Inaugural Emergency Life Support Course, and Serious Illness in Remote Environments Course Suva Fiji March 2017

Report Prepared by Course Convener Clinical Professor David Smart
BMedSci, MBBS(Hons), MD(UTas), FACEM, FIFEM, FAICD, FUHM, FACTM, Dip DHM, CertDHM(ANZCA)

ELS i FIJI 2017

SIREn FIJI 2017
Introduction

In the week of 6th to 10th March 2017, two inaugural courses were held at the Colonial War Memorial Hospital (CWMH), Suva Fiji: the Emergency Life Support (ELS) Course for Doctors and Serious Illness in Remote Environments (SIREn) Course for Nurses. The successful delivery of these courses was the culmination of 4 years of liaison work and planning.

The planning for the courses commenced in 2013. For the doctors, it was expected that the ELS would complement the recently developed post-graduate Diploma of Emergency Medicine and the Master of Medicine program in Emergency Medicine at the Fiji National University. These programs commenced in year 2012, with first graduates in 2016.

It was known that Fiji’s Master of Medicine graduates from the Emergency Medicine program were also likely to be able to be recruited as faculty. All current Post Graduate specialists are based at CWMH.

For Fijian Emergency Nurses, there was no formal postgraduate diploma or equivalent degree in emergency nursing, so there was a strong probability that the SIREn course would fill an unmet need for emergency nursing education.

The benefits of parallel up-skilling of both medical and nursing staff have been demonstrated as Emergency Medicine has developed as a speciality, over many years. Care is delivered as a team process with all members of the team needing to be on the same page. Both courses had full support of Colonial War Memorial Hospital Senior medical and nursing management, the Central Fiji Health Division and the Fiji Ministry of Health.

A key fundamental principle of the Fijian proposal was to initiate a “train the trainer” process, which would be developed over a number of courses. The aim was to progressively hand over the running of the both courses to a local faculty. This would permit the courses to be sustainable in the future, run by, and for the Fijian medical and nursing communities.

Planning for the Courses

There was a considerable delay between the concept and actual course delivery.

Several hurdles were encountered and overcome:

1. Dengue Outbreak

An initial planning visit by David Smart in March 2014 to assess viability of running the courses was delayed due to a Dengue outbreak. Once the outbreak was over, David Smart July CWMH in July and met Dr Jemesa Tudravu (Medical Superintendent), Margaret Leong (Director of nursing), Prof Ian Rouse (Fiji National University), Dr Anne Creaton (FACEM), Dr Amit Sewak and Dr Osea Volavola (CWMH Director of Emergency Medicine).

A gap analysis was undertaken of available teaching equipment, resources and venues including local capacity for establishing a faculty. There was considerable enthusiasm for the ELS course and it was regarded as being complimentary to existing programs in Fiji. In addition, there was an unmet need at
other centres in Fiji such as Labasa and Lautoka. Staff (including Management) at CWMH indicated they had the capability of hosting and facilitating ELS and SIREn courses, using CWMH as the base (possibly also using lecture space at FNU).

(2) Lack of local teaching equipment

After assessing the possibility of using local education resources, a key issue was identified: there was a lack of teaching mannequins and other equipment, and any such equipment was located across multiple hospital Departments, including the Fiji National University. Collation of the equipment for either ELS or SIREn courses would be virtually impossible.

It was concluded that a full kit of equipment needed to be sourced from scratch to run the course and there were not sufficient financial resources to fund this from Fiji. Additional funding and donations would be required.

(3) Cyclone Winston

It was planned to run the course in September 2016. However, cyclone Winston hit Fiji Feb 22 2016. As the most intense cyclone ever to hit Fiji – many areas became disaster zones. Although Suva itself was not hit, the target audience for the course included more remote nurses and doctors, and many had their infrastructure seriously damaged when hit by the cyclone. Time to recover and rebuild was required. The cyclone caused significant impact on general resources as well as health resources.

Photo – Cyclone damaged high school, Ba Fiji (taken by Prof David Smart, May 2016)

Setting the Date of the course

After liaison with local champions, and CWMH Management, it was decided to postpone the courses to 6 – 10 March 2017.
Support and Sponsorship of the course

This course and been possible because of support from a number of organisations and individuals; listed below. The report that follows is to provide information and feedback regarding the outcomes of that support.

- **ACEM International Development Fund Grant $21,000.00**
  An application to ACEM International Development fund was submitted in July 2015, with full support from Management at CWMH. This application was successful and awarded November 2015. This equipment (including out of date disposable and laminated printed supporting material) has been donated to CWMH Emergency Department for use with subsequent courses. The Fijian medical faculty have agreed to be custodians of the equipment.

Other assistance was received as follows:

- **Fiji Ministry of Health (Central Division) and Colonial War Memorial Hospital**
  Allowing time off for staff to attend the courses and also travel money. For the Nurses, the latter totaled just over $3000 FJD. In addition, CWMH kindly provided the venue and catering (value not ascertained).

