

Primary Trauma Care Refresher Course- Kokoda, Oro Province, PNG.

Introduction

The Primary Trauma Care (PTC) course has been delivered in Papua New Guinea (PNG) since 2002 by the Emergency Medicine Fraternity under the South Pacific Society for Emergency Medicine. There has been 60 courses conducted in all the 20 provinces in PNG with over 2000 participants and the majority of whom have been non- doctors. The course is designed at empowering all levels of health workers in resource poor environments to deliver a reasonable standard of care to acutely injured trauma patients.

A modified version of the Primary Trauma Care course was conducted to health staff who are stationed along the famous Kokoda track. The one day course was conducted at the Kokoda Memorial Health Centre on the Oro province side of the track. It was a refresher course to some of the participants while for others, it was their first time to have a course on managing trauma and injured patients.

Logistics

Location:	Kokoda, Oro Province, PNG.
Venue:	Kokoda Memorial Health Centre
Dates:	5 th December 2012
Lead Co-ordinator:	Ms Vicki Assenheim (Kokoda Development Program Health Adviser)
Local Co-ordinators:	Ms Dulcie Mausen and Mr Duon Koi (KDP Community Health Officers)
Instructor:	Dr. John Tsiperau (Emergency Physician- Port Moresby)
Participants:	1 Health Extension Officers 2 Nursing Officers 16 Community Health Workers
Funding:	Australian Aid (AusAid) through Kokoda Development Program (KDP)

Comments

The course ran well with the 19 participants most of whom came from the local health facilities while others came from the health facilities along the Kokoda track. The course was delivered as a refresher course to most of the participants who attended a similar course in 2011 which was conducted by Dr. Julius Plinduo. For a few of the community health workers, this was their first trauma course. Lectures were delivered on the key aspects of Primary Trauma care in the morning sessions while the afternoon was spent demonstrating emergency procedures. A snake bite lecture and demonstration of the first aid for snake bites, the Pressure Immobilization Bandaging (PIB) was also given in the afternoon session. All course participants were given copies of the PTC Course Manual and a snakebite PIB placard.

The topics which were covered were assessment and management of airway plus cervical spine, breathing and circulation problems, secondary survey and log rolling injured patients. Emergency life saving techniques like basic airway manoeuvres, crico-thyrotomy, needle decompression of a tension pneumothorax, 3 side occlusive dressing for an open pneumothorax wound and pelvic binder application in open, unstable pelvic fractures were demonstrated to the participants. The participants were also shown how to calculate the weight of paediatric patients as well as their fluid requirements for resuscitation and maintenance purposes.

Pre- course and post- course tests which consisted of 10 multiple choice questions on the course content were carried out to determine the difference in the knowledge base of the participants before and after the course. Only 17 out of the 19 participants did both tests. In the pre- course test, the average score for all participants was 4.64 and 9 out of 17 (53%) passed with 50% or more of the questions. The range was 1/10 to 8/10. In the post – course test, the average score was 6.35 with score range of 3/10 to 9/10. Of the 17 participants who did both tests, 13 (76%) passed with 50% or more of the questions correct and this was a 23% improvement from the pre- course test.

Some of the main challenges that were encountered with the delivery of the course were:

1. The participants were a mix of both those who attended a similar course last year and those who were attending for the first time. Tailoring a course that suited both groups was a challenge as some had the basic knowledge of primary trauma care and some had none.
2. The allocated one day was not enough to deliver a more comprehensive course which would have catered for the two groups of participants mentioned in point 1.
3. There was a limited number of equipment and mannequins to deliver the necessary skills and knowledge to attend to seriously injured or sick patients. For e.g. advanced airway skills like intubation was not covered because there was no intubate able mannequin.

In summary, the course was well received by the participants according to the course evaluation forms that they filled in after the course. They also commented on the limited time that was allocated for the course as they would have like to gain more. Based on the MCQ test results, most of the participants did gain something from the course which will definitely be of use to them in their work places to deal with acutely ill and injured patients.

Recommendations

1. That the participants who will be attending the course are known before the course is delivered so that the course contents can be tailored and focused towards these levels of health care professionals.
2. The number of days could be extended to cater for the low cadre of health workers like the community health workers and village health volunteers to give them a better chance to absorb more of the course contents.
3. More communication is needed between the local coordinators and the facilitators of the course to better plan and deliver the course in a more organised manner.
4. There needs to be consistency with the person delivering the course so there is continuity in the course contents which is delivered each year.
5. The course facilitators need to purchase some more equipment like intubate able mannequins to aid the instructors to help the participants who are the primary health care providers the essential skills of securing the airway with intubation or Laryngeal Mask Airway (LMA) insertion.
6. The cardiolife cardiac monitor at the Kokoda Memorial Health Centre is missing its battery, cardiac leads cable and its power cord cable. These need to be replaced for the equipment to be used for its intended purpose.

In conclusion the trip to Kokoda was a good experience for the instructor to be involved in teaching and imparting essential knowledge and skills to rural health care professionals who are otherwise isolated most of the time and work in relative isolation. It is hope that this great initiative by the Kokoda Development Program (AusAid) continues so that these group of health professions continue to up skill their knowledge and skill base to deal with the challenges they face in their isolated work environments.

Dr. John R. Tsiperau

Emergency Physician- Port Moresby, PNG.

Photograph of Instructor and Participants- Kokoda PTC Refresher Course

