

## Evaluation of a Primary Trauma Care Course

Delivered in the RACS Training Centre at Hospital Nacional Guido Valadares (HNGV)

11-12 April 2018

### Course Instructors

Dr Joao Ximenes, *Course Director*  
Dr Colombianus da Silva, *Course Director*  
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Dr Trafford Fehlberg, *RACS Surgeon*  
Dr Robert Grace, *RACS Anaesthetist*  
Dr Cath Grace, *Volunteer Anaesthetist*

Coordinator: Ms Stephanie Korin, *RACS Monitoring & Evaluation Officer*

### Course Participants

Abelita P.S.P Magno Ximenes	Jacinto Vaz
Albertina Barros de Jesus	Joao de Jesus Arcanjo
Andre Soares Claver	Luzelia Marta Sequeira Saldanha
Domingos Sousa da Costa	Maria Francisca Soares
Deonisio Caetano de Jesus	Mateus Cardoso
Dioneia Benevides Monteiro	Nelson Eugenio Pires Goulart Monteiro
Elisabeth dos Reis Madeira	Octaviana das Dores Temaluru
Filomena Monica	Rina de Araujo Franco
Florentina do Rego Guterres Sousa	Semantha Viegas
Flavio Jose Boavida	Teresa Angelina Deago P. Rodrigues
Teofilo Soares Pereira	

### Overview & Context

The Primary Trauma Care (PTC) course was delivered by a predominantly Timorese faculty with input from RACS clinicians. This was the second time that the PTC course has been led in Timor-Leste by a national Course Director.

The PTC course is part of the Royal Australasian College of Surgeons' (RACS) Foundation Year training program curriculum. The 21 course participants included 19 trainees enrolled in the Foundation Year Program (cohort 3) plus 3 Timorese doctors. The other 11 Foundation Year trainees completed the PTC course in November 2017.

The purpose was to teach the trainees how to effectively provide basic trauma care and was especially directed at doctors who will be working at the Community Health Centre level. The standard 2-day PTC program was delivered.

To assess the outcomes of the course, participants were asked to complete a pre- and post-course multiple choice questionnaire (MCQ) and evaluation form and they were asked to rate their confidence in managing a variety of trauma cases, before and after the course. Data was collated from pre- and post- course evaluation forms (n=21) by Mr Lauriano Fernandes and analysed by Ms Stephanie Korin. Detailed responses to all questions are in appendix 1.

## Summary of Results

The questionnaires demonstrated that by the end of the course the group had greater knowledge and more confidence in providing basic trauma care. Specifically, many participants demonstrated an understanding of the importance of the ABCDE - primary and secondary surveys as vital elements in trauma assessment and management.

### MCQ – knowledge assessment

The majority of participants (76%, n=16) scored between 10 and 16 out of a possible 20 marks on the pre-course knowledge assessment (range 7-16). On the post-course assessment, 85% scored between 16 and 20, with no participant scoring less than 14 (range 14-20).

### Confidence

Before the course, 18 participants self-rated their confidence in managing eight hypothetical trauma scenarios as between '*not at all confident*' and '*neutral*' 91% of the time. After the course, the same 18 participants rated themselves in managing the same cases as either '*confident*' or '*completely confident*' 82% of the time.

Before the course, participants were asked about the last trauma case they saw that worried them and how they managed it. 11 participants responded. The most common responses were *head trauma* (n=4) and *femur trauma* (n=2). *Burns, chest trauma, electrocution and a child with major haemorrhage from a traumatic amputation* were also mentioned. The most common way of managing these cases were by *performing ABCDE* (n=4).

After the course, they were asked what they would change in their management of those cases that worried them. Five said they would *apply the systematic approach to assessing and treating the patient* and two mentioned they would control their nerves and remain calm.

### Knowledge

Before the course, the most common things the participants said they wanted to learn/achieve were:

1. *Trauma management including haemorrhage, chest, spine, head and multiple fracture trauma, trauma in pregnant women and children* (n=14)
2. *Burns management* (n=4)
3. *Shock management* (n=2)

After the course, participants were asked what the most useful thing was that they learnt and what changes they planned to implement in their approach to trauma management as a result.

11 of 21 participants referred to the *systematic assessment using ABCDE* approach / the *primary and secondary surveys* as the most useful part of the course. 9 participants went further to say that they will apply this approach in their practice. Other participants cited *Pneumotorax or tension pneumotorx* (3) increased confidence (4), *how to intubate a patient* (2), *decompression and chest drain* (3) and *calculating IV fluid* (2) as the most useful part of the course.

### Course Feedback

Participants were asked to provide feedback on each topic covered during the course. Overall, all topics received overwhelmingly positive feedback with 10 of 20 topics receiving ratings of either 'Good' or 'Very Good' by all respondents. The other 10 topics received ratings 1 or 2 'Average' ratings, and the remaining either 'Good' or 'Very Good'.

The most popular topics were *the ABCDE of trauma & primary/secondary surveys*, and *Burns*. 11 participants agreed that the scenarios / skill stations were the best part of the course.

When asked what they would change about the course, six participants suggested a longer course duration including more time for scenario practice. One requested handouts for all topics. Five misinterpreted the question.

### Observations & Recommendations

1. The HNGV Anaesthesia Department was able to share the goat specimen procured for the PTC course and initiate an impromptu Surgical Airway Workshop to practice chest tube insertion. All of the Diploma in Anaesthesia trainees and two Masters candidates practiced and passed the procedure. For future PTC courses this should be notified to the Anaesthetic Department so they can repeat the skills practice yearly.
2. The following two questions on the evaluation form were misinterpreted or not answered by most participants and could be re-worded or explained by the course instructor, at the time of the survey.  
*'How did you hear about the PTC course?'*  
*'What would you change?' [specify 'about the course' not their practice]*

### Acknowledgments

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