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## Editorial

### From the Editor

This issue is a milestone in the chronicling of the first decade of the International Emergency Medicine Special Interest Group (IEMSIG) of ACEM.

Established at the International Conference on Emergency Medicine (ICEM) held in Cairns in 2004, IEMSIG got under way two decades after the establishment of the College, with a foundation group numbering 25. At the time FACEMs were engaged with the development of an emergency medicine training program in PNG and with some limited humanitarian work through MSF, ICRC and other NGOs.

The first two decades of the College saw effort directed towards the establishment of the specialty in Australia and New Zealand, and in the building of EM training. This third decade has seen a great expansion of engagement with EM development beyond our island shores and into our Asian and Pacific neighbourhoods in particular.

PNG graduated their first emergency physician in 2006, and there are now FACEM-supported EM training programs under way in Botswana, Nepal, India, and Sri Lanka. Myanmar and Fiji are providing courses as a precursor to launching definitive specialty training programs. There has been a professionalization of FACEM engagement with disaster response and with humanitarian activities, and an expansion in the delivery of EM short courses in our region. There is engagement in training other acute care providers – health extension officers, nurses, and ambulance crews. ACEM trainees can now have time accredited for work in some of these activities.

The IEMSIG now receives support from two college officers, and ACEM funding is expanding through the International Development Fund (IDF) within the new Foundation.

As islanders in the austral region of Asia, we are uniquely positioned to contribute to developments within our neighbourhood. As numbers of FACEMs and ACEM trainees increases, it is our hope that this engagement can continue to expand.

Chris Curry

Editor, IEMSIG Newsletter 2004-2014

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### Message from the IEMSIG Chair

Australian and New Zealand emergency physicians and trainees have been very actively engaged in international emergency medicine (IEM) activities for many years now. It is almost ten years since the ACEM International Emergency Medicine Special Interest Group was formed as a conduit for collaboration for ACEM members participating or interested in what is going on in IEM.

In recent years, and arguably never more so than in 2013, the IEM activities of ACEM members have been matched by ACEMs support for these same programs, most obviously in Myanmar. Indeed, ACEMs administrative and funding support for IEM activities in 2013 is a cause for recognition and celebration. Ultimately, the measure of ACEMs engagement with IEM can best be judged on how best it supports IEM programs, and in 2013, this can be summarised, briefly, as follows.

### Program Support – Membership

As of the 2013 ASM in Adelaide, there were 44 new members to IEMSIG in the past year. IEMSIG membership now includes 249 Fellows and 94 Trainees. A new call for members will be made in early 2014. The cost is free and the opportunity to see, or be engaged, in what is happening in the field, can be very rewarding.

### Program Support – Executive

2013 saw the first call for expression of interest for the IEMSIG Executive. There are now three IEMSIG Executive members: Gerard O'Reilly (Chair), Chris Curry (Honorary Secretary) and Georgina Phillips (Deputy Chair). The Executive intends to expand again, with the addition of a 4th member, in 2014.

### Program Support – Administration

ACEM's International Development Department continues to grow in terms of staffing, activity, and workload! Sarah Smith has provided wonderful support to IEMSIGs activities since 2012, and in 2014, will be joined by Chris Hill. The additional staffing will provide at least 2 days a week of dedicated administrative support to IEMSIG and its programs.

### Program Support – Funding

While most of the IEM work performed by ACEMs emergency physicians and trainees has historically been with shoestring funding, the establishment of several funding sources at ACEM has been a huge bonus for delivering effective programs. The International Development Fund has provided AUD\$90,000 of funding to more than 9 programs across Asia, the Pacific and Africa, in the last 2 years. Meanwhile the International Scholarship Award (ISA) has, again in 2013, provided for 4 delegates, champions of emergency care development from resource-poor environments, to attend the Annual Scientific Meeting. In 2013, the ISA recipients represented EM in Myanmar, Nepal, Solomon Islands and Vanuatu. Finally, with the establishment of the ACEM Foundation in 2013, and the generosity of donors, there will be growth in the additional funding support available to support sustainable IEM programs.

### Program Support – Working Groups

It is important as ACEM engagement with programs globally grows, that these activities continue to be conducted ethically, effectively, sustainably and with good governance. It is important that those who are working in a particular country are well informed regarding the impact of a specific program within the context of the country and other programs. In 2014, the IEMSIG Executive will call for expressions of interest to be part of a country-specific working group, doing its best to ensure a consistency or purpose, information-sharing and communication between ACEM members working within the country and with, of course, the local stakeholders.

To further support programs, other working groups will also be called for to facilitate the many and varied aspects of IEM, including, for example, accreditation of overseas training posts or to identify strategic plans or funding proposals.

### Program Support – Meetings

In 2014, there will be a series of opportunities to gather together in Australia, to collaborate and exchange IEM experiences, lessons and ideas. It is intended that a small group IEM strategic workshop will be held in the first half of the year. The 3rd Alfred International Emergency Care Symposium will be held in Melbourne at the end of the first week of

September. And, of course, there will be the regular IEM session at the Annual Scientific Meeting, again in Melbourne to celebrate a year of activity.

### Program Support – The IEM chronicals

The IEMSIG Newsletter has been a constant, informative, inspirational and endearing repository of ACEM IEM activities for the decade since IEMSIG was founded. In 2014, its 10th year, it will likely take on a new identity, but with all the guaranteed updates that continue to motivate all of IEMSIGs members.

Finally, I would like to thank all of the contributors, at all levels, for the passion and work given to increasing access to emergency care globally. Foremost, we thank the local champions of emergency care, wherever they are, but we also recognise the work of ACEM, through its members, to support these local champions.

I wish you all very fruitful and rewarding 2014!

Gerard O'Reilly, Chair, IEMSI

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### International Scholarship Award

The International Scholarship Award is once again open from **1 January to 31 May 2014**. Members of ACEM are encouraged to nominate doctors or health professionals who are actual or potential leaders in the development of emergency medicine in their country to present at the 2014 ACEM Annual Scientific Meeting.

For information on selection criteria please contact the IEMSIG team: [IEMSIG@acem.org.au](mailto:IEMSIG@acem.org.au)

### International Development Fund

The International Development Fund Committee (IDFC) promotes the development of emergency care in the developing world through teaching, training and capacity building. Each year, the IDFC may grant funding of up to AUD \$30,000 for an approved project(s), which have identified needs with local participation and agreement, and demonstrate strong linkages between the partner organisation(s) and key stakeholders.

The next round of funding through the IDFC will commence with expressions of interest in March 2014 via the ACEM website and the ACEM weekly Bulletin. The total value now available is \$90,000 per annum.



## New Website

International EM section on the new ACEM website has been updated to allow easier access to information on international EM developments by FACEM and trainees around the world. Throughout 2014 it will be expanded to include International EM events, country updates and contacts, podcasts and videos.

Review the new international EM webpages under the "about ACEM" menu and select [International EM special interest group](#).

## Accredited Training Time for Trainees in 2013

Are you an ACEM trainee interested in working overseas in an international EM development role? You could have your time overseas accredited toward your training requirements.

In 2013 a number of trainees visited PNG and Nepal and had their time accredited as a special skills term. Opportunities for accredited training time for trainees in other regions such as India, Fiji and Myanmar are opening up and PNG and Nepal continue to be supported terms in 2014. If you are interested please contact the IEMSIG team at [IEMSIG@acem.org.au](mailto:IEMSIG@acem.org.au) for more information.

## International EM Opportunities

### Fiji

Fellows are wanted to assist in the development of EM in Fiji. We are looking for a fellow to spend 3 months to help develop Emergency Medicine in Fiji. The role is mainly teaching and supervising and your weekends are your own to explore the many delights that Fiji has to offer.

The medicine is interesting and varied and the trainees are hungry to learn.

Your flights and accommodation will be covered by Fiji National University and you will be paid a small local salary which should cover your costs while in country.

Contact Anne Creaton at [acreaton@hotmail.com](mailto:acreaton@hotmail.com) if interested, or for further information.

### Other Opportunities

There are many other regions that require assistance and would appreciate your help. If you would like to find out how to contribute to developments around the world please contact the IEMSIG team at [IEMSIG@acem.org.au](mailto:IEMSIG@acem.org.au).

## Events

### International Summit on Emergency Medicine and Trauma 2014

12 – 16 February 2014  
Pondicherry - India  
<http://isemt2014.com/>

### Society for Emergency Medicine in Singapore – Annual Scientific Meeting 2014

11 – 13 April 2014 Changi General Hospital - Singapore  
[http://sems2014.com/page/pre\\_conference\\_workshops](http://sems2014.com/page/pre_conference_workshops)

### 2nd Nepalese Emergency Medicine Seminar 2014 (NEMSem14)

April 15 - 16  
BP Koirala Institute of Health Sciences (BPKIHS), Dharan, Nepal  
Contact Chris Curry for more information:  
[chris@chriscurry.com.au](mailto:chris@chriscurry.com.au)

### 15th European Congress of Trauma & Emergency Surgery

2nd World Trauma Congress  
24 – 27 May 2014  
Germany Conference Centre – Frankfurt/Germany  
<http://www.ectes2014.org/ectes-2014/attendance/registration/index.html>

### International Conference on Emergency Medicine 2014

11 – 14 June 2014 Hong Kong Convention & Exhibition Centre – Hong Kong  
<http://www.icem2014.org/main.php>

### 3rd International Emergency Care Symposium 2014 September

The Alfred Hospital – Melbourne  
Contact Gerard O'Reilly for more information:  
[oreillygerard@hotmail.com](mailto:oreillygerard@hotmail.com)

## IEMSIG ACEM Staff

Sarah Smith – Manager  
Chris Hill – Administrator  
For general IEMSIG enquiries or information on how to become a member please contact the IEMSIG team at [IEMSIG@acem.org.au](mailto:IEMSIG@acem.org.au)

## PRESENTATIONS AT THE ACEM ANNUAL SCIENTIFIC MEETING

### Emergency Medicine in Myanmar: completion of the first post-graduate specialist training course

Georgina Phillips  
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In 2009 a core group of International medical specialists began collaborating with local doctors to improve emergency care training in Myanmar through a simple trauma training course. In early 2012, the Australasian College for Emergency Medicine (ACEM) signed a 'Letter of Intent' agreeing to support the development of EM alongside other international partners and the Myanmar Ministry of Health. The first phase of a comprehensive Myanmar EM Development Program (MEMDP) aimed to train local doctors for EM and to become the first local emergency physicians in time to lead emergency care for the South East Asia (SEA) Games (December 2013) and into the future.

In June 2012, the 18 month post-graduate diploma in EM commenced through the University of Medicine (1) (UM1), Yangon. Eighteen junior specialists from other disciplines joined the Myanmar EM Introductory Course and subsequently rotated through 6-8 week clinical rotations in key disciplines other than their own. All participants (known as the 'EM18') spent time rotating through the emergency receiving centre (ERC) of the Yangon General Hospital (YGH) supervised by a volunteer emergency physician (FACEM). Several short courses covering trauma, disasters, teaching, ultrasound, pain, toxicology and adult and paediatric emergency care were delivered by visiting teams and a 3-week educational visit to Hong Kong completed in March 2013. Curriculum and assessment was entirely devised and carried out by a core of volunteer FACEMs and Hong Kong specialists.

