

# IEMSIG

Newsletter of the International Emergency Medicine Special Interest Group of ACEM



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## Editorial

### In This Issue

2012 has seen further increases in the numbers of FACEMs and EM trainees involved in EM developments beyond our shores.

EM trainees are venturing into difficult and challenging environments, as illustrated by the reports from Haiti by Nicky Dobos and from Afghanistan by Jenny Jamieson.

FACEMs are contributing to EM development projects recently launched in Myanmar (Burma) and in Qatar.

Meanwhile, contributions to EM developments in our region continue in PNG, Sri Lanka, Nepal, India, China, the Pacific Islands (all reported in this issue) and elsewhere. News from afar comes from Finland.

### ACEM Supports Delegates from Developing EM Programs

Again this year, ACEM supported delegates from our region to attend the ASM held in Hobart. Sonny Kibob from PNG, Krishantha Jayasekera from Sri Lanka, Ramesh Acharya from Nepal, and Maung Maung Htwe from Myanmar presented updates on their programs. The ASM also supported Moe Myint from Yangon (with support from ISTIH at University of WA).

### A First IEC Symposium

The year saw our first stand-alone meeting for international EM, convened by Gerard O'Reilly and conducted at The Alfred Hospital Melbourne. The 2012 International Emergency Care Symposium – "Building regional capacity: lessons learnt and next steps" included international keynote speakers Prof Lee Wallis from University of Cape Town and Prof Jim Holliman from George Washington University. The one day symposium attracted a large audience of fellows, trainees, medical students, nurses and paramedics. It addressed issues related to medical and nursing development, trauma systems and disaster response.

### ACEM International Development Fund Grants

The recipients of grants from the 2011 round were presented in the previous issue of this Newsletter.

The recipients of grants from the 2012 round are:

1. Philip Hungerford, for the project "Establishing a locally run Emergency Life Support (ELS) Course in Myanmar (Burma)"
2. Gerard O'Reilly/Sally Charlton, for the project "Alfred-Hue Emergency Care Partnership Project"
3. Kerry Hoggett, for the project "Toxicology for Myanmar Emergency Medicine Course"

### IEMSIG Executive – Expansion

Currently the Executive for IEMSIG is Gerard O'Reilly (chair) and Chris Curry (foundation chair, hon.sec, editor IEMSIG Newsletter).

It is planned over the New Year to expand the Executive to four.

Details will be forwarded to IEMSIG members in due course.

If you want to sign up with IEMSIG, contact Sarah Smith, via [IEMSIG@acem.org.au](mailto:IEMSIG@acem.org.au)

### Employment Opportunities

#### Myanmar (Burma):

Australian Volunteers for International Development (AVID) has a position for a FACEM in Myanmar. <http://www.australianvolunteers.com/10532149-emergency-medicine-lecturer-and-adviser.aspx>

#### Botswana

Positions are available with the University of Botswana. Contact: Megan Cox [drmegancox@yahoo.com.au](mailto:drmegancox@yahoo.com.au)

### Trainee Credentialed Opportunities

#### Madang, PNG:

See reports in previous issues of IEMSIG Newsletter.

Contacts: Georgina Phillips [drgeorgina@gmail.com](mailto:drgeorgina@gmail.com); John Kennedy [drjfk@bigpond.com](mailto:drjfk@bigpond.com)

#### Gabarone, Botswana

See reports in previous issues of IEMSIG Newsletter.

There is an established emergency medicine training program in Gabarone. Megan Cox is the full time FACEM.

Contact: Megan Cox [drmegancox@yahoo.com.au](mailto:drmegancox@yahoo.com.au)

#### Kathmandu, Nepal:

There is now a new emergency medicine training program at Tribhuvan University Teaching Hospital in Kathmandu. FACEMs are visiting through most of the year.

Contact: Chris Curry [chris@chriscurry.com.au](mailto:chris@chriscurry.com.au)

#### MSF

See reports in previous issues of IEMSIG Newsletter.

ACEM considers MSF missions on individual merits. Application for credentialing is initiated prospectively.

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## Guideline Compliance in the International Response to Disasters

The Response to Haiti Examined from the Perspective of an Emergency Medicine Trainee in the Field

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### Introduction

After a sudden-onset disaster in a resource-poor region, major healthcare needs include early emergency medical care, follow up trauma and medical care for secondary effects, and regular healthcare needs after the destruction of hospitals and health centres and the loss of staff. In the past the dispatch of foreign field hospitals (FFH) to countries affected by sudden onset natural disasters has resulted in dissatisfaction from both donor and recipient organizations. In 2003 the World Health Organization (WHO) and the Pan American Health Organization (PAHO) met in El Salvador to discuss the pros and cons of using FFHs in the post-disaster setting, resulting in the "WHO-PAHO Guidelines for the Use of Foreign Field Hospitals in the Aftermath of Sudden-Impact Disasters." A Field Hospital is defined as "a mobile, self-contained, self-sufficient health care facility capable of rapid deployment and expansion - to meet immediate emergency requirements." The guidelines aimed to improve the cost-effectiveness of utilising FFHs in the aftermath of sudden impact disasters.

Despite the lessons learnt from previous disasters requiring international assistance, the global health response to the earthquake in Haiti was perceived by many state and independent organisations as uncoordinated, ill-equipped, and fraught with unacceptable shortcomings, and a report in 2012 listed many instances in which the WHO/PAHO guidelines were not adopted successfully or at all.

### The WHO/PAHO guidelines:

In the first 48 hours – Provide early emergency medical care

- Be operational on site and entirely self-sufficient within 24 hours after the impact of disaster
- Offer comparable/higher standards of medical care than were available prior to the disaster
- Be familiar with the health situation and culture of

the affected country

Day 3 – 15 – Provide follow up trauma and medical care

- Be fully operational within 3 – 5 days, with minimal requirements of support from local communities
- Basic knowledge of health situation and language, and respect for the culture
- Availability of selected specialties

2 months – 2 years and ongoing – Donation of FFH to serve as a temporary hospital pending final repair or reconstruction.