- **ELS Faculty**
  Individuals who donated their own time and also paid for their own travel, accommodation and meals. (In kind value ~ $6000 per individual travel costs)

**Australian Faculty:**
David Smart convener and instructor  
Annette Smart course administrator

**Senior ELS instructors**
Phil Hungerford - Tamworth  
John Kennedy – Royal North Shore Hospital  
Andrew Bezzina – Shell Harbour Hospital  
Mark Miller – John Hunter Hospital Newcastle  
Nick Ryan – Tamworth Hospital  
Chris Trethewy – Gosford Hospital  
Alan Tankel – Coff’s Harbour Hospital

- **Local Faculty**
  Local champion – Dr Amit Sewak (MMed Graduate), and also local faculty – Osea Volavola, Shivani Shailin, Arveen Maharaj and Lavinesh Raj. Support from Assistant Professor Dennis Lee, head of the MMed Emergency Medicine program at FNU.

- **Colonial War Memorial Hospital Management**
  Executive Management Support at Colonial War Memorial Hospital. The faculty received great support from Medical Superintendent Dr Jemesa Tudravu and Director of Nursing, Margaret Leong.
Fiji Airways
Support for excess baggage 40kg (Hobart/Nadi) carried by David and Annette Smart (Teaching Manikins and other equipment)
Approximate value $1000 AUD

Cook Medical Australia
Donation of 5 intraosseous needles to facilitate teaching (Approximate Value $600 AUD)

Following setting date, local doctors and nurses were identified to attend courses, consisting of 20 Doctors and 25 Nurses. The doctors came from central and Western divisions Fiji and Solomon Islands and Sri Lanka.

- Supported wages for course attendees or faculty has not been calculated.
- The remainder of equipment and disposables was sourced from out of date stock by faculty, and items such as mock pulse oximetry probes, constructed with creativity.

The total ‘in kind’ support of the courses was in excess of $80,000 AUD, considerably leveraged above the initial ACEM grant of $21,000 AUD.

It is highly likely from this point forward, that the course will be sustainable into the future, using the pool of donated equipment and with local capability.
Target Audience of the course

**Fijian Doctors** – any who were likely to be working at front line in primary care where emergencies could present – included hospital ED’s and district hospitals as well as smaller health centres in remote areas.

In particular – the possibility of the course being part of the Dip Emergency Medicine was considered and the utility of the course material to compliment and dovetail with this program.

**Fijian Nurses** - Following liaison with the Director of Nursing CWMH, nurses from a mixture of acute hospitals and remote areas were recruited to attend the course. In some centres, there was only one doctor and one nurse on duty.

Aim of the courses

1. To introduce a standardised generic approach for stabilising and managing undifferentiated seriously ill patients, to doctors and nurses in Fiji
2. To assist with obtaining equipment and resources to run the course
3. To recruit local faculty to run the course, using train the trainer principles, and to build local capacity
4. To dovetail the courses with local programs, which would assist with sustainability

Outline of the courses

The ELS course was a modified version of a well-established Australian designed and run ELS course. This course was designed to teach a standardised approach, as well as the skills required, to stabilize and manage seriously ill and undifferentiated medical patients. The lectures and skill stations from the Australian course were revised prior to the Fiji course to enhance their relevance and usefulness in a different country with a different culture and health system. The program for the ELS course is attached as Appendix 1.

The course was conducted by a visiting international faculty made up of eight Australian Emergency Specialists as well as five local Fijian Doctors who possessed the Master of Medicine in Emergency Medicine from the FNU. The local and international participants are listed in the introduction. The visiting faculty consisted of senior clinicians with significant experience in short course teaching.

The ELS course consisted of alternating lectures and skill stations over a two-day period followed by an assessment process, and was a modified version of a well-established Australian designed and run course.

The SIREn course format has been used successfully in multiple other countries such as Papua New Guinea, Timor Leste and Myanmar. It followed a similar structure to ELS, but with a nursing emphasis. The SIREn course was designed to complement the ELS course in content so that doctors and nurses have the same approach. The program for the SIREn course is outlined in Appendix 2.

Following extensive pre-course consultation with local clinicians (which included the scout visit by Prof Smart in 2014), the lectures and skill stations from the Australian course were modified and refined to enhance their relevance and usefulness in a different country with a different culture and health system.
Course Participants

ELS Course

The ELS Course was attended by 19 Fijian doctors. All doctors were undertaking the Diploma of Emergency Medicine, which is a 12 month post-graduate Diploma course. Some of the delegates were also enrolled in the MMed (Emergency Medicine) program. The doctors are listed in the appendix 3.