All the EM18 completed the clinical training program and sat for final assessment in October 2013. Particular strengths of the course were the clinical rotation to the ERC supervised by a visiting FACEM, when the EM18 were exposed directly to EM care issues and received focussed and consistent teaching on EM topics. Short course teaching was also highly valued, as these enabled the group to refresh core skills, appreciate the importance of teamwork in emergency care, and meet a wide selection of

emergency and other specialists. The educational visit to Hong Kong was considered extremely useful to enable the EM18 to visualised advanced EM systems that could be adapted to the local Myanmar context. FACEMs volunteered their time generously for this ambitious but successful program. Several used long service or other personal leave (Chris Curry, Michael Augello, Shona McIntyre, Georgina Phillips, Antony Chenhall) to live in Myanmar for months at a time in order to deliver the core EM, hospital-based teaching. Others lead short courses, provided strategic advice and assisted with curriculum and assessment (including Phil Hungerford, Michael Bastick, Ian Norton, Chris Kruk, Simon Young, Gerard O'Reilly, Kerry Hogget and John McKenzie). A Hong Kong based surgeon, James Kong, provided crucial assistance as the international co-coordinator of the program, along with other Hong Kong partners; Tai Wai Wong (emergency physician), TW Lee and YF Chow (anaesthetists). A FACEM, Rose Skalicky and her husband, Nigel Klein (ambulance / nurse educator) are now living in Myanmar long term and working on the many components of the MEMDP as Australian Volunteers for International Development. The volunteer long term FACEMs delivered daily bedside and structured teaching in EM, as well as providing vital strategic advice on ED design, staffing and equipment for future developments. Such was the regard for the visiting FACEM expertise; that the ERC at YGH commenced renovations based on their suggestions and diagrams. Equipment purchase and 'resuscitation room' set-up commenced as the SEA Games approached. Additional input into pre-hospital systems and further post-graduate EM training, including emergency nurse development was also provided to university, hospital and Ministry of Health leaders.

Seventeen of the EM18 passed the final exams and are now the first emergency physicians for Myanmar. The success of the first Myanmar post graduate diploma in EM provides an example of collaborative



and responsive clinical health capacity building with very limited resources. Although the short courses received donor support, the program overall has not received any funding. All of the long term FACEM work and coordination from Hong Kong was done entirely voluntarily and in personal leave time. Because of the in-country presence of a FACEM through 2013, the course and associated developments were able to be adapted to local needs and deliver EM teaching relevant for Myanmar, which was highly appreciated by the hosts.

The newly graduated Myanmar emergency physicians

will become clinical leaders in EM as well as assist in future academic teaching and training for EM. Both a second post-graduate diploma and Masters of Medical Science in EM are planned for 2014 with the assistance of the current core international team, the new Myanmar EM graduates and the long term FACEM 'on the ground'.

All FACEMs and other clinicians involved are acknowledged and thanked for their time, energy, intellectual and emotional engagement with the MEMDP, which ensured its success now and for future developments.



**The first emergency physicians for Myanmar:**

**Back row (L to R):** Than Latt Aung, Nyein Chan, Nyi Nyi Tin, Maw Maw Oo, Win Kyaw, Nay Naing Tun, Shein Myint Han, Aung Myo Naing, Naing Win Aung, Shwe Kyaw Oo, Tin Kyaw

**Front row (L-R):** Thandar Oo, Thandar Win Nwe, Khin Shwe Wah, Aye Thiri Naing, Ni Ni Aye, Khin San Moe, Yi Sanda Thein

## Myanmar: EM development at Yangon General Hospital – Preparing for the South East Asian Games

Dr Pa Pa  
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My work-place is Yangon General Hospital (YGH), with 1500 beds the largest tertiary referral teaching hospital in Myanmar.

Myanmar is a country that like others has had its share of conflict, natural disasters and mass casualties.

With around 60 million people, 135 national groups, and life expectancy around 65 years for males and 69 years for females, injury is still rated as the highest single cause for morbidity in 2012.

In 2009 YGH had the only A&E department out of 924 Government Hospitals. As the biggest hospital with 29 specialities, the average admissions per day are about 139. The hospital admissions are increasing, doubling from 2008 to 2012.

Of the ten leading causes of morbidity treated at YGH, head injury is number one, at 10.86%. Road traffic injuries are increasing and Emergency Medicine is a real need for saving lives of our people.

Head injury is also the leading single cause of mortality, at 6.39%. Intra-cerebral haemorrhage, unspecified, is the second leading single cause of mortality, at 4.01%. Among these cases, some are from medical causes and from trauma. This again shows the importance of EM in our country.

In 2008 Cyclone Nargis was the precipitating event for the introduction of the Primary Trauma Care Course to Myanmar through a team lead by Dr. James Kong, from Hong Kong and with the Royal Australasian College of Surgeons. Many emergency physicians participated in these courses.

Out of this came a growing realisation of the need for the formal development of Emergency Medicine.

In December 2011, the development of EM in our country was introduced officially through the continuous interest and efforts of Prof. Zaw Wai Soe (MOH), Georgina Phillips (ACEM) and Dr Kong. And in 2012 a Consensus Workshop was held and an agreement signed between the Myanmar Ministry of Health, ACEM, RACS and IFEM.

What has the introduction of EM meant for me in my role as DMS at YGH? After all, we already had an A&E Department.

Basically, the A&E is made of 3 separate areas run by 3 different units – medical, surgical and orthopaedic. Each of these specialties have teams that are rostered for 24 hour periods. The only dedicated staff to the ED are junior doctors and the nurses.

The triage-registration desk was located within the central orthopaedic area, the Emergency Reception Centre (ERC). The ERC sorted the patients to which unit they should be seen by - chest pain to medical, abdominal pain to surgical, etc.

Problems arise when the patient has both a medical and surgical problem – they are wheeled to the doctors of those units rather than the doctors coming to them – even if they are very unwell.

Triage was really on a 'First come, first served' basis, unless you looked very unwell.

With the development of EM and the help of Australian FACEMs like Assoc Prof. Chris Curry, Michael Angello, Shona McIntyre and Georgina Phillips, we are now redesigning our ED so that it becomes more like one unit rather than 3. With limited resources we are looking at small structural changes.

Changes in progress include connections between the areas; widening of rooms to accommodate patient resuscitation beds; dedicating and equipping rooms to be used by the new Emergency Physicians for the emergency skills they are now using.

But what of the upcoming SEA games? Prof. Zaw Wai Soe, Rose Skalicky FACEM, Dr.Pa Pa (YGH) and the new Emergency Physicians are working together for SEA Games preparation.

In preparation for this there is upgrading of all EDs, including YGH. There are renovations as I have mentioned. We are further equipping the department through Government and donor money.

My responsibility is also for collection and



procurement of those equipments to be used in YGH The Major Incident Medical Management Support (MIMMS) Course was held in Yangon in February 2013. We are strengthening our Emergency staffing with those doctors who recently passed their Diploma of EM.

In the new year we will be looking at modifying our workforce structure in the ED to suit a unified department. The Emergency Physicians are training others in Basic Life Support

Yet for all these improvements there are still many challenges for me and the development of the ED at YGH. Bringing 3 separate units under one unit may be easier structurally than culturally. These doctors are not use to having a senior EP present and with any change it will not be easy.

My role will be to help negotiate and facilitate these specialties working with the new EPs as a Team. Only 11 of the 18 Diplomates in EM will stay in EM after

the SEA Games and 3 will be in Mandalay. Our base of EM staff will be small for the work that needs to be done. Protecting them from burn-out but encouraging them to work despite predictable frustrations and challenges will be difficult. Encouraging the development of good Emergency Nursing will also be important.

Despite the temporary boost for the SEA Games, securing equipment and maintenance, and human resources- doctors, nurses and enough of them - for a good functional ED will be a challenge.

Despite these challenges, in the long run I am looking forward to being an active part of the development of EM at YGH and in Myanmar. I know that I am not alone and together with our efforts and your support, we can reach our destination quickly.

Special Thanks!!! Thank You!!!

Dr Pa Pa, Deputy Medical Superintendent, Yangon General Hospital



Clockwise from above:  
Introducing FAST Scanning;  
ED improvements;  
Opening the resuscitation rooms;

## Nepal: A New Training Program at BPKIHS - the development of a Fellowship in Emergency Medicine

Gyanendra Malla  
[gs\\_malla@yahoo.com](mailto:gs_malla@yahoo.com)

B.P. Koirala Institute of Health Sciences (BPKIHS) was established in Eastern Nepal in 1993 and subsequently upgraded to an autonomous Health Sciences University in 1998.

The Institute has a vision of being a self-governing, self-reliant international Health Sciences University attracting students and teachers from all over the world to its constantly innovative educational programs. It provides undergraduate, postgraduate, university certificate and diploma programs in various medical fields. It consists of four colleges - medical, dental, nursing, and public health - with a 700-bedded central teaching hospital. The medical college has well-established major clinical and basic science departments.

Nepal's healthcare system faces many challenges including extreme poverty, lack of government funding for local clinics and hospitals, and lack of

physicians and specialists as the population grows. In leading hospitals in Nepal, the Department of General Practice and Emergency Medicine (GP&EM) provides both emergent and non-emergent care. Hospitals and communities depend on the assessment and life saving skills of specialist GPs, known as MDGPs, in EDs across the nation. At the present time, even in developed countries, some areas still depend on GPs to operate their local EDs as there continues to be a shortage of EM trained physicians. Currently, the role of the GP in acute care in developing countries such as Nepal is essential and is being used to build a conduit to specialty-trained emergency care providers.

To improve emergency care in EDs, doctorate and fellowship programs in EM have been established in Nepal to provide specialized training for MDGPs. The Tribhuvan University Teaching Hospital (TUTH)



B.P. Koirala Institute of Health Sciences (BPKIHS) was established in 1993



in Kathmandu commenced the first program for the Doctorate of Medicine (DM) in EM in October 2011. However, at BPKIHS, the first curriculum workshop for EM was held in 2006 with the vision to commence a fellowship in EM. International delegates and national GPs were included among the participants. Eventually, in October this year, the Institute launched an 18-month Fellowship Program in EM. BPKIHS is in collaboration with the International Emergency Medicine Special Interest Group (IEMSIG). Fellows of ACEM have been instrumental in developing this specialty curriculum for MDGPs in Nepal.

Healthcare providers from across our nation seem to have embraced this trend at the national conference of the General Practitioners' Association of Nepal (GPAN) held in November 2012. It was based on the theme - "Role of General Practitioners in Primary health and emergency care-present and future."

The first Nepal Emergency Medicine Seminar

(NEMSem13) was held in TUTH in 2013. The next conference, NEMSem14, will be held at BPKIHS on the 15 - 16 April, 2014.

These developments in Nepal have created great optimism for the evolution of an expanded and enhanced role for GPs in emergency care and the development of EM in Nepal. This may serve as an encouraging example for other developing countries in ways to sustainably develop EM. The enhancement of the role of GPs in acute care provides us with a way to improve care to our people and to help to provide a global standard of care in acute care settings.

