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Department of Anaesthesiology & Intensive Care,

REPORT

PRIMARY TRAUMA CARE PARTICIPANT COURSE

Alotau, Papua New Guinea.

28th – 29st September 2009.

Introduction

The catholic health service has made its priority to train all its health workers in primary trauma care. This was enforced by the improvement in management in the rural health facilities by those who attended the course previously.

This most recent primary trauma course was the 6th organized by the catholic health services co-rdinators – Sr Ilaisa and Sr Baloiloi. It was conducted at the united church recreational hall on the 28th – 29th of September, 2009.

This was also the first time that Dr L. Samof handed down the responsibility to Dr Wake to be in charge of the two day course, thus making it a new experience for all the facilitators who were involved.

Summary

The 6th PTC had about 9 participants and 4 instructors. Of the 9 participants, 6 were community health workers (CHW) and 3 were nursing officers (NO). Again everything was organized by the catholic health agency. After the end of the course, everyone was satisfied with the course. However, most of them wanted the course to go on for a longer time.

The coordinators included Dr Perista Mamadi who was assisting the 3rd time, Dr Pauline Wake who was in-charge of the team, and Dr. Kepas Kapeo who was taking part the 2nd time. During this time, Mr Leonard Goliath (HEO), an experienced PTC facilitator also assisted especially in the demonstration parts.

PTC Participants Course Instructors.

These staff were released from their normal duties in Alotau General Hospital by the acting Chief Executive Officer, to conduct this course over the two days period.

Dr. Perista Mamadi
(Local PTC Instructor/facilitator)
Surgeon – Surgery department –Alotau General Hospital.

Dr. Pauline Wake
(Local PTC Instructor)
Emergency Medicine department Medical Officer.

Dr. Kepas Kapeo
(Local PTC Instructor/Facilitator)
Anaesthetic Registrar – Alotau General Hospital

HEO Goliath Leonard
Local PTC Instructor
Anaesthetic Scientific Officer - Alotau General Hospital

Course Participants

There were 9 participants who attended the course; all participants are from the Catholic Health Services. They are all from the most remote parts of the Province (maritime province- see attached map); passenger boats travel there once a month.
There were three (3) Nursing Officers and six (6) Community Health Workers.

Participants name	Health Category	Health Facility
Max Lote	CHW	Daio health centre
Mary Dominic	CHW	Jinjo health centre
Jacinta Elliota	CHW	Nimoa health centre
Gerald Lui	CHW	Kurada health centre
Paul Mwakoba	CHW	Budoya health centre
Augustine Sibalai	CHW	Sideia heath centre
Elaine Edward	Nursing Officer	Kurada health centre
Simon Mongi	Nursing Officer	Jinjo health centre
Felix Newaoya	Nursing Officer	Sideia health centre

Course Program

See Appendix 1

Standard program was used for the 2-day PTC course. We used the 2009 updated Pacific Islands Trial slides that Dr. Rob MacDougal and Dr. Wayne Morris put together after our review in Lautoka, Fiji, in March. We also included the one on Monitoring and Reassessment by Dr. Kambue Yongue.

On the morning of first day, it was noted that the participants did not have a systemic way of approaching patients with trauma and other severe illnesses. By the end of the first day, the participants began to understand that there was a better way of approaching all cases of patients. They understood what primary survey was and why it was important to follow a system. Different scenarios were given to them to help enhance the principle of primary survey. By the second day, everyone knew what primary survey and secondary survey was and knew the system of approaching all patients.

See Appendix 2
At the end of the 2nd day, some more multiple questions were added to the set multiple questions and given to the participants. It was noted that everyone answered the set questions very well and with confidence. As for the new questions, most of the participants answered well but other were hesitant.

Venue and Course Presentation

Course was held in the United Church Recreational Hall, a spacious place. Alotau General Hospital kindly loaned us adult non-intubating, and a paediatric mannequin. On the first day the United Church lended us their projector and on the second day, the Catholic Church gave their projector to use
Participants were used as subjects for the skill stations and they enjoyed it. Manuals were organized by the catholic health agency and distributed to the participants.