SIREn Course

The SIREn course was attended by 24 nurses. They were recruited by the CWMH director of Nursing. All were from either teaching hospital ED’s or district health centres that received acute cases. The regions were Suva, Lautoka, Western Health, Labasa Nausori, Korovou, Navua and Vunidawa. The nurses are listed in Appendix 4.

Course Manuals

A number of versions of ELSi and SIREn manuals were available from previously conducted courses. In order to tailor these manuals for Fijian use, local advice was sought from local emergency physicians, senior nurses, Dr Anne Creaton FACEM, and A/Prof Dennis Lees from Fiji National University.

Two manuals were produced. An ELSi (Fiji) version of 106 pages, and a SIREn (Fiji) manual of 84 pages. PDF versions of the manuals were forwarded to Margaret Leong (Executive Director of Nursing, CWMH), and they were printed locally and supplied in advance to course participants.

These manuals were supplemented by multiple other handouts of local Fijian clinical protocols, Australian Resuscitation Council guidelines for course participants.

Printing and Laminating

The Skill Stations for each of the courses had multiple posters (A2 and A3) to assist with teaching. These were printed in Tasmania, laminated, and carried by the convener and course administrator, when travelling to Fiji.

Disposable equipment

Australian faculty were tasked with sourcing out of date and superfluous disposable equipment to facilitate teaching the course. This was transported to Fiji and amalgamated at the setting up workshop.
CONVENER AND FACULTY TIMETABLE

Thursday March 2\textsuperscript{nd}
David and Annette Smart depart Hobart

Friday March 3\textsuperscript{rd}
1000 Arrival Suva Fiji
1300 – 1700 Convener/Administrator met with CWMH Staff and initial equipment inventory performed

Saturday March 4\textsuperscript{th}
0900 – 1500 Sourcing of stationery items, tape and glue, preparation and labelling of equipment boxes and commenced populating skill station equipment
2030 Faculty arrival Holiday Inn Suva

Sunday March 5\textsuperscript{th}
0900 – 1200 Faculty Meeting at Holiday Inn meeting room Suva
1400 – 1700 Faculty attend CWMH and meet local Emergency Physicians, set up skills stations and the teaching venue
Lectures and meals – CWMH lecture theatre. Skill stations 1-3 held in CWMH operating theatre lecture rooms. Skill stations 4-6 CWMH lecture theatre.
All SIREN skill stations held in CWMH lecture theatre.
1830 – Faculty dinner

Monday 6\textsuperscript{th} and Tuesday 7\textsuperscript{th} March
0900 – 1730 ELSi course delivery to Fijian Doctors

Wednesday 8\textsuperscript{th} March
Preparation and set up for SIREn Course

Thursday 9\textsuperscript{th} and Friday 10\textsuperscript{th} March
0800 – 1700 SIREn course delivery to Fijian Nurses
Courses closed 1700 Friday 10\textsuperscript{th} March
1900 End of course dinner

Saturday 11\textsuperscript{th} March
0900 – 1200 Provision of Lectures Department of Anaesthesia CWMH – Diving Medicine
Process of participation and train the trainer for local faculty:

Local Fijian Emergency Medicine specialists participated initially as observers, then became more active in course delivery, as they became familiar with the format. The local specialists had already provided considerable input to local content and practice.

As both courses evolved, following the observational orientation process, the Fijian Emergency specialists provided half of the lectures of the SIREn course, and delivered skill stations. The format of repeating the skill stations to multiple groups facilitates the handover and direct “train the trainer” process.

The sense of ownership and capability of running both courses is well advanced among the local faculty.

Handover of course resources material and donated equipment

The teaching equipment and resources material were handed over to Dr Osea Volavola, following completion of the SIREn course. This will be stored safely for use with future teaching and other courses.

Guidance material to run the course including manuals

The guidance and teaching material including Power Point lectures were collated post-course(s) and saved in electronic files by Prof David Smart.

The manuals were further updated and edited by Dr’s Hungerford and Bezzina, and included with the electronic files. The material includes full instructions of what preparation and printing is required for the next courses.

I touch the future, I teach..........................

A major inspiration came when meeting up with A/Prof Dennis Lee, who is head of the Fiji National University Master’s program in Emergency Medicine. Dennis was a participant in the inaugural ELS international course held in Port Moresby in 2007. A photo of the first ever course group was shown in the introductory presentation. A/Prof Lee is now a leader in Emergency Medicine education in Fiji. The Australian faculty were delighted to learn of A/Prof Lee’s progression! The first PNG course group is depicted below, Dennis Lee in the back row:
ELS and SIREN Courses Suva Fiji March 2017 - Report by Clinical Professor David Smart

ELSı Course photos:
ELS and SIREN Courses Suva Fiji March 2017 - Report by Clinical Professor David Smart

SIREn Course Photos:
ELS and SIREN Courses Suva Fiji March 2017 - Report by Clinical Professor David Smart
Course evaluations and participant feedback

As these were inaugural courses the faculty needed to be alert to any cultural sensitivities, as well as local nuances. Real-time feedback was sought from participants in both courses, so that issues identified could be quickly remedied. In addition, it was important to gain a perspective of local practice, so the course could be tailored to meet the needs of the Fijian clinicians.

