IEMSIG

Newsletter of the International Emergency Medicine Special Interest Group of ACEM

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Contents

Editorial

From the Editor

This issue of the IEMSIG Newsletter contains reports that illustrate the extent of engagement by ACEM fellows and advanced trainees in the development of capacity to deliver acute care, especially in our Asia/Pacific neighbourhood.

Capacity is being built through support of specialist training programs in PNG, Fiji, Myanmar, Sri Lanka and Nepal. Connections in Mongolia are under development. A long-standing connection in Africa is ongoing.

Engagements include full-time residence, delivery of courses, and response to disasters. Training is being provided to doctors, nurses and pre-hospital providers.

Rosanne Skalicky, Anne Creaton, and Megan Cox are full-time resident FACEMs in Myanmar, Fiji and Botswana respectively. The Emergency Life Support for nurses (ELSn) course is an innovation from ELS Inc, led by Phil Hungerford. Pre-hospital care training in Myanmar is being led by Nigel Klein.

ACEM advanced trainees continue to contribute to capacity building in PNG and in Nepal.

Australian and New Zealand disaster response teams have made contributions this year to the Solomon Islands and to the Philippines.

Building emergency medicine training programs in least developed countries in southern Asia

This is an abstract of a presentation made at ICEM 2014 in Hong Kong.

The capacity to respond to acute illness and injury should be an integral component of every health system, irrespective of its wealth. Available resources need to be equitably distributed to facilitate this capacity.

Historically acute care has been neglected world-wide, while resources have been directed towards the development of specialties with a weighting towards non-acute care. The introduction of the idea of providing equivalent acute care in the most resource-limited environments raises many challenges.

Australian and New Zealand emergency physicians, and advanced trainees beyond postgraduate year 5, are involved in assisting the aspirations of pioneers in several resource-limited countries in southern Asia.

Experience for this paper comes primarily from Papua New Guinea, Nepal and Myanmar (Burma).

Initiation of development requires local champions, a group, support from the top and the bottom, energy and endurance. Progress requires benchmarking, borrowing, useful events and interests, appropriateness, and links with primary care and public health. To thrive requires educating everyone, independence, sustainability, attention to priorities, and a willingness to overcome innumerable road blocks.

Access to acute care should not be a privilege reserved for the more wealthy. It should be universally available, with resources commensurate with the means of the country.

Best of Web

Best of Web EM

IEMSIG members are invited to suggest resources for inclusion in the College's Best of Web EM platform. Best of Web EM is a collation of reviewed and recommended educational resources that align to the ACEM Curriculum Framework and identify the target audience and educational uses.

Resources on Best of Web EM include videos, presentations, podcasts, journal articles, E-Learning modules, websites and webpages.

More than 50 educational resources reviewed and recommended by your emergency medicine colleagues are now available on the ACEM website.

International emergency medicine resources could relate to disaster management, teamwork and collaboration, setting up a triage process, managing staff, and cultural competency. Curriculum domains of particular relevance to international emergency medicine include: Prioritisation & Decision Making, Teamwork & Collaboration, Leadership & Management, Scholarship and Teaching, Health Advocacy and Communication.

IEMSIG members can use the following short online form to suggest a resource to be reviewed for Best of Web EM. Resources that pass the internal review will be reviewed by at least two ACEM members.

Resources can be aimed at all ACEM members or specific membership groups including Fellows, trainees or non-specialist doctors.

Fellows can record viewing/watching/reading Best of Web EM resources as CPD activities under Self-Directed Learning activities.

If you would like to become a Best of Web Reviewer, please complete the following short application form or email bestofweb@acem.org.au

More information about Best of Web EM can be found on the ACEM website.

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PACIFIC

PNG - Emergency Medicine advanced trainees in Papua New Guinea

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In his capacity as Director of ED and Director of Medical Services at Modilon General Hospital in Madang, Vincent Atua MMedEM has supported several ACEM advanced trainees there. He was invited by the AMA to present to their 2014 National Conference at a session titled "Global Health Vocational Training: has its time come?" This is a summary of his presentation.

Introduction

Over the last five years a number of ACEM advanced trainees have come to Madang for three to six months, and were able to get their time in PNG recognised towards their specialist training. The registrars have contributed immensely through their participation and collaboration with their PNG colleagues and with the Divine Word University as visiting lecturers in Emergency Medicine. This has been a mutually benefitting exercise for both PNG and the ACEM trainees. The registrars have come away with valuable experiences in tropical medicine and have personally grown in their time in PNG. This has come at great effort on the part of the ACEM International Emergency Medicine Special Interest Group (IEMSIG) and a few individuals who had a passion for that vision.

Background

"When there were expatriate specialists in medicine and in surgery in PNG during the 80s and 90s, their respective colleges recognised training time in PNG towards the FRACP and FRACS. That stopped when expatriates with FRACP and FRACS left, so were not there to supervise trainees. The recognition by ACEM of training time by ACEM trainees at Modilon is therefore unique and ground-breaking in that it is not reliant on a FACEM being the on-site supervisor." *(personal communication, Chris Curry)*.

Since 1996 there had been a desire to establish a specialist emergency medicine program in PNG. This concept was left on the backburner for several years until Australian and American support came on board as resident and visiting faculty in 2002. The first

locally trained specialist Emergency Physician (EP) graduated in 2007. Since then PNG has graduated eight EPs and has an ongoing specialist pathway for junior doctors.

Some financial contribution from Ausaid encouraged the program that has seen a number of Australian EPs visit Port Moresby General Hospital and more recently Modilon General Hospital and Divine Word University in Madang to provide teaching as well as support to the onsite registrars over the years. However, largely this has required personal financial commitments of those involved.

Benefits to PNG

Huge improvements have been made in the way emergency medicine is practised in the country in organisational culture and for patient outcomes. This ongoing technical support has seen a major emergency department redevelopment at Port Moresby and plans are afoot to redevelop all emergency departments nationally. Courses in emergency medicine have been developed at the University of Papua New Guinea and Divine Word University in particular to improve capacity.