To conclude, Emergency Medicine is on the rise in Nepal. Through national and international efforts of individuals and organizations, this field's improvement is gradually benefitting parts of Nepalese society. Hence continual expansion and innovation is vital to spread Emergency Medicine practise throughout Nepal.



Triage Area



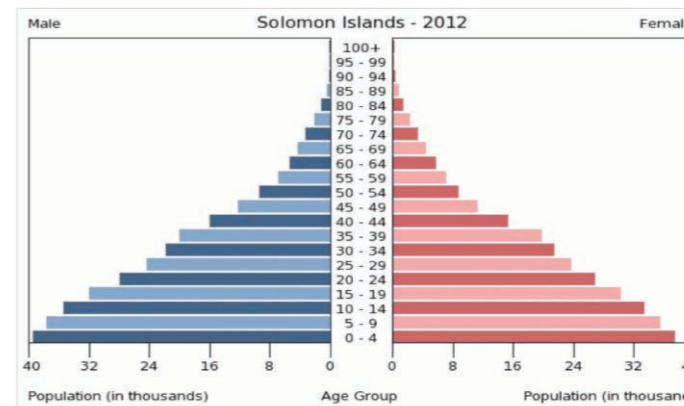
Designated areas in the ED



## Solomon Islands: Emergency Medicine in Solomon Islands

Trina Sale  
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The Solomon Islands is made up of an archipelago of 992 islands in the South Pacific Ocean stretching 1500km from east of Papua New Guinea to northwest of Vanuatu. In 2009 it had a population of 520,000 with 65,000 living in the capital city of Honiara. It has an annual growth rate of 2.6%, infant mortality of 26 per 1000 live births, maternal mortality of 110 per 100,000 and as per the population pyramid in 2012 a young population with most below 40 years of age.

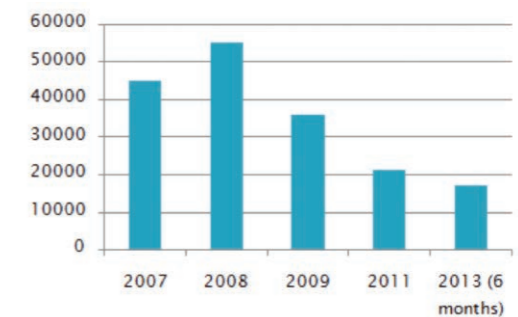


The National Referral Hospital is the largest hospital in the Solomon Islands. It has 300-400 beds and serves the population of Honiara as well as providing a tertiary hospital for provincial referrals. There is another hospital on Guadalcanal, the Good Samaritan Hospital which is run by the Catholic mission and there are 7 private clinics and 8 public clinics which are run by the Honiara Town Council. The Emergency Department is staffed with 19 nurses (total of 25 nurses, some on leave) and 8 nurse aids, and on the ground most times 4 to 5 doctors, though the number may vary. The nurses work three 8 hour shifts: 7am to 3pm, 3pm to 11pm and 11pm to 7am. The doctors as of May this year work two 8 hour shifts continuing on an on-call basis after midnight to 8am.

The ED has four areas within it: the resuscitation bay which has 3 beds; the minor theatre where minor surgical procedures are done; the acute bay which has 14 beds and serves as a holding bay for admitted patients when there is access block and also as a

short stay ward pending admission or discharge. The fourth area is the subacute area where triage categories 4 and 5 and some triage 3 patients are seen. When the acute bay is full there is an overflow into the subacute area so patients are seen at times lying on benches or on the floor.

TOTAL NUMBER OF PATIENTS SEEN PER YEAR



As is seen the total number of patients seen is going down. Record keeping is not one of the strong points of the department, there is no clerical staff and patients are recorded by the triage nurse. When there is shortage of staff a whole shift may be left blank. This is seen on more than one occasion.

PERCENTAGE OF PATIENTS BY TRIAGE CATEGORY

Triage Category	Percentage of total patients
1	3
2	3
3	12
4	18
5	24

Patient flow is 40-60 per morning shift, 40 per afternoon shift and 10-15 per night shift. Presentation is to the triage desk although it must be noted that the ED is very porous and apart from the triage desk has four other ports of entry. Average length of stay as calculated from 2011 statistics is 1.09 day although as per the table below; patients have remained in the ED for up to a week.



Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
63.1%	23.5%	8.6%	3.3%	0.7%	0.4%	0.2%

Bed Occupancy is 200%, gross death rate 1.2%.

Regarding burden of disease, although unable to get exact statistics it is seen that lifestyle diseases are on the rise. Diabetes is creating a huge disease burden as well as pneumonia, tuberculosis. Trauma is also increasing with more stab wounds now than before. Interest in Emergency Medicine was in 1998, then 2006, 2007, 2008 and 2009, totaling 5 trainees. Two have either withdrawn or switched courses leaving 3 in training. There are no completions to date.

In March 2013 a state of Emergency was declared at the National Referral Hospital because of a dengue epidemic. A total of 4500 patients were diagnosed during the outbreak, 1000 tested positive, there were 400 admissions and total of 8 deaths. Overseas help was sought and the first AusMAT team arrived in April, followed by a second team in May. Patient flow was reassessed and emphasis at record keeping and better organization of patient records and lineup was done. Suspected dengue patients were triaged at a separate desk to minimize waiting time. The team adapted well, their knowledge, skills and work attitude were inspirational. They provided much needed rest, for which all staff were grateful.

Challenges include:

- No ED Consultant, no regular visits from university (UPNG)
- No clerical staff
- Workforce shortage
- Delay in return of results
- Staff attendance
- Work ethics
- No incentives

Recommendations:

- Situation analysis of the current situation, both users and providers, equipment, system and patient flow.
- Regular training focused on common emergencies, presentations and triaging.
- Ensuring basic equipment and medication are in stock and in regular supply
- Have a functioning prehospital system
- Arrange 1-2 times a year visit from an Emergency Physician to support standards and assess practice
- Have a funded sister relationship with another Emergency Department so nurses can go on short rotations to see how things are done elsewhere
- Have regular staff appraisals
- Have government support for training.

Currently morale is low and work ethics are poor. If the highlighted issues begin to be addressed it will do much to pep up the spirits and provide encouragement and support for all staff and all will work together to develop this important component of the health care system - Emergency Medicine.

## Vanuatu: Emergency Medicine Development in Vanuatu

Trelly Patunvanu

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Emergency Medicine development in Vanuatu is in its infancy, where the country's population stands at 250,000- 300,000. Throughout the islands of Vanuatu the majority of the health care facilities are staffed by nurses and nurse practitioners. They do provide some form of emergency medical care; however their care may not be up to the standard they might achieve with the resources they work with. Therefore most emergency medical care is practised mainly in the two major referral hospitals - Northern Provincial Hospital and Vila Central Hospital. That is in spite of the fact that there are no Emergency Medicine trained doctors in these two hospitals.

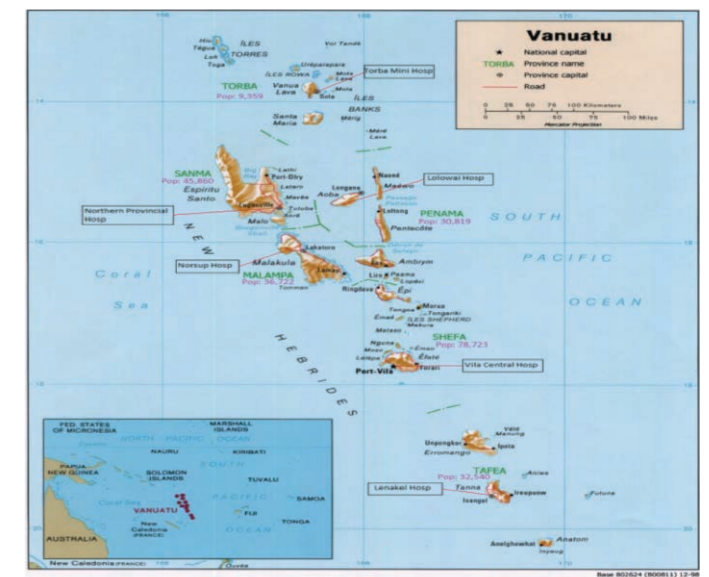
In both these referral hospitals there is an out-patient/emergency department, however most of the initial assessments of patients are done by the nurse practitioners and registered nurses. Doctors from various disciplines (surgery, obgy, internal medicine, paediatrics and anaesthesia) are usually called to review the patients and to decide who will be admitted.

During the period of 2004-2006 there was a nurse from Australia working at Vila Central Hospital under Australian Volunteers International. She started a triage system and it worked well while she was there for 2 years, but when she left the system failed. An initial visit by Dr. Brady Tassicker and his team in 2010 and his subsequent visits have revived an interest in EM within the Ministry of Health.

I developed my interest in EM when I was the only medical officer in a 50-60 bed provincial hospital on Malakula Island, the second largest island in Vanuatu with a population of about 30,000 people. I decided to do the EMST course in 2011 and I

applied to the University of Papua New Guinea School of Medicine and Health Sciences to join the Masters of Medicine (Emergency Medicine) program. I was accepted for a placement in 2012 and I am grateful to AUSAID for providing me with a 4 year scholarship (2012-2015). I hope to complete the MMedEM by 2015 and return back to Vanuatu to tackle the challenges of running effective and efficient emergency care with the resources that the Vanuatu Government can provide to this new specialty.

The challenges ahead are many, but I believe and trust that with cooperative between the existing human resources and partner agencies such as AUSAID, NZAID and WHO, progress can be made. It will need the recruiting of extra interns into the program and also the training of emergency nurses with ongoing in-service training. We hope for CME for EM trainees in collaboration with support from ACEM.





## Fiji: EM Specialty Development

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### First Steps

Since joining the Emergency Medicine program at Fiji National University, Suva, in April this year I have faced several challenges. I stepped into a postgraduate diploma program with students enrolled in six different locations, resistance and discord from local specialists, no structured curriculum and no old exam papers.

After my first week at work, the program director (a doctor from Australia with an academic background and some previous emergency medicine experience) departed for some badly needed leave.

After extending his leave, and many months of uncertainty, he did not return.

I set out on a campaign to win hearts and minds: introducing myself, finding out who was who, building bridges and seeking allies. It took a while to work out the differences in culture, work practices and patient presentations.

The next steps involved assessing the existing foundations: how to start to build emergency care systems; how to ensure any changes in practice and systems would be embraced and sustained; how to use your influence but avoid the traps of being an outspoken foreigner?

The goal is global excellence with local relevance: Pacific Emergency Medicine should and will be different from that in Australasia or the USA.

Another big challenge was how to manage my own time and energy. So much to do and so much potential but so few human resources! Curriculum development, research, clinical guidelines, equipment and consumable management, clinical teaching, recruiting and organizing visitors, attending meetings and meeting other key personnel, developing emergency nursing.... It all has to happen, but what to do first?! At times it was all totally overwhelming.

Things don't always go your way and progress can be slow. There really are no "low hanging fruit." It took me three months of meetings, emails and documents to enable portable chest xrays to be taken in the emergency department. Understanding power and influence hierarchies is key to success in any new venture. Change cannot be achieved with logical

argument alone. Tolerance, patience, acceptance and resilience are key to survival.

