retical hospital treatment capacity of 112 patients/hour was calculated for a performance score of level 5. This is served by a transport capacity of 49 ambulances directed by 8 emergency physician cars. For increasing the rescue capacities, the rescue teams could be supported by 7 local SEGs (pecial acting groups) and 5 helicopters from the vicinity.

In total, up to 05/2000 voluntary CEP system took responsibility for about 550 victims of minor injuries. According de Boer's criteria for disaster scoring, we had to deal with events of a disaster severity score from 1 to 6. The severity index was calculated between 0.3 and 3.

Conclusions: To be able to distinguish between the three degrees of Villareal's differentiation of MCs: I=B0, II=B0, III=B0, it is necessary to know exactly the capacities of your local rescue chain elements. It is essential to be able to distinguish between MCs II=B0 and III=B0 because you have to call for help in the vicinity in time in case of MC III=B0. So you should be able to prevent that your local MC might end as a disaster because of bottleneck problems within your local system capacities.

References

- de Boer J: Criteria for the assessment of disaster preparedness II. Prehosp Disast Med 1997;12:13-16.
- Villareal M: Quality control module for mass casualities. Prehosp Disast Med 1997;12:200–209.
- de Boer J: Definition, classification and scoring of disaster. In: Handbook of Disaster Medicine. De Boer J,. Dubouloz M (ed), VDW publisher 1999, pp 227–228.

Key words: capacities; classification; coordinating emergency physicians; disaster; performance; quality assurance E-mail: bm.schneider@medizin.uni-ulm.de Prehosp Disast Med 2001;16(2)s65.

The Complications in Excimer Laser In-Situ Keratomileusis for Severe Myopia

Sbi Xiuru; He Tiangeng; Wang Lijun; Wu Sbi Ying Tianjing Medical University, Tianjing, PEOPLE'S REPUBLIC CHINA

Objective: To evaluate the safety and efficacy of excimer laser in-situ keratomileusis for severe myopia.

Method: 463 eyes of 237 cases which ranged from -6.00D to -22.00D were operated upon using Lasik using SCMD Microkeratome and NIDEK EC-500 excimer laser system. The complications and prognosis were analyzed retrospectively.

Results: Postoperative, uncorrected visual acuity increased significantly, and 75.3% of the patients achieved preoperative best corrected visual acuity or better. The perioperative complications included: incomplete corneal flap (0.86%); free cap (0.43%); decentred flap (0.22%); and limbus hemaorrhage (7.3%). The postoperative complications included: particulate debris under the repositioned flap (2.8%); over or undercorrection (9.8%); and epithelial interface ingrowth (0.65%).

Conclusion: Lasik for severe myopia proved to be safe and effective, although it needed to be improved microkeratome and experience.

Key words: acuity; complications; efficacy; excimer laser; keratomileusis; myopia; safety

Prehosp Disast Med 2001;16(2):s65.

https://doi.org/10.1017/S1049023X00036396 Published online by Cambridge University Press

Reducing Community Vulnerability of Lalitpur Submetropolitan City Dr. Bijaya K. Sbrestha

The high rate of urbanization and haphazard urban growth coupled with change in the economic base has transformed the tiny town of Lalitpur into a submetropolitan city. Founded in 299 AD along Tibetan and Indian trade routes, the town developed based on Hindu and Buddhists planning principles into the present form. Lalitpur, within its 22 municipal wards over an area of 459 hectares, is comprised of both planned and unplanned, as well as old and new urban fabrics, exhibiting the socioeconomic reality and development process that prevailed in those earlier periods.

The consequences of this transformation not only are limiting physically, such as destruction of traditional homogeneous building stocks into inferior parts, severe deficiencies in basic urban services, conversion of courtyards and pedestrian lanes into "death traps" and so on, but also on reduction of an individual's or society's ability to cope with hazards, thus making the old neighborhood more vulnerable. The government's response to deal with various problems associated with this process through enforcing building legislation and rescue operation on an ad hoc basis is insufficient and discouraging.

This paper examines the community vulnerability from an integrated approach of Lalitpur, just next to the capital city of Kathmandu. It has four objectives. First, it demonstrates the natural hazards in the city, considers seismic risk and socioeconomic structure including variables in infrastructure, building materials, and population vulnerabilities. Second, it analyzes the preparedness level and response capacity of the city (and society) for vulnerability analysis. Also, a case study of a typical neighbourhood in the historical core area is examined in order to demonstrate the process of urban transformation and its consequences on neighbourhood vulnerability. Third, it identifies various reasons of vulnerability increases, and then, assesses the risk analysis (future probable damage). Finally, it proposes some recommendations for public authorities, communities, and policy makers in the fields of planning and development, vulnerability analysis, and capacity of local government (and ward office) and local resource mobilisation and community awareness.

Key words: community vulnerability; Lalitpur; seismic risk; socioeconomy; urban transformation

E-mail: shrestha@hyogo.uncrd.or.jp Prehast Disast Med 2001:16(2):s65

Prehosp Disast Med 2001;16(2):s65.

