Executive Summary

Globally pain (of all types) is often an unrecognised and inadequately treated problem. Fortunately many effective pain management strategies are “low tech” and cheap and can offer significant improvements to an individual’s quality of life.

The Essential Pain Management (EPM) workshop has been developed:
- To improve knowledge about pain
- To provide a simple framework for treating pain
- To address pain management barriers

We ran a series of EPM workshops at the Sylhet Medical College in Sylhet, Bangladesh
- EPM Workshops on Tuesday 26th, Wednesday 27th and Thursday 28th May

Unfortunately we were unable to run any instructor courses during this visit, due to the unavailability of participants to attend for more than one day, however a couple of the workshop participants from the first day assisted with the lectures and group discussions on the third day.

The objective of the visit was to introduce EPM to another regional centre in Bangladesh and to continue to support Professor Akhtaruzzaman in his efforts to promote EPM throughout Bangladesh.

Recommendations Summary

1. Encourage the running of further EPM workshops at Sylhet Medical College. This would likely require assistance from trained instructors from Dhaka. Negotiate with SMC to ensure potential instructors would be available to participate in the instructor workshop to ensure the viability of EPM in Sylhet.

2. Encourage multidisciplinary participation in the workshops (particularly nursing staff).

3. Professor AKM Akhtaruzzaman would like to run a 3 day EPM program in another regional centre in Bangladesh, Bogra (northern Bangladesh) in 2016. This may require assistance from external instructors.
4. Continue to support Professor AKM Akhtaruzzaman's efforts to promote EPM in Bangladesh through ongoing multidisciplinary workshops in Dhaka.

5. The Bangladesh Society for the Study of Pain (BSSP) continues to work closely with regulatory authorities as well as both medical and nursing schools to address local pain management barriers such as access to opioids and education.

6. Dr Rush will continue to liaise with Professor AKM Akhtaruzzaman with regards to the development of EPM in Bangladesh.

Background

Bangladesh has a population of approximately 160 million. It has a very low per capita GDP but in recent years there has been strong economic growth. Dhaka, the capital has a population of approximately 7 million (15-20 million in the greater Dhaka area).

Sylhet is a major city located on the banks of the Surma River in north east Bangladesh, approximately 240 km from Dhaka. The population of the city of Sylhet is approximately 500,000 however the Sylhet district has a population of close to 3,500,000. Sylhet is surrounded by tea estates, sub-tropical hills, rain forests and river valleys. Remittance has been a key element to the economic growth of the city of Sylhet and also the region. The money is mainly sent by expatriates of Sylhet living abroad, particularly the United Kingdom.

Sylhet M.A.G Osmani Medical College and Hospital is a government medical college which was first established in 1936. It offers a Doctor of Medicine (MD) in Anaesthesia. The Professor and Head of the Department of Anaesthesia & ICU is Professor Dr. Md. Helal Uddin. The hospital has 900 beds however it usually accommodates up to 1800 patients.

The EPM Workshop was developed by Wayne Morris and Roger Gouke with the assistance of ANZCA to improve pain knowledge, to provide a simple framework for managing pain and to address pain barriers. Pilot courses were held in Papua New Guinea in April 2010 and workshops have since been held in a number of countries in the Pacific, Asia, Central America, Africa and most recently Russia. The management framework we use is RAT, standing for Recognise, Assess and Treat. This has been used very successfully to discuss common and also difficult pain management scenarios.