- Lack of other more cost-effective alternatives and designed to be used until final reconstruction. Awareness of major costs for both donor and recipient, including transport, maintenance and utilities
- Appropriate standards for both patients and staff, including adequate space, temperature control, shelter from water and other potential environmental elements, acceptable quality of donated medical equipment, and the ability to isolate patients with infectious diseases and ensure appropriate ventilation

### Haiti

The Republic of Haiti has a population of over 10 million people, with approximately 2.3 million people living in the metropolitan capital area, also known as the Port-au-Prince (PaP) "agglomeration." Haiti is considered the poorest country in the Americas and its mainly Creole-speaking population make up one of the poorest countries in the world.

Specialised health services, including post-trauma rehabilitation, mental health, and blood banks are insufficient and significantly beyond modern standards even under normal circumstances, let alone in the wake of a catastrophe. Climatic hazards, including hurricanes, flooding and extreme temperatures, as

well as poor building standards and non-existent or ignored anti-seismic construction standards, make Haiti even more vulnerable to disasters.

On January 12, 2010, a magnitude 7.0 earthquake hit Haiti for a duration of 35 seconds, with its epicentre approximately 25 kilometres southwest of Port-au-Prince. The earthquake created an unprecedented impact on an overpopulated metropolis containing a high concentration of the country's meagre resources, as well as many international organisations (including the UN mission MINUSTAH, UN agencies and NGOs).

The devastation to both infrastructure and staff was immense, with the destruction of the Presidential Palace, Parliament, Law Courts, Ministries of Justice, Health and Education, the airport and the port. Also destroyed were more than 50 hospitals and health centres, 1,300 schools and education centres and 310,000 homes. There was economic loss of US\$7.8 billion, equivalent to setting back the nation's economic development by 10 years. It left more than 1.5 million people displaced, over 300,000 people injured, and an estimated 220,000 people dead (with an estimate of 20% of the deaths occurring in the 6 weeks following the earthquake). The scale of the resulting morbidity far outweighed the capabilities of an already poor health infrastructure. Haiti's University and Educational Hospital (HUEH) in PaP was the country's largest hospital and severely affected by the earthquake, with both physical damage and staff losses. Already existing deficiencies in access to health care, food and basic sanitation and services were intensified.

### My deployment

I was completing my Masters in Public Health at New York University when the earthquake occurred in Haiti. In April 2010 I spent 2 weeks in Port-au-Prince working in the emergency tents of HUEH with the International Medical Corps (IMC). The IMC had arrived in Haiti 22 hours after the earthquake to provide emergency medical relief and had maintained its presence to continue medical relief and build local capacity.

### Method

Some of the deficiencies of the international health response in Haiti centred around:

1. The health impact
2. Information management and coordination

3. Security
4. Mass media and social media
5. Water, sanitation and hygiene
6. Standards for patients and staff, and
7. Mental health and psychosocial assistance.

The deficiencies in the international health response in Haiti and the lessons learnt will be discussed using dual information sources: the subsequent 2012 report and my individual observations and perspective as both a witness and worker in the field. For the purpose of this account, focus will be on the third stage of the WHO/PAHO guidelines, given that this was the timeframe of my deployment. It was my conclusion that there were many instances in which the WHO/PAHO guidelines were not adopted successfully or at all.

### Results

The list of deficiencies:

#### 1. Health Impact

Report: Lack of documentation recording number, type and severity of injuries, leading to a lack of compiled data and inaccurate estimates of morbidity and mortality.

Observations: No surveillance systems in place; No system for documentation of medical records or even listing the patients and their diagnoses. No patient identifiers/wristbands. At first we scribbled patient's names and diagnoses down on scraps of paper or cardboard, but these were often unavailable and many patients would sit in the tent unidentified.

Lesson Learnt: The number of injured is a critical indicator of the need for assistance. Simple lists detailing types of injuries must be developed urgently at a global level.

#### 2. Information Management and Co-ordination

Report: Strong consensus that the response was chaotic and poorly coordinated. Authority should be in the hands of the Ministry of Health (MOH), not with international organizations. One of the biggest challenges faced by the MOH during the first months of the response was keeping track of all the different organizations that were in Haiti: by mid-April, 396 international agencies registered with the Health Cluster, 50 of those were registered with the MOH.

Observations: There was a severe lack of coordination, organization and communication

between FFHs. There was no-one in charge or supervising what we were doing. Health care workers were arriving to Haiti in good faith, but with no plans of what they were going to do, and there was nobody on the ground directing them where to go or what to do. Volunteers from a multitude of medical backgrounds, some even solely research oriented, were all thrown into the same emergency tent, lacking the experience or expertise to treat the patients. Many aid organisations from different countries, with different languages and with different perceptions of their missions were operating independently and failing to coordinate their efforts amongst themselves and with local healthcare and governmental authorities, leading to waste, duplication of services and general insufficiency.

Lesson Learnt: Re-establish the authority of national health structures and ensure quality control of medical assistance. The primary responsibility for coordination should lie with the national MOH. International humanitarian aid should be organized to support or complement existing national response mechanisms rather than create parallel ones which may actually weaken or undermine national efforts.

Health care volunteers must become involved in appropriate relief organisations, rather than arrive on their own without a plan. Ensure quality control of medical assistance: A global database that is accessible to the MOH would facilitate a prioritised deployment of pre-inventoried teams and enable scrutiny of the qualifications of other potential actors.

#### 3. Security

Report: Increased gender-based violence requiring better quantified evidence.

