per the Simple Triage and Rapid Treatment (START) protocol. A mass-casualty incident (MCI) was defined as ≥7 red patients or ≥20 patients at one time. The data was analyzed using SPSS version 10.

Results: Out of 25,928 patients, triage was performed for 25,468 (98.2%); 8,390 (32.3%) presented during the morning shift (08:00–14:00 hours), 7,119 (27.5%) during the evening shift (14:00–20:00 h); and 10,185 (39.2%) during the night shift (20:00–08:00 h). Of the patients, 8,303 were triaged during the morning shift, 6,994 during the evening shift, and 9,978 during the night shift. Of the subjects, 1,431 (5.6%) were tagged red, 10,634 (41.7%) with yellow, and 13,424 (52.7%) were tagged green. Of the patients, 694 (2.7%) were retriaged. During the morning shift, 327 were tagged as red, 3,512 as yellow, and 4,465 as green, and 243 were retriaged. During the evening shift, 383 were tagged as red, 2,918 as yellow, and 3,685 as green, and 194 were retriage. During the night shift, 705 patients were tagged as red, 4,116 as yellow, and 5,165 as green. Sixteen MCIs occurred during the night shift, four during the morning shift, and one during the evening. Total numbers of patients presented during a MCI were 1,227. Of these, 102 were tagged as red, 463 as yellow, and 642 as green, and 79 were re-triaged.

Conclusions: High patient volume during the night shift hampers triage during peace time and MCIs.

Keywords: emergency department; mass-casualty incident; patient volume; shift duties; triage

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A 12-Month Retrospective Review of Errors in Triaging and their Outcomes at the Emergency Department of Philippine General Hospital

Scarlett Mia S. Tabunar; Erwin R. Cruzado

Philippine General Hospital, Manila, Philippines

Introduction: The purpose of this study was to review the patients at the Acute Care Unit (ACU) that were triaged to the Ambulatory Care Unit (AMCU) of the Philippine General Hospital after being categorized as non-urgent. This study seeks to identify factors that contributed to these triage errors.

Methods: A retrospective chart review was conducted for all patients that were triaged to the AMCU who died at the ACU 01 January–31 December 2007. The data collected included demographics, date/time of triage, chief complaint, initial impression at the AMCU, triage officers, and date/time and probable cause of death. Data were analyzed as frequencies and mean values.

Results: The total number of victims triaged to the AMCU was 12,513. Of these, 784 (6%) were referred back to the ACU. The total mortality was 1,284. The AMCU mortality rate was 21 (2%); 14 were male and seven were female. The mean age was 57 years. The presenting complaints were abdominal pain (33%), shortness of breath (19%), chest pain (9%), dizziness (9%), weakness (9%), back pain (5%), vomiting (5%), swelling (5%), and fever (5%). Patients classified as non-urgent were sent to the AMCU for symptomatic treatment.

The average stay at the AMCU prior to transfer to ACU was three hours. The mean stay in the ACU prior to death was 30 hours. The two most common probable causes of death signed out by the primary service were acute coronary event (57%) and pneumonia (24%).

Discussion: The majority of AMCU mortalities were triaged by junior residents. The most frequent cause of death was Acute Coronary Event. Experience is a major factor for residents when managing triage. The presenting complaint also is pivotal.

Many factors (e.g., patient load, logistics, diagnostics delay) also should be considered.

Conclusions: The presenting complaints, together with the initial data elicited by the triage officer, are vital in categorizing undifferentiated patients and triaging them into the appropriate treatment path. Knowledge and experience of the triage officer are factors that should be considered.

Keywords: competencies; education; emergency departments; error; the Philippines; training; triage

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Development of Intuitive Administration Software to Assist the Triage Process during a Medical Disaster

Al Badi Rashid

German Institute for Disaster Medicine, Tübingen, Germany

Introduction: There are several deficiencies in the practical performance of the triage process, such as Medical Emergency Triage Tag (METTAG) or Simple Triage and Rapid Treatment Tag (SMART). In addition, information technology innovations can provide the chance to eliminate these deficiencies and enhance the efficiency of medical performance during this stressful process of triage.

An electronic solution should include the following components: (1) easy to use; (2) intuitive; (3) high security; and (4) mobility. Other helpful abilities include the ability to assess and document patient data (number of patients, injury patterns, gender, personal data) and an archive for documentation and later scientific analysis.

Methods: The software is divided in three main components. In the field, first triage uses the Sieve as a database, documenting photos of the victims. Second, it is an administrative tool that gathers information from the field station and provides a complete report on the victims' triage code for the admitting hospital and/or administrative authority. Third, it is used as an archive for research and backup data.

Results: The software program was tested in the Sultanate of Oman with a mock exercise of a disaster with 200 patients. The program was assessed as easy to use, intuitive, and mobile, had high security, and worked without failure. One drawback is the power requirement it requires during the long triage process. This can be solved with a rechargeable power supply.

Conclusions: This software provides a solution that enhances the accuracy and efficiency of medical performance during the stressful process of triage.

Keywords: disaster health management; disasters; information technology; software; triage

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