Course coordination

Professor AKM Akhtaruzzaman was the main coordinator of the EPM workshops in Sylhet. He is based in Dhaka at the Bangabandhu Sheikh Mujib Medical University (BSMMU) as the Professor of Anaesthesiology and co-ordinator of the MD (Anaesthesia) resident program. He was accompanied by Dr Dilip Kumar Bhowmick. Both Professor AKM Akhtaruzzaman and Dr Kumar also acted as instructors in Sylhet.
External instructors

1. Professor AKM Akhtaruzzaman (PA), Professor of Anaesthesiology, BSMMU, Dhaka, Bangladesh

2. Dr Dilip Kumar Bhowmick (DK), Anaesthetist, BMSSU, Dhaka, Bangladesh

3. Dr Moira Rush (MR), Anaesthetist, Victoria, Australia

4. Dr Rashmi Patel (RP), Anaesthetist, Perth, Australia

Course Participants

See Appendix 1

Twenty (20) doctors attended the first one day EPM Workshop in Sylhet on Tuesday 26th May. Most of the doctors were consultant anaesthetists however we did have representatives from orthopaedics, plastic surgery, internal medicine and cardiology. Places for day one of the course were preferentially given to senior staff members.
We ran the course on the second day, Wednesday 27th May, for 20 doctors and 1 physiotherapist. While the majority of the doctors were anaesthetic trainees we also had one trainee from obstetrics and gynaecology and one from orthopaedics. We were unable to run the instructor program due to the fact that very few of the participants from the first day were available on the second day. Two of the anaesthetic consultants who attended on day one also came on day two. They assisted with the lectures later in the day.

On the third day we had a new group of participants again. We had 23 doctors, most of them training to be anaesthetists.

Course Programs

The workshop program is shown in Appendix 2. Due to significant time restrictions we ran the courses from 830 – 1430 each day (to coincide with the participants’ normal working hours).

EPM Workshops

The standard EPM workshops were used on all days of the program with some small modifications in order to ensure that all the material was covered adequately. We had a short break for morning tea after the interactive lectures and group discussion about the barriers to pain management. A late lunch was
provided at the end of the day following the small group discussions. In these groups the participants discussed a number of cases using the RAT approach.

_EPM Instructor Workshop_

As previously mentioned we were unable to run the instructor workshop on day two of the program.

_Venue and Catering_

The workshops were held in a meeting room next to the Intensive Care Unit at Sylhet Medical College.

Morning tea and lunch were provided by UniHealth. The food was excellent and we were very well fed.

_Teaching materials_

All printed teaching materials (manuals, pre and post tests and feedback sheets) were printed in Sylhet.

_Assessment_

The course participants completed a 25 question test at the beginning and at the end of the workshop. The graph only shows data from participants who completed both the pre- and post- tests. A number of participants were not present for the pre-test on day two and three.

Pre-test scores were reasonably high however there was some improvement in the post-test scores.

Some of the questions proved to be problematic. Misconceptions about the physiological consequences of acute pain and the importance of non-drug treatments in chronic pain were evident in the post tests.

18. Acute pain helps wounds to heal faster.

22. Drug treatments are more effective than non-drug treatments in chronic pain.

The wording of question 10 caused a great deal of confusion and the difficulty in accessing morphine for analgesia may reflect the lack of familiarity with its use in different populations.

1. Paracetamol is very safe, even when high doses are used.

12. People of the same age and weight need the same dose of morphine.

13. Morphine shouldn't be used in old patients.
The test scores are out of a maximum of 25. On Days 2 and 3 we went through the post-test answers with the participants at the end of the day and explained any incorrect answers that were of concern.

![Mean Pre- and Post- Test Scores](chart.png)

The test scores are out of a maximum of 25. On Days 2 and 3 we went through the post-test answers with the participants at the end of the day and explained any incorrect answers that were of concern.

Feedback

*See Appendix 3.*

Participants completed a feedback form at the end of each course. Overall the feedback was positive and participants either agreed or strongly agreed that the course was worthwhile. The RAT approach to pain management was well received and many participants indicated that they would be able to use the knowledge gained to improve the way they assess and manage pain. Many felt that they would be more confident to prescribe opioids in the future and that some of their misconceptions about opioids and pain had been addressed. This was not universal however. The interactive nature of the program was a positive feature for many of the participants. Overwhelmingly it was thought that the program should be repeated and made accessible to other health care professionals, particularly junior doctors. The shorter days did cause some concern due to the lack of time for more in depth discussion. Increased opportunity to discuss more cases in a group setting was suggested in a number of the feedback forms.

