

metropolis using the Taipei experiences. We provided the establishment of emergency medical services (EMS) system, the organization, and the multidisciplinary team response to a major disaster.

**Method:** We choose the city of Taipei for the study sample. Taipei has a population of 2,640,000 people, and has 12 local administration areas. The emergency medical services system (EMSS) has 24 system hospitals (6 medical centers, 14 regional, and 4 local hospitals). We divided Taipei into 5 disaster medical response areas (east, south, west, north, and middle), and the demographic data, the use of severity scores, and questionnaires from the respondent persons were collected. A cohort study design was used.

**Results:** The accuracy and reproducibility of these assessments depended upon the training and skill of the assessors and upon the refinement of the tools used in the conduct of these assessments. The data collected included: medical, public health, sanitation and water supplies, shelter and clothing, food, energy supplies, search and rescue, public works and engineering, environment, logistics and transport, security, communication, economy, and education. After five disaster medical response areas were compared, the best responses were found in the north and middle areas.

**Conclusion:** To build a model of disaster medical response in the metropolis is necessary. From the project design, we can identify our vulnerabilities. Implementation of change is directed towards mitigation of the damage that may occur from disasters.

**Key words:** assessment; design disaster medicine; disasters; earthquake; medical responses; model; preparedness

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### Clinical Characteristic and Prevention of AMI in Middle Age and Young Patients

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**Objective:** For improving the diagnosis of younger patients presenting with acute myocardial infarction (AMI).

**Methods:** The clinical analysis was done in 125 patients with AMI who were <49 years of age with 125 middle and young age cases.

**Results:** The middle and young age patients were 15.1% of total AMI cases evaluated during the same period with 122 males and 3 females; the ratio was 40.7:1. In the young group, 74.6% smoked, 56.0% had hyperlipidemia, 40.8% drank, 27.2% had hypertension, and 27.2% had a family history of AMI. The mortality was 7.2% in four weeks. The male to female ratio, smoking and family history in the young group were higher than they were in the older group, whereas hypertension and mortality were lower than in older group. These differences were significant statistically.

**Conclusion:** The middle and young age patients mostly had risk factors, significant predisposing causes, sudden onset, and on premonition. The early sudden death rate was higher, but the late complication rate was lower. Therefore, the

course of disease was short and the prognosis was better than for the older cases.

**Key words:** age; clinical characteristics; diagnosis; mortality; myocardial infarction; prevention; risk factors

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### Relationship Between Mortality and Building Collapsed Patterns

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**Introduction:** This presentation describes the relationship between injuries to persons and the collapsed patterns of buildings in the Cokaeli Earthquake in Turkey, 1999. Collapse of buildings is responsible for many victims during an earthquake, while there are some patterns of collapse that do not kill. On 17 August 1999, an earthquake with a magnitude of 7.4 on Richter scale, struck Cokaeli, Turkey. More than 16,000 people were killed.

**Methods:** The research team defined the collapsed RC buildings 20 types, and classified them using the 5 MSK damage grade, D0 – D5, in the view point of architect engineering. Moreover, the team subclassified the D5 damage, considered totally destroyed, into 11 precise patterns. The team visited the site—Adapazari, Turkey—and collected the data about individual collapsed buildings and the mortality of the inhabitants, using inspections and interviews.

**Results:** The results showed that the mortality related strongly to the type of collapse. The deaths only occurred in 5 of the 11 types of MSK-D5, a pancake-like collapse in the lower stories of the structures.

**Discussion:** The research team proposes discussion about the human damage and building damage under the more precise classification of complete collapse than those of ordinary MSK damage grade.

**Conclusions:** The survival potential of trapped victims according to the collapsed patterns, may help the decision-making for the optimal triage for search and rescue. The conclusions should be associated with improvements in the strategies used for search and rescue activities, and also the induced building-collapse type to the survival.

**Key words:** building collapse; earthquakes; patterns; search and rescue; survival

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