A major spin off of the ACEM involvement has been the introduction of the Primary Trauma Care (PTC) course which has gained huge popularity and attracted funding domestically to train a large group of primary health care workers nationally. To date over 50 PTC courses have been delivered to over 500 participants. The Emergency Life Support (ELS) course has also been delivered to over 100 doctors and Health Extension Officers (HEOs) and nurses over the last six years.

Conclusions

As many PNG specialists have spent training time in Australian hospitals, there is still a very pro Australian culture in the PNG medical profession to build on concerning training opportunities for Australian registrars. This however depends on the Australian specialist medical colleges recognizing PNG specialists who are suitably experienced or qualified to provide this supervision. The benefits to the specialty concerned are immense for a developing country like PNG and it is hoped that the registrars will be able to get funding as well as professional recognition for their time abroad in a not-so-parallel medical system.

Finally I wish to emphasize that building long term relationships with local champions, goodwill, fostering strategic alliances and developing opportunities for mutual benefits are crucial to the success and sustainability of these programs long after the funding runs out or where there is no funding.

Fiji - Developing Emergency Medicine in Fiji: Challenges, Solutions and Next Steps

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This is an abstract of a presentation made at the ICEM 2014 in Hong Kong. Anne Creaton is the sole resident emergency physician in Fiji.

Emergency medicine is in early stages of development in Fiji. Working towards holistic advancement of a new discipline is not easy. Sustainable capacity building requires the establishment of robust networks and systems.

The highs and lows, challenges and rewards of running an Emergency Medicine program in the Pacific are described.

Challenges

Fiji includes 330 islands, with a population of 900,000. Population migration to the capital Suva and surrounding areas with peri-urban fringe dwellers puts enormous load on CWM Hospital (Colonial War Memorial Hospital). Access block is a major problem as is access to emergency and elective surgery.

Emergency Medicine development is non linear. It has been desired by some for years but started rapidly because of a political push without a local champion. It is competing for resources with better established specialties who are better connected to power brokers.

There was a change in leadership of the Emergency Medicine program mid way through the academic year in 2013 with no formal handover. The program was running at multiple hospitals. Emergency physician input was from the USA, who visited for short periods.

Clinical supervision of EM doctors is severely limited due to what is feasible with a single emergency physician in country. Sustainability of a program led and partly delivered by a single in country emergency physician is questionable.

Solutions

Strategies include:

- Collaboration with more established departments and individuals. Discovering powerful allies.
- Setting up structures to talk to powerbrokers, e.g. Trauma committee, Emergency Medicine Clinical Services network.
- Getting key stakeholders together for collaborative problem solving, e.g. asthma project.
- Integration into established university programs, e.g. public health and research.
- Using short courses to deliver key material and train local instructors.
- Inspiring the young by thinking big.
- Use of technology to videoconference with other sites and other countries for teaching.
- Collaboration with the UK College of Emergency Medicine to access their web based learning platform "ENLIGHTENme."
- Developing fast-track pathways for palliative care patients and those with suspected pulmonary TB.
- Outreach education to smaller hospitals and health centres.

Next Steps:

- Recruitment of additional faculty who will stay and help build the specialty in country.
- Further development of ENLIGHTENme collaboration with a Fiji home page.
- Consolidation of what has been started.
- Multidisciplinary Team training.
- Pre-hospital care and retrieval.
- Discussions regarding benchmarking of masters graduates.
- Development of Emergency Nursing.

Solomon Islands - The New Zealand Medical Assistance Team deploys to the Solomon Islands

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Chris was clinical team leader, NZMAT Team Alpha.

In early April 2014, sustained heavy rainfall triggered flash flooding in Guadalcanal, the Solomon Islands. This sudden onset disaster displaced tens of thousands of people, with the destruction of existing infrastructure and the consequent contamination of water supplies. In response, the Solomon Islands Government requested medical assistance from New Zealand.

www.wpro.who.int/southpacific/programmes/health_sector/emergencies/solomons-flashfloods-2014/en/

This preamble helps explain how we ended up on a plane to Honiara, serving as the Ministry of Health New Zealand Medical Assistance Team Alpha. Our team included health care professionals (acute care nurses and specialist emergency physicians) from across New Zealand, plus two experienced emergency physicians from Australia (AusMAT). We were led by Mr. Martin Buet, of the New Zealand Ministry of Health. One of our first objectives was to create a sense of 'swift trust' within our team, crucial given we were to spend the next fortnight looking after patients together. We needed to turn a 'team of experts into an expert team':
qualitysafety.bmj.com/content/22/5/369.abstract

The New Zealand Medical Assistance Team is a recent creation of the Ministry of Health; this mission was the first major NZMAT deployment:

www.health.govt.nz/our-work/new-zealand-medical-assistance-team

NZMAT is fortunate to work closely with AusMAT. Our standardization of training facilitates inter-operability between teams.

The World Health Organization is standardizing the Foreign Medical Team (FMT) emergency response: www.who.int/hac/global_health_cluster/fmt/en/

NZMAT is an example of a 'Type 1' Foreign Medical Team, which provides 'Emergency Outpatient' care.

In essence, NZMAT were tasked with lending a helping hand to our neighbour in need. It was an honour to spend time caring for the people of the Solomon Islands. They consistently demonstrated courage, patience and equanimity with the members of our team. Clinical presentations to the National Referral Hospital Emergency Department humbled us with their pace and intensity. Amongst the myriad presentations of diarrheal and other febrile illnesses, two cases are seared into my memory. A young woman presented in status epilepticus. As we resuscitated her, the constellation of hypoglycaemia, soaring fever and point-of-care malaria rapid detection kit diagnosed her with Plasmodium falciparum cerebral malaria. A few days later she made a full recovery. The second case is of a young boy with a minor head injury. Who happened to be a haemophiliac. In a country without factor replacement. Who died.

Triage nurses sharing stories.

One highlight for our team was blending public health with acute care medicine. In collaboration with our public health physician and the World Health Organization, precise case definitions at triage helped to provide real-time syndromic surveillance. Access to clean water was and remains a massive challenge for those affected by the flash floods. Further, malnutrition is affecting many young children in the region. Many governmental and non-governmental organizations are working together to provide the people of the Solomon Islands with access to these essential resources.