I have developed strategies to manage my own feelings of frustration. I get away to enjoy the natural delights of Fiji. I go kitesurfing or scuba diving. I sample the art, music and culture of this wonderful island nation. I talk to other expats who have been here much longer. All of this helps me to push the reset button.

With a new perspective I can again see that much is already changing, emergency care is improving and that emergency medicine in Fiji is progressing more rapidly than in most other places in the world!

### Help Arrives

In October, Dr Melanie Underwood arrived to spend three months based in Lautoka on the west coast of Viti Levu. It was great to have another FACEM to help deliver clinical teaching, weekly videoconference sessions and generally bounce ideas off. She helped greatly in writing, conducting and marking exams. She has also been key in redrafting the plans for the new Emergency Department in Lautoka. Melanie will be returning to Australia shortly but has pledged to continue her support for the program with regular visits next year.

### Emergency Medicine Clinical Services Network

I decided to establish a Clinical Services Network in order to unite leaders in emergency care (medical and nursing) in Fiji. United, our voice should have more influence with government and other agencies and disciplines. It also seemed like a good way to share ideas, maintain morale, promote consistent practice across sites and ensure sustainability of ventures. Our first meeting was organized by one of my key allies, Matron Margaret Leong, who has recently been promoted to manager of nursing at Colonial War Museum Hospital, Suva, but vows to continue to support our endeavours.

This meeting (picture) was one of my proudest moments. It felt like we were starting a movement, there was so much passion and energy in the room.

### Fiji EM Clinical Services Network



Following our first meeting we established some Terms of Reference and an action plan:

ED CSN Terms of Reference

- Develop, monitor and implement standards on ED equipment, consumables and drugs.
- Develop, review and implement evidence based Clinical Practice Guidelines.

- Participate in workforce planning for EDs.
- Develop, implement, monitor and evaluate Emergency Department Clinical and Professional Standards.
- Facilitate and participate in ED research, audit and quality improvement projects

### Academic Progress



Thirteen students sat the written and clinical (OSCE) exams for the Diploma in Emergency Medicine. Eleven passed. This was an amazing achievement given the students were spread across six different hospitals, and hence much of the teaching was conducted online or via videoconferencing.

The Masters program will commence in Suva in 2014, and will be a three year program following on

from the one year diploma program. We expect to have approximately eight students.

I have been privileged to work alongside these enthusiastic, talented and hard working doctors. With this program we hope to graduate local specialists who will do much to improve emergency care in Fiji and in the Pacific region.



## PACIFIC

## Update on Emergency Medicine in Papua New Guinea

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Emergency Medicine (EM) continues to evolve in Papua New Guinea (PNG). It is now seven years since Dr. Yongue Kambue graduated as the country's first emergency physician. The landscape has changed significantly since then, particularly in Port Moresby where the new Emergency Department (ED) has now been open for almost a year. There are currently five emergency physicians working there as well as 13 to 16 registrars, which is a big step up from the recent past.

There are 14 EM training positions spread over the duration of the program, with some talented trainees occupying them, which bodes well for the future. The training program itself is a Masters of Medicine (EM) administered through the University of PNG. It is a four to six year program with an entry exam, exit exam, research requirement and minimum term requirements. It was established in a time when there were no local emergency physicians so the training is heavily based out of the ED. In fact, during some of my visits this year, even with such a high number of registrars, there were no EM trainees in the ED itself.

The training hub is the ED in Port Moresby General Hospital (PMGH). The new ED was opened 24th December 2012 and visited by the Prime Minister Peter O'Neill shortly thereafter. A stark contrast to the old facility, the new ED has a modern design with separate areas for acute / resuscitation cases and a fast-track area, both with central elevated glassed-in 'fishbowls'. The facility is air-conditioned and even has keypad entry (which works). The environment is far calmer and less chaotic and it actually looks like a modern ED. There is wall oxygen available (most of the time) and a training room, which is far easier than doing talks in the middle of the ward. If anyone else has had a patient arrest during one of their presentations, you will know how distracting that can be. Not all has gone smoothly though, part of the roof fell in during a rain storm (fortunately not injuring

anyone) but has since been repaired. A big issue though for the staff is that the infectious area where the patients with tuberculosis (TB) were kept has recently been closed, leaving a corridor as the only option.

Equipment wise, the ED is gradually moving forward. There is an ECG machine with plentiful stocks of paper so ECGs get done regularly and the skills in their interpretation are noticeably improving. The (ancient) ultrasound machine has gel so it also is being used far more frequently and appropriately. An iStat machine was recently installed. These simple measures have all contributed to the improvement in care provided. Unfortunately, the new Oxylog 3000 has been damaged as has the old original (and hitherto unbreakable) Oxylog so they are again reliant on 'wantok' ventilation (by family or friend). There is now a CT scanner in PMGH which, when functioning, offers further diagnostic capabilities (for those who can afford it).

While the standard of care has improved substantially over the last few years, there are ongoing challenges. There is a chronic severe shortage of nursing officers which means the ones present are hopelessly overworked and a number of the nursing roles have to be adopted by the medical staff. There are also various equipment shortages, drug shortages and access block that is measured in days not hours.

The clinical exposure is still dominated by infectious disease and trauma but lifestyle diseases are becoming more common. TB, HIV, malaria, bacterial meningitis, typhoid are all regular diagnoses and this year has seen an outbreak of chikungunya. Machete wounds are very common (see photos of skull X-rays). Critical asthma is a regular presentation where IM adrenaline is an effective first line therapy for most but intubation and ventilation is often required. On one morning ward round there was an adult male,

unmonitored on his adrenaline infusion in the corner, who had been intubated and extubated that night. He went home the next day.

There is an Australian funded study underway in the ED with a blinded randomised controlled trial on the use of a new, cheaper anti-venom for taipan envenomations, which are all too common. This trial, being run by the snake guru, David Williams, is an example of high quality research which has the spin-off that snakebite victims get exceptional care whilst in the ED.

This report is very Port Moresby centric but so is the program. There are trainees outside in Alotau (Milne Bay) and Moro (Southern Highlands) but they are all doing external rotations. There is also the visiting clinical lecture program in Madang where ACEM trainees are accredited to both work in the ED and teach health extension officers at Divine Word University.

Unfortunately there are no emergency physicians working publicly other than the five in Port Moresby. However, Dr. Vincent Atua in Madang, who is now the director of medical services there, still oversees the ED. Part of the problem was the loss of trainees who remained in Australia, but tighter visa restrictions and the ability to do all training in PNG has curtailed this. Another big issue is that MMed(EM) graduates are very employable in the private sector, where three emergency physicians have gone. It is hoped that there will be some movement to the provinces of emergency physicians early next year. So with the development of EM, particularly within Port Moresby, there is a feeling that it is now time to re-evaluate the training program. Some of the issues under consideration include how to increase the time spent in ED, the introduction of an EM first part exam (the trainees currently do the surgical first part exam) and perhaps even to establish a diploma in EM that would be useful for trainees waiting to do EM or for others who are keen to improve their emergency care skills.

As always, in the land of the unexpected, you never know what is ahead. There is scope for others to get involved and the Chief of Emergency Medicine in PNG, Dr. Sam Yockopua, extends an invitation for those who are interested. Further information can be obtained from myself at [colin.banks@health.qld.gov.au](mailto:colin.banks@health.qld.gov.au) or you could check out the excellent website established this year by Dr. Zafar Smith (Brisbane based ACEM trainee) at [www.emergencymedicinpng.com](http://www.emergencymedicinpng.com)



Skull X-rays of a young male who lost a family argument (GCS 15)



Female with DKA treated with both the EDs infusion pumps





The secure ED



ED X-ray discussion. Dr. Peawi imparting his wisdom



Mediastinal mass for investigation in a 23 year old male



ED ward round

## Nursing Capacity Building for Emergency Care in PNG

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The ACEM International Development Fund 2011 Grant was awarded to a team of senior nurses from the emergency department (ED) St. Vincent’s Hospital, Melbourne (SVHM) to assist with a long term project of nursing capacity building for emergency care in Papua New Guinea (PNG). The amount of \$20,991 was allocated to fund exchange visits between SVHM nurses and nurses from the ED of the Port Moresby General Hospital (PMGH) for the purposes of peer support, knowledge expansion, teaching and training and professional development. The project was timed to coincide with the opening of a new ED at the PMGH and designed to focus on the skill, staffing, equipment and management needs of the PNG senior ED nurses. Whilst PNG emergency physicians have received longstanding peer support from FACEMs, it was recognised that their nursing colleagues were working in isolation. This project sought to educate and support the PMGH ED nurses in order to build a sense of teamwork and a shared understanding of emergency care.

A visit of three SVHM ED nurses to PNG occurred in late 2012, and in mid-2013, two PMGH senior nurses spent time at SVHM. For the Australian nurses visiting PNG, activities included observing the new ED, meeting with stakeholders and providing education and strategic advice on key ED systems and management issues such as triage, patient flow, “fast-track” care and ED equipment. For the PNG nurses visiting SVHM, activities included participatory observations, meetings, formal teaching and reflective discussion around the topics of triage, ED nursing leadership, clinical assessment, teamwork, documentation and quality, safety and infection control. Of course there were also opportunities for social events which consolidated friendships and a sense of comradeship and peer support outside of the normal ED environment. In Melbourne, a special “Trivia Night” event focussed on raising funds to purchase essential equipment and other crucial items for the PMGH nurses and their new ED.

Direct feedback from all participants was extremely positive. From the PNG nurses, they highly valued the opportunity to see mature systems of triage, learn about a variety of ED topics and receive directed

mentoring and professional peer support. The SVHM nurses received valuable insights into the delivery of emergency care in the PNG context and the resource challenges faced by their PNG colleagues. This has enabled them to adapt teaching and other exchange activities to the PNG context in order to ensure high relevance and facilitate sustainable changes. Work is ongoing to enhance the desired regional ED nursing peer support networks through increased engagement with the College for Emergency Nursing Australasia (CENA).

There have been several challenges to delivering this unique program, including many practical difficulties in obtaining timely visas and securing travel arrangements. Communication with our PNG colleagues is often difficult, which has meant that evaluation of longer lasting changes to ED nursing at the PMGH has been nearly impossible. Our last contact with the ED revealed that all the nurses were absent due to industrial action, which is a small indication of the many challenges faced in this program. As a result, we have adapted our future plans to incorporate longer visits to Australia followed immediately by a multidisciplinary team from SVHM accompanying their PNG colleagues back to assist with implementing sustainable improvements in the PMGH ED.

We thank the IDF Committee and ACEM leadership for their generous support of this program. Clinicians and leaders of both the PMGH and SVHM are also thanked for enabling these exchange visits, generously hosting nurses at both their hospitals and having the vision of improving emergency care for their communities and building capacity for their staff.



Sue Cowling (SVHM NUM), Sr Marilyn Nicholas, Sr Datin Trinit and Belinda Casbault (SVHM ANUM) in the PMGH ED



## Emergency Medicine in Vanuatu: The View From Afar

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After slow beginnings, momentum is building in emergency medicine in Vanuatu. My involvement began several years ago, when I answered the call put out by the Ministry of Health, as part of a team of two doctors and two nurses, representing both Australia and Solomon Islands.

