Purpose of Visit

The purpose of the visit to Mongolia in June 2005 was to introduce the Primary Trauma Care Course to Mongolian health professionals and health authorities.

Executive Summary

The two-day PTC Course is intended to provide the basic knowledge and skills necessary to identify and treat victims of trauma who require rapid assessment, resuscitation and stabilisation of their injuries. The course particularly highlights the need for early recognition and timely intervention for specific life threatening conditions. The course is intended to provide material that represents an acceptable method of management for trauma, by lectures, practical skills sessions and case-based scenario teaching. It provides the foundation on which doctors and other health workers can build the necessary knowledge and skills for trauma management with minimal equipment and without sophisticated technological requirements.

The goals of the PTC program are:

- To teach the basic principles of trauma resuscitation and management, adaptable to the local conditions and equipment.
- To hand over responsibility for the teaching and administration of the course to local medical staff.

In 2004 the Primary Trauma Care Foundation received a request from the Mongolian Society of Anaesthesiologists to introduce PTC to Mongolia. This request came from Dr Ganbold Lundeg, who is a University Lecturer in Anaesthesiology and sits on numerous government advisory committees.

The course was held on June 27th to 28th at Hospital No. 1 in Ulaan Baator. It was attended by ten doctors. The course was conducted in English and completed by all participants successfully.

Trauma in Mongolia

Mongolia has a population of 2.6 million and an area of 1.56 million km2, which is similar in size to the Australian state of Queensland. This makes it one of the most sparsely populated countries on earth.

According to the Mongolian Ministry of Health, injury was the third leading cause of morbidity in 2002 and the leading cause of death among people aged 20-55 years old. Interpersonal violence and motor vehicle incidents are the leading cause of injury-related hospitalisation.

Mongolia is divided into 21 provinces (Aimags), each of which have hospitals equipped with operating theatres but not intensive care facilities. Each Aimag is divided into a number of Sums, which are regional administrative areas. Each Sum has a small hospital/clinic, which is staffed by one or two doctors plus a similar number of nurses. These clinics function as primary health centres and have limited facilities for resuscitation of trauma victims. Limited intensive care facilities are available in Ulaan Baator. Transportation systems are poorly developed by western standards. Outside of Ulaan Baatar very few roads are sealed and those that are, may be in poor condition.

There has been little formal training of healthcare workers in trauma management outside of Ulaan Baator. Currently the World Health Organisation is trialling a training program based on the "Essential Surgical Care Manual" in a number of Aimags. Whilst the PTC manual is part of this manual, PTC itself has not been included in the training program. It is not clear at this stage why this is so.

Key Personnel

Dr Ganbold Lundeg, Lecturer in Anaesthesiology, Health Science University
Dr Rob McDougall, Secretary, PTC Foundation
Dr David Pescod, Australian Society of Anaesthetists Visiting Lecturer
Dr Douglas Wilkinson, Chairman, PTC Foundation
Dr Poom Tritrakarn, Assistant WFSA lecturer
Professor Thara Tritrakarn, Chairman, Bangkok Anaesthesia Regional Training Centre

Itinerary

24thJune	Travel from Melbourne to Beijing
25th June	Travel from Beijing to Ulaan Baatar Planning meeting with Dr Ganbold
26th June	Visit to Sum Hospital in rural area
27th June	Day 1 PTC Course
28th June	Day 2 PTC Course
	Meeting with Dr Govind, WHO representative Meeting with Dr Jargalsaikhan, Director, Medical Services Department, Ministry of Health
29th June	Attendance at Hospital Number 1 Grand Round Tour of Hospital Number 1 Meeting with Dr Douglas Wilkinson Travel to Terelj National Park for sight-seeing
30th June	Return from Terelj National Park Meeting with Drs Thake and Young from SOS international
1st July	Tour of Child and Maternal Hospital Lecture on Paediatric Trauma to staff of Children's Hospital Tour of Hospital Number 3 Travel to Beijing
2nd July	Travel from Beijing to Melbourne via Hong Kong, with lunch in Hong Kong with Dr TW Lee, PTC co-ordinator for China.

Details of PTC Course

This was the first PTC course in Mongolia. The course was attended by ten participants (listed in appendix 1), who were generally senior anaesthetists and intensivists from the major teaching hospitals. All understood English and were involved in teaching and curriculum design for either anaesthesia trainees or medical students.

The course format followed the standard format, with an emphasis on small group teaching methods. Both afternoons were given over to scenario teaching. This was the first occasion that majority of the participants had experienced scenario teaching.

I was the sole instructor but received excellent assistance from Dr Poom and Dr Wilkinson on the afternoon of day two.

The course manual had been translated into Mongolian prior to the visit by Dr Tunga from the Paediatric Hospital; however, it was not possible to distribute this to participants prior to the course. It was later discovered that a separate translation had been completed by the WHO as part of the "Essential Surgical Care Manual".

