were protection of staff and patients, staff coordination and control, and expansion of surge capacity. Various hospital characteristics that were evaluated did not correlate to the hospitals' SOPs scores or to the performance assessment.

**Conclusions:** The correlations found between hospitals' SOPs to manage pandemic flu and the performance assessments of dealing with an avian influenza patient show the importance of effective SOPs as part of the emergency preparedness process. Standard operating procedures are required especially for supplying guidelines that instruct hospital staff on how to function in unfamiliar situations or

in areas that are perceived by the staff as risking their well-being. The study strengthens the need to develop SOPs that are comprehensive and cover relatively new risks.

**Keywords:** pandemic influenza; pandemics; preparedness; standard operating procedures; training

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### Pandemic Influenza Triage System

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**Introduction:** During a pandemic influenza outbreak, the current healthcare infrastructure would be overwhelmed with patients. A standardized method of appropriately triaging patients to hospitals, clinics, alternate care facilities, and other sites of care is needed. Current scoring systems for triaging patients are complicated and require laboratory data. A new triage system is proposed.

**Methods:** An expert panel developed an algorithm for triaging patients from the ambulance, clinic, and emergency department settings to different levels of care during a pandemic. Potential community facilities for patient care were categorized into four levels based on the complexity of care that could be provided. The new algorithm assigns patients to these different locations.

**Results:** The patient is assessed and one point assigned for each abnormality: respiratory rate <30/minute; shock index <1 (heart rate/systolic blood pressure); O<sub>2</sub> saturation <90%; altered mental status; age ≥65 years.

A detailed disposition scheme based on the point score was developed and will be described. To summarize a patient with a score of 1 is triaged home or to a low-level care facility, patients with scores of 2 are triaged to a broad range of facilities depending on the abnormalities, and those with scores of 3 are triaged to a hospital.

**Conclusions:** This novel triage algorithm can be used to rapidly estimate the severity of illness during a pandemic. This will facilitate more appropriate and standardized allocation of patients to different levels of care during an influenza pandemic. This will help to avoid overwhelming hospitals with non-critical patients.

**Keywords:** algorithm; influenza; pandemic; severity; triage

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### Attitudes of Japanese Healthcare Professionals toward an Avian Influenza Pandemic

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**Introduction:** According to an estimate, the absence rate of Japanese businessmen may increase 40% during an avian influenza pandemic. Medical needs will increase, and simultaneously, the risk of infection of the medical staff and the absence rate of the medical staff also will increase. This situation will impact on psychosocial aspect of status of the