Formal feedback via a structured questionnaire was sought and obtained. For overall ratings, each category was assessed on a 5-point categorical scale with the lowest rating scoring 1 and highest scoring 5.

For self-assessment of skills, each category was assessed on a 5-point categorical scale from 0 (no knowledge) to 4 (excellent knowledge). Participants rated their skill levels pre course, and then following the course. The results were tabulated, and compared using Wilcoxon rank paired t tests.

Course participants reported statistically significant improvements in skills and confidence in all sections of the courses.
FIJI ELS Course Evaluation

16 responses (84%) were received from doctors attending the ELS course.

Overall Course rating:

The course was rated as 5/5 (excellent) by 94% of attendees and 4/5 (good) by 6%

The course relevance was rated as 5/5 (excellent) by 94% and 4/5 (good) by 6%

The course presentation was rated as 5/5 (excellent) by 94% and 4/5 (good) by 6%

The course rating for enjoyment was 5/5 (excellent) by all (100%) participants

ELS Course Analysis of pre and post course ratings by parameter

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Precourse Mean</th>
<th>Precourse SD</th>
<th>Post course Mean</th>
<th>Post course SD</th>
<th>P value Wilcoxon ranked test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a structured approach to the emergency management of a seriously ill patient</td>
<td>2.38</td>
<td>0.62</td>
<td>3.88</td>
<td>0.34</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Acute coronary syndromes</td>
<td>2.44</td>
<td>0.73</td>
<td>3.69</td>
<td>0.48</td>
<td>0.0002</td>
</tr>
<tr>
<td>Breathing emergencies</td>
<td>2.38</td>
<td>0.62</td>
<td>3.75</td>
<td>0.45</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Seizures</td>
<td>2.25</td>
<td>0.77</td>
<td>3.69</td>
<td>0.48</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>The team approach</td>
<td>2.31</td>
<td>0.79</td>
<td>3.88</td>
<td>0.34</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Triage</td>
<td>2.44</td>
<td>0.89</td>
<td>3.88</td>
<td>0.34</td>
<td>0.0004</td>
</tr>
<tr>
<td>Poisoning</td>
<td>1.88</td>
<td>0.72</td>
<td>3.44</td>
<td>0.73</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Shock</td>
<td>2.63</td>
<td>0.72</td>
<td>3.94</td>
<td>0.25</td>
<td>0.0001</td>
</tr>
<tr>
<td>Airway &amp; breathing</td>
<td>2.27</td>
<td>0.70</td>
<td>3.88</td>
<td>0.34</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Intubation</td>
<td>1.56</td>
<td>1.03</td>
<td>3.50</td>
<td>0.63</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>ACLS</td>
<td>1.94</td>
<td>0.93</td>
<td>3.63</td>
<td>0.62</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>ECG interpretation</td>
<td>2.06</td>
<td>0.77</td>
<td>3.44</td>
<td>0.51</td>
<td>0.0001</td>
</tr>
<tr>
<td>CXR interpretation</td>
<td>2.50</td>
<td>0.73</td>
<td>3.50</td>
<td>0.63</td>
<td>0.002</td>
</tr>
<tr>
<td>IV fluids and venous access</td>
<td>2.63</td>
<td>0.96</td>
<td>3.81</td>
<td>0.40</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Qualitative feedback was sought using a number of questions, and the answers are reported verbatim:

Was the time allocated for this course sufficient?

- Yes -14
- No -1
- Maybe -1
- Remarks
  - Was informed last minute about this.
  - Need 3 days with the content spaced out – overloading.
What do I value about the lecture format?
- Interactive, clear and understandable power-point presentation facilitators.
- It was valuable that all lectures were: appropriate to our clinical setting and all pathologies discussed are seen on a daily basis and concise.
- Interactive and concise.
- Easily understood, interactive sessions so one does not feel sleepy.
- Easy to learn and remember.
- Easy to follow and understand, easy application of the blue print in patient management.
- Concise.
- The emphasis on sticking to a structured format was the management of any emergency.
- To the point, short important notes.
- Relevant for our settings, short, interactive, funny.
- Very interactive and more relevant to problems here in Fiji
- Short and accurate information. Presenters made them simple to understand and with time frame given.
- Short and to the point.
- Good.
- Simple.
- Short and precise. To the point, no unnecessary information on the power-points.