Some of the successes since then include:

- Recognition of EM as a specialty worthy of consideration by the Ministry of Health
- Enhanced profile of EM among the medical and nursing staff
- Enrolment of the first candidate in the Masters programme (MMedEM) at the University of Papua New Guinea.
- Design and construction of a new emergency department at Vila Central Hospital
- Successful granting of a scholarship by ACEM, to Dr Trelly Samuel – providing international recognition of the success to date.
- Awarding of a grant by the International Development Fund of ACEM to run the Emergency Life Support International (ELSi) course in Port Vila, and to run the Serious Illness in Remote Environments (SIREN) course twice - in Port Vila and in Luganville. These courses shall happen in 2014.

Despite these successes, considerable challenges remain.

**Is it feasible to run two emergency departments on different islands, separated by hundreds of kilometres with a single emergency physician?**

Training more doctors to fulfil this role will be essential for success. But at the current point in time, none of this training can be carried out in-country. If the Ministry of Health facilitates this training, there will be a five year lag-time between allocating staff to training, and getting any work out of their staff. Persuading them of the benefits of this investment will be a priority.

**How will junior staff decide EM is the career for them?** Their experiences in the EDs at the moment are challenging – there is little senior support, the department faces overcrowding challenges common to institutions throughout the Pacific, and morale is low. Allowing the future leaders of EM to find their path will be essential.

**Who will pay for this training?** Dr Trelly Samuel's funding is through an AusAID scholarship. Following the change in federal government, and with emergency medicine not being listed as a Millennium Development Goal by WHO, will AusAID prioritise this over other development needs? Finding ways to allow cost-effective training in EM will smooth the way.

Formidable challenges indeed. How then should development proceed? The simplest strategy of all revolves around improving existing systems in the EDs. Signs of improvement in response to the effort expended encourage further effort. Giving junior staff a positive perspective on emergency medicine will encourage them to pursue this in future. We aim to leverage the recent successes to achieve this.

A (possibly apocryphal) Chinese saying runs "May you live in interesting times". Well, from the perspective of emergency medicine in Vanuatu, the times are indeed interesting, and I am glad to live in them.

## SOUTH EAST ASIA

### Primary Trauma Care Cambodia

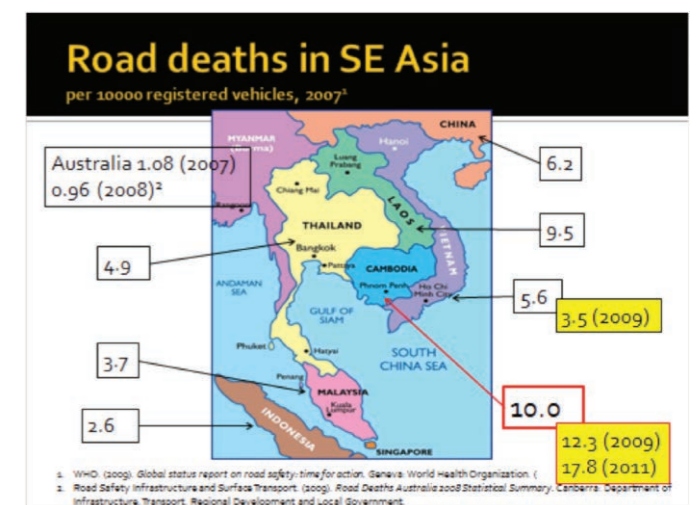
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When most people think about trauma in Cambodia, they think of the mass genocide inflicted at the hands of the Khmer Rouge, civil war and landmines. At the hands of the Khmer Rouge, an estimated 1.7 million people died and an estimated 6 million land mines were laid. But in this century, the backdrop for the trauma scene has changed. Although Cambodia has the highest number of landmine amputees per head of population in the world (Halo Trust, 2013), there are now fewer than 300 casualties per year as a result of landmines, and one third are fatal (Reliefweb, 2011). The rapidly emerging killer in Cambodia is the daily activity of using the roads. Road fatalities are the leading cause of death in Cambodia, as it is becoming in many Asian and developing countries. The road mortality rate in Cambodia is nearly 20 times that of Australia (Road Safety Infrastructure and Surface Transport, 2009) and is the highest of all South East Asian nations (WHO, 2009). That equates to 4.7 deaths per day on the roads. From my perspective, as someone who travels frequently by road in Cambodia that means I have witnessed, on average, one fatality for every road trip.

The health care players on this stage are many and their relationships complex. Over 2000 Non-Government Organizations are registered in Cambodia. Some, like Belgium's Handicap International, have been pivotal in defining the trauma burden in Cambodia. Those who work in this sphere will be more than aware that this decade has been declared the Decade of Action on Road Safety by the World Health Organization. They too, have been active in Cambodia.

Locally, amongst health professionals there is an acute awareness of the burden of injury arising from traffic accidents but they are a disparate group. Many of the anaesthesia, ICU and emergency medical specialists (they are all combined in the same training



program and professional organisation) reside in the capital, Phnom Penh. Some of these specialists are highly trained in traumatology, some have received further training in the principles of disaster preparedness and mass casualty management. They are frustrated by parts of the trauma system that are lacking, such as ambulances, dedicated emergency departments, telephone hotlines and triage. However, most of the population outside of the capital are served by junior doctors and health centre nurses. It is to these people that the Primary Trauma Care (PTC) has been taken.

PTC is a system for training front-line staff in hospital trauma management. It is specifically aimed at the needs and logistics of front-line hospitals. It is based on straightforward clinical practice and does not require the practitioner to have access to high-tech facilities. PTC materials have been endorsed by WHO and the course is taught in over 60 countries worldwide. It is coordinated by the Primary Trauma Care Foundation, a UK-registered charity, which raises funds for the support of courses. Courses are provided at zero or nominal cost to participants.



In 2013 negotiations began with the Cambodian Ministry of Health regarding the future of PTC in the country and the fifth Cambodian PTC course was held. The location was the town of Stung Treng, 400km yet an 8 hour drive from Phnom Penh. The instructors were generously provided gratis from the Angkor Hospital for Children. This hospital asks all of its staff to communicate in English, as opposed to Khmer, the official language of Cambodia. As a result they become highly sought after in working with overseas teams and NGOs.

As part of their team I oversaw the PTC course in Stung Treng. We (and I only include myself loosely here) delivered the course with as much local emphasis as possible. Khmer lecture slides accompanied the course, given wholly in Khmer. When we didn't have enough manikins we used the participants as patients. As cervical collars are almost non-existent in Cambodia, we taught them how to make them from IV fluid cardboard boxes. We didn't mention the words MRI or pelvic angiography. We took medical education to an area of Cambodia which receives almost none.

The feedback from the course was positive. The requests for more teaching were overwhelming. We were fortunate to be taken on a tour of the hospital, in particular the 2 bed "Emergency Department" and the 4 bedded ICU. I was impressed with the ED: a room, 2 beds, a monitor, some cannulation equipment. Far better organised than some I have visited, and a long way from other, larger hospitals, which don't have an ED at all. The ICU contained a now all too familiar sight: an empty bed beside a brand new ventilator. In the last 12 months many hospitals in Cambodia have received ventilators, defibrillators and other equipment, without any training on their use. Along with this sight came the all too familiar sound: a request from the Head of ICU for us to return to teach them how to use the ventilator.



This was the 5th PTC course to be conducted in Cambodia and there is a pool of 18 local instructors. The course is always well received and there are plans for further courses as well as the training of more instructors. However, the local instructors who are expert teachers and adept clinicians are reticent to conduct courses on their own. There are many complexities in the hierarchy of health professionals in Cambodia and having an overseas trauma expert brings a lot of respect and recognition.

Acknowledgements: PTC courses in Cambodia would not have been possible without the support of:

- ACEM IDF for funding the course
- AHC for donating staff time
- PTC Foundation for translating the materials
- ASA for funding the initial courses and Instructor training
- APLS for lending the manikins and training equipment

If you are interested in becoming involved, please contact Suzi Nou: [suzi\\_nou@yahoo.com](mailto:suzi_nou@yahoo.com) or <http://www.primarytraumacare.org/>



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## Indonesia - Bali

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National Critical Care and Trauma Response Centre (NCCATRC) in Darwin has had a relationship with Bali since the Bali Bombings. There is also relationship between Sanglah and Royal Darwin Hospitals under the Sister Hospital Program funded by AusAID. These programs support disaster response development, including the ambulance service, and ongoing nursing upskilling.

Di Brown from RDH is the in-country coordinator for both programs and Malcolm Johnston-Leek is a driver of much of this work.

In March 2013 a disaster response exercise was conducted in Denpasar, and along with this it was decided to conduct a toxicology workshop.

The workshop covered general toxicology, but the focus was the burgeoning problem of methanol poisonings. There was clearly great interest in the methanol issue coming from the Balinese medical staff and Health Department. The workshop was very well received and it was a great collaborative opportunity to begin work in improving care of the

poisoned patient.

From this, a number of significant issues were identified:

1. There was an appetite for, but minimal evidence of Emergency Medicine knowledge and teaching, with little application of EM toxicological principles on a day to day basis.
2. There was no practice and little acceptance of ethanol blockade for methanol poisoning.
3. Frontline medical staffing of Sanglah Hospital ED was junior trainee GP doctors with little evident EM skills.

There was clear evidence however of local interest in developing EM training and skills. Sanglah ED HOD was very supportive of this occurring. There exist some inevitable barriers to this work, and Di Brown and Malcolm Johnston-Leek have been patiently working to address them.

In follow up to this workshop, we developed some protocols for pre-hospital identification and care of



the suspected methanol poisoned patient, evidence base to support this, and a protocol for a simple formate assay that could be locally applied.

To consolidate this work a repeat two day workshop in October 2013 focused specifically on methanol management. This was attended by several hundred pre-hospital health workers, health department and medical staffs from many hospitals across Bali. As a result of this the health department appears to have accepted the validity of the management protocols, which we are now working to have formalised and distributed. There was significant media coverage, which gave us a great opportunity to educate the

## Timor Leste

(From correspondence with the Editor)

Antony Chenhall is working as part of a team that includes an anaesthetist, surgeon, paediatrician, and obstetrician. The current project is called ATCLASS 2 – Australia Timor Leste Assistance for Specialist Services 2. The project has been going in one form or another since 2002. The focus has changed over the years with changes in the Ministry of Health (MoH) and AusAID/Australian Aid/DFAT priorities, and change is ongoing.

The ATCLASS 2 goals are around postgraduate medical education and hospital quality improvement.

Education includes teaching for the early post-graduate years, diplomas in some areas such as paediatrics and anaesthesia, (but not EM), and preparing people for specialist training overseas. Dr Todi, current ED director, has been accepted into the University of Papua New Guinea Master of Medicine in Emergency Medicine (UPNG MMedEM) program. He will start in 2014, with his first year in surgery to be done in Dili.