Observations: Unsatisfactory security levels, with angry family members threatening violence, sometimes with weapons. Triage was disorganized, patients often entered the tents on their own and in one instance, a patient pulled a gun at triage. There was some UN presence of the streets, but generally the hospital's security was often lax/non-existent and easily breached. Members of the IMC at times felt threatened, finding it difficult to work. The safety of medical equipment and supplies was at risk (US orthopaedic surgeon, David Helfet, described his re-supply truck being hijacked en route to the hospital from the airport, and his team needing to be escorted from the hospital with Jamaican soldiers carrying M-16s). Girls as young as 6 years old were seen in our emergency tents for treatment of sexual assault

injuries in the tent communities.

Lesson Learnt: There must be clear involvement and support from the military, including strong security presence at the hospital.

#### 4. Mass Media and Social Media

Report: Both traditional mass media and social media played a critical role in encouraging generous support for Haiti. This was a double-edged sword: Positive by motivating the governments and public to provide financial and operational support, but negative by inciting a deluge of well-intentioned but unsuitable supplies or personnel.

Observations: There was often a disrespect of patient's privacy, with many volunteers taking photographs without permission and posting pictures and comments on social media websites.

Lessons Learnt: The potential for social media in information dissemination should be explored, and if possible, harnessed before the next disaster. Ethical behaviour must be enforced amongst volunteers.

#### 5. Water, Sanitation and Hygiene

Report: "Sanitation continues to be a major challenge of utmost concern." Reports estimated one latrine per 50 – 200 people.

Observations: Poor hygiene and sanitation in camps and hospitals, and unsafe disposal of medical waste and dead bodies. Patients relieved themselves in dirt strips outside the emergency tents, with no water or soap to wash hands with. There was often lack of clean water and soap for medical volunteers to use as well. In the emergency tents rubbish bins and sharps containers were often overflowing.

Lessons Learnt: The MOH should assume quality control of water and sanitation, as well as prioritise universal precautions of medical equipment and waste. "New approaches are needed for excreta and waste management in temporary settlements in dense urban areas...and medical and hospital waste is a costly issue that must be addressed early on." There are no NGOs and very few bilateral teams with skills and resources for the identification and respectful management of dead bodies. It is a humanitarian niche that has not yet been filled. Handling of the dead with dignity and cultural respect needs to be prioritised in order to provide accountability and closure to the living.

#### 6. Standards for patients and staff

Report: Drug donations: Many medicines arriving into

Haiti were without labels, in foreign languages and expired or arriving as assortments. There was minimal power and running water. With no air conditioning and minimal ventilation, temperatures reached up to 40 degrees Celsius in the emergency tents.

Observations: There was an uneven allocation of resources and lack of basic quality standards. Drug donations were often in different languages, with no formal labels and high dependency drugs were left out in the open without supervision. There were dwindling supplies of even the most basic of medicines and oxygen, and rationing of morphine often occurred overnight. There were major difficulties in replacing supplies in a timely manner and allowing continued efforts to be possible and sustainable. There were no patient supportive services – the only food or water available for patient's had to be brought in by family members, and no privacy or separation of genders existed in the emergency tents.

Lessons Learnt: An organized system in cooperation with military agencies and the government is necessary, and a central pharmaceutical warehouse is needed for quality control. Priority should be made towards gaining awareness and sensitivity of local culture and tradition.

#### 7. Mental Health and Psychosocial Assistance

Report: Poor psychological support to patients,

families and foreign healthcare volunteers.

Observations: No psychological support available for patients or families. Many volunteers found their experiences to be psychologically overwhelming and no psychological support was offered while on deployment, despite many volunteers being exposed to 3rd world and disaster medicine for the first time. Many suffered emotional strain from lack of resources and perceived futility, when they are normally accustomed to giving patients every opportunity in state-of-the-art medical care to save life and limbs, without any expense spared. Physical exhaustion played a part, with round the clock work in hot, unrelenting conditions. Acute stress responses were seen amongst volunteers, including emotional liability, nightmares and insomnia, loss of appetite and visual flashbacks of disturbing imagery seen.

Lessons Learnt: Part of an international response to sudden impact disasters must include established interventions to prevent and treat the psychological impact of exposure to the devastation, or untrained volunteers may be at risk of developing acute stress responses and post-traumatic stress disorder. As far as the local communities are concerned, the needs for psychosocial assistance should not be overlooked on the assumption that poor communities are more resilient. Specialised programs in the aftermath of

sudden-onset disasters should serve as the point of entry for the provision of mental health services at primary health care and community levels.

#### Discussion

##### Specific Needs

"In an interconnected world, where providing assistance in every major disaster becomes everyone's responsibility, there should be a minimum standard of preparedness that every country should be expected to maintain." E.Benjamin et al. Principles and Practice of Disaster Relief: Lessons from Haiti

Both the report and my individual observations highlight specific needs for improved preparedness for the next sudden-onset disaster, including:

- International organisations should collaborate with the WHO to maintain a registry of disaster-trained

volunteer health care workers.

- Institutions interested in disaster-relief should collaborate with organisations already operating in disaster-prone regions of the world. They should have pre-prepared emergency and disaster-relief planning with a database of trained volunteers, a structured plan for deployment of teams and a stockpile of supplies.
- Interested health care workers should pre-register with relief organisations so as to obtain proper training, including disaster management skills and pre-departure preparation.
- There needs to be leadership trained in international disaster response, with knowledge of both local needs and system requirements.
- Incoming foreign teams must work with the local Ministry of Health and coordinate with other



NGOs and providers. They must be portable and self-sustainable. A pre-formed relationship with the incoming country's military would be beneficial to accompany and assist relief teams on their missions.

- Books and on-line resources need to be available, such as the Sphere Project handbook, an internationally recognised set of principles and universal minimum standards for the delivery of quality humanitarian response.

