

PRIMARY TRAUMA CARE [PTC] COURSE REPORT

NUKU'ALOFA, TONGA

11TH – 12TH AUGUST 2009

[Prepared by Matamoana Tupou]

1. Executive Summary.

The Primary Trauma Care [PTC] course held on the 11th and 12th of August 2009 was the third one to be conducted in Tonga. The previous two courses were held in 2001 and 2008. All three courses were held in the capital of Nuku'alofa. This course is important for Tonga because trauma is the leading cause of death in the first four decades of life, with trauma due to motor vehicle accidents leading the way. It was organized with collaboration between the Tonga Ministry of Health, the Pacific Islands Project, and participants from the PTC Instructor Meeting held earlier this year in Fiji. Twenty-two healthcare workers and five instructors were involved in the two-day course, not including organizers and catering staff. The course officially opened with a short ceremony and ended with the presentation of certificates to all participants. The majority of participants were supportive of the programme and gave positive comments. The main recommendation is for the PTC course to be held in Tonga as a regular part of upskilling healthcare workers.

2. Introduction.

Tonga is a developing country located in the East Asia and Pacific region. The Kingdom of Tonga consists of 171 islands, of which 48 are inhabited. These islands are divided into three main island groups: the Tongatapu and 'Eua group, the Ha'apai group, and the Vava'u group. There are also the two smaller islands of Niuaotupou and Niuafo'ou to the north. The country is spread over an 800-kilometre stretch of Pacific Ocean in a north-south alignment between the latitudes 15° and 23°S, and longitudes 173° and 176°. The latest census conducted in 2006 gave a population of 101,169 people, with 34,000 (approximately 34% of the total population) residing in the capital of Nuku'alofa on the main island of Tongatapu.

From the Local Trauma Perspective lecture by Dr. Kolini Vaea, it was noted that the leading cause of deaths from injury are via motor vehicle accidents, and trauma is the leading cause of death to the age of 40 years.

The PTC course has been held previously in Tonga with positive feedback from both organizers and participants. The first course for Tonga was in 2001, for participants. The second course held in 2008 used the 2-day participant course, 1-day instructor course, 2-day participant course format. This was the third time for a PTC course to be conducted in Tonga. All courses were held in the capital of Nuku'alofa, but there was participation from healthcare workers from other areas.

3. Organizing PTC in Tonga.

Earlier this year a Regional PTC Instructor Meeting was held from the 23rd to the 27th of March in Lautoka, Fiji. At that meeting it was decided to have another PTC course in Tonga. Dr. Bernard Tu'inukuafe organized the Tonga side of things in conjunction with the Ministry of Health. Dr. Wayne Morriss and Dr. Lito de Silva organized the regional instructors and funding.

Unfortunately, there was no media coverage for the course.

4. Instructors.

There were two regional instructors and three local instructors.

- Dr. David Kenneth Brownhill, Anaesthesia, Australia
- Dr. John Roberts, Intensive Care, Australia
- Dr. Saia Piukala, Surgery, Tonga
- Dr. Kolini Vaea, Surgery, Tonga
- Dr. Matamoana Tupou, Outpatient and Emergency, Tonga

5. Participants.

There were a total of twenty-two course participants. It was a mixed group with doctors, health officers and nurses from small health centres, surgical and intensive care units, outpatient and emergency department, and outer island hospitals.

- SN Seiloni 'Alatini, Surgical Ward, Vaiola Hospital
- SSN Lineti Bourke, A&E Dept, Vaiola Hospital
- SN Falakika Fetu'u, A&E Dept, Vaiola Hospital
- SN 'Alani L. Havili, Vaiola Hospital
- HO Paea Hingano, Health Centre, Tongatapu
- SN Poasi Hungalu, A&E Dept, Vaiola Hospital
- HO 'Ofa Kava, Health Centre

- SN Manatu Langi, Operating Theatre, Vaiola Hospital
- SN 'Akanesi Latu, Operating Theatre, Vaiola Hospital
- SN Sela Latu, A&E Dept, Vaiola Hospital
- SN 'Ana Sisilia Lolohea, A&E Dept, Vaiola Hospital
- Dr. Flora Lutui, Intern, Surgical Ward, Vaiola Hospital
- HO 'Asipeli Mafi, Niu'eiki Hospital, 'Eua
- Sr. Sulia Nonu, Surgical Ward, Vaiola Hospital
- HO Lupe 'Oliveti, Fua'amotu Health Centre, Tongatapu
- Dr. 'Ofa Sanft-Tukia, Intern, Medical Ward, Vaiola Hospital
- SN Malia Sete, Vaiola Hospital
- SN Melemoli Siale, A&E Dept, Vaiola Hospital
- Dr. Mele Tonga, Intern, Obstetric Ward, Vaiola Hospital
- SN Telesia Tu'itupou, A&E Dept, Vaiola Hospital
- Dr. Tevita Tu'ungafasi, Intern, Anaesthesia, Vaiola Hospital
- HO Sione T. 'Ulufonua, Health Centre, Tongatapu

6. Programme.

The programme followed was the same one as the PTC course timetable used in 2008. The course was opened with a short ceremony. This included a prayer by Rev. Tu'iniua Finau, introductory statements by the organizers, and an address by the Tonga Director of Health.