What do I value about the skill stations?
- Getting to do procedures that I have never done before.
- Practise if we lack the skill with assistance and how to improve and become better.
- Excellent: 1:1 teaching since group numbers were small. All questions answered, sufficient time to clarify doubts.
- Interactive
- New ideas learnt on tackling lack of resources at the health centre level. Useful skills taught that will improve the quality of care provided at health centre setting.
- Strengthening up weaknesses.
- Was given individual opportunity to learn by being able to practice at each station. A very interactive session.
- Concise, precise.
- Being able to clarify doubts. Practicing of skills that are relevant to emergencies.
- Interactive session, get to practice well.
- Informative, hands on, chance to practise. Even though there were topics I was not sure about the facilitator did not make me feel stupid but helped me understand and become better.
- Actual practice with good equipment.
- Very interactive and the coordinators were friendly and ready to teach.
- Very good, learnt a lot.
- Small group and interact more. Instructors do understand our difficulties and explain things well. Only the cardiac monitor station needs to improve facilitator as need to reach how to operate the Defib machine well.
- Interactive and easy to understand.
- Good hands on upskilling which I would otherwise not have had at the health centre.

Would I recommend this program to my colleagues …?
Yes -16 No – Nil, Maybe - Nil

- Remarks
  - 100% yes yes yes
  - Highly recommend.
What changes could be made to the course to make it more relevant to emergency medicine practice in Fiji?

- The course also took into consideration our guidelines in practice which was good.
- Allow involvement of other personnel.
- Treatment/Management was more specific for a tertiary level hospital (available equipment/drugs), there are some variations in management at health centre level/rural hospitals.
- Could educate my staff at the health centre how to implement it there.
- Basically everything taught was very relevant to Fiji; more resources at our disposal in our ED though.
- No much. The faculty has pretty much tailored the course to fit our low resource setting.
- Well for me I am at peripheral level at times I am alone, no nurses, so emergencies come in and it can be difficult trying to do everything for a patient – so training on how to handle those situations. Workshop for nurses too.
- Do the course with nurses because we also need the whole team to work together.

What was the most useful aspect of the course?

- Course was relevant to my workplace and is really helpful indeed.
- Every topic/lecture/skills station was appropriate to our setting.
- Blueprint
- Skills Stations
- It's applicable to our setting.
- The Blueprint. Application of the “blueprint” in each and every case scenario.
- Airway management practice.
- The “Blueprint”
- The blueprint – structured approach to patients.
- The blueprint, step/organised format and assess and manage all patients.
- The skill stations was so good.
- Skills Stations.
- Everything
- The Blueprint. Excellent, and easy to remember system to treat critically ill.
- Hands on approach/very interactive and instils confidence in managing patients the proper and systematic was

Are you interested in being a present/facilitator in future courses?

- Yes -11
- No
- Maybe -5
- Remarks
  - Definitely would be interested in presenting on a couple of topics.

Any other comments?

- By using Blueprint difficult cases become easy to manage
- Thank you so very much. This course has made me a lot more confident in dealing with emergencies. God bless you all !!
- Thank you for taking your time to teach us.
• I’m really happy to have been part of this training programme. It was well consolidated and definitely made a huge difference in my approach to the management of the patient. Thank you.
• Interact direct more with everyone which clarified each lecture ie: Group questions to each number-name.
• Thanks for this opportunity.
• I really enjoyed being part of this course, as it really has refreshed my knowledge and skills. I am also thankful to you guys for allowing me to join and for taking out time to teach.
• I really enjoyed the 2 day training – I learnt so much. Vinaka
• Very well done effort I couldn’t have asked for more.
• No further comments. All was excellent.
• Thank you.
• Well done guys. You have a great team.
**FIJI SIREn Course Evaluation**

20 responses (83%) were received from nurses attending the SIREn course. The response rate was affected by a group of nurses who needed to leave early to catch a bus to Lautoka, and missed the course feedback session.

**Overall Course rating:**

The course was rated as 5/5 (excellent) by 100% of participants

The course relevance was rated as 5/5 (excellent) by 100% of participants

The course presentation was rated as 5/5 (excellent) by 100% of participants

The course rating for enjoyment was 5/5 (excellent) by 85% of participants and 4/5 good, by 15% of participants