### ACEM involvement

The confronting images and stories that hit the media in the days and weeks following the earthquake made clinicians from all over the world want to help. I was one of those clinicians, but after two weeks in the field in Haiti, it was obvious that the chaotic disaster zone I found myself in was a long way from the organised, protocol-lead, sterile environment I was accustomed to working in, and I came away with very different attitudes about the needs of a disaster zone. With many volunteers lacking experience and expertise, the outcome was often less than adequate and convinced me more than ever of the need for trained disaster response specialists.

In May 2012 ACEM held the "Working Together: Emergency Medicine, Disaster and Public Health Consensus Meeting," and in September 2012, The Alfred Hospital presented The 2012 International Emergency Care Symposium, "Building regional capacity: lessons learnt and next steps." Both of these meetings were useful platforms for Australian and New Zealand fellows and trainees to identify issues and share ideas on how emergency practitioners can respond to sudden impact disasters in our region, with relation to the priorities, the role of the emergency care provider, training and fitness for the field, and lessons from previous international disaster responses.

Some of the key issues identified were the need for a minimum level of experience, other relevant disaster medicine training or experience, and ideas on how ACEM can encourage these experiences amongst trainees.

Some useful ideas for emergency physicians and trainees interested in working in emergency disaster medicine were:

1. Courses – including, ALS, APLS, EMST, pain management, ultrasound
2. Humanitarian Relief – Field work in developing countries such as PNG, Nepal or Myanmar, where ACEM fellows are currently working on the development of international emergency medicine, or with NGOs such as the International Committee of the Red Cross (ICRC), the International Rescue Committee (IRC), or Médecins sans Frontières (MSF).
3. Disaster Management – courses within Australia include, the Major Incident Medical Management and Support (MIMMS) course and the Australian Medical Assistance Team (Ausmat) courses.
4. Public Health – complete a Masters in Public Health and acquire fundamental public health concepts, such as biostatistics and epidemiology.
5. Conferences, committees, subscriptions (including IEMSIG) and symposiums.

### Conclusion

Despite the existence of guidelines in the international response to disasters in resource-poor settings, there were many failures of guideline compliance during the Haiti earthquake response. Some of the deficiencies of the international health response in Haiti were centred around the health impact, information management and coordination, security, mass media and social media, water, sanitation and hygiene, standards for patients and staff, and mental health and psychosocial assistance. Both the report and my individual observations highlight specific needs for improved preparedness for the next sudden-onset disaster. ACEM has begun identifying ideas on how emergency practitioners can respond to sudden impact disasters in our region, with relation to the priorities, the role of the emergency care provider, training and fitness for the field, and lessons from previous international disaster responses. There are many useful options and ideas for trainees with a special interest in this field of emergency and disaster medicine to begin building their skills and experience.

### Acknowledgements

Many thanks to Dr Gerard O'Reilly, A/Prof Peter Aitken and A/Prof Chris Curry for their encouragement, assistance and helpful suggestions in the writing of this article.

## Emergency Medicine in Vanuatu – A Work in Progress.

Brady Tassicker  
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It is sometimes hard to believe that it was only three years ago that our team was first asked to attend by the Ministry of Health, to provide advice about how to improve emergency care there. We made a number of recommendations based on those findings, and a report of those has previously been published in this newsletter.

It has been very gratifying since then to see a number of these recommendations acted upon, as well as a number of other developments, which clearly demonstrate the commitment of the Ministry of Health to seeing a sustained improvement in emergency care. These include

- Appointment of Dr Trelly Samuel as the first ever emergency medicine registrar, and his enrolment in the Master of Medicine, Emergency Medicine (MMedEM) programme at the University of Papua New Guinea. Given the centralised work-force planning process within the Ministry of Health, the significance of this cannot be overstated.

- Construction of an extension to the existing emergency/outpatients department, using their own funds rather than relying on donations.
- Breaking of ground in the construction of a new hospital wing, funded by JICA (Japan International Cooperation Agency). This includes a new emergency department, and members of our team have contributed to the design process.
- An emergency nurse from Solomon Islands is on secondment in Vila Central Hospital to assist in skills development.
- Development of a pilot process for triage of patients.

Despite this, a large number of challenges remain, and resources with which to tackle them are limited. On a personal level, I am limited to two weeks in country per year, and I have a finite amount of administrative time to devote to the tasks. Input from others will be required.

Educational visits are an area in which emergency physicians can contribute:



Kenton Sade from the Solomon Islands as a patient for training.

A paediatric resuscitation scenario.

## Advanced Life Support (ALS) Course - Sri Lanka

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In November 2012 seven Advanced Life Support instructors led by Andy Ratchford FACEM travelled to Sri Lanka to deliver a course in Colombo.

The ALS course was conducted along the principles of the Australasian Resuscitation Council (ARC) Advanced Life Support (ALS) course, using their manual and course material. It was delivered by a fully Australasian faculty, all accredited ARC instructors, and most had delivered similar training in other countries.

The course was part of the SSCCEM 2012 Annual Scientific Congress, which is the main academic activity of the Sri Lanka Society of Critical Care and Emergency Medicine.

<http://www.ssccem2012.com>

The course was fully subscribed with 24 candidates, all of whom successfully completed it. The candidates were very enthusiastic and involved.

The President Elect of SSCCEM, Rd. Srilal de Silva's opening statement was that the "...introduction of this well-structured Advanced Life Support course in this country I sincerely believe will have a positive impact on critically ill patients, bridging the gaps in critically care".

The course was closed by Dr. Ananda Gunasekera from the Sri Lankan Ministry of Health.

The ALS course faculty included: Andy Ratchford, Peter McKie, Mike Gale, John Thompson, Tony

Mattick, Tanya Halbert, Caitlin Keighley.

