

vigilance, but into apathy.

**Keywords:** attitudes; disaster; media; news; politics; reports  
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### Monitoring of Cabinet X-Ray Users

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**Objectives:** To determine the sensitivity and applicability of the use of film badges for the assessment of radiation exposure to cabinet x-ray users. The use of x-ray film badge for personnel monitoring of cabinet x-ray system users is a requirement of the local Department of Health (DOH) in the Philippines as per Administrative Order DOH AO No40 s1996.

**Method:** Radiation exposure assessment of cabinet X-ray users was done using the film badge for personnel monitoring.

**Results:** 252 x-ray film badges that were gathered in 1998 and 1999 at Intel factories in the Philippines showed that the results all were <0.15 mSv for the period which is the lower limit required for detection. The Derived Working Limit (DWL) for the monitoring period is 1.7 mSv/month.

**Conclusion:** The use of film badge to monitor exposure to x-ray radiation is not sensitive enough to measure the limit of detection for the method, and therefore, is not practical for personnel monitoring of cabinet type of x-ray machine users. It is recommended that the semiconductor and electronics industry association request the DOH to review their requirements for cabinet x-ray systems users based on the results gathered and the limitations of the film badge.

**Keywords:** cabinet x-ray; electronics; film badges; monitoring; personnel; radiation; semiconductors  
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### Traditional Surgical Practice and Adverse Health Outcomes Among Refugees in Tanzania

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**Introduction:** In Tanzania, the UNHCR provides protection and assistance to some 415,000 refugees from Burundi (285,000), the Democratic Republic of the Congo (DRC); 118,000), Rwanda (7,600), and Somalia (4,200). Although Tanzania Red Cross Society and other international NGOs provide medical care in refugee camps, traditional healing practices are popular among and depended upon by the refugees. Among such procedures, uvulectomy is practiced widely by traditional healers, and it is suspected to cause sepsis or neonatal tetanus and subsequent death.

**Objectives:** To clarify knowledge, belief, attitude, and practice of uvulectomy and its health outcomes.

**Methods:** In May 2001, structured interviews were con-

ducted with 149 traditional healers and 400 randomly sampled persons in a Congolese refugee camp with a population of about 50,000 in eastern Tanzania.

**Results:** Among the 149 traditional healers, 39.6%, 45.6% and 14.8% were registered, non-registered traditional healers, and plea leaders. Of the total, 56.8% learned their skills from their family; 25.0% from a traditional healer; and 6.8% were self-taught. Of the traditional healers, 86.6% and 24.1% used herbs and exorcism respectively for treatment of their patients. Of the total number of participants, 73.0% felt that some of their treatments were more effective than were those provided by western medicine; 63.3% trusted and 56.9% cooperated with western doctors. Uvulectomy was practiced by only 4.8% of the healers, but these healer had performed the procedure an average of more than six times, 19.1% thought uvulectomy was effective, 36.9% while believed it to be harmful. The respondents noted that the indications for uvulectomy included vomiting and respiratory problems of infants; an adverse effect was throat pain, bleeding, and death.

Among the 400 refugees respondents, 65.7% had any family member given a uvulectomy; 16.1% answered that it was provided by a traditional healer, but more than half were done by family or other lay persons. More than two-thirds of the respondents thought uvulectomy was effective, while less than half thought it was harmful.

**Conclusion:** Uvulectomy was a popular, traditional, surgical practice to treat infants with respiratory problems in a Congolese refugee camp. It was performed not only by traditional healers, but also by lay persons, and might lead to increase in infant mortality. Collaborative work was suggested between on-site medical services and traditional medical practitioners.

**Keywords:** healers; infants; mortality; refugees; respiratory illnesses' surgery; Tanzania; uvulectomy  
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### Education and Training

#### Meeting New Challenges in Disaster Medicine Education

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Disaster Medicine has become a recognized sub-specialty area of emergency and trauma medicine in many countries. Increasingly, the basics of disaster medicine are included in the education of physicians-in-training and routinely are a part of examination questions leading to certification in emergency medicine. More advanced educational opportunities come in the post-graduate level fellowships and master's level programs. Unfortunately, few educational programs or their graduates were prepared to offer the needed expertise in meeting the demands required of current disasters. Yet, medical professionals are assuming more and more leadership positions in state and national governments and in national and international agencies and organizations as decision-

makers. Deficiencies in the educational process primarily are in the area of management and organizational requirements, especially in disasters that demand non-traditional approaches to emergency medical services, and as effective decision-makers and representatives in the governmental process. Future disaster medicine leaders will require a broader base of knowledge and experience.

