

## Primary Trauma Care Course Report (28<sup>th</sup> – 29<sup>th</sup> May, 2019)

The Shady Rest Hotel, Port Moresby, Papua New Guinea (PNG)

### Purpose:

The purpose was bifaceted. Firstly, to equip the Emergency Department (ED) staff of Port Moresby General Hospital (PMGH) with a standardised approach to all trauma patients; in keeping with the vision of the Papua New Guinea Society for Emergency Medicine.

And equally important; to provide an avenue for six of the recently inducted cohort of certified instructors to conduct their inaugural course. Albeit, under the watchful command of three trainer facilitators (Drs Desmond Aisi, Georgina Phillips and Lucas Samof).

### Summary:

In a country like PNG where trauma is one of highest causes for presentations to health facilities; it is imperative that all health workers must have a skill set that equips them for expeditious assessment and management of acute trauma. The PTC course has been run at different time intervals across the span of PNG with a few regional exceptions where the course still hasn't reached.

Port Moresby General Hospital (where all participants are employed) is a level 7 hospital and is the national referral hospital for the country. It caters for a population base exceeding 1 million, therefore; the staff of the hospital highly appreciated being taught a systematic manner of trauma assessment. Hoping to alleviate, also, the erroneous delay to diagnosing life-threatening conditions.

The course was held in the conference room of the hotel located in close proximity to the hospital. There was adequate space and comfortable surrounds for the all activities to be completed. The participants were divided into four groups for their scenarios, workshops and skills stations. All participants travelled from their respective homes. The catering provided by the institution was of high quality.

The two day training was accomplished without much interference and well received by the participants. There was no media coverage for the event.

### Acknowledgement:

We cannot proceed any further without acknowledging the Royal Australasian College of Surgeons (RACS) through the Australian High Commission (DFAT) for the funding for training and development of staff of the ANGAU and Port Moresby general hospitals. The course was made possible through the Clinical Support Program (CSP).

### Course Facilitators:

The Instructors for this course were:

Dr Scotty Kandelyo – Emergency Physician, NDOH

Dr Duncan Sengiromo – Emergency Physician, PMGH

Dr Carl Kingston – Emergency Physician, PMGH

Dr Ware Vagoli – Emergency Physician, PMGH

Dr Samuel Andrew – Emergency Physician, KGH

Dr Mangu Kendino – Emergency Physician, PMGH (Course Director)

Faculty Facilitators:

Dr Georgina Phillips, FACEM  
Dr Lucas Samof, MMED ANAESTHESIOLOGY  
Dr Desmond Aisi MMED EM

Course Participants:

(Medical Officers – 7, Resident MOs – 3, Nursing Officers – 11, **Total – 21**)

Dr Steven Aaron – EM Advanced Trainee	Alfred Steven – NO
Dr Posing Posanau – EM Advanced Trainee	Charity Kiap – NO
Dr Frederick Koha – EM Advanced Trainee	Dakan Kauga – NO
Dr Glenda Kore – EM Advanced Trainee	Lala Posenu – NO
Dr David Pomat – Dip. EM Trainee	Nathan Rueben – NO
Dr Dean Tulia – Dip. EM Trainee	Miting Kalandi – NO
Dr Ulysses Oli – Dip. EM Trainee	Wiliiam Budiara – NO
Dr Evangeline Maora – Service Registrar	Evelyn Tolo – NO
Dr Sonia Dadae – RMO	Eraslowa – NO
Dr Fiona Bare – RMO	Patrick Ken – NO
Dr Maryanne Posenu – RMO	Jimmy Joseph – NO
	Wamil John – NO

Activities:

The course was formally opened with a word of prayer as registration was simultaneously completed during welcome and introductory proceedings. An assessment of pre-test knowledge was then sought through completion of the 20 MCQs. Additionally; the participants reflected on their confidence in management of a handful of trauma case scenarios through completion of the confidence matrix questionnaire. The remainder of the 2-day course then progressed uneventfully with standard lectures and skills stations. *See full programme attached in appendix 1*

Three breaks a day were observed inclusive of the hour long lunch. In order to maintain stamina and engagement of the participants.

An exciting two days was concluded with the post-test MCQs and jubilation at the certificate presentation.



Dr Kendino delivering the welcome address



Participants completing Pre-course Confidence Matrix

## The course:

The participants arrived promptly and quite excited to have been given the opportunity to participate in a career-development course. Because the staff all engage daily at the work-place they all communicated well and had established rapport with each other that made the teaching and learning quite lively and without interruption.

There was resounding consensus that the most memorable part of the course were the scenarios and skills stations. A few participants stated specifically that they would have appreciated higher fidelity simulation equipment, but that isn't financially feasible at this stage. A majority sought for more time in order to have greater exposure to scenarios which would then provide the platform to practise at various roles for trauma resuscitation.

We observed varying levels of engagement during each of the lectures with generation of discussion usually arising from inquisitive participants. But the skills-station were the true test of character. Here we witnessed teamwork, collaboration and animated moods as the participants assisted each other to succeed.

A total of 8 case scenarios were run (2 at each of 4 stations). To the amusement of the trainees; 2 case scenarios were demonstrated by the trainers. One depicting an incorrect sequence for the primary survey, then one done in exemplary fashion.