**SIREn Course Analysis of pre and post ratings by parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Precourse Mean</th>
<th>Precourse SD</th>
<th>Post course Mean</th>
<th>Post course SD</th>
<th>P Value Wilcoxon Rank Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a structured approach to the emergency management of a seriously ill patient</td>
<td>2.60</td>
<td>0.99</td>
<td>3.95</td>
<td>0.22</td>
<td>0.0002</td>
</tr>
<tr>
<td>Triage of Emergencies</td>
<td>3.00</td>
<td>0.65</td>
<td>3.95</td>
<td>0.22</td>
<td>0.0006</td>
</tr>
<tr>
<td>Teamwork and patient stabilisation</td>
<td>2.95</td>
<td>0.69</td>
<td>3.95</td>
<td>0.22</td>
<td>0.0002</td>
</tr>
<tr>
<td>Acute Coronary Syndromes and STEMI's</td>
<td>2.75</td>
<td>1.02</td>
<td>3.90</td>
<td>0.45</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Diabetic Emergencies</td>
<td>2.85</td>
<td>0.75</td>
<td>3.95</td>
<td>0.22</td>
<td>0.0003</td>
</tr>
<tr>
<td>Unconscious patients</td>
<td>2.90</td>
<td>0.79</td>
<td>4.00</td>
<td>0.00</td>
<td>*NC</td>
</tr>
<tr>
<td>Seizures</td>
<td>2.85</td>
<td>0.81</td>
<td>3.95</td>
<td>0.22</td>
<td>0.0003</td>
</tr>
<tr>
<td>Airway Management</td>
<td>2.90</td>
<td>0.72</td>
<td>4.00</td>
<td>0.00</td>
<td>*NC</td>
</tr>
<tr>
<td>Breathing Intubation</td>
<td>2.70</td>
<td>0.92</td>
<td>3.90</td>
<td>0.31</td>
<td>0.0003</td>
</tr>
<tr>
<td>Anaphylaxis and Asthma</td>
<td>2.85</td>
<td>0.81</td>
<td>3.95</td>
<td>0.22</td>
<td>0.0003</td>
</tr>
<tr>
<td>Fluid management</td>
<td>2.85</td>
<td>0.75</td>
<td>3.90</td>
<td>0.45</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Haemorrhagic shock</td>
<td>2.75</td>
<td>0.85</td>
<td>4.00</td>
<td>0.00</td>
<td>*NC</td>
</tr>
<tr>
<td>Septicaemic shock</td>
<td>2.75</td>
<td>0.85</td>
<td>4.00</td>
<td>0.00</td>
<td>*NC</td>
</tr>
</tbody>
</table>

*NC = Not able to be calculated due to all scores post course being equal

Qualitative feedback was sought using a number of questions, and the answers are reported verbatim:

**Was the time allocated for this course sufficient?**

- Yes - 20, No – Nil, Maybe - Nil

- Remarks
  - Sufficient time for skill station
  - Well allocated
  - If reading material could be provided earlier.
What did I value about the lecture format?

- What I valued about the lecture format is that the presentations are simple, to the point and also include case presentations.
- I value the lecture presentation which is very simple and to the point.
- The lecturers were very helpful and incorporated interactive sessions to make the course so much interesting.
- I value the short lectures yet very informative.
- The lecture format was well presented, and I value how the lecturers presented, very simple according to our level of understanding relevant to our work.
- Not boring, to the point.
- Value of the lecture was excellent and in a systematic order.
- Simple and easy to understand.
- Blueprint – in order for emergency situations.
- Pretty much on time and simple lectures to our understanding and not lengthy and just right.
- The lecture format was very informative.
- Very informative and was a very good refresher. I was able to relate it to my everyday work.
- Perfectly structured with good presentations. A two way learning approach with active participation from the students.
- Excellent.
- It was short and simple. It is well structured to adult learning.
- Very informative.
- Short and simple. Lecture was relevant to my nursing practice.
- Well-spaced, and explained.

What did I value about the skill stations?

- They are practical, gives us a hands on experience and makes us relate what we have learned from the lecture practically.
- Skill Station is very helpful and simple east to understand.
- Learnt a lot of new things and techniques, conducive to learning.
- I value the hands on and getting to learn about the equipment we use.
- The Skills Stations have all the equipment needed for an emergency real life situation which is very helpful in our practical team. Different types of masks and usage. How we measure neck collar.
- Very resourceful and informative/flexible and positive.
- Excellent, each participants are able to get to practise on the medicines and thus gain confidence.
- Very clear demonstration which would enable me to practice effectively and efficiently.
- New technique taught.
- Excellent – tutors were nice and helpful.
- Instructors are very informative. Excellent job shown, explanations are very helpful and they do link theory well with skills practiced. Overall, I enjoyed skill stations.
- Interesting and helps us to relate to work.
- The skills stations were very helpful and well related to our working area.
- New techniques learnt which is applicable to ED.
- Excellent – very informative and skill orientated.
- It is an extension to the lectures. Also coordinates to be critical to decisions they make – following the blueprint.
- Very skillful, work setting, good scenarios. Overall fantastic.
• Informative – learnt how to use and tie for intubation. How to measure for a neck collar and how to apply it.
• Basic knowledge on our everyday work. I have learnt how to do my work systematically and how to use Blueprint.
• Very interesting, as the chance to experience and practice the procedures.

Would I recommend this program to my colleagues ...?
• Yes – 20, No – Nil, Maybe - Nil
• Remarks
  o Structured approach
  o Would recommend all nurses to go through this training.
  o All emergency and GOPD & Nursing in Fiji.
  o Definitely performs drills and CME.
  o Highly recommended.
  o Definite course for all clinicians to go through.