Participant Feedback

The questions were modified to make it easier for the participants to understand. Question two was initially written out as “What did you like the least?” however due to difficulty in understanding the question, it was rephrased as “What did you not like in the course?”

1.What did you like most in the course?

All 9 participants liked the whole course. One (1) said that there were “some things were difficult to understand but the whole course was interesting”. Another said that he especially liked the “case scenarios which deal with real life situations”.
Another response was “the thing I like most in the course is that the facilitators have made it very clear and also have shown formulas and the equipment was all set.”
The rest of the response to this question was simply “liking the whole course” and finding it “very interesting”.

2. What did you not like in the course?

Five (5) of the participants liked the whole course and had no complaints. One said that she "like everything that was discussed", and another said that she "enjoyed the whole sessions in the two days". Two responded that they did not like the manuals distributed by the catholic health agency due to the missing pages/incompleteness.

3. What can we improve or change in the course

Two said that there was nothing to change or to improve. 3 responded that the "workshop was too short and needs more time" or "four to five days should be better." One said that she wanted "more demonstration to be done." Another wanted improvement in the "multiple choice questions". Two said that it was themselves that needed to improve their way of learning and it was up to them to change their way of assessing and managing patients.

Things to Improve

Participant's feedback was helpful and positive, as this was their first course, they all enjoyed it. The Instructors/facilitators need to take the participants through the method of using scenario as a good teaching tool.
Skill and scenario secessions should be our main teaching technique for the local PTC courses. However, more time should also be given to teaching primary survey. Once the understanding is present about primary trauma care, then it becomes easier to do skill stations and scenarios.

Success of the Course

This is was 6th locally organized and conducted PTC course in Alotau. The sponsorship from the Catholic Health Services involved participants transport and accommodation, venue, catering, production of manuals, and the certificates.

The planning and execution of the course was excellent. There was cooperation between the Alotau General Hospital (Government), and the Catholic Health Services (Church).

This course was different, because Dr Samof handed down the responsibility to me to take charge in organizing and facilitating the course. He only was present during the introduction time. Therefore it was a challenge for me – to teach the right things and make sure that everyone learns the primary survey and secondary survey.

The course also allowed us to see that every PTC participants different and the time taken to explain different things will also be different.

We initially had 3 facilitators. Fortunately, Mr Goliath Leonard joined us during the sessions and therefore helped us with the demonstration sessions. During the demonstration sessions there were many questions asked and so it became interesting and felt like the demonstration times were too short.

In summary it was a new experience for the facilitators to do a PTC course without Dr Samof but every participant enjoyed the two days of the course.

Plans for the Future

The organizers of the course (Sr. Eliza, and Sr. Baloiloi), were impressed with the course, and have invited the PTC team from the Hospital to conduct one more course before the end of 2009.

Acknowledgement

Special thanks to Sr. Bettina Ilaisa for initiating the idea and inviting the PTC team from the hospital. Thanks also to Sr. Ruth Baloiloi, for excellent organization of the administrative requirement of the course.

Thank you to Dr L. Samof for this experience of facilitating the PTC course

Special thanks also to the Alotau PTC team of Dr. Perista Mamadi, Dr. Kepas Kapeo, and HEO Golaiath Leonard for their invaluable assistance.

Thanks also to the Alotau General Hospital Management team, lead by Mr. Billy Naidi (acting CEO), and Dr. Noel Yaubihi (DMS), for releasing and allowing the PTC team to run the course. We also appreciate the support of Mr. Goliath Leonard.

Special thanks also go to the Catholic Women catering team for the wonderful meals we had during the course and the United Church for the use of the recreational hall.

Thank you to Catholic Bishop of Alotau, Most Rev. Francesco Panfilo, SDB, for allowing the budget allocation for the cost.

Dr. Pauline Wake
Emergency/Outpatient Medical Officer
Local PTC Instructor

Footnote: by Dr. Lucas Samof – PTC Coordinator/Instructor/Trainer – Alotau, PNG.