For EM the focus is on 1) early post graduate year doctors, who make up the bulk of the ED medical staff; 2) supporting Dr Todi as ED director and for his further study; and 3) quality improvement projects in the ED. While the focus is on ED systems, this often necessitates engagement with the broader hospital.

Balinese and Australian public on the risks associated with this poisoning.

The ongoing challenge is the development of Emergency Medicine on an island that at any one time has 10,000 - 20,000 Australians present. There is clearly a local appetite for this, and very clearly a need.

So, who's going to Bali?

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Language is always a challenge in Timor Leste. Other than for specific courses such as Primary Trauma Care (PTC), where translators are used, it is hard to see how a visiting emergency physician (EP) could contribute much in two weeks unless they already spoke Tetun - and Antony would be very keen to meet any Tetun speaking FACEMs out there - or Bahasa. But Antony would be very open to any EPs with ideas, and they are invited to get in touch with him.

Five PTC courses were run in 2013, plus an instructors course. Support has been provided by Kerrie Jones (FACEM, Darwin) and Sydney Chung (surgeon, Hong Kong). Discussions are under way with the MoH regarding further PTC courses in 2014. The local instructor pool is getting more confident and it is likely that the need will be for only one or two visiting instructors in 2014. The anaesthetist in Dili, Eric Vreede, is an experienced PTC instructor from the very early days, and if Sydney and/or Kerrie were available, those relationships would continue.

Antony has a medium to long-term commitment to TL. He was first there in late 2009 and stayed for 2010. Matthew Wright then spent most of a year there. Antony has been back since January 2013, will be there for 2014, and likely beyond.

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## Emergency care in Vietnam: The Alfred-Hue Emergency Care Partnership Project

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Emergency medicine is only just beginning to develop in Vietnam, with its predominantly rural population of about 90 million. The Good Samaritan Medical and Dental Ministry from the USA identified a need for dedicated emergency care in Vietnam and created linkages with an international emergency medicine faculty (predominantly from the US). In March 2010 the first annual Vietnam Symposium in Emergency Medicine was held in the old imperial capital of Hue in central Vietnam. This event significantly raised the profile of emergency medicine and nursing in Vietnam. Importantly, a consensus document committing to the development of emergency medicine as a specialty was signed.

But whilst EM had been identified as a priority across Vietnam by key stakeholders, observations suggested a clear and ongoing need for on-the-ground professional support and capacity-development. In April 2012 two Alfred Hospital emergency nurses visited Hue University Hospital ED to provide training. It was noted, in addition to a limitation in resources, that there was no triage system and no systematic approach to the seriously ill or injured patient. Following the visit, the Alfred Hospital Emergency and Trauma Centre in Melbourne developed and proposed the Alfred-Hue Emergency Care Partnership Project and successfully received funding support from ACEM's International Development Fund Grant for 2012.

The primary aim of the Project was to develop the capacity to improve emergency care in Hue. Secondary objectives of the Project were to:

- Improve the systematic approach to the patient requiring emergency care in Hue
- Develop the use of a triage system to prioritise the delivery of emergency care in Hue
- Further develop linkages between Australian and Vietnamese emergency care providers and professional organisations

- Stimulate the development of emergency medicine and nursing as professions in Hue
- Support emergency care providers real-time in the workplace
- Foster the engagement of Australian emergency care specialists in the development of emergency medicine in Vietnam

Following the development and translation into Vietnamese of the Emergency and Trauma Team Training (EATTT) manual for Hue, with pre-contact evaluation including a written exam and self-rating questionnaire, the first module of "contact" training was conducted in October 2013. The faculty, comprised of 3 emergency physicians and 2 emergency nurses, provided bed-side patient education supplemented by a two-day formal training program with a train-the-trainer component. The program was conducted in the EDs of Hue University Hospital and Hue Central Hospital, with the enthusiastic support of local stakeholders and ED staff.

Important features of the program, used previously in Asia, include the combination of formal training and real-time patient-based bedside teaching and support. The faculty is composed of doctors and nurses, and the participants are similarly gathered in small teams of doctors and nurses, learning and working together. The next contact module will be conducted in late February 2014. Then, from 3 to 7 March 2014, the annual Vietnam EM symposium will be held in Ho Chi Minh city, focusing on Emergency Medical Services, and led by an international, predominantly US, faculty. This symposium is open to all faculty and presents an excellent opportunity for Australasian emergency physicians and nurses to be further involved in EM specialty and emergency care capacity development in Vietnam.



## ASIA

## Bangladesh: A Glimpse of EM

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This is the first time that Bangladesh is being featured in the IEMSIG Newsletter. In view of this I think it is pertinent to provide some background to the country, socio economic state and health infrastructure.

The health system is a remnant of the old British system and so emergency medicine is non-existent.

Over the last five years a group of physicians in Bangladesh have got together to try to introduce the concept of EM and its principals. We in Australia are actively trying to assist the group to achieve its goals.

### COUNTRY CONTEXT

Bangladesh is bordered by India in the north, west and east, by Myanmar (Burma) to its south-east and by the Bay of Bengal to its south.

With a population of more than 160 million people in a territory of 147,570 sqkm Bangladesh is the world's eighth most populous country, as well as one of the world's most densely populated countries.

Health and education levels remain relatively low; although they have improved recently as poverty levels have decreased (26% at 2012). For those in rural areas, village doctors with little or no formal training constitute 62% of the healthcare providers. Formally trained providers are a mere 4% of the total health workforce. A survey conducted by Future Health Systems revealed significant deficiencies in treatment practises of village doctors, with a wide prevalence of harmful and inappropriate drug prescriptions.

The poor health conditions in Bangladesh are attributed to the lack of health care and services provision by the government. The total expenditure on health care as a percentage of their GDP was only 3.35% in 2009, according to a World Bank report published in 2010. The number of hospital beds per 10,000 population is 4. Expenditure on healthcare as

a percentage of total government expenditure was only 7.9% in 2009. Citizens pay 96.5% of their health care bills.

### INFRASTRUCTURE FOR MEDICAL SERVICES

**PUBLIC SECTOR:** There are currently 21 Government Medical College Hospitals (which are regarded as tertiary hospitals) providing most subspecialty care 24hrs, while 64 Government District level hospitals provide basic generalised care and refer onto the tertiary centres. There is a specialised tertiary hospital in the capital city providing quaternary cardiac care and a tertiary children's hospital.

**PRIVATE SECTOR:** This has been expanding over the last 10years. During this time more than six private medical colleges have been granted approval by the government to provide MBBS degree curriculums as well as operate tertiary level hospitals.

### INFRASTRUCTURE FOR MEDICAL EDUCATION

The basic MBBS degree is provided by medical colleges, while specialised training is through formal fellowship courses conducted by the Bangladesh College of Physicians and Surgeons.

<http://www.bcpsbd.org/>



The BCPS awards fellowship degrees in medicine and surgery.

Bangladesh has a medical university, the Bangobandhu Sheikh Mujib Medical University (BSMMU), which is also the country's leading tertiary care centre. The university runs programs for MD (Masters in Medicine) in most medical, surgical, and O&G subspecialties. These are awarded at the end of a formal training program and exit exams.



### EMERGENCY MEDICINE IN BANGLADESH:

This is non-existent. The concept has only just started to grow over the last 5-6 years. Emergency departments act as a "medical triage" centre only, directing patient flow to appropriate wards of the hospital where the acute management is looked into.



A group of physicians got together and formed an organisation called "BANGLADESH EMERGENCY MEDICINE" in 2007-2008. This group has so far held three conferences in order to promote and encourage the growth of emergency medicine. An extract from their website ([www.bangladeshemergencymedicine.org](http://www.bangladeshemergencymedicine.org)) reads:

Main objectives:

Promotion of Education and Training in Emergency Medicine in Bangladesh.

Other objectives:

To bring in touch of the interested Doctors from UK, USA and Australia with the Medical Professionals in Bangladesh to promote Medical Educational and Training activities with especial interest in Emergency Medicine. Improvement of Emergency healthcare by increasing awareness the people's side by side the improvement of knowledge and skills of Professionals. Providing consulting services to the Government and non-government organizations to

promote Emergency Medical Services in Bangladesh. Liaise with the Post graduate Medical Education Institutions/bodies of Bangladesh for the introduction of Education, training and conferring postgraduate Diplomas/degrees /Fellowship in Emergency Medicine.

This group has successfully negotiated with BSMMU to consider commencing a formal training program in emergency medicine. The Vice Chancellor of the University is providing exceptional leadership in this avenue.

As a first step a formal curriculum is being prepared by emergency physicians in Australia, USA, and UK. The DRAFT paper work has already been submitted to the senate of the university.

As a second step, a programme of "Clinical Attachment" has been agreed upon by BSMMU and Blacktown Hospital in Sydney Australia, to allow selected clinicians from BSMMU to spend time in an Australian ED to appreciate and gather knowledge on the processes of emergency care.

As a third step, BSMMU will be encouraging emergency physicians from Australia to spend time in their hospital to transfer knowledge and skills.

### FUTURE

This will rely heavily on consolidation of the work done thus far. There are prospects for formal training and up skilling of EM clinicians from Bangladesh by providing the opportunity to work in Australia as trainees. At a college level we should consider if there is an opportunity to open up our Diploma and Certificate programs to clinicians from Bangladesh.

We hope that through the IEMSIG we can assist Bangladesh to develop emergency medicine as a subspecialty as well as start to develop a skilled workforce in order to provide quality emergency care to the population. In my opinion Bangladesh has the infrastructure, what it needs are the skills to develop the process.



# India: Emergency Medicine: Are We There Yet?

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## Introduction

Some say that India is a poor country. We would argue, however, that India is a poorly understood country, especially vis a vis Emergency Medicine. Here are some easily understood statistics though: with a population of 1.3 billion, India suffers a trauma death every 1.9 minutes. There are only 300 trained emergency physicians through any structured national or international training program. Surprisingly, approximately 48,000 medical students graduate each year yet there are only 16,000 residency places in all medical specialties. The rest of the graduates do not have the opportunity to obtain any further training. The development of Emergency Medicine (EM) as a specialty has presented graduates with exciting new possibilities. This explains the great appetite for consumption of EM training programs in India.

## History

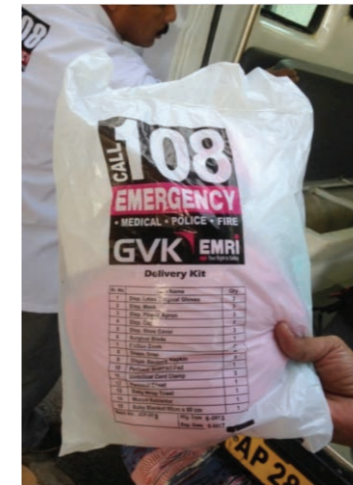
Advocacy for the development and recognition of EM as a specialty has been ongoing since 1999. It truly has been international interest and local leadership that has set fire to the specialty in India. Several international organizations, such as the Indo-US organization, the American Academy for Emergency Medicine in India (AAEMI), and the College of Emergency Medicine UK (CEM), the International Federation for Emergency Medicine (IFEM) and several US university hospitals have been active in promoting this specialty over the past 14 years. The Society of Emergency Medicine of India (SEMI) has been active since 1999. Some made strides with political advocacy, while others with education through conferences, EM residency training, examination and shorter courses such as life support courses. In this manner EM in India got its jump-start. Today, in 2013, there is a significant amount of awareness of EM, however the various organizations are making efforts from their different perspectives and the effort is often discordant. There is a great need for coordination and collaboration of all international efforts to take EM in India to the next step of specialty implementation.