What changes could be made to the course to make it more relevant to emergency medicine practice in Fiji?
• None
• All we learn and practise was relevant to our scenario and need more involvement of nurses from the district.
• Nothing – it was excellent.
• No changes at all.
• All is very perfect.
• Conduct this programme every quarter and involve all sub divisional hospitals always.
• To be certified in order to practise the skills.
• Perfect Course.
• If certified for me to practice especially working in outer stations or places where medical officers are not there.
• I am happy with the outline of the course as it is perfect.
• Nil – good choice of topics.
• Maybe do a live case scenario in ED, CWM Hospital.
• I think the SIREn programme is quite applicable to Fiji settings/systems.
• Very big changes on patient assessment and prioritising the cases.
• Maybe teach nurses on how to do intraosseous and femoral cannulation.
• I think the triaging system does not cover Fiji’s ED.
• If it can be done for all the nurses in sub-divisions with fewer medical officers.

What was the most useful aspect of the course?
• I would say the skill stations – totally loved them
• Skill Stations
• The stations helped in better learning
• The Blueprint
• The Blueprint
• Better understanding of the Blueprint format.
• All useful.
• Facilitators were very informative and information was precise and easy to understand.
• Skill Station
• Knowing Blueprint
• Lectures and Skill Stations.
The Skill Stations and the scenarios given was really interesting.

- Blueprint
- The Blueprint – systematic approach makes work easier.
- Getting to know and apply the Blueprint.
- Skill Stations
- Blueprint – makes it simpler to assess patient and manage.
- Going through the Blueprint.
- The practical area, interesting techniques learnt.

Are you interested in being a present/facilitator in future courses?

- Yes - 14
- No
- Maybe - 4
- Remarks
  o To help other nurses learn more and have the same knowledge as I have gained.
  o I will very much appreciate to be given a chance to enhance my knowledge in Emergency Nursing if we teach it at present.

Any other comments?

- All together a well presented and informative workshop. As a mental health nurse who had just been recently transferred to ED, I learned plenty new things. Hats off to the presenters and to the team as a whole.
- A big “vinaka” for the team and well organised course.
- Thanking all the facilitators for such a wonderful course. All of you did a great job in helping all the nurses polish their skills. Perfect approach towards participants – Vinaka
- Very well organised workshop.
- As an emergency nurse I would like to have more courses in emergency and serious illness courses and also to be given a chance to be exposed to overseas and other relevant emergency courses. Thank you so much for your time and knowledge.
- I would like to master this emergency skill so that I can teach my fellow colleagues and save a lot of lives. Thank you very much for availing your precious time to teach us, your quality of skills and sharing with us your abundance of knowledge. God bless you all.
- Thank the SIREn team for broadening our knowledge and skills in emergency and to have this course more often – twice a year.
- If more nurses from the district could be involved as we don’t deal with emergency every day and tend to loose practice.
- Very good workshop, have learnt a lot.
- Thankyou.
- Thank you for all facilitators (SIREn team) for the shared knowledge and skills station as many of our nursing does lack the knowledge on how to use this skill. We recommend in the future plenty of emergency training sessions like this one. Can it be performed at the Northern Division (Labasa Hospital)?
- Thank you very much for your time and may God bless us all. Safe trip back to Australia. Really enjoyed the 2 day courses with you.
- Thank you so much team for the lovely and informative 2 days and for your time.
- A very helpful course. If more courses could be introduced for staff to broaden their knowledge.
• I would like to take this time to thank each and every one (facilitators) for this very informative workshop. I really learnt a lot and will disseminate this information to my colleagues. May God bless your beautiful families and have a safe trip home. Vinaka.

• Excellent presenters. Would be great to take the programme yearly or local presenters could organise yearly refresher courses.

• Very informative and learning experiences.

• Thank you for a lovely 2 day workshop. It has been educational.

• Thank you very much for the knowledge and time.

• Thanks for providing the knowledge that was lacking in attending to patients.
Future plans

There are almost immediate plans to deliver additional courses in Fiji. The Ministry of Health Central Division has now given its support for future courses, as early as August 2017. This also includes for Nurses.

The timing of only 6 months after the inaugural courses presents an ideal opportunity to consolidate and reinforce with local faculty how to run the course, and achieve the original aims of courses run by local Fijians for their colleagues, and which are sustainable long term.

Conclusions

The aims of the courses were:

(1) To introduce a standardised generic approach for stabilising and managing undifferentiated seriously ill patients, to doctors and nurses in Fiji
(2) To assist with obtaining equipment and resources to run the courses
(3) To recruit local faculty to run the course, using train the trainer principles, and to build local capacity
(4) To dovetail the courses with local programs, which would assist with sustainability

The first two aims have been achieved, and with plans underway for a second tranche of courses, achievement of the third and fourth aims are well advanced.

Capability of purchasing and setting up essential equipment to run the courses was a key component of achieving the aims. This was made possible by the International Development Fund Grant from the Australasian College for Emergency Medicine, and donations from other sources.