All participants completed the course and all performed well in their scenarios. All undertook the Multiple Choice Question paper. Two participants recorded scores of 23/28 on the MCQ. The lowest mark was 9 and this was from a candidate who had relatively poor English. This candidate performed two excellent scenarios and demonstrated a good grasp of PTC concepts throughout the course. The failure of the candidate to achieve a higher mark may well reflect the difficulties of non English speaking people and MCQ tests in English. Questions with double negatives were especially problematic for the participants.

At least four of the participants would make excellent instructors. I have approached three of these potential instructors and they have expressed interest in undertaking instructor training.

Feedback from the participants was generally extremely positive. Some participants requested a longer course and nearly all enjoyed the presentation and learning formats.

Future of PTC in Mongolia

There are a number of possible models for PTC to follow in Mongolia:

1. Incorporation of PTC into the WHO training programs developed around the "Essential Surgical Care Manual".
2. Incorporation of PTC into Medical School Curriculum
3. PTC stand alone program

Incorporation of a two day PTC program into the WHO program was proposed to the WHO representative by Dr Ganbold and myself. This would allow a coordinated teaching of health care workers in the regional areas where primary trauma management education is vital. I consider this the ideal way of propagating PTC in Mongolia. There would need to be some minor modification to the course prior to teaching it in more remote areas.

Option 2 would follow models similar to that adopted in Fiji at the Fiji School of Medicine. The disadvantage of this approach is that medical students have little experience of trauma patients and their management. In my experience this diminishes the effectiveness of an interactive practical course such as PTC, but it would mean that a large number of doctors could be taught quite rapidly.

Option 3 is the least desirable, because it would be harder to establish a completely new program than run as part of an existing program. It is, however, feasible. The involvement of other healthcare workers, including surgeons, general doctors and nurses would be vital. Sponsorship would need to be found. I believe that there are a

number of organisations that may be interested in sponsoring a PTC program in Mongolia. These include public companies and community organisations, which already have interests in Mongolia.

Suggestions for Course Design

It is vital that all the course materials, including slides, case scenarios, MCQ and instructor manual, be translated into Mongolian for future courses. This will help older health workers participate effectively in the course. I was fortunate to have participants who understood at least some English but this cannot be relied upon for future courses involving external instructors.

As an instructor I enjoyed this course immensely, probably more than any previous PTC course that I have run. I feel that this was because the audience, after some ice-breaking, were so receptive and keen to be involved.

The use of the MCQ in English when examining non English speakers should be avoided. It is recommended that the use of double negatives in the MCQs be reviewed.

The teaching on the management of head injuries needs review with adaptation to Mongolian conditions. This should be easily achieved with input from Mongolian doctors.

Peripheral Activities

The tours of the various hospitals were particularly interesting, particularly the Sum hospital visited on day two. This gave a great insight into facilities and training in the more remote areas.

It was wonderful to meet with Mongolian anaesthetists and see the conditions under which they work.

The success of the WFSA's Bangkok Anaesthesia Regional Training Scheme was most evident. Seven graduates of this program work at the paediatric hospital and they displayed tremendous enthusiasm for, and knowledge of, paediatric anaesthesia. The $10000 USD that it costs per student per year of education and training in Bangkok represents great value.

The effect of Dr David Pescod's previous visits to Mongolia is also evident. He has helped set the curriculum for anaesthesia training in Mongolia and the development of his textbook will only continue this.

Summary

The initial PTC course in Mongolia can be regarded as a success. The format and teaching style proved popular amongst participants and a number of potential instructors were identified.

The potential benefits of the PTC course have been put forward to the Mongolian Ministry of Health and WHO.

Ideally PTC should be incorporated into existing WHO activities in Mongolia but the potential exists for PTC to stand alone provided sponsorship can be found and various health professional groups agree to cooperate in its introduction.

Acknowledgements

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The support of the World Federation of Societies of Anaesthesiologists in funding Professor Thara's visit is also gratefully acknowledged. David Pescod's advice and guidance were vital to the success of the visit and Dr Ganbold's enthusiasm and organisational skills were also essential inputs.

Appendix 1 Participants

Dr Sanjaa Burmaa, Maternal and Child Health Research Centre

Dr Solongo Tumur, Hospital #1, Health Science University, Mongolia

Dr Dalkhsuren Boditsetsig, Maternal and Child Health Research Centre

Dr Ganbold Lundeg, Health Science University, Mongolia

Dr Urantsetseg Baterdene, Hospital #1, ICU

Dr Shurenchimeg Shagdar, Hospital #1, ICU

Nurse Unurzaya Lkhagvajay, Hospital #1

Dr Bayanmunkh Rentsendorj, Military Hospital

Dr Tumenbayar Dashzeveg, Yonsei Friendship Hospital

Dr L Bulgau, Central Clinical hospital for the Special Employees