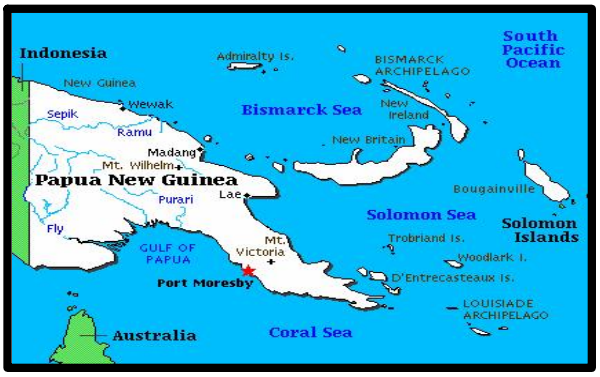
This was a special PTC participants course for me personally, because I was called to take on another urgent task during that week. Hence, I thought it was a good opportunity for me to allow my trainee Anaesthetic Registrar (Dr. Pauline Wake), who have been a local PTC Instructor for 2 years, to take on full responsibility to organize, coordinate and run the course.

Has her report above indicated that she had benefited more from the PTC course as the participants themselves. This is an important role of the PTC course in the Pacific as we have experienced.
I spend most of my time on training of trainers as it has much more impact on the outcomes than the participants training, in my experience.
You "kill to birds with one stone" so to speak.

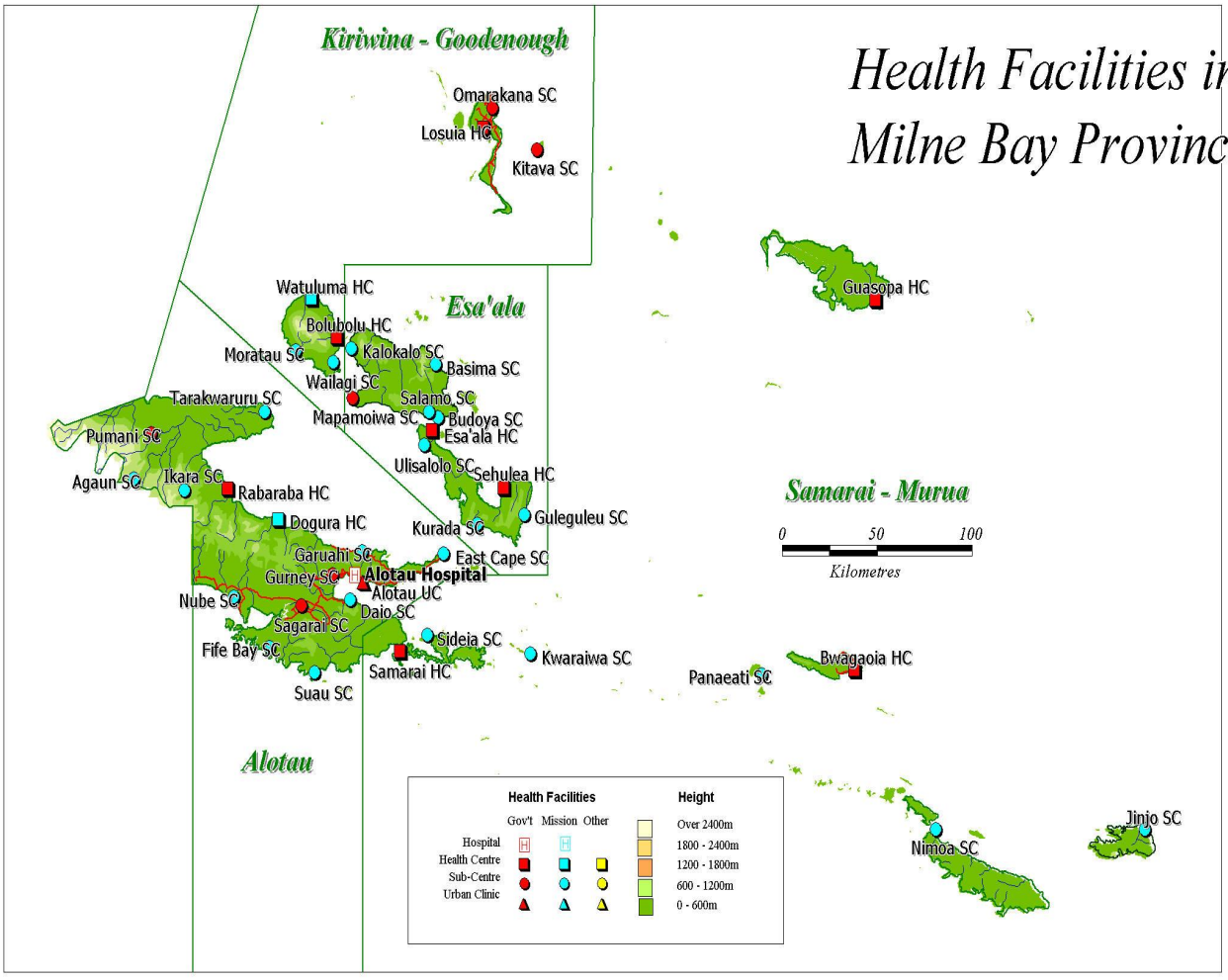
Lucas Samof.