Team Alpha initiated 'ultra-low fidelity' in-situ inter-professional simulation training in resuscitation at the request of our host clinicians. Our erstwhile USAR logisticians helped us construct a manikin made of a coconut head with a body of spare clothes stuffed into a white tyvek suit. With this rudimentary patient we shared many learnings with our local healthcare partners.

Low fidelity inter-professional team training.

Our deployment finished with an 'in-country' handover to NZMAT Team Bravo. Upon returning home we met with the Ministry of Health to debrief our mission. We would like to thank our work colleagues in the various District Health Boards for their clinical and administrative support while we were overseas on deployment. Further, it was an honour to serve alongside our colleagues from the New Zealand Fire Service (Urban Search and Rescue) and the Australian Medical Assistance Team (AusMAT).

AusMAT in action.

Philippines - Typhoon in the Philippines - "once more unto the breach"

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The NCCTRC (National Critical Care and Trauma Response Centre) was deployed to the Philippines as part of the response by the Australian Government to assist the Philippines Government. The request from the Philippines Government was for a fully equipped deployable hospital to be stationed at Tacloban where typhoon Heian had made landfall. Tacloban unfortunately was at the very edge of the eye of the typhoon and so suffered the highest wind speeds. The typhoon hit at high tide so there was a storm surge of some 6 metres. Tacloban is built on a flat peninsular with mountains to the side. Tacloban airport is at a height of 3 metres above sea level and the major regional hospital at a similar height. The local poor villagers live in houses built directly on the ground with minimal if any foundations and no building standards. As such the devastation was immense, as vividly portrayed in the media.

The main hospital was intact, however it is 2 stories high. The wave of mud crashed through the ground floor leaving it completely clogged, the winds damaged most of the roof. On the first floor were the operating theatres which were mildly damaged but there was no water, no power, and rain poured in through the damaged roof, so essentially there was no operating hospital.

The airport was destroyed but the runway was intact.

The mission was in two phases each with differing objectives. Team Alpha's objectives, the first team in, was to set up the hospital and begin treatment of people injured in the typhoon, thus there was a lot of trauma surgery expected. This team had to arrive, set up, and have an operational hospital with surgical capacity very quickly. In this they succeeded spectacularly.

Team Bravo, the second team in, had a different mission objective. The purpose was first of all to relieve Team Alpha then to continue the treatment of people injured during the typhoon. People were still emerging untreated with often severe injuries now complicated by infection weeks after the event. Also occurring was the continuing management of the people already treated. When Team Bravo was deployed there was planning for a third rotation, Team Charlie, however this was cancelled. Critically then, on the ground, was the forward planning of returning the care of victims and others to the local health resources now being brought back onto line.

Other NGOs were present, especially Medecins Sans Frontieres (MSF) who were staying longer and eventually took over the care of the patients still requiring hospitalization when we departed.

Overall 3000 patients were seen over 4 weeks and 234 operations were performed. Given we were operating out of a 60 bed hospital patient flow was a vital part of the mission.

Fortunately we were never bed blocked and there was no access block. There were no ambulances to take patients home so some creative work was done with local minivans to adapt them to our need.

The night before our planned closing down of the facility and packing up to return home there was some early putting away of gear, and we began to close and pack up the resuscitation bay.

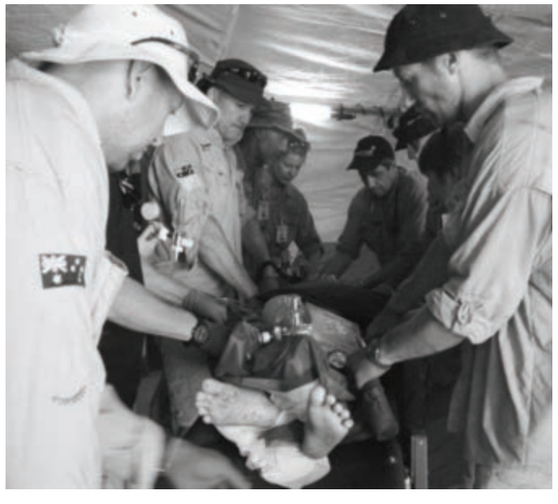
Then we received the phone call..... a military helicopter had crashed and all patients were coming our way. It showed the esteem that the hospital was now held in by the local population and health department, but.... (expletive deleted).

Fortunately there was a delay of a few hours before the patients arrived so everything was ready, but then most of the patients arrived all at once!

The weather was hot and either pouring with rain or the sun out with extreme humidity. For those who live in Darwin it was the normal type of weather. For those from colder climates, especially Tasmania and NZ, it was a challenge as we had deployed too quickly for a full acclimatization. However, all staff received acclimatization training and preparation as part of the deployment.

Are you interested in being a member of the "deployable force" that NCCTRC has trained?

Is this right for you?



This is a photo of the last patient delivered home as we left. He is the small boy on the right.

You do have to have a certain approach to this: willingness to be part of a team and to work in difficult austere conditions, adaptability and an ability to improvise if necessary. You have to be medically and physically fit enough for such deployments.

What skill sets are required? In this deployment there was a general surgeon and an orthopaedic surgeon with two anaesthetists on each rotation. The rest of the medical staff were emergency physicians, except in Team Bravo where the team leader was a general physician also subspecialising in infectious diseases and respiratory medicine. Nursing staffs were from operating theatres, midwifery and emergency/critical care, some with all three skill sets.

So the emphasis is on general skills.

Training? All deployable staff members have undertaken EMST, MIMMS, ALS and the AUSMAT training of the NCCTRC. All have up-to-date immunisations, a recent medical assessment and a current passport.

If you are interested then contact the NCCTRC or visit the website www.nationaltraumacentre.nt.gov.au

This is his home..... so our role was a mere fraction of the total effort to restore this community to its previous condition.

ASIA

Myanmar - Myanmar Emergency Medicine – Moving Forward

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Rosanne Skalicky is working long-term with Australian Volunteers International (AVI) in Yangon for the development of EM in Myanmar.