## Pre Hospital Care and EMS

Pre-hospital care and Emergency Medical Systems have made a good start and are developing in a unique way. Training of ambulance paramedics and emergency technicians started much before the training of medical doctors. Several local universities have 6 months to 2yrs emergency paramedic training programs. The Emergency Medicine Research Institute (GVK-EMRI) is the biggest public-private partnership in India covering 18 states with more than 5000 ambulances and 8000 trained paramedics. It is the world's largest ambulance service in the making. There is overwhelming data available for research in pre-hospital care and the International EM team from Stanford University USA has been supporting this service for the last seven years. Not surprisingly the number of babies delivered (approx. 239 per week) in these ambulances has led the institute to develop a special delivery kit for ambulances, and delivering a baby is a skill taught to all paramedics (pic 3). Several other community based organizations are paving their way into development of EMS in India. To name a few of them: ANGELS (Active Network Group of Emergency Life Savers) in Kerala, Life line foundation in Gujarat and LHRI (Life Supporters Institute of Health Sciences) in Mumbai have initiated some successful models. There is an active campaign led by the Society of Emergency Medicine of India to achieve a single National Emergency number for the whole country.



World's largest ambulance service in the making



Emergency Delivery Kit for ambulances



Training room at GVK - EMRI



Limited resources in a public hospital – washed for re-use

## Academic Emergency Medicine

### Recognition

Recognition is important in the development of a new specialty. In 2009 EM was recognized by the Medical Council of India (MCI) as a specialty. The other regulatory board, the National Board of Examinations (NBE), recognized EM just this year (2013). Currently there are all sorts of Emergency Medicine training courses: 6 month diploma courses, 1 year fellowship courses, 2 year courses, and some that are 3 year residency training courses. There are training programs that take place in government hospitals and some that take place in private hospitals. The difference in the resources available between private and public training centers is evident in terms of numbers of presentations and resources available.



Resus room in a private emergency department



Public hospital emergency room



Emergency room of a private emergency department



There are several programs affiliated with US residency programs in which the US institutions send faculty to the Indian program monthly. These are called Masters in Emergency Medicine (MEM) courses. Post-graduate EM residency training courses occur both in government (public) hospitals as well as in private hospitals across India. There are a total of approximately 150 EM-trained residents from 28 institutions each year. However, most of these trainees are not officially recognized by the MCI or the NBE. While training programs may abide by MCI standards, the MCI only recognizes 35 of them primarily because of faculty - student ratio requirements. This leaves the rest of the EM-trained residents, who have spent tens of thousands of rupees and up to 3 years of their life training, without any official recognition by their own medical governing body. (The NBE Emergency Medicine residency training programs will start in 2014 and graduate their first class in 2017.)

### Faculty

One of the biggest issues is the lack of faculty. Both the MCI and the NBE recognize seats in a training program based on faculty - student ratios. The minimum requirement for faculty includes 3 years of official training in a specialty (medicine, surgery, orthopedics, anesthesia) and 1 year of experience in EM. The NBE criteria are expected to be wider and inclusive of the programs already running. In a country which has few official graduates and which has just recognized EM, there are not enough graduates who have the required years of experience, and hence there is a dearth of faculty.

### Standardisation and Accreditation

There are no widely agreed-upon standards about what makes a qualified emergency physician (EP) or about what makes a quality training program. There is a need for definition of the amount of time required in training, whether it is 6 months or 3 years; there is need to have a description about what subject matter or what skills must be mastered; and there is a need for independent examinations that residents take at the end of their training for evaluation of their knowledge and ability.

The MCI and the NBE have developed definitions of training and they will have exam and training requirements, however the number of physicians they graduate and qualify will not begin to address the current need.

The College of Emergency Medicine UK offers their membership exam, the MCEM, to doctors from India. Passing Parts B and C of this exam allows the physician to be qualified to work in the UK in a training position in EM. Given the conventional status of the MRCP and the MRCS as registerable qualifications, the MCI has agreed that passing the MCEM exams is a registerable additional qualification with the MCI. The NBE, however, has proposed that the MCEM qualification is equivalent to a two year post-graduate course or a diploma.

There is a clear need for bodies like the IFEM to develop some minimum training and assessment criteria to guide countries implementing EM as a new specialty. These needs can be addressed by coordinated discussions and collaboration of all the stakeholders.

### Future Steps

The challenges faced by EM as India moves from the advocacy phase to the specialty implementation phase are similar to those of any other country: recognition, standardization, accreditation, assessment, research, capacity building, faculty development and subspecialty development.

The Global Academy of Emergency Medicine (GAEM) is an organization with a focus on collaboration of global efforts to progress academic EM in India and to provide support for various international EMS, pre-hospital, EM workflow and trauma implementation projects in India.

GAEM intends to provide various academic programs, already existing or in the process of development, the support of recognized faculty and expertise from all around the world in a coordinated and sustainable manner.

For further interest in EM in India please visit

[www.GlobalAcademyEM.org](http://www.GlobalAcademyEM.org)

[aaemi.org](http://aaemi.org)

[www.ISEMT2014.com](http://www.ISEMT2014.com)

[www.EMCON2014mumbai.com](http://www.EMCON2014mumbai.com)

[indusem.com](http://indusem.com)

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## Mongolia

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Earlier this year I was invited to help participate in delivering a course titled "Initial Emergency Care" (IEC) to groups of doctors in Mongolia. My initial thoughts were that I didn't have the faintest idea about Mongolia and what my involvement would be, but I decided to jump in anyway.

The background to this invite revolves around the activities of a group of Australian anaesthetists who have been travelling to Mongolia on an annual basis for approximately 12 years. Over that time they have significantly contributed to the development of anaesthetics training in Mongolia by lecturing annually to the Mongolian Society of Anaesthetists (MSA), as well as developing a training program. For this year's MSA annual conference the core topic to be discussed was Emergency Medicine in the guise of IEC.

IEC was developed by a collaboration of doctors from varying fields on varying topics. Anaesthetists, surgeons, FACEMS and GPs all helped prepare sessions on core ED topics. The topics were then presented in a variety of forms including lectures, interactive sessions and skills stations. Whilst the course was initially aimed at being delivered to a group of Mongolian anaesthetists, it became apparent that such a course would be useful for the rural doctors of Mongolia, and therefore our program was developed to include delivering IEC in a Mongolian provincial centre (Aimag) as well.

So we arrived as a team in Ulaan Bataar, the capital city of Mongolia, to deliver the first IEC. There were

approximately 100 anaesthetic attendees from Mongolia who were patient enough to hear the topics delivered in English and then translated to Mongolian (which provided its' own difficulties). The course was delivered over 2 days with the majority of participants incredibly enthusiastic about what they had learnt. Following the course a train the trainer day occurred, where through interactive sessions we aimed to skill some Mongolian doctors to perform IEC themselves.

We then remained in Ulaan Bataar for another day, which allowed time for some local excursions. To keep everyone back home happy, we of course had to indulge in purchasing some of the local cashmere produce. In addition there was also the obligatory show to attend of throat singing, which is different to anything I had ever heard before.

The IEC group then divided into 2 and travelled to 2 separate Aimags in rural Mongolia. My group travelled to Arkhangai, which was an 8 hour drive through the steppes, to a small rural hospital. It became apparent on arrival that the resources available in this remote setting were very different to what we had seen in the capital city, which made providing IEC more challenging. We delivered the course again over 2 days to a variety of different doctors, including both hospital specialists as well as rural GP equivalents, of whom all had very different skill sets. Again the course was well received with the participants showing an eagerness to hear more.



## EM at B.P. Koirala Institute of Health Sciences, Dharan, Nepal

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Dharan is a lovely small town situated at the foothills of the Himalayas in Eastern Nepal. It is a University town, hosting the B.P. Koirala Institute of Health Sciences (BPKIHS) campus. The Emergency Department is currently run by general practitioners (MDGP), however there has long been a movement to introduce emergency medicine as a specialty with Gyanendra Malla currently leading the movement.

I arrived in September at the time the selection process was being undertaken to choose the first three candidates to participate in the post-MD, 18 month long, Fellowship of Emergency Medicine (FEM) program. This selection process resulted in Rabin Bhandari, Rajani Giri and Sonai Giri, three highly motivated candidates, being chosen. All three have previously been senior doctors within the ED and have strong interests in research and teaching.

My time in Dharan was spent with the fellows assisting them to plan their FEM teaching program and providing support as they transitioned from being associate professors to students. In the ED there was a constant supply of interesting cases that provided an opportunity for on the floor teaching and case based discussions. As in other areas of Nepal there is a

significant amount of serious pathology that makes for interesting medicine, especially when dealing with the limited resources available.

It is still early days for the FEM program at BPKIHS and they welcome all the international support they can get. Currently placed there is Rob Currie, from Darwin, who is completing a three month elective placement there as part of his Advanced Training. Other FACEMs who have visited include Mark Monaghan, Tony Mattick, Ric Todhunter and Chris Curry. The main purpose of requesting international support for their FEM program is to help advocate for EM as a specialty. An international specialist presence helps to raise awareness of what EM as a specialty can offer and assists in raising the profile of EM both within the hospital and the country. This raised profile can assist to increase the resources available to both the ED and our fellows. There are multiple teaching opportunities to be involved with, including the ED rounds, case based discussions, procedural supervision as well as structured tutorials.

The second Nepal Emergency Medicine Seminar, NEMSem14, will be hosted in Dharan in 2014, 1 April, giving yet another excuse to visit.



(L-R) Rob Currie, Rajani Giri, Rabin Bhandari, Ros Taylor

## A Mountain to Climb – 11 Weeks in Nepal

*An advanced trainee and an emergency nurse at Tribhuvan University Teaching Hospital*

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I am sorry to disappoint those who might prefer an intrepid tale of high altitude adventures and scaling death defying peaks in the Himalaya. My travelling companion doesn't like heights so we didn't get past the foothills. The mountain I am referring to relates to the challenges of trying to help set up an embryonic training program in Emergency Medicine in a resource limited, testing environment.

Midway through advanced training I thought it was a good time to go off tack and foray into a medical world that would push the limits and give a good perspective on acute care medicine without the luxury of massive transfusion protocols and pan scans. Instead of the standard option for non-ED terms i.e. doing Clin. Pharm. or more ICU, I ventured off via China, where Immigration were adamant they would not let me through given that I had a beard while my passport photo did not.

Eventually I arrived in Nepal. I was greeted by one of the founders of Australasian IEM himself, A/Prof. Chris Curry. Chris proved to be a wise guiding figure before, during and after our posting in the Emergency Department in Tribhuvan University Teaching Hospital (TUTH) in Kathmandu. He has built up a great respect and relationship between the doctors at TUTH and the visiting FACEMs and now trainees. Led by Prof. Pratap Prasad, Head of the Department of General Practice and Emergency Medicine, the Nepali doctors working in the ED are well experienced and extremely keen to develop their skills further.