A personal account from John Thompson:

"I was lucky enough to be part of the team teaching ALS in Colombo. I've taught on several courses over the years, but none have I enjoyed quite so much.

The welcome I received throughout my stay was one of genuine kindness and it was incredibly refreshing to be able to teach the ALS course material to such receptive and enthusiastic candidates. At the end of the two days I felt we had done something very worthwhile and achieved a great deal.

The venue was good, teaching materials of an appropriate standard and back-up staff capable, helpful and seemed always to be carrying out their work with a smile. I felt we could learn a lot from their attitude.

It was fabulous to be part of a team of ALS instructors who came from both east and west coasts of Australia, and who seemed to gel so well.

This was the first time I had taught in Sri Lanka or indeed in any developing country. I would strongly recommend any ALS instructor to jump at the chance to go to Sri Lanka if given the opportunity to teach on a course there.

I think it's unlikely I'll ever teach another life support course where the candidates are so keen, and the closing ceremony is given by the Minister of Health."

It is sometimes hard to believe that it was only three years ago that our team was first asked to attend by the Ministry of Health, to provide advice about how to improve emergency care there. We made a number of recommendations based on those findings, and a report of those has previously been published in this newsletter.

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(MMedEM) programme at the University of Papua New Guinea. Given the centralised work-force planning process within the Ministry of Health, the significance of this cannot be overstated.

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- An emergency nurse from Solomon Islands is on secondment in Vila Central Hospital to assist in skills development.
- Development of a pilot process for triage of

## A Visit to Vinayaka Mission Hospital, Salem, Tamil Nadu, India.

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I think to practice good medicine one has to be knowledgeable, compassionate and imaginative. When I visited Vinayaka Mission Hospital (VMH) I saw these characteristics in their Emergency Department. It is guided by an imaginative leader, they have a wealth of knowledge as a team and also they are very compassionate about their fellow beings.

Emergency Medicine is a very young specialty in India. The first courses in emergency medicine were started in the late 1990s. Sri MG Ramachandra Medical College in Chennai was the first to start a structured MD course around 10 yrs ago. Since then many institutions have jumped on the wagon. Specialty training for an MD EM was recognized by the Medical Council of India (MCI) in 2009. I was fortunate to be one of the members of the curriculum review committee for this submission. Since then there has been a rush of institutions wanting to offer an MD EM. At present there are in excess of 45 institutions that are involved in the program in one way or the other. There are around 15 institutions (as of May 2012) who offer an MCI recognized MD EM course, and VMH is probably one of the better ones amongst them.

Vinayaka Mission Hospital University's main ED is based around 15km from Salem, an industrial town

in the state of Tamil Nadu. The ED was established under the able guidance of Dr. V.P.Chandrashekar, who is from one of the first batches of MD EM from Sri MG Ramachandra Medical College in Chennai. It has around 23 trainees who work in the 3 affiliated hospitals (only 2 are MCI recognized posts). They have till now produced in excess of 100 ED specialists which is a big number considered that EM was recognized as a specialty only a few years ago. Though they have been training MDs they were recognized by MCI only recently, and the first batch of MCI recognized MD EM will be out next year. This I think is a big step towards establishing EM as a specialty in India.

They run a robust program, with training in essential ED skills including Ultrasound and ECHO. They also train in the HDU setting and spend a significant amount of time in HDU/ICU. The presentations vary; they may be high acuity trauma, tropical infections, toxicology or any others that are usually seen in EDs of the western world. But I must say that they see some very interesting cases, especially in toxicology and infectious diseases.

They also provide training to GPs, nurses and paramedics with a modified version of ALS called AELS, which is specifically targeted to the local audience. They are an innovative bunch. One of the things I want



to mention is their version of a cuff pressure monitor, which usually costs a lot to buy in India. They have devised a way to use a sphygmomanometer to do the same thing which costs a fraction of equipment bought new.

All the MD candidates are required to submit a research project or case studies. Some of them are particularly interesting, especially for us who have trained there. They also give back a portion of their remuneration and have created a fund which they use for buying equipment and to pay for the patients who cannot pay for their treatment.

Chandru, Srinath and the rest of the team at the Society for Emergency Medicine, India (SEMI) have brought out a national journal of emergency medicine, which once again is a huge step towards establishing EM as a specialty in India. Many FACEMs including myself have been part of the international

## Development in China

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As part of my hospital's (Cabrini, Melbourne) social outreach program I attended Sir Run Run Shaw Hospital (SRRSH) in Hangzhou China in June this year. I consulted in their ED and assisted in the provision of the BASIC course to their ICU residents.

It became clear that EM in China is at a crossroads. With massive urbanization, major infrastructure developments and no family medicine/GP network, existing ED services are swamped. This particular hospital in a city of 7 million people (the 36th biggest city in China!) sees 350 patients per day in

advisory panel for this journal. The first issue was brought out earlier this year and it is in very early stages.

There are many groups of EPs working towards developing EM in India. I think there needs to be an overarching body that can act as an umbrella to all these groups and bring them together so that more can be achieved in an efficient manner. In the future I would want to see more cooperation between FACEMs and the Indian specialists to explore options like joint research projects and trainee exchange programs. There is also a huge need for knowledge to be dispersed to rural parts and to cater to the needs of physicians who work at the grass roots level. With close cooperation and support I am confident that it can be achieved and we can save thousands of lives.

I think there is lot to be gained by ACEM trainees from a term in these EDs. If anyone is interested I would be more than happy to help out.

the ED. There is no formal post graduate EM program, and the hospital struggles to service the demand or train any of its residents or senior staff in clinical and administrative EM practices.

The President of the hospital was keen to train his middle level doctors with EM interest and has asked me to explore the possibility of the ACEM allowing the provision of the Certificate at SRRSH.