Anaesthetist – Alotau General Hospital, Papua New Guinea.

Map of Papua New Guinea



- **MAP OF MILNE BAY & HEALTH FACILITIES**



Appendix 1. PTC Program

Two Days PTC Course program – Catholic Health Services
Alotau 28th – 29th September, 2009

TIME		TOPIC	INSTRUCTOR
DAY 1			
8.00	5 mins	Devotion/Opening prayer	Local
8.05	5 mins	Opening remarks/Welcome	Team
8.10	15 mins	Introduction/Grouping – team	Dr Wake
8.25	20 mins	Introduction to PTC/local trauma perspective	Dr Wake
8.45	15 mins	MCQs	Dr Wake
9.00	20 mins	Demonstration scenarios – bad management	Team
9.20	15 mins	PTC system	Dr Wake
9.35	30 mins	Primary survey	Dr Kepas
10.05	25 mins	**Morning tea break**	
10.30	30 mins	Airway and Breathing	Dr Kepas.
11.00	30 mins	Circulation and Shock	Dr Wake
11.30	30 mins	Demonstration scenario – Primary survey	Team
12.00	50 mins	**Lunch break**	
12.50	15 mins	Reassessment and Monitoring	Dr Wake
13.05	85 mins	Skill stations and workshops - Basic Airway - Primary Survey/Needle chest compression/3 sides seal - Cervical Spine protection/Log roll	 Dr Kepas Dr Mamadi Dr Wake
14.30	30 mins	**Afternoon tea break**	
15.00	20 mins	Secondary Survey	Dr Kepas
15.20	60 mins	Skill stations and Workshop - Secondary survey - Case scenarios	 Drs Kepas/Wake Dr Mamadi
16.20	10 mins	Overview and Summary	Dr Mamadi
16.30		End of Day 1	

DAY TWO(2)

TIME		TOPIC	INSTRUCTOR
8.00	5 mins	Devotion/Prayer	Local
8.05	15 mins	Questions/comments	Dr Kepas
8.20	40 mins	Head/Spinal injuries	Dr Mamadi

9.00	30 mins	Abdominal/Pelvic injuries	Dr Kepas
9.30	30 mins	Case Scenarios (same case)	Team
10.00	20 mins	**Morning tea break**	
10.20	30 mins	Chest injuries	Dr Mamadi
10.50	20 mins	Limb injuries	Dr Mamadi
11.10	30 mins	Case Scenarios (same case)	Team
11.40	20 mins	Trauma in Children	Dr Kepas
12.00	60 mins	**Lunch break**	
13.00	20 mins	Trauma in Pregnancy	Dr Wake
13.20	30 mins	Burns	Dr Mamadi
13.50	90 mins	Workshops - Burns Fluid Calculation - Analgesia/Coma - Glascow coma scale (GCS)	 Dr Mamadi Dr Kepas Dr Wake
15.20	20 mins	MCQs	Dr Kepas
15.40	20 mins	Course Evaluation	Team
16.00	10 mins	Certificate presentation and Close	

Appendix 2

MULTIPLE CHOICE QUESTIONS

PTC MCQ
2001

1 "Primary Survey" is done to identify all of the following EXCEPT

a. airway obstruction
b. dislocation of joints
c. abdominal injuries
d. severe external/internal haemorrhage