A number of participants indicated that they were interested in learning about interventional pain techniques and in fact wanted more in depth teaching on all aspects of pain and its management. It was suggested that pain management protocols should be established and used by all disciplines throughout Bangladesh.

Some of the informal comments made by the participants over the course of the 3 days that we spent in Sylhet were enlightening. Many felt completely overwhelmed by the clinical caseload which inevitably relegated appropriate
pain management to the bottom of the priority list. While there was a genuine
desire to be able to relieve pain and suffering it was acknowledged that the
current system simply cannot support any meaningful attempt to do so. Lack of
access to appropriate drugs, monitoring and means of ongoing assessment were
recognised as significant barriers to safe prescribing. Rashmi was able to talk to
some of the junior doctors in Dhaka before she returned home and a common
theme emerged. Without significant change in Bangladesh at all levels it does not
seem likely that pain management will be given appropriate recognition as an
essential component of good clinical medicine.

Animated small group discussions on Day 3 with Dr Dilip Kumar Bhowmick

Presentation of certificates on Day 3 to one of the very few female participants.
There was a significant gender imbalance in all of the groups that attended the
course. Female doctors were very poorly represented.
Financial

The program would not have been possible without the financial support provided by Interplast Australia and New Zealand. The funding provided by Interplast covered travel expenses from both Australia and Dhaka, accommodation and meals in Sylhet and printing costs.

The catering was arranged locally and covered by UniHealth Pharma.

The room was provided free of charge through the Sylhet Medical College.

We are incredibly grateful for this support.

Publicity

There was no specific publicity associated with this trip.

Dr Rush presented a talk on the ‘Role of Tramadol in Postoperative Pain Management’ at a dinner organised by UniHealth Pharma which was well attended.

Rashmi and I had a very interesting discussion with one of the UniHealth representatives about the difficulties of producing and distributing opioids in a highly regulated environment. Only one company is able to produce morphine in Bangladesh and there are significant restrictions that limit availability.

Success and Relevance of the Visit

This series of workshops provided some challenges. While we were able to run the EPM workshops as planned we did have to compromise a little in order to accommodate the local requirements. It is interesting to note that while we had to deliver the lectures between 0830 and 1430, a number of the participants would have in fact preferred more time to go through the material in greater detail with more in depth discussion. Unfortunately the requirements of the institutions do not always reflect the educational needs of the health workers.

As mentioned we were only able to run the workshops from 0830-1430 each day which did mean that we rushed through some parts of the course in order to ensure that we covered all the material. We did however have enthusiastic participants and the feedback that we received was overwhelmingly positive.

We were unable to run the instructors’ course as scheduled which was disappointing. Only 2 of the participants who attended the workshop on Day 1 were able to attend on Day 2.

Professor AKM Akhtaruzzaman was responsible for organising the course in Sylhet from Dhaka and once again he and his team did a fantastic job.

Professor AKM Akhtaruzzaman continues to be a champion of the EPM program in Bangladesh. I am hopeful that some of the participants from the workshops in Sylhet will be able to support his efforts.
Recommendations

1. **Encourage the running of further EPM workshops at Sylhet Medical College with training of instructors.**

Hopefully Professor AKM Akhtaruzzaman will be able to liaise with Professor Helal Uddin to encourage the running of more EPM workshops in Sylhet. This will likely require the assistance of instructors from Dhaka. Training of local instructors will be important to ensure the continued success of the program.

2. **Encourage multidisciplinary participation in the workshops (particularly nursing staff).**

Prof continues to run EPM courses in Dhaka for both doctors and nurses however they are usually done in separate groups. I understand that combining the disciplines poses some difficulties. Certainly the feedback from the participants in Sylhet indicated that multidisciplinary courses would be a welcome addition to the teaching program.