Clearly there are significant hurdles but none insurmountable. Additionally there is huge scope to extend this "test program" to the wider Chinese EM community and to other developing nations.

## Emergency Medicine development in Finland

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Finland's first emergency medicine training program is starting in anticipation of a new emergency medicine specialty.

Turku University Hospital and the Hospital District of Southwest Finland are starting the first EM training program in Finland in January 2012, despite the lack of a nationally recognized EM specialty.

Over the past decade the voices calling for EM as a new medical specialty have become louder and the momentum is growing. The Finnish Medical Association does have a special competency in EM, and since 2007 some 100 physicians from various specialties have completed the certification. In June the Ministry of Health accepted a draft resolution for a specialty of "Acute Medicine". Emergency Medicine, or Acute Medicine, will be officially recognized as a full medical specialty in Finland starting in January 2013.

At a local level, further positive developments are taking place. The Hospital District of Southwest Finland has been building a new hospital since 2004, with a large new ED development. The new ED will open in April 2013 and the annual patient volume is expected to be approximately 120,000. Traditionally Finnish EDs have had 2 separate, independently staffed areas, primary and tertiary care sides. However in this new development the ED will be staffed primarily with acute care doctors with close support from tertiary care.

In anticipation of the new ED, the Hospital District of Southwest Finland started recruiting for these "acute care" doctors early in 2012 and at the same time started its own emergency medicine training program. Currently there is no EM training available

for medical students in Finland, nor is there any requirement to work in emergency departments for trainees in general practice (primary care). Thus most primary care EDs are run by locum companies and staffed by medical students or junior doctors.

The training program involves regular didactic teaching sessions (3hrs/week), practical hands on sessions and also in the future with the new ED development, regular simulation sessions. The curriculum is based on the EuSEM European Curriculum for EM. This has recognition by the Finnish Medical Association to train Finnish specialists to complete their EM special competency. Teaching staff includes consultants from Finland and abroad, representing various medical specialties. Most already have their EM competency. Also, Finland's first EM professor has started part-time in September 2012 to direct the training program and develop research into EM.

With the new group of doctors, the teaching program has been but one of the new developments in EM. Other new practices include; shorter work shifts from 24 hrs to 9-12, shift rotation with emphasis on physiological recovery, expanded clinical role and skills, role of specialists and full-time career ED physicians.

The program has been received enthusiastically, but challenges remain. Current challenges include the traditionally minimal resources for the primary side of the ED, with few staff and small and inadequate treatment areas. Also, other medical specialties have been somewhat sceptical of the new full-time acute care doctors. A major challenge is how to coordinate the delivery of regional health care resources, with bed block in the EDs and lack of GP urgent services.

## Trauma Care in Northern Afghanistan

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Imagine a 10 year old girl. Imagine she has had a traumatic incident involving both her legs. One leg was amputated at the scene, the other severely damaged but just intact. She needs surgery to amputate her last leg as there is no blood supply reaching her foot and this leg is slowly dying. If it isn't amputated, she will die from the ensuing infection.

Now imagine she has no voice in the decision – because she is a child. And now imagine you are the doctor her father talks to. He says that he simply cannot bear to have a child with two amputated legs.

This is Kunduz, in northern Afghanistan, where Médecins Sans Frontières (MSF) are running a trauma hospital. This is a large town with dusty streets and a green and mountainous backdrop, with temperatures reaching 50 degrees in the summer and dropping to minus 10 in the winter. Back in 2007 Kunduz was an opposition stronghold. Today, there is still a lot of violence in the region between

Afghan national police and different armed opposition groups.

There are patients in the hospital affected by violence-related trauma, such as bomb blasts, improvised explosive devices (IEDs), shootings and stabbings. But there are also patients who have been injured in road accidents involving motor vehicles, motorbikes or rickshaws.

Despite being an emergency trainee, I was posted to Kunduz as the Intensive Care doctor for six months to oversee the small four-bed unit. This is a new project for MSF and currently the only level-two intensive care unit (ICU) in the field with the capacity to ventilate patients if needed. The four beds are always occupied by young trauma patients requiring short periods of critical care.

My role in Kunduz was equally clinical and non-clinical. I had the privilege of working alongside a talented emergency and surgical team who performed numerous life-saving operations. I also had the

opportunity to work every day with national staff who were eager to learn the intricacies of critical care including how to operate ventilators. In the event of a mass casualty, as the ICU doctor I was in charge of the “red area” in the emergency department, managing patients with life-threatening injuries. My non-clinical tasks included department administration, collection of statistics, training, teaching and creating guidelines and protocols for MSF.

MSF do not take sides on the conflicts in Afghanistan. The principle of neutrality observed by MSF means that we treat everyone who comes to the trauma centre, from Taliban fighters to Afghan local police to innocent civilians. Although we do not take sides, we speak out against the atrocities seen by the medical staff on behalf of our patients. MSF works to raise awareness and create debate about some of these conflicts and crises through their policy of *témoignage* or “bearing witness”.

The bright 10 year old girl sits upright in bed, reading books and asking for ice-cream. Her bubbly personality fills the ICU and all the staff couldn't help adoring her. Her grandfather told me that she went to school and was getting the highest marks in her class. She announced that when she grew up she wanted to be a teacher or a doctor.

The most difficult decisions to make in our intensive care unit in Kunduz are often those related to innocent victims in this conflict. This situation was one of the hardest we encountered. The grenade thrown into her house was never her fault – she did not ask to end up as a patient in intensive care. Her big brown eyes never revealed any understanding of the decisions going on around her. They never questioned her father as to what his ultimate decision would be. They never questioned the political situation in a country which has seen decades of internal and external conflict. All she has ever experienced is war and conflict.

After multiple family meetings to ensure the father has a complete understanding of the situation, he asks for more time. Our bubbly little girl starts to become drowsy and spike fevers. Her leg is slowly turning black from lack of blood supply. The minutes and hours pass, a physiological race where time has the upper hand.