2
All of the following are signs of airway obstruction EXCEPT

a. stridor
b. tachypnoea
c. cyanosis
d. snoring

3 Primary Survey should be performed

a. after the secondary survey
b. within 30 minutes
c. after airlifting the patient to a tertiary centre
d. within 2-5 minutes

4 AVPU deals with

a. rapid neurological evaluation
b. rapid cardiovascular evaluation
c. triage
d. mass disaster

5 When assessing circulation feel for

a. radial pulse
b. temporal pulse
c. carotid pulse
d. cardiac impulse

6. The most common cause of airway obstruction in an unconscious patient is

a. chest injury
b. foreign body in the airway
c. falling back of the tongue
d. fracture of nasal bones
e. fractured larynx

7. The amount of blood loss for fractured shaft of femur is up to

a. 500ml
b. 750ml
c. 1000ml
d. 1500ml
e. 2000ml

8. The commonest type of shock in a trauma patient is

a. cardiogenic shock
b. haemorrhagic shock
c. neurogenic shock
d. septic shock
e. none of the above

9. First line intravenous fluid resuscitation is

a. normal saline or Ringer's lactate
b. 5% dextrose
c. 5% dextrose normal saline
d. blood
e. Haemaccel

10. Cervical spine stabilisation is done during the assessment of

a. airway
b. breathing
c. circulation
d. disability
e. exposure
f. none of the above

11. When airway control is being established on a victim with multiple trauma, the most important consideration should be

a. cervical spine injury
b. rib fracture
c. pneumothorax
d. hypovolaemia due to blood loss
e. fat embolism

12. The most reliable method of securing the airway is by using

a. a Guedel's airway
b. nasopharyngeal airway
c. oesophageal obturator airway
d. endotracheal intubation
e. laryngeal mask airway

13. In treating open pneumothorax with occlusion dressings on should

a. seal four sides
b. seal three sides
c. seal two sides
d. seal one side
e. leave unsealed

14. If a tension pneumothorax is found during the primary survey, it should be

a. decompressed immediately
b. decompressed by chest drain insertion as part of the secondary survey
c. decompressed after chest Xray confirmation
d. decompressed when tracheal shift develops

15. If a patient becomes unstable at any time, the management is

a. arrange transfer to a major hospital
b. repeat the secondary survey
c. administer a fluid bolus
d. perform a neurological examination
e. perform a primary survey

New Questions formulated:

16. In a severe head injury, your priority is
    a. take to surgery
    b. airway assessment
    c. give pain relief
    d. give antibiotics

17. If a patient with head injury has a dilated left eye, where is the injury?
    a. Left side of the head
    b. right side of the head

18. Which is not a sign of basal skull fracture?
    a. raccoon's sign
    b. Bleeding from the ears
    c. Tracheal shift
    d. Clear fluid from the nose
    e. Battle's sign

19. Which is not true of abdominal injuries?
    a. Common site of "hidden haemorrhage"
    b. Contains vitals organs like the spleen – can bleed
    c. Management starts with ABCDE
    d. Do not insert gastric tubes if there is abdominal distention

20. If there is blood in the urethral meatus, then
    a. Insert an IDC
    b. Do not insert an IDC

21. Torniquet is applied
    a. First if there is bleeding
    b. If pressure dressing and all else does not work
    c. At Kurada and not removed until arrival in alotau 12 hours later

22. The first sign of compartment syndrome is
    a. Edema
    b. Pain
    c. Reduced sensation
    d. Muscle weakness
    e. Reduced pulse/capillary refill

23. Late signs of compartment syndrome is
    a. Edema
    b. Pain
    c. Reduced sensation
    d. Muscle weakness
    e. Reduced pulse/capillary refill

24. Because children are small, you should manage them differently from adults in trauma cases
    a. True
    b. False

25. What is the first management of pregnant mother with trauma?
    a. Give pain relief/antibiotics
    b. Think of the fetus first
    c. ABCDE

26. In patients with burns to the face, BEWARE of
    a. Pains of the face
    b. Infection
    c. Airway obstruction
    d. Shock
    e. Unable to eat/drink