**Keywords:** disaster medicine; education; emergency medicine; management; organization; specialty  
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### Introduction of European Master in Disaster Medicine (EMDM)

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**Introduction:** In case of a disaster, the community expects effective relief. Medical involvement is necessary in the planning, in the response, in the coordination, and also in the evaluation of disaster plans, and this requires specific knowledge, the ability to organize an emergency medical system adapted to disaster situation, and the professional skills to provide medical care of high quality even in a hostile environment. Therefore, education and training in all aspects of disaster medicine are essential. The European Master in Disaster Medicine (EMDM: <http://dismedmaster.com/home>) is a new project that includes theoretical and practical sections together with the use of the new electronic educational tools, organized by the Universities of Novara (Italy) and the Free University of Brussels (Belgium) hosted by the European Center for Disaster Medicine (CEMEC).

**Objective:** The EMDM aims at training the medically educated professional to respond better in the aftermath of an event that causes a disaster using an innovative educational approach, implementing adult learning (self-study, frontal lessons, practical exercises, etc.). Using distance-learning techniques. At the end of the course, the participants are expected to be able to evaluate risks, participate in planning for disaster preparedness, direct the medical response team in case of disasters, organize and manage evaluation and debriefing sessions, and provide introduction to disaster management for medical response teams.

**Methods:** The duration of the Master is of one academic year divided into four month segments of self study including the first draft of the dissertation or the research project, two consecutive weeks of an interactive, live-in course concluded by the multiple choice questions and oral evaluation, four months for the redaction of the final version of the research project, and preparation for the interactive Internet assessment. In our vision of distance learning education, effort and care have been taken for implementing an electronic book (part of our "virtual classroom") and a computer/Internet-based, simulated approach to emergency and disaster situations. The electronic book is divided into modules and chapters, which can be uploaded/updated by

the authors with simple actions taken in the "administrative" side of the website. The EMDM website assigns a pre-defined level of privilege to every user so that a higher level corresponds to a wider range of actions (authoring tools, forum and polls, administration, etc.). The last version of the authoring tool is a powerful, Java-based WYSIWYG courseware-developing environment, specifically tailored for EMDM didactic needs. The simulation exercises (based on the ITLS system by E Semble) include assessment and resuscitation/stabilization issues, triage (conventional and mass casualty), treatment, tactical evacuation, and casualty management. The casualties are chosen by the teachers using a victim database with over 1,500 records, and can be put in a scenario builder offering multi-user and real time simulation capabilities.

**Conclusion:** The results and positive feedbacks that EMDM has received during its first Academic Year greatly contributed to help to ameliorate and expand both the technical side and some didactic/organizational issues.

**Keywords:** Disaster Medicine; distance learning; education; evaluation; planning; simulation  
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### Education and Training in Disaster Medicine

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Given the global rate of urbanization and industrialization, disasters, though occurring infrequently, are expected to increase quantitatively and worsen qualitatively. Knowledge regarding each event not only is limited, but varies between different disasters. Therefore, education and training are vital in gaining the maximum achievements of mitigation, planning, response, and recovery at any one tragedy.

Personnel from a wide spectrum of agencies must be educated and trained, including those from medical, rescue, military, government administration, NGOs, and all others who are directly and indirectly involved in their management. This programme must cover: 1) Concepts and definitions; 2) Types and classifications; 3) Effects and complications; 4) Phases of disaster cycle; and 5) All other related topics.

It is also important to involve lay public, so that disseminated information and skills may lead to common understanding and implementation of standardized plans. Either these must be conducted at local or regional levels, education and training may employ various techniques, namely: 1) Lectures; 2) Discussions; 3) Case studies; 4) Lab workshops; 5) Table top exercises; 6) Mock drills; and 7) Post mortems.

Other initiatives also should complement the above, such as research studies and organizing seminars and conferences. Evidently, lessons learnt and acquired through this process have, and will continue to improve the management performance and outcome of any disaster event.

**Keywords:** courses; curriculum; disaster medicine; education; plans; training  
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