There is a saying in Myanmar "the journey to Bagan begins with the first step" and so it has been here with emergency medicine (EM). The first Diploma of Emergency Medicine was that first step and led to the successful convocation of Myanmar's first 18 EM consultants in February 2014. This momentous occasion was witnessed by many of the international faculty who had been a part of the collaborative training and consultative effort, a first in University of Medicine 1 history.

Having passed their final examinations in October 2013, these newly trained emergency physicians were then asked to head up emergency preparations for the South East Asian Games (SEA Games). Training nurses and doctors in basic life support for ambulances (purchased for the games), writing disaster plans and ensuring venues and hospitals were equipped to receive emergency patients were some of the roles these consultants took on so early in their EM careers.

With the SEA Games over, 10 of the 18 committed to stay fulltime in EM and were located in Mandalay, Nay Pyi Taw and Yangon hospitals.

But this is not the end of the story. The journey now continues with the second Diploma of Emergency Medicine, started in February 2014. Eight women - 4 paediatricians, 2 O&G consultants, a physician and an anaesthetist have committed to 18 months full-time training and 2 years bonded to working in EM when they finish.

An international faculty from Australia and Hong Kong, and the new local EM consultants delivered the second Myanmar Emergency Medicine Introductory

Diploma graduates and faculty, February 2014

A poster presentation made at the ICEM 2014 in Hong Kong

Course (MEMIC 2) in February 2014, modified and contextualised to meet the evolving situation in Myanmar. Local and international instructors also delivered an Emergency Life Support International course. The trainees of the last Diploma have become the teachers for the new course. This is sustainability at its best!

Not only are we producing more doctors but the development of emergency nurse training began with an Emergency Life Support course for nurses concurrent with MEMIC 2. In 2015 the first Diploma of Emergency Nursing will commence and will aid EM development greatly.

At the time of writing, the new EM8 have completed 5 months of training and are benefitting from the clinical placement of national emergency physicians in the resuscitation room. They are able to put into practice the skills and knowledge they have learnt in their introductory courses. They are triaging patients – still a new concept here - and being asked by the specialty units to see their 'sick' patients. On their non-ED rotations they are being asked for their input and are being actively involved in the care of patients. This embracing of the new EM trainees reflects Myanmar EM - it is not just walking but it is running and with a Masters of Emergency Medicine due to start in 2015 these new EM trainees will soon become the teachers. The journey of EM in Myanmar is well under way.

New trainees at work with Rose Skalicky

Myanmar - Emergency Life Support Course for nurses (ELSn) – Myanmar.

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On February 25-26th 2014 an Emergency Life Support Course for nurses (ELSn) was run in Myanmar at the University of Medicine 1, Yangon.

This was the first of its type in that country and it was run by 7 local instructors (recently graduated emergency physicians), 1 local course convener (Dr. Khaing Shwe Wah) and with an international emergency specialist acting as course director (Dr. Phil Hungerford FACEM).

The aims of the course were:

1. To introduce to emergency nurses in Myanmar, the concept of a standardised approach to stabilising and managing seriously ill medical patients.
2. To promote local ownership of the course by having Myanmar doctors deliver the course and to do so in their own language.
3. To promote the leadership role of the recent local graduates of the Diploma of Emergency Medicine.

The content of the course was "country specific", incorporating the observations and experiences of a number of Australian emergency physicians who had been living and working in Myanmar in recent times.

The course consisted of 2 days of skill stations, lectures, and group discussions.

The written material for the course was in English but the instructors all spoke in Burmese whilst delivering the course. This was so as to improve comprehension as well as to promote local ownership of the course.

The course participants were 28 Myanmar nurses from a number of different institutions.

The equipment used for the course was from a pool which had previously been purchased in 2013 to run an Emergency Life Support course for doctors at the University of Medicine 1, Yangon.

Financial support for the course came from the Australian government through the Direct Aid Program

(DAP) of the Australian Embassy in Myanmar.

Background

One year previously, in February 2013, an Emergency Life Support (ELS) course for doctors was delivered in Myanmar at the University of Medicine 1, Yangon. This was as part of the curriculum for the recently developed Diploma of Emergency Medicine.

A team of 8 international instructors delivered that course to 21 Myanmar doctors.

This course was based on the Australian ELS course and introduced a standardized approach to stabilizing and managing seriously ill medical patients.

In order to build capacity, these 21 Myanmar doctors were then trained as future trainers for the course. These new local trainers went on to deliver the course to another cohort of 21 Myanmar doctors with the 8 international instructors acting as supervisors.

Following these courses, it was thought to be important that nurses working in Myanmar Emergency Departments were able to share in this standardized management approach in order to deliver maximum benefit to their patients.

Hence, the development of the ELSn, which was customized for Myanmar emergency nurses.

Course evaluations and participant feedback

Verbal feedback was sought from all participants during the closing sessions of the course and structured written evaluation forms were completed following this.

The course was very well received.

The simple, structured generic approach to the emergency management of seriously ill patients was highly valued, as was the ability to practice potentially life-saving resuscitation skills. The emphasis on team work was also rated highly.

All candidates felt the course provided information they could use in their daily work.

Significant improvements in knowledge regarding the importance of vital signs, red flag signs, triage and teamwork were also recorded.

Overall, candidates left feeling very happy with what they had learned.

Specific comments (translated from Myanmar) included:

"I become more interested in Emergency care"

"I can provide and give effective care for severely ill patients"

"I can save lives in emergency situations"

"The instructors taught us generously."

"I got a lot of benefit that I cannot express by words."

Skills stations were highly valued overall. Common responses involved the ability to learn practical skills in small groups to allow for individual learning and practice. Skills were thought to be relevant to daily practice.

"Because of the skills stations, I can do things systematically in real life."

Future plans

The delivery of the course achieved its stated aims.

A framework is now in place for the future development and delivery of this course in Myanmar.

It is hoped that this will result in a situation where the course is self-sustaining in all aspects including administration; logistics; running the courses; and the quality maintenance of the courses.

Ongoing international oversight of course content and quality control will continue as required.

Myanmar - Pre hospital care in Myanmar

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Nigel is an Australian Volunteers International (AVI) ambulance trainer who has been working in Myanmar since August 2013. A second AVI ambulance trainer, Jarad Wilkinson, was there until June 2014.