For the actual timetable, please refer to *Appendix 1*.

7. Teaching Materials.

The regional instructors brought with them computers, resuscitation manikins [adult and paediatric], cervical collars, laryngoscope, intraosseous needles and similar items. All other items were provided locally. These included a projector, paper, marking pens, trolley bed, intravenous fluids, chest drain and airway materials. Participant manuals were also printed locally, but with financial assistance from AusAID.

8. Multiple Choice Questions [MCQ]

There were twenty MCQ conducted as a pretest and posttest [MCQ #1 through #20 in the PTC Instructor Manual]. There was a definite improvement in scores for the posttest. In the pretest, only 9 participants [40%] got at least 15 correct answers. In the

posttest this number rose to 16 [73%]. Comments from the participants themselves showed they did feel more confident with the posttest. Those questions that were not straightforward to some participants were able to be explained and understood satisfactorily.

9. Participant Evaluation Forms.

A total of twenty course evaluation forms were received with the following results.

Two participants had to leave early.

	Very poor	Poor	Average	Good	Very good
DAY 1	1	2	3	4	5
Local trauma perspective	--	--	1	2	14
The ABCDE of trauma and Primary Survey	--	--	--	--	20
Airway and breathing	--	--	--	--	20
Circulation and shock	--	--	--	2	18
Skill stations	--	--	--	1	18
Secondary survey	--	--	--	1	19
Demonstration scenario by instructors	--	--	--	2	17
Scenarios practice	--	--	--	1	19
Chest injuries	--	--	--	2	18
DAY 2					
Head and spinal trauma	--	--	1	--	19
Abdominal and limb trauma	--	--	--	1	18

Trauma in children and pregnancy	--	--	1	3	16
Burns	--	--	--	2	18
Workshops	--	--	--	1	19
Disaster management	--	--	4	2	13
Scenarios practice day 2	--	--	--	1	18
Multiple choice questionnaire	--	--	--	--	20
<p>What was the best part of the course?</p> <p><i>The majority of participants cited the scenarios and skill stations. Several chose the ABCDE of Trauma and Primary Survey.</i></p>					
<p>What would you change?</p> <p><i>Many participants would have liked to have more practical activities. One participant mentioned lack of punctuality and wanted more audience participation.</i></p>					

10. Positive Outcomes.

The participants have given positive feedback after the course when they had returned to their usual duties that when they encountered patients, they were more able to deal with them in a systematic manner and prioritize appropriately. The local instructors had a chance to use the knowledge they had learned in the previous year's course.

11. Recommendations.

The PTC course should be a regularly held programme to equip staff to deal appropriately with trauma patients. There are always new staff being added to the

Ministry of Health, and they need this knowledge. The next PTC course training should again include an instructor course to increase local human resources in this area. A modified version of the PTC course is also being considered for the training of first responders, namely police officers and firefighters. Finally, participant comments should be taken into account when organizing further PTC courses in Tonga.

12. Acknowledgements.

Many thanks are due to everyone involved who gave of their time, expertise, finances, and other resources.

- Dr. Bernard Tu'inukuafe organized the course venue, catering, and obtained permission from the Tonga Ministry of Health. The Director of Health, Dr. Siale 'Akau'ola showed his support.
- Dr. Wayne Morriss organized overseas instructors.
- Dr. Lito de Silva arranged for funding to be provided from the Pacific Islands Project [AusAID].
- Drs. John Roberts and David Kenneth Brownhill took time out to travel from Australia to help run the course.
- The local instructors and participants rearranged their work schedules, so they could be a part of making this course successful.
- Rev. Tu'iniua Finau, for beginning this year's course with a blessing.

13. Appendix 1

PTC 2-Day Course, 11th-12th August 2009

Nuku'alofa, Kingdom of Tonga

DAY 1

0830-0930	Introduction	Bernard, Ken
	Local Trauma Perspective	Kolini
	MCQs	
	<i>Morning Tea</i>	

1000-1030	ABCDE, Primary Survey	John
1030-1100	Airway and Breathing	Moana
1100-1130	Circulation	Kolini
1130-1200	Skill Stations	
	Airway 1	John
	Airway 2	Ken
	Cervical Spine	Kolini
	Chest drain	Saia
1230-1330	<i>LUNCH</i>	
1330-1400	Demonstration Scenarios	All
1400-1515	Scenarios (four)	All
1515-1530	<i>Afternoon Tea</i>	
1530-1600	Secondary survey	Kolini
1600-1630	Chest Trauma	Saia
1630-1645	Day 1 Summary	Ken

DAY 2

0830-0900	Abdominal and Pelvic Injuries	Saia
0900-0930	Head and Spinal Injuries	Kolini
0930-1000	Paediatric and Obstetric Trauma	John
1000-1030	<i>Morning Tea</i>	
1030-1100	Burns	Saia
1100-1215	Workshops	
	Analgesia	Moana
	Transportation	Saia
	Paediatrics	Ken

Neuro assessment

Kolini

1215-1315 *LUNCH*

1315-1415 Disaster Management

Ken/Moana

1415-1530 Scenarios

All

1530-1545 *Afternoon tea*

1545-1630 MCQs and discussion

All

1630-1645 Feedback, Certificates, Closing

Ken