Organising a skill-station



Dr Kingston preparing for the Basic Airway



Dr Vagoli running a Scenario



Participants practising advanced airway

### MCQ Scores:

The participants were evaluated using the standard Multiple choice questions.

MCQs	Range		Average		Modal score	
	Pre-test	Post	Pre-test	Post	Pre-test	Post
<b>Scores (Out of 20)</b>	8 – 19	8 – 20	15 (75%)	17(85%)	15,16	19

The percentage of scores in each range:

	<10	10 -12	13 -15	16 -18	19 -20
Pre-test	19%	19%	19%	33%	9%
Post-test	9.5%	9.5%	23.8%	23.8%	33.3%

The overall assessment is that of improvement in this group of participants. It is even more pleasing to note that the greatest improvement was to attainment of scores ranging between 19 and 20.

### Feedback:

There was resounding positive feedback from all participants.

Nearly half the group specifically enjoyed the case scenarios and all who did so also added that they would have liked more time allocated for the scenarios and skills-stations so they could have more practise. Many had praise for the repeated systematic PTC approach that is taught in the course. Special mention was made for the knowledge gained highlighting peculiarities in trauma management in the paediatric and pregnant populations.

A quarter of the participants expressed dissatisfaction with the wording of a few of the MCQ questions and answers that rendered them rather ambiguous. This can certainly be reviewed for a few minor adjustments.

The quality of slides and teaching materials, as well as the interactive and lively discussions, were enjoyed by the trainees.

The instructors have taken all feedback into account and have many years ahead to refine and ensure this course runs like a well-oiled machine. Time is always of the essence, and so the instructors found we had to make a few adjustments to time allocations for lectures in order to fulfil the programme.

We are confident, though, that the gospel of PTC has been taught and learnt and will change practise!

### Limitations

Due to unforeseen circumstances; participants had not been issued course materials in advance. This may have contributed to their overall performance.

It is acknowledged, also, that higher fidelity mannequins and simulation equipment is desirable.

## Acknowledgements

This course was made possible through the Royal Australasian College of Surgeons. Thanks to:

- Local PNG PTC leader and mentor; Dr Lucas Samof
- International PTC Leader and mentor; Dr Georgina Philips
- All Instructors
- Royal Australasian College of Surgeons: Gwyn Low, Tessa Fiskien and the team
- Australian Government DFAT
- PTC Foundation
- ACEM PNG Country Liaison; Dr Colin Banks, ACEM International EM Committee and PNG supporting FACEMs
- Shady Rest Hotel and management
- Claire Matainaho, HECS office, SMHS

### Appendix 1: Provider Course Program

### Appendix 2: Management Confidence Matrix



Successful PTC participants with the instructors and their facilitators

## Appendix 1

### The Course Programme:

#### Day1 Tuesday 28<sup>th</sup> May, 2019

Time	Topic	Presenter
8.00 am	Registration	All
8.30 am	Welcome and Introductions	Kendino/ Faculty
8.45 am	MCQ	Kendino
9.00 am	Local Trauma Perspective	Sengiromo
9.15 am	PTC Role Play/ Demonstration	Faculty
9.25 am	PTC Overview	Sengiromo
9.40 am	ABCDE of Trauma and Primary Survey	Kandelyo
10.10 am	Break	
10.20 am	Airway and Breathing	Kingston
10.55 am	Circulation and Shock	Vagoli
11.30 am	Chest Injuries	Andrew
12.00 am	Lunch Break	
12.45 pm	Skill Stations	
20 minutes	<i>Basic Airway</i>	Vagoli
20 minutes	<i>Advanced Airway</i>	Kendino
20 minutes	<i>Cervical Spine/ Logroll</i>	Sengiromo
20 minutes	<i>Chest drains</i>	Andrew
2.05 pm	Break	
2.15 pm	Abdominal and Pelvic	Kandelyo
2.40 pm	Limb Injuries	Kendino
3.05 pm	Demonstration Scenario	Faculty
3.20 pm	Scenario Practice (in groups)	Faculty
4.30 pm	Overview and Summary	Sengiromo

#### Day 2 Wednesday 29<sup>th</sup> May, 2019

Time	Topic	Presenter
8.30 am	Head Injuries	Kingston
8.50 am	Spinal Injuries	Sengiromo
9.10 am	Trauma in Children	Andrew
9.30 am	Trauma in Pregnancy	Kendino
9.50 am	Burns	Vagoli
10.20 am	Break	
10.30 am	Workshops	
20 mins	<i>Analgesia</i>	Vagoli
20 mins	<i>Transportation</i>	Sengiromo
20 mins	<i>Pediatric trauma</i>	Andrew
20 mins	<i>Neurological assessment</i>	Kingston
11.50 am	Secondary survey	Andrew
12.20 pm	Break	
1.20 pm	Disaster management	Sengiromo
2.00 pm	Scenarios (in groups)	Faculty
3.20 pm	Break	
3.30 pm	Repeat MCQ's	Kendino
3.45 pm	Summary, Feedback and Evaluation	Kendino
4.05 pm	Faculty Discussion	Faculty
4.20 pm	Presentation of Certificates	All

## Appendix 2 – Management Confidence Matrix