'This is Burma', wrote Rudyard Kipling. 'It is quite unlike any place you know about'.

As the country undergoes rapid change and reform, a greater demand for accessible and effective emergency medical systems (EMS) has been created.

In Myanmar, like many other developing countries, EMS has long been neglected. Pre-hospital care, an integral component of this system is virtually non-existent. Therefore it comes as no surprise that patients are transported to the emergency departments by relatives or bystanders primarily by taxi (70-80%).

Ambulances that are present, apart from those owned and used by private hospitals for inter hospital transfers, generally carry no equipment except a basic ambulance stretcher. There currently is no national training program for pre-hospital care.

South East Asian Games

As part of Phase 3 of the Myanmar Emergency Medicine Development Program (MEMDP), two volunteer positions were created by Australian Volunteers International (AVI) in partnership with the ACEM to assist the Ministry of Health in its initial development of a professional ambulance service and

Aye Thiri Naing DipEM training ambulance nurses

in its preparations for the South East Asian (SEA) Games held in December 2013. These positions were filled in July – August 2013.

In preparation for the SEA Games assistance was given in the training of over 1500 volunteers who provided basic pre-hospital care during the period of the Games. Volunteers were primarily junior doctors, nurses and Red Cross volunteers. Training was conducted at multiple sites around the country in the

months prior to the Games focusing on basic life support, management of trauma, disaster preparedness, triage, use of basic ambulance equipment and scene management. The Ministry purchased 86 new ambulances that were equipped with basic equipment and consumables. A 'hotline' number for pre-hospital care services during the Games period was established and a 'basic' ambulance communications centre was set up at the General Hospital in Nay Pyi Taw, the capital city. Ambulances and personnel were placed in strategic locations where events were being held, as well as along the national highway system.

Logistics were put into place. It really was an amazing feat. Whilst countries like Thailand, Hong Kong, Australia and Japan extended technical support to aid the Myanmar Government in its preparedness, one cannot but applaud the efforts of the Myanmar nationals involved in this exercise. The standard of emergency services that was provided during the Games period was at the accepted standard required to stage such an event and was conducted in an effective manner with no adverse outcomes.

Post SEA Games

Since the Games, ambulances purchased have been put into service at government and regional hospitals, providing a much-needed upgrade to patient transport services.

The capital of Myanmar, Nay Pyi Taw, has been identified as a starting point to establish a national ambulance service and plans are being discussed as to how to do this most effectively. In an effort to combat the current high rate of mortality due to road trauma on the national highway, the government is also looking at establishing highway pre-hospital care as a high priority together with additional medical facilities.

It appears reasonably certain that the Ministry of Health has accepted a proposal for a three tiered ambulance service, with Nay Pyi Taw to serve as a model for the rest of the country. Initially provided at a basic level, this would then be built upon with an intermediate and advanced paramedic level of training.

Myanmar, although undergoing rapid change and reform, is a country that still has a developing health system and is still struggling to provide even the basics of health services. The expense and complexity of establishing a nationwide pre-hospital emergency service means that it may yet be some way off, but it is slowly becoming a reality.

Nigel Klein training ambulance crews

Mongolia - Mongolia 2014: Initial Emergency Care

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How Initial Emergency Care (IEC) developed

The Australian Society of Anaesthetists (ASA) and the Mongolian Society of Anaesthesiology (MSA) have a long-standing relationship and collaborate on a yearly basis to present an anaesthetic conference in Ulaanbataar (UB). Emergency medicine does not currently exist as its own training scheme and the majority of critical care in UB is provided by the anaesthetists. In 2013 the MSA requested emergency medicine as their annual topic, and so Initial Emergency Care (IEC) 2013 was born. Australian Anaesthetists, FACEMs and GPs delivered this three-day course in June 2013 in UB, Khentii and Arkhangai province.

IEC 2014: a new goal, a new team

The development of emergency medicine in Mongolia is currently considered a high priority and has been documented in The National Emergency Medical Retrieval Network Programme of Mongolia 2010-2016. We were invited back to Mongolia with a greater goal and different focus. We would be introducing emergency care to the Soum doctors. These are doctors working in rural and remote regions in mostly primary or secondary level settings. Outside of UB, these are the doctors providing emergency care. The aim would be the dissemination of an introductory course that could potentially provide a platform for a diploma or specialist qualification over the coming years.

Under the umbrella of the ASA, the 2014 "Emergency team" was born. Our team of ten - seven FACEMs, two rural GPs and one anaesthetist - spent several months contributing to and editing the 2013 course content. Based on last year's feedback from presenters and participants, this year's IEC would focus on more hands-on workshops, particularly on BLS and ALS skills.

Rubina Bunwaree conducting an ICC workshop

The course is run in an " ALS/APLS" format using a combination of lectures and workshops. A pre and post-test is used in conjunction with participant feedback to assess the quality of the course.

In June this year, in two teams of five, we delivered IEC 2014 in Khentii and Zavkhan provinces.

Simon Smith, a Victorian FACEM, returning for the second year running, headed the Khentii team consisting of Wolfgang Merl, Sam Kennedy, James Fordyce and Tom Morton. Despite intermittent problems with electricity provision, the team delivered a successful course to 23 participants. Most components of the course received excellent participant feedback.

Also returning for the second year running, I headed the Zavkhan team - Rubina Bunwaree, Christelle Botha, Rob Phair and Ameera Khan. Similarly, our experience in Zavkhan was equally successful and positively received by the 24 participants.

IEC into the future

The project continues to have its difficulties and challenges. One of the greatest challenges is the lack of English spoken in Mongolia. We lecture using interpreters, which are provided to us by the MSA. They are usually anaesthetists or medical students. Although our lecture slides are pre-translated and presented in Mongolian, the delivery of the content is still time consuming. Question and answer sessions can be difficult. This limits the quantity of workshops and lectures we can deliver. We have a course manual, which has been generously contributed to by James Hayes. We aim to have this manual interpreted for distribution, which is a logistical and financially difficult undertaking.

Khentii team from left to right: Simon Smith, Wolfgang Merl, Sam Kennedy, James Fordyce and Tom Morton.