He eventually agrees to let her have the operation.

In the recovery room after the surgery, he sits sobbing with his head on her bed. She gently strokes his hair and reassures him that everything will be alright.





## International Delegates Presentations – ASM

Above: Left to Right – Sonny Kibob, Maung Maung Htwe, Krishantha Jayasekera, Ramesh Acharya, Peter Cameron

Left: Left to Right – Gerard O'Reilly, Moe Myint, Georgina Phillips, Maung Maung Htwe, Sally McCarthy

## Emergency Medicine Development in Myanmar: An Update

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The development of emergency medicine is a progression from the capacity building through the Primary Trauma Care (PTC) Program, started in March 2009. This was introduced after the unfortunate events of Cyclone Nargis (May 2008). PTC courses have been provided by volunteer fellows from three Australasian Colleges (RACS,

ANZCA and ACEM) and fellows from Hong Kong Colleges.

After the Emergency Medicine Development Consensus Conference in January this year, the Myanmar Ministry of Health, the Myanmar Medical Association and the local academic and clinical leaders have committed to a 3 phase program to enhance the

quality of emergency care provision with international partners. The program includes the rapid training of junior specialists for EM, the establishment of formal specialty training and the introduction of EM systems including pre-hospital and emergency care for the benefit of the whole country.

The Myanmar Emergency Medicine Introductory Course (MEMIC), the inaugural component of Phase 1, was conducted at the University of Medicine 1 in Yangon in June 2012. The aims of MEMIC was to introduce the concepts, competencies and practice of EM, core EM skills and knowledge as well as introducing EM systems, leadership and teamwork to the initial cohort of Myanmar EM trainees.

The curriculum for these trainees include various short skills courses, an educational visit to Hong Kong, as well as clinical rotations beyond their initial specialist

subjects. Volunteer in-country FACEMs from Australia will also spend up to three months supervising and teaching them. This training for Phase 1 will be conducted over an 18 month period culminating in an assessment for a Diploma of Emergency Medicine.

South East Asian Games in December 2013 provides an imperative to develop Emergency Departments, especially in the three centres where the games will be held, Nay-Pyi-Taw, Mandalay and Yangon. The initial EM graduates will be providing services from these centres.

These developments offer a golden opportunity for international partners to participate and contribute to providing improved health care in Myanmar.

*Maung Maung Htwe is professor of orthopaedics in Mandalay. He is a leader in the EM development movement in Myanmar. Ed.*

## Challenges for the Improvement of Emergency Department Care in Nepal

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Historically, General Practice in Nepal was developed as a postgraduate degree program in order to develop the team leader in the district hospital, mainly focusing on resource poor rural regions. The goal of the program is to provide comprehensive and effective management of common health problems encountered in rural Nepal, including timely emergency and life-saving surgical and obstetrical intervention. Thus, the graduates perform life saving interventions like appendicectomy, exploratory laparotomy and caesarean section etc.

The success of this program led to recognition of GPs as leaders of emergency care, not only in a rural district hospital but also in bigger hospitals. In a way, emergency medicine became a sub-specialty branch of general practice. Now a Doctor of Medicine in Emergency Medicine (DM EM) program

has been started and three GPs are undergoing the course.

One service component of emergency care, pre hospital systems, are non-existent. The number of academically qualified GPs is inadequate. Emergency care is still provided by interns or relatively fresh medical graduates who are at times volunteers. They lack proper training and there is a rapid turnover of doctors. Emergency Departments lack critical resources for proper management of varieties of clinical problems encountered.

*Ramesh Acharya is Associate Professor, Department of General Practice & Emergency Medicine; Chief of Emergency Services at Tribhuvan University Teaching Hospital; Senior Vice-President of Nepal Medical Association. He has a particular interest in emergency care and ethics. Ed.*

## Development of Emergency Medical Services at Teaching Hospital Karapitiya, Galle, Sri Lanka

Krishantha Jayasekera

In 2004 the Indian Ocean Tsunami on Boxing Day resulted in a heavy death toll in Sri Lanka, with the Southern Province being the worst affected. The Teaching Hospital Karapitiya (THK), a multi specialty tertiary care centre situated in Galle which is the capital of Southern Province, lacked the proper facilities to respond to the disaster, which contributed heavily to the overall mortality. THK did not possess a proper Emergency Department, pre hospital trauma care service or disaster preparedness.

Following the tsunami the Ministry of Health and the Victorian Government collaboratively developed the "Health for the South" project, the main objective being to improve trauma care services in the Southern Province. The project plan with 3 phases was developed by A/Prof Mark Fitzgerald, Director of Trauma Services of The Alfred Hospital Melbourne, after he visited THK in 2006.

The first phase was expansion of the two bed Emergency Treatment Unit (ETU) to a six bed interim service which was completed in February 2007.

The second phase, a capacity building component, was funded by AUSAID. It comprised of six modules, three weeks each, during which visiting emergency physicians and nurses from The Alfred trained the staff of the ETU. The next step was 3 weeks training for 1 emergency nurse and 3 consultants from THK (physician, surgeon, anaesthetist) at The Alfred. In addition to that a scholarship was granted to a senior emergency nurse who completed 3 months training at The Alfred, mainly on triage which was a new concept for the planned model of care. The capacity building component which was coordinated by Dr Gerard O'Reilly, emergency physician from The Alfred, greatly enhanced the quality of trauma reception and resuscitation at THK.

The third phase was the development of a purpose built Emergency & Trauma Centre (ETC) which was jointly funded by the DPC, Government of Victoria and Ministry of Health Sri Lanka. This was commissioned in March 2011 as the Sri Lanka - Victoria Emergency & Trauma Centre by Hon.