It is worthwhile reading the previous IEMSIG articles on Nepal by Chris, Athol Steward and other emergency physicians on their work there to learn about the evolution of the program.

There are currently three EM trainees in TUTH, Ramesh Mahjara, Ajay Thapa in their third year of the three year Doctor of Medicine (DM) program and Ram Neupane in his second year. As eluded to in other articles they are experienced clinicians having completed their General Practice training a number of years ago. Having trained as a GP myself I could see the challenges that lay ahead in the transition to becoming an Emergency Physician. The DM's are walking a path that is not only a first in their country but also a very

tough one with regard to working hours and the demands of the program. The third year DMs are due to sit the exit exams in 2014 after completion of their research projects so it will be a noteworthy year in the development of EM in Nepal.

The main task I was given was to 'buddy' the three DMs and join them on their morning ward rounds in the critical care area aptly named 'The Red Zone' and assist them in their academic training program. The ward rounds were usually long, hot and challenging. The patients were usually extremely poor, and incredibly sick. The death defying experiences were right here in the Red Zone.

### Casemix

The plethora of end stage pathology was formidable. Whereas back in Darlington you often write in the notes mild/moderate something something... here the word mild was not in the rule book. Hepatic encephalopathy and fulminant TB were frequent flyers. There were too many interesting cases to list but certain ones are hard to forget. The young man who was seen in a rural hospital but deemed not treatable there was sent on a 24hr bus journey to Kathmandu's 'Teaching Hospital'. He had an open dislocated fracture of his ankle which had been 'out' for three days. The wound was in a bad way, it was truly amazing to see how stoic he was given what he been through. Another man had more air inside his cranium than you would think it possible. The local Nepali utility knife the Khukuri was the weapon that caused the damage. Thankfully the injuries from this implement, also known as the 'Gurkha blade', were not commonly seen during our stay in this mostly peace loving nation, past civil war aside.

Patients from car crashes were rarely seen as the roads in Kathmandu were mostly too poor to allow enough speed to cause serious injury. Motorbike accidents were reasonably frequent but it was nearly always an unfortunate pedestrian, who was sharing the 'road' (some resemble building sites) with the motorcyclist, who ended up in the ED.

In our third week in the hospital there was a call around 1pm on a Tuesday from the military to say there was a serious bus crash a few hours away by road. Fifteen



people were dead on scene. Military helicopters brought twenty eight injured to TUTH ED over a period of forty minutes. It was a surprisingly slick operation. The Hospital Preparedness for Emergency (HOPE) program had set up a hospital wide mass casualty plan which had been obviously practiced a number of times before. The ED was flooded with doctors and nurses from other departments in an organised team-based approach. The doctors in the ED and senior consultants from other mostly critical care disciplines headed the different zones and the patients were given prompt care. One patient died soon after arrival but most of the other patients were reasonably stable within the coming hours after the necessary chest tubes, intubations, etc. were performed. Resources were, as expected, significantly stretched with only three sats probes covering the three main zones and, as with any disaster, certain points could be improved on but it certainly was an impressive display of preparation and planning being actioned.

### Emergency Nursing

My partner in crime on this adventure was my fiancé Ruth who, luck would have it, is an ED nurse. This worked well and it was a great benefit to approach a lot of the challenges we came across from the joint perspective of medical and nursing viewpoints. It meant we could link with both sides of the clinical divide to try and bring together what are traditionally almost independently acting teams. This was one of the big focuses of our attachment and showed that to have an effective emergency medicine staffing unit, both components need to be in a training program. Unfortunately at the moment the nursing team have been under-resourced and under-developed when compared to their medical colleagues but that is changing. We had the opportunity to meet with the Nursing Director to open a dialogue regarding starting in-service training for nurses working in the ED. We also met with Mrs Tara Pokharel, Tribhuvan University Nursing Campus Chief and have opened channels that we hope will culminate in the commencement of an Emergency Nurse university run training program in the coming 1-2 years. This would be the first of its kind in Nepal. Of note there has been an Australian nurse from Fremantle visit TUTH in October to help progress Emergency Nurse training in the hospital, with hopefully knock on effects throughout the country. This is a very important area and we hope one that will grow.

Ruth worked on the floor with the mostly junior nurses trying to help with the critical care patients. This was challenging to say the least as there is an inverse

relationship between patient acuity and skills and training. The Nepali nurses are extremely hard working and diligent but their levels of equipment and proficiency could not possibly match the needs of their patients. A wonderful group of people to work with, we were soon given Nepali nicknames: Maya and Chankhe. One means 'Beautiful' and the other seemed to bring out the same reaction in all Nepalis that heard it... rib-chortling laughter... Needless to say, I don't think it was me who was labelled as the better looking one.

We ran meetings with the five senior nurses in the department with some success. We looked at possible solutions of the many issues raised. Some were fixable with relative ease, at least on a temporary basis, such as sourcing and distributing hand wash dispensers and posters. Most issues will take some time to address, such as setting up a robust training program.

We tried to address the doctor-nurse divide with the best training solution we knew. Simulation. With seven 'train the trainer' sessions we managed to capture most of the key players in the department and over the eleven weeks we had four departmental simulation scenarios with 25-30 doctors and nurses present. What started in session one as a foreigner directed simulation scenario finished in session four with only Nepali staff involved in the full scenario, including planning and debriefing. Further opportunities and departmental support is necessary for this program to progress but it was heartening to see skills learnt during simulation being used later in the Red zone.

Other projects we worked on included trying to bring in new documentation, assessment charts, vitals recording and fluid balance. We performed equipment audits and developed a local based intubation checklist and protocol. Trauma, toxicology, burns, pain management and infection control and sepsis were other areas of focus.

### The future

As is the case I am sure in all other developing world medicine projects it is all wonderful and great to have these plans and developments but in reality it requires persistence and continued presence for programs to work and to stay in place. And I believe it is this longer-term strategy that the IEMSIG is looking at and why it is so important that the visiting doctors can stay as long as possible and/or return at a later time, within the limits of our work and family commitments. Another important area that really makes a difference is the effective handover to the incoming visiting FACEM/trainees, an area that was very well dealt with by the work of

Chris Curry and others.

For anyone out there reading this with an inkling of doing something similar, I would wholeheartedly say go for it whether you are trainee or FACEM. It really was a great experience. And a decision you will be very glad you made. If you miss a day of work in Australia, the system will cope and patient care is unlikely to suffer whereas working in an environment such as this you can see much more tangible effects from your work. It is an exciting time for EM in Nepal with BP Koirala Institute of Health Sciences in the east and Patan Hospital in Kathmandu also setting up training programs. With continued support and progress the country will develop a strong network of emergency care although the limited resources look to restrict optimal care in the foreseeable future.

Of note I was privileged to be the first ACEM trainee to

## Progress for EM in Nepal

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Emergency Medicine training in Nepal has continued to evolve since the first of the residents in the DM EM degree at Tribhuvan University Teaching Hospital (TUTH, or 'Teaching Hospital') commenced their 3 year training in 2011.

Two of the three residents, Ramesh Maharjan and Ajay Thapa, are in the final year of their training and are due to sit their exit exam in October 2014. The DM EM program has recruited a third resident, Ram Neupane, who is a year behind the other residents in his training. The enthusiasm of all three residents who work long hours, as well as study, is extra-ordinary.

As part of the DM EM, the candidates are required to complete a thesis, and all three residents are well into this process.

Fellows of ACEM have provided support since the program began. These Australian and New Zealand emergency physicians give administrative, teaching and clinical assistance as well as encouragement in a general sense for the specialty whilst it is in its early development phase.

It is obvious that the residents greatly appreciate the Australian and New Zealand presence in Nepal. As exams for the residents approach, it would be ideal for this support to be more intensive, and more Fellows would be welcomed in Nepal in 2014.

have an accredited term in Nepal, however there is already another trainee there as I write, and I know of at least two trainees who will be making their way to Nepal in 2014. The accreditation process was quite simple and streamlined with good support from Sarah Smith in ACEM. A thanks also has to go to Dermot Patterson, CEO of the International Skills and Training Institute in Health ([www.istih.org](http://www.istih.org)) who provided financial support for flights and accommodation during our attachment.

We were very fortunate to stay in a hotel that belonged to the family of one of the senior doctors in the Dept. of GP and EM, A/Prof. Yogendra Shakya. We were soon treated as one of their very sizeable family! I have never received such hospitality and warmth in another country and we certainly look forward to our return, once the small matter of fellowship exams is dealt with!

New 18 month EM training programs have been launched at the B. P. Koirala Institute of Health Sciences (BPKIHS) in Dharan and at Patan Hospital in Kathmandu. These programs will further the development of EM as a specialty in Nepal.

This year, a toxicology seminar was conducted in September at both Teaching Hospital in Kathmandu and at the BPKIHS in Dharan. Australian leadership was provided by Mark Monaghan, clinical toxicologist at Fremantle Hospital, and supported by Ros Taylor, also from Fremantle. The seminar was well-received at both locations. It provided a venue for academic and clinical focus on a subject that is important for training emergency physicians. The seminar in Kathmandu attracted about 120 clinicians from all over Kathmandu Valley and was a major new initiative for the EM department at TUTH. The seminar was re-presented at the BPKIHS in Dharan for the local medical staff. Here in Dharan it coincided with the launching of the new EM program.

There is a growing recognition and acceptance of the importance of EM as a specialty in Nepal. Much has happened in the past few years since the inception of the idea. There are now three programs which will soon be producing specialised doctors who will provide a quality of care that will be of great benefit to the Nepalese medical system.



## Sri Lanka

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Since the last report, progress has been made on a number of fronts in Sri Lanka.

The MD in Emergency Medicine (MDEM) has now commenced and 15 trainees who sat the original entrance exam are now in training posts throughout the country. It is hoped that another entrance exam will be held in 2014 for another round of trainees.

The Emergency Life Care course has now been run over 3 sessions in 18 months with 2 courses run each session. It continues to be highly sought after by a number of varying level medical officers. All MDEM candidates have now completed this course. There are 12 local instructors, 4 of whom are considered to be "full" instructors along with 8 associate instructors.

The last 2 series of courses have been held at a university skills lab that, now it is fully completed, is on a par with many of the facilities in Australia that are used for similar courses. There are 2 more series of courses planned in 2014, the initial one in April 7-10 and the second series in November.

It is hoped that the second series will be able to be

taken to Jaffna. As always I am happy to take whoever wants to come with me to assist (remembering that you need to be fully self funded). Feel free to contact me.

One of the universities is also developing a Masters course in Emergency Medicine and Disaster Care, to be developed in conjunction with the ED that is being built as part of the new University Hospital on Galle Road in Colombo.

The Sri Lankan Society of Critical Care and Emergency Medicine ran a successful ASM this month with emergency physicians from Liverpool Hospital in Sydney continuing their association with the society.

There have been discussions with the ACEP Sri Lanka interest group to coordinate efforts to improve EM in Sri Lanka.

What is needed most of all is some emergency specialists to actually spend time on the ground mentoring the MDEM candidates. If you want to spend some time in country please let me know!



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