Our current major focus and aim for IEC 2015 is to optimise the course content. Mongolia is currently developing at a rapid rate as a result of a mining boom. It additionally has a lot of input and donation from various NGOs. The course needs to address the knowledge deficits that currently exist but also provide doctors with the ability to use the equipment and drugs that are suddenly becoming available to them. An example of this is our experience in Khentii. Last year the participants felt our retrieval lectures were unhelpful, as they had no appropriate transport to retrieve patients. As a result these lectures were omitted in the 2014 course. This year the team arrived in Khentii to find that 3 ambulances had been donated to the hospital and the participants were requesting retrieval lectures. Similarly in Zavkhan, a CT scanner and two-ultrasound machines were unveiled while we were there. Our feedback was for an ultrasound course and more CT interpretation. IEC is still in its infancy. We have successfully introduced the idea of emergency medicine to both UB and three regional centres. Hopefully with the ongoing drive from the Mongolian side to develop emergency care, as well as the enthusiasm and commitment from our Australian team, the project will continue to grow. Ultimately, we aim to develop a comprehensive training program and establish emergency medicine as a new speciality.

Mongolian doctors participating in a BLS workshop.

Zhavkhan province team from left to right: Christelle Botha, Rob Phair, Loren Sher, Rubina Bunwaree and Amera Khan. Front row - team mascot, Lola Phair

Introducing the team

SOUTH EAST ASIA

Sri Lanka - Emergency Medicine in Sri Lanka

Shane Curran
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This is an abstract of a presentation made at the ICEM 2014 in Hong Kong.

Emergency Medicine in Sri Lanka is in its infancy with a number of interested groups coordinating the education and training of doctors involved in emergency care, both internally and externally.

A number of international groups have contributed to the development of emergency training to where there is now a formal training programme for an MD, interest from a university about emergency medicine training and a committed society of critical care and emergency medicine (SSCCEM).

The efforts till now have been integrated with involvement of a small number of stakeholders.

With increasing recognition of Emergency Medicine in Sri Lanka, there is increasing international enthusiasm to contribute to the ongoing development of the specialty, sometimes with little knowledge of the local medical or political landscape.

This talk will detail the development of a liaison committee to coordinate and harness this enthusiasm in a way that allows integrated progress without repetition or infringing on any local issues.

Nepal - International Emergency Medicine in Nepal: Expect the Unexpected

Kai-Hsun Hsiao – ACEM advanced trainee at BPKIHS
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Introduction

"Wedged between the high wall of the Himalaya and the steamy jungles of the Indian plains, Nepal is a land of snowy peaks and Sherpas, yaks and yetis, monasteries and mantras." – Lonely Planet

This was undoubtedly the imagery that was conjured in the minds of my envious friends as I told them of my three-month Emergency Medicine posting in Nepal. Indeed, this alluring depiction is not untrue. I felt a definite sense of awe and anticipation as I caught glimpses of the looming white peaks of the Himalaya, silhouetted against a near-cloudless blue sky, as I flew into Kathmandu on a clear February day.

Kathmandu, however, was not my destination.

Within hours I was on another flight, this time heading 220km southeast and descending to a mere 350m above sea level to Dharan (via Biratnagar) in the Eastern Terai region of Nepal. As we landed in the dusty and humid Terai (meaning low-lying plains in Nepali), the Himalaya was all but a memory. It would in fact be another three months before I saw those snowy peaks again.

The Terai is perhaps best summed up, in the words of one of my well-travelled MSF colleagues, as "the near antithesis of much of the world's perception of Nepal". Flat, low-lying and tropical with peoples and cultures more closely akin to those of northern India, the Terai was certainly a part of Nepal about which I had previously known very little. Yet this region, which constitutes almost a quarter of the country, is significant as the most productive and populated part of Nepal.

Thus, beyond the expected exotic pathologies and resource-poor medicine, this posting in the Eastern Terai, working and living with local Nepali, presented a unique opportunity to experience and learn about an often forgotten part of Nepal. And being far off from the usual tourist routes, it also provided candid insights into the resource limitations, under-development, geographical isolation and healthcare challenges that contribute to Nepal's place as one of the least developed countries in the world.

The Emergency Department at BPKIHS

My destination in Dharan was the B.P. Koirala Institute of Health Sciences (BPKIHS), a large health sciences university incorporating a 700-bed teaching hospital. The hospital serves as the major tertiary referral centre for much of the eastern-most regions of Nepal and is considered second best in the country. My role at the Institute was to provide clinical teaching, support and mentorship in the Emergency Department, particularly for the inaugural trainees in the Institute's new specialist training program in Emergency Medicine, which is part of a wider and long-standing Australasian (and international) effort to improve acute medical care in Nepal.

Despite the pre-departure briefings with Associate Professor Chris Curry (term organiser and remote supervisor) and Rob Currie (emergency registrar previously posted at BPKIHS), there were still aspects of the ED that came as a bit of a shock. Chaotic, overcrowded and noisy, it was like most EDs except amplified – patient gurneys crammed side-by-side, mattresses across the floor and patient relatives amassed in any remaining space. The three-bedded resuscitation area constantly had three, sometimes four, patients with a maze of criss-crossing wires tracing back to archaic-looking monitors with displays in faded monochrome. Meanwhile, lay family members onerously hand-ventilated their critically ill and intubated relatives, although often in obvious dyssynchrony.

Of the many differences between the ED at BPKIHS and those in Australasia, two aspects stood out in particular:

First, were the medical-ward-like consultant rounds that occurred at 8am and 2pm each day. These rounds of the entire Department, which took between two to four hours, were mandatorily attended by all the doctors on shift, forming an entourage of up to 15 white-coats plodding from bed to bed. The rounds had the triplicate function of consultant review, patient hand-over and bedside teaching. But while these rounds were perhaps advantageous in facilitating bedside hand-over and teaching, they were also the predominant means by which consultant input in patient management occurred; between rounds, the junior doctors were left largely to their own devices. This had obvious impacts on timely initiation and correction of management and on patient flow.