The equipment is now stored as a package, which will make future courses considerably easier to run. There is a system for sustaining the course including all instructional material and documents as well as electronic format handed over. The likelihood of sustainability is very high, there is significant support capability and motivation locally in Fiji. In addition, there is local faculty, Hospital Management and Health Ministry support for this format.

Acknowledgements

The final delivery of the project has been immensely satisfying for me personally. It was a huge project (see deliverables below), and required an over the horizon view for a period of 4 years. I am very grateful to our Australian faculty (and their supporting families), for their commitment to the project, their advice and assistance in delivering the product. I also extend my gratitude to my wife Annette who assumed the role of course administrator without any prior knowledge of the task ahead.

Memorable moments

There were many memorable moments, and particularly special was the vinaka vaka levu speech at the end of the SIREn course, from Ilisapeci Tamanitoakula which was straight from the heart. The Nurses rendition of Isa Lei, the Fijian farewell song at the end of the SIREn course will stay etched in the hearts of all the faculty.

Course media coverage, and appendices follow:
MEDIA – Some very positive media was achieved with assistance and support from CWMH Management
Fiji Broadcasting Commission:

Emergency training for nurses and doctors
06:23 Yesterday

Taken from/By: FBC News
Report by: Praneeta Prakash
An average of one hundred and fifty emergency cases are attended to by the staff at the CWM hospital daily.
In an effort to improve emergency services, 40 medical professionals are undergoing training.
Professor David Smart of Royal Hobart Hospital, Australia says eight specialists’ emergency doctors from Australia are training the medical staff to help them provide better patient care.
“The type of emergencies range broadly across the spectrum from a sick child to airway emergency where someone might have choking episode or a cardiac arrest or problems with asthma, cardiac emergencies without a heart attack and they have to be managed. They are all medical emergencies.”
Manager Nursing at the CWM hospital, Margaret Leong, says the training will equip the nurses who deal with emergencies daily.
“With medicine the training has to go side by side. If you train the doctors, you have to train the nurses because we work very closely together and there is a huge gap with our nursing qualifications at post graduate level. There is no institution yet that is providing any post graduate qualification in this area, in cardiac care and emergency medicine. So this is very valuable for us.”
The training ends today.
- See more at: http://www.fbc.com.fj/fiji/48890/emergency-training-for-nurses-and-doctors#sthash.SNyDOJsM.dpuf!
Training for health specialists

Tevita Vuibau
Saturday, March 11, 2017

STAFF of the Colonial War Memorial Hospital are better equipped to handle the 100 daily emergency cases they receive after receiving training on emergency life support and serious illnesses.

Hospital staff were part of a group of 57 medical professionals from around Fiji who received training from an emergency life support team from Australia this week. Apart from the training, the Australasian College for Emergency Medicine International Development Fund gave training equipment worth about $F47,000.

CWM Hospital Emergency Unit acting head of department Osea Volavola said getting access to workshops overseas would cost about $3140 and they were grateful the workshops were being provided in Fiji.

"It will improve the level of healthcare services in Fiji particularly for emergency units that deal with cardiac cases, asthma, accident and trauma cases on a daily basis," Mr Volavola said.

"On a daily basis, the Emergency Unit at CWM Hospital attends to about 100 to 150 emergency cases."

The training was led by Australian Professor David Smart, who said it's aim was to improve patient care.

He said the training would enhance the skills of doctors and nurses to deal with the emergencies, including general emergencies ranging from a sick child to asthma and cardiac arrests.

CWM Hospital manager nursing Margaret Leong said the training provided great opportunities for the nurses to acquire skills for the enhancement of healthcare services in Fiji.

"While the doctors have their postgraduate emergency medicine, the nurses currently don't have any postgraduate emergency care training available through the education institutions," she said.

"That is why this training is very important for the capacity building of our nurses that provide emergency care to our patients."

Television:


Web links to electronic media

http://www.fijiplus.com.fj/2017/03/10/training-to-better-handle-medical-cases
Training to Better Handle Medic Cases

Nurses and medical staff should have proper training to better handle emergency cases, says Clinical Professor, David Smart.

The Royal Hobart Hospital Medical co-director from Australia is in the country with his team of eight medical specialists conducting a two-day course at the Colonial War Memorial Hospital in Suva.

The Serious Illness in Remote Environments (SIREN) Course is designed to improve skills of medical and nursing staff to manage patients at the emergency unit.

Professor Smart said the $20,000 equipment for the training was funded by the Australasian College for Medicine Emergency under the International Development Grant.

He said the equipment would be used by Fijian nurses and doctors for future training.

Professor Smart compared Fiji’s health system to Australia’s in the 1980s when they didn’t have specialist doctors or nurses in the emergency unit.

However, he said there were specialists in Fiji but they weren’t based in all the hospitals around the country.