Governor of Victoria Prof David De Krester. The ground floor (ETU) comprises of a 4 bed resuscitation bay, a 21 bed treatment bay and the Radiology Department with a CT scanner. The first floor houses a state of the art four theatre complex with recovery area and an 8 bed ICU. The top floor has a 56 bed short stay unit plus a modern auditorium.

Capacity building continued through the pre and post transition to the new ETC as a Trauma System Maturation Project, which further enhanced the level of Emergency and Trauma care.

The ETC is now fully operational, triaging more than 200 patients per day and providing optimal care to all trauma and emergencies.

We are facing a number challenges, namely staffing the unit for optimal functioning, handling conflicts arising from the changed model of care, dealing with increasing numbers of ED admissions and the continuous occupation of resuscitation beds by long term ventilated patients. Our vision is to become a recognized trauma centre in South East Asia.

Emergency Medicine is now recognised as a new specialty by the Post Graduate Institute of Medicine

(PGIM) of Sri Lanka, the organization governing specialty training. The curriculum for an MD EM was drafted with the support of A/Prof Shane Curran and A/Prof Chris Curry from Australia. The first batch of trainees will be enrolled in March 2013 for 5 year of local training and mandatory 1 year of overseas training. The new ETC will function as a major training centre for emergency medicine and emergency nursing in the country.

*Krishantha Jayasekera is the Resident Physician in the E&TC at Teaching Hospital Karapitiya. Ed.*



## Development of Emergency Medicine in Papua New Guinea

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Papua New Guinea is a country situated directly north of Australia. It has a tropical climate with a population of 7 million. Eighty percent of its population is rural based, where accessibility to health and other government services are often very difficult due to many geographical, social and economical factors.

In 1996 the National Department of Health and the School of Medicine and Health Science identified development of Emergency Medicine in the country as a way forward to deal with acutely ill and injured patients. In 2002 the Master of Medicine in Emergency Medicine program was established at the University of Papua New Guinea School of Medicine and Health Sciences and the first graduate emergency medicine physician was produced in 2006.

To date after 10 years we now have a total of 7 emergency physicians working in various major hospitals in the country and 15 emergency registrars at various stages of their training in EM. Capacity building

in EM is identified as a way forward in improving quality of care in our acutely ill and injured patients. Courses like the Primary Trauma Care, Snake Bite Management, Emergency Life Support, Seriously Ill in Remote Environment, and the Diploma in Emergency Medicine courses are used as vehicles to teach doctors, health extension officers (HEOs), community health workers (CHWs) and nurses to improve quality of care to the acutely ill and injured population.

The development of Emergency Medicine in PNG is still in its infancy stage and there are many challenges ahead. Identifying each of these challenges and addressing them has been a very daunting task, often very demanding and nerve racking for the front liners with limited resources at hand.

*Sonny Kibob MMedEM is a PNG trained emergency physician leading EM training at Port Moresby General Hospital. Ed*

## EM in Qatar

Peter Cameron  
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Qatar is a country of about 1.8 million people of whom about 300,000 are Qatari. There is a large expatriate community, mostly young males. About half of the population is originally from the Indian subcontinent. A large number are from Nepal, which is ironic - given the extreme heat and lack of undulation! During summer the temperature exceeds 50 degrees and is frequently above 40 at midnight. There is also high humidity - fortunately air conditioners work well and pools are accessible.

It is a muslim country with a strong islamic culture. This results in strongly enforced cultural differences such as separation of sexes, no touching between sexes, covering of the body from head to toe, no alcohol, strict prayer times and different religious festivals such as Eid. Fortunately there is some latitude for foreigners such as myself.

Qatar is very rich, but has only discovered its wealth recently. The population has doubled in only a few years and buildings are popping up all over Doha. Infrastructure is patchy with no rail, fragmented road and public transport, but plans are in place for a fully integrated system over the next 20 years. The Football World Cup in 2022 (the one that Australia lost) is a huge driver for change - with ambitions for many infrastructure programs to be completed before this date.

The EM system is fairly basic at this stage, but there is an intention to develop it into a world leading EM centre. Hamad General, the major teaching hospital, has about 200 emergency doctors, 400 nurses and 1500 attendances per day. Training programs are in place for residents and a fellowship program will be instituted next year for the post board candidates. This will make it one of the most comprehensive training programs in the world. There is a great need for advanced nurse practice and this will be starting over the next couple of years. At present, nurses are poorly paid and are not supported to do more than basic nursing. There is an intention to completely rebuild the ED at least twice in the next 10 years - on top of a renovation that has not yet been completed. Hopefully we can get the facility purpose built by the third iteration!

The casemix of the presentations is unusual as the spectrum of disease is different because of the skewed population demographics. The immigrant workers are young and frequently present with minor injuries and other medical conditions such as URIs. They also bring many endemic diseases from their home countries with them such as TB and neurocystercosis. The local population is overweight and has diabetes, heart failure and kidney failure. They also have a high rate of injury due to poor injury prevention programs. There is a poorly developed primary care system that puts added pressure on the ED.

Managing patient flow is a recent concern for Hamad Medical Corporation but major strides have been made in the last 6 months with "patient pending admissions" numbers dropping from >50 each morning to less than 10 now... Hopefully with the targeted strategies in place, this can be improved further. There is also the chance for Qatar to avoid the excesses now being experienced in Australia and the UK - by having patient centred KPIs to drive change (not a 4 hour rule!).

There are many challenges going forward, including embryonic administration processes, education/training, facilities and infrastructure. Nevertheless - there is a vision and there is the money to pay for it!

*Peter Cameron is President of the International Federation for Emergency Medicine (IFEM). He has taken a year away from The Alfred Hospital to head up EM development in Qatar. Ed.*

### Hamad General Hospital Emergency Department cubicle and Doha skyline