Second, was the requirement for patients or their relatives to purchase and provide all disposable equipment, drugs and investigations necessary for their care (although IV cannulae, endotracheal tubes and IV adrenaline were available for immediate use during resuscitations, to be re-stocked by the patient relatives afterwards). This produced some odd and surreal situations, such as staring idly (and nervously) at the monitor of a patient in shock-refractory ventricular tachycardia while waiting for the patient relative to return with some IV amiodarone. Day-to-day, this user-pays reality of healthcare in Nepal, like in many resource-constrained settings, demanded of the clinician a tighter rationalisation of investigations and treatments. Unfortunately, this also meant that for some cases treatment was detrimentally constrained by the financial abilities of the patient.

Beyond these practice-culture and structural differences, there were also the expected differences in presenting pathologies. Examples of encountered cases that would otherwise be rare in the Australasian setting included organophosphate poisoning, tuberculosis and its various sequelae, adult tetanus, symptomatic rabies, leprosy, typhoid fever, visceral leishmaniasis (as part of the differential diagnosis for febrile illness without obvious focus) and multi-casualty trauma from an elephant attack!

More unexpected, however, was the significant proportion of presentations with chronic or non-communicable diseases, which more resembled the Australasian setting, albeit often more severe or late in presentation. These included ascites and upper GI bleeds secondary to alcoholic liver disease (chronic alcohol abuse is surprisingly common), acute coronary syndrome, exacerbations of congestive heart failure, exacerbations of COPD, complications of diabetes, and chronic renal failure requiring emergent haemodialysis (end-stage renal failure

patients are only scheduled for routine haemodialysis once every seven to ten days due to insufficient capacity). But while these conditions were familiar, there were necessary differences in management due to technical and resource constraints, which exist even for an academic tertiary centre such as BPKIHS. One prime example was the lack of on-site percutaneous coronary intervention, which was only available (to financially capable patients) at a private hospital 45 minutes away.

Opportunities and Challenges for Change

During my posting I adopted the recommended modus operandi of partnering with one of the EM trainees, accompanying them on their various day or evening shifts through the Nepali working week of Sunday to Friday. The EM trainees held the role of managing the ED and supervising the junior doctors on shift, especially during the periods of consultant absence between rounds.

The partnering was an ideal means of providing the intended clinical support and mentorship, but in a more collegial manner through mutual exchange of knowledge, case discussions and joint supervision of junior doctors. This approach also provided the advantage of gaining useful commentary and insights from the EM trainees on local practices (and their rationale), hospital dynamics and Nepal's health system in general. It was also useful for negotiating the potential perils of language barriers, cultural differences and internal hospital politics.

Each shift provided ample opportunity for bedside teaching, particularly to the junior doctors, who were extremely keen in improving their knowledge. This teaching ranged from disease-specific management (eg. ACS and DKA) to interpretation of core investigations (eg. ABG, CXR and ECG) to demonstration or supervision of procedures (eg. femoral nerve blocks, pleural or ascetic taps and shoulder relocation). With the assistance of visiting FACEM David Symmons, we were also able to introduce simulation teaching, using only a CPR training manikin, some basic props and an iPhone app for cardiac rhythms. These sessions, which were a novel experience for many of the Nepali doctors and nurses, not only taught resuscitation protocols but also practiced communication skills and teamwork.

Overall, the key areas of focus for clinical improvement or practice change, which were identified during the posting and from prior visits by Chris Curry, included:

- Airway management and improved preparation for intubation
- Resuscitation algorithms
- Teamwork and communication during resuscitation
- Rational use of inotropes with adequate and accurate blood pressure (BP) monitoring (in the absence of automated or invasive BP monitoring)
- Rational use and choice of antibiotics
- Improved analgesia use, particularly with IV morphine (rather than IM ketorolac)
- Improved consultant and senior supervision on the floor

However, while there were certainly observable positive changes during my time at BPKIHS, such as improved senior presence and supervision, I learnt (with the mentorship of Dr Curry) that effecting change required patience and a broader perspective – that is, recognising the wider factors that may impede change despite teaching or improved knowledge or skills. For example, the necessary use of old and faulty manual BP cuffs and the lack of automated or invasive BP monitoring equipment due to resource constraints are structural factors that somewhat impede the practice of careful initiation and titration of inotropes based on accurate and close BP monitoring. There are also cultural factors, such as the strong emphasis within Nepali culture on hierarchy and seniority, which can hinder the adoption of newer practices due to top-down propagation of out-dated dogma. Examples include aversion to IV morphine for analgesia with preference for out-dated IM ketorolac, and aversion to muscle relaxants (or RSI) for intubations with preference for nothing more than 5mg of IV midazolam. Lastly, political factors, namely resistance from other specialties in relinquishing certain roles or procedures to the ED (such as chest drain insertion, shoulder relocations and procedural sedation) obstruct the acquisition and application of interventions that are considered the domain of the emergency physician in Australasia. Although, as I have learnt from Dr Curry, this resembles the challenges faced by emergency medicine in its nascency in Australasia.

Concluding thoughts

This posting was undoubtedly a unique and enriching experience that fulfilled much more than my original objectives, which were to gain clinical knowledge in tropical diseases and other pathologies less commonly seen in Australasia, to experience the practice of emergency medicine in the resource-constrained setting of a developing country, to further my skills in clinical teaching and supervision, and to contribute to the efforts in developing and improving emergency care in Nepal. However, the greatest privilege was in working alongside and building collegiality (and friendships) with the EM trainees, who will go on to become the pioneers and leaders of emergency medicine in Nepal. And even though trying to effect change felt frustratingly slow and challenging at times, it was still rewarding to have been able to contribute, however small, to the wider Australasian efforts to advance emergency medicine training at BPKIHS and Nepal – efforts which will be continued and sustained by ongoing visits from FACEMs and emergency registrars, including Kim Poole and Byron Booth, who will be taking on this same post at BPKIHS for six months later in 2014.

Outside the Emergency Department at BPKIHS with the local EM trainees (fellows) Sonai Chaudhuri and Rabin Bhandari, and Chris Curry

Further Information

This posting at BPKIHS is accreditable by ACEM as a 3-6 month non-ED, Category T Special Skills Post in International Emergency Medicine. It would be advisable to contact ACEM for the required application forms, and to return these as early as possible, preferably 2-3 months prior to the intended date of commencement. A Special Skills Log-book needs to be kept during the term, and a paper ITA completed and submitted at the end of the term.