Management of Calcium Oxide Intoxication M. Simon;¹ M. Dubois;² F. Van Trimpont³

- 1. Rinsis, Mons, BELGIUM
- 2. Chr Warquignies, BELGIUM
- 3. Chu Ambroise Pare, Mons, BELGIUM

Introduction: On an industrial site, an intoxication of a large number of workers by calcium oxide has necessitated strict triage so as to avoid a massive evacuation toward the hospitals. Method: Work on a construction building site settled within an industrial area required spreading of quick lime near the factory. A change of wind direction exposed a large numbers of labourers to calcium oxide emanations. The first dispatch of assistance consisted of two ambulances and one medical team. The director of medical assistance (DMA) also was notified and went to the scene. The intoxication was moderate and consisted of airway and eye irritation.

Initially, around 40 labourers showed up with these symptoms, but soon more than 100 labourers complained of cough and ocular irritation. An accurate triage was indispensable on the scene as to avoid a massive evacuation of the victims toward the hospitals, and in this way, impeding emergency medical services. The arrival on the site of an extra ambulance and a second medical team permitted the realization of the DMA directives, triage in an hour, and the evacuation started 1.08 hrs after the alert. Transportation of casualties was done by ambulances for four victims and 16 other victims were tranported with the help of the minivan of the civil security. The major problem confronted during this incident was a hysterical panicking among the workers and only a few casualties really had the symptoms.

Results: Of the hundred or so labourers who arrived in the triage area, only 20 had to be evacuated. The last casualties left the scene 1.45 hrs after the alert and the DMA left 2.23 hrs after the start of the event.

Conclusions: An important number of casualties did not need evacuation, and an appropriate triage allows nontransport of people involved who otherwise would overwhelm the emergency services.

References

Koch P: Skin burns, necrosis and ulcers caused by wet cement, ready-mixed concrete and lime. 8 cases *Ann Dermatol Venereol*. 1996;123(12):832-836.

Key words: calcium oxide; director; evacuation; lime; symptoms; triage

Prehosp Disast Med 2001;16(2):s66.

Study of Stress among Rinsis Workers M. Simon;¹ F.Van Trimpont²

1. Centre Rinsis, Mons, BELGIQUE

2. Chu Ambroise Pare, Mons, BELGIQUE

Introduction: Rinsis (call centre for emergency needs, ambulance, firepersons, emergency medical team, etc.) services a population of about 1,350,000. The calls (about 1,400 each day) cause stress among workers. We evaluated the stress levels using several studies.

Methodology: First test of Derogatis is a list of 90 proposals. Participants must choose between 5 possible answers ("not at all", "a little", "sometimes", "often", "very often"). The score is compared with the score of witness population. The second test is the Maslach and Jackson test: 22 proposals permit choice between 6 frequency and 7 intensity. We established an emotional exhaustion coefficient, a depersonalisation coefficient, and a personal accomplishment coefficient.

Results: Score of was is 32.1 for the Rinsis and 62 for wit-

ness population. Test of Maslach and Jackson showed the following results:



Conclusions: The score of Derogatis indicates a better adaptation to the stress for Rinsis than for the witness population. The tests of Maslach and Jackson indicates a low score of emotional exhaustion with very few people who depersonalise relationships with callers. Their work represents a satisfying personal accomplishment for 55% of the Rinsis workers.

Key words: call center; dispatchers; emotions; relationships; Rinsis call center; stress

Prehosp Disast Med 2001;16(2):s66.

The Sleipner Catamaran Incident—Norway, November 1999

Olav Sønderland;¹ Olav Eielsen, MD;² Geir Sverre Braut, MD³

- 1. Chief of Police, Stavanger Police District, Stavanger, NORWAY
- 2. Consultant Anaesthetist, Departement of Anaesthesia, Rogaland Central and University Hospital, Stavanger, NORWAY
- 3. Chief County Medical Officer, Stavanger, NORWAY

During the evening of 26 November 1999, the passenger catamaran vessel SLEIPNER, with 85 persons on board, ran aground in open sea near the west coast of Haugesund, Norway. It was dark and cold with strong winds and rough seas. The sea temperature was 9° C. The Search and Rescue (SAR) services were alarmed by a coastal radio station a few minutes after the event. At about 19:45 hours, the ship sunk, approximately 40 minutes after the grounding, and all persons on board were in the water. By means of helicopter and nearby boats, 69 were saved alive, 11 were found dead during the SAR operation the same evening, and five were found dead by underwater search.

The Coastal Radio Station alarmed the Joint Rescue Coordination Centre Southern Norway (RCC) and nearby vessels according to IMO procedures. The RCC also alarmed the Emergency Dispatch Centre at Haugesund Public Hospital. Health personnel from this hospital went out to a small harbour nearby the site of incident. A SARhelicopter was dispatched from Sola Air Base at Stavanger, some 40 nm south of the scene of incident. Due to response time, the helicopter left base at 19:45 hours, arriving on scene at about 20:10 hours. Nearby vessels had just arrived. Both the helicopter and the surface vessels were