For further information, please feel free to contact myself kh.hsiao@yahoo.co.nz or Associate Professor Chris Curry (organiser and remote supervisor/DEMT) chris@chriscurry.com.au.

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I would also like to thank the B.P. Koirala Institute of Health Sciences, Professor Gyanendra Malla (Head of Department) and the EM Fellows for their warm hospitality, and to Associate Professor Chris Curry for his supervision and wise mentorship during the posting.

Nepal - The Nepal Emergency Medicine Seminar 2014 – NEMSem14

Chris Curry
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The second Nepal EM seminar, NEMSem14, was conducted over two days in April at the BPK Institute of Health Sciences (BPKIHS). It attracted 9 Nepali plenary speakers and 150 delegates. International perspectives were contributed by 8 FACEMs and an ACEM advanced trainee, from Australia and New Zealand.

Following the first NEMSem in Kathmandu in 2013, this meeting took another step in progressing the Nepali understanding of the scope and practise of emergency medicine.

BPKIHS is the second most prominent medical education institution in Nepal, after the Institute of Medicine at Tribhuvan University Teaching Hospital in Kathmandu. However, it is located in far eastern Nepal in the small town of Dharan and is remote from the concentration of resources in the Kathmandu Valley.

The Organising Committee of the Department of General Practice and Emergency Medicine are to be congratulated on achieving a successful outcome in the face of many logistic and human resource challenges, both expected and unexpected.

Back row - Geoff Hughes, Tom Morton, Kai Hsiao
Front row - Gina Watkins, Jennifer Rush, Naren Gunja, Ros Taylor

NEMSem14 organisers

AFRICA

Botswana - Update from Botswana

Megan Cox
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Botswana's first locally trained medical students are currently sitting their final year exams and are due to graduate in October 2014. This is an exciting time for the University of Botswana, and Botswana in general, as the 36 new doctors will join the health system as interns.

The Botswana health system is still challenged by infectious diseases (23% of the population is HIV positive) but non-communicable diseases- especially trauma- are burgeoning major health issues. The government has just started the country's first public ambulance system.

I am the sole emergency physician working in the country and would welcome FACEM or advanced trainee volunteers for 6 weeks (or more) to assist me in the major teaching hospital Princess Marina Hospital in Gaborone. Currently there are four emergency medicine registrars at various levels of training, and final year medical students rotate in the Accident and Emergency Department.

There are huge opportunities for education and clinical work in emergency medicine, intensive care, pre hospital care, trauma, paediatric emergency medicine, paediatric intensive care and many research opportunities for those interested in setting up multiple visits or an ongoing commitment. There are also mid level simulation equipment and IT educational opportunities that can be explored at the University to help train the registrars and medical students.

Botswana is a peaceful middle-income country with multiple world heritage sites including the newly listed Okavango Delta. Gaborone, the country's capital city, is malaria free and very child friendly. There are many travelling opportunities and lots of amazing African experiences to be had a short distance away.

Please contact me on mcox2050@gmail.com; have a look at my recruitment video on vimeo.com/76859965.

INTERNATIONAL EMERGENCY MEDICINE CONFERENCES

African Conference on Emergency Medicine 2014

4 - 6 November 2014

After the successful African Conference on Emergency Medicine held in Ghana in October 2012, the African Federation for Emergency Medicine (AFEM) (www.afem.info) is proud to announce that the second African Conference on Emergency Medicine will be held from 4 - 6 November 2014 at the United Nations Conference Centre, Addis Ababa, Ethiopia

WWW.AFCEM2014.COM

WELCOME

Dear Colleagues,

It is my pleasure to invite you to attend the second AFEM Emergency Medicine Conference. Over 400 delegates are expected to attend the conference which will be hosted by the Ethiopian Society of Emergency Medicine Professionals, in Addis Ababa from 4 – 6 November 2014 at the United Nations Conference Centre.

The theme for the conference will be Partnerships in Emergency Care and a wide range of expert speakers will be covering extensive topics in Emergency Medicine which will be of relevance to pre-hospital, nursing and medical emergency care workers. In addition to the Scientific Programme plenaries, there will also be pre-conference workshops, poster presentations and an extensive trade presence.

I am delighted to be able to extend this invitation to you all to come and visit the beautiful city of Addis Ababa and to experience our truly warm and sincere Ethiopian hospitality. To those of you who will be returning from a previous visit we welcome you back as our friends and to those of you who will be making the journey to the horn of Africa for the first time we trust that it will be an opportunity to network with new friends and acquaintances.

We look forward to meeting you in Addis Ababa.

Warm regards,

Dr Sisay Teklu Waji
Chair, local organising committee
President, Ethiopian Society of Emergency Medicine Professionals

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"Overcoming poverty is not a task of charity, it is an act of justice. Like slavery and apartheid, poverty is not natural. It is man-made and it can be overcome and eradicated by the actions of human beings. Sometimes it falls on a generation to be great. YOU can be that great generation. Let your greatness blossom" (Nelson Mandela, 1918-2013)

Adopt a Delegate is a conference sponsorship program with a difference. AFEM encourages peer to peer sponsorship where developed region delegates sponsor peers from the developing world. The sponsorship is a part-sponsorship, as delegates requesting sponsorship are expected to finance their own travel to the conference venue. In 2012 (the first year the program was run for AfCEM) Adopt a Delegate helped to sponsor 11 delegates to attend the AfCEM conference in Ghana. We need your help to double this effort in 2014 and continue improving access to academic conferences for emergency care workers from developing regions. The little you give will mean a lot to those you sponsor, and the world to those they care for.

To sponsor a delegate simply click the secure link below. This will take you to a new website. Enter *Support a Delegate* in the message area. You can now sponsor any amount you choose. If you are feeling generous and wish to sponsor a full delegate (registration and accommodation) you'd need to sponsor $500 (US). Most donations we receive are in the area of $50 to $200.

www.afcem2014.com/support-a-delegate.html

International Emergency Care Symposium 2014