3. **Professor AKM Akhtaruzzaman would like to run an EPM program in another regional centre in Bangladesh, Bogra in 2016**

This will likely require assistance from external instructors. Depending on the logistics it may be sensible to recruit instructors from the region rather than Australia. Prof indicated that he would appreciate our ongoing involvement however I think that it would be prudent to assess the ongoing viability and relevance of the program before committing to further regional courses.

4. **Continue to support Professor AKM Akhtaruzzaman’s efforts in promoting EPM in Bangladesh through ongoing multidisciplinary workshops in Dhaka.**

Dr Rush and Dr Morris continue to keep in regular contact with Prof and are very pleased to support his ongoing efforts to promote EPM in Bangladesh.

5. **The Bangladesh Society for the Study of Pain (BSSP) continues to work closely with regulatory authorities as well as both medical and nursing schools to address local pain management barriers such as access to opioids and education.**

Prof is involved in ongoing discussions with the government regulatory authorities in order to attempt to increase access to opioids in Bangladesh for pain management. He has been able to introduce EPM into the nursing curriculum and he is in the process of developing pain management protocols for use in hospital. An acute pain service (APS) has been established at BMMSU in Dhaka. While an audit of current practice and prescribing would be a useful measure of the effectiveness of the EPM teaching I am unsure exactly how we would go about obtaining this sort of information. We did discuss the possibility of collaborating on a survey of attitudes to pain and pain management in Bangladesh. Again, the logistics would be somewhat challenging. There continue to be significant pain management barriers in all centres in Bangladesh.
6. Dr Rush will continue to liaise with Professor AKM Akhtaruzzaman with regards to the development of EPM in Bangladesh.

Acknowledgements

This program would not have been possible without the incredible efforts of Professor AKM Akhtaruzzaman and Dr. Dilip Kumar Bhowmick. They travelled to Sylhet from Dhaka by bus, not an insignificant undertaking.

Many thanks to Professor Dr. Md. Helal Uddin and his team at Sylhet Medical College for their generous hospitality and to Professor (Dr.) Md. Shahnewaz Chowdhury from Sylhet Women's Medical College.

My deepest gratitude goes to Dr Rashmi Patel who accompanied me to Sylhet from Australia. Her support was invaluable and her insights thought provoking.

Many thanks to the organisations who provided financial or logistical support – Sylhet Medical College, the Bangladesh Society for the Study of Pain (BSSP), UniHealth, Interplast Australia and New Zealand (in particular Julia Keating) and the Australian and New Zealand College of Anaesthetists (namely Paul Cargill and Tiare at FCM Travel).
I am also very grateful to Dr Wayne Morriss for his ongoing support.

Dr Moira Rush
9th June 2015
Appendix 1: Course Participants

EPM Day 1 (26 May) -
Consultants

1. Dr Sabyasachi Roy Anaesthesia
2. Prof Dr Md Shahnewaz Chowdhury Anaesthesia
3. Dr Moninuzzaman Ahmed Internal Medicine
4. Dr M Shahabeddim Cardiology
5. Dr Shishir K Basak Cardiology
6. Dr Abdullah Al Mamun Physical Medicine
7. Dr Md Akkas Miah Anaesthesia
8. Dr Jayanta Kumar Das Anaesthesia
9. Dr Anwar Jahem Khan Anaesthesia
10. Dr Shanker Kumar Roy Orthopaedics
11. Dr Ishtiaque al Paltone Orthopaedics
12. Dr Md Mujibur Rahman Anaesthesia
13. Dr Syed Miftahuddin Anaesthesia
14. Dr Abdul Salam Howladez Anaesthesia
15. Dr Md Abdul Maman Plastic Surgery
16. Dr Kazi Zana Alam General Surgery
17. Dr Chowdhury Md Walid Physical Medicine
18. Dr Md Mustafa Kamal Anaesthesia
19. Dr AKM Zillud Hatu Anaesthesia
20. Dr Sayad Shautrular Alam Anaesthesia

EPM Day 2 (27 May)
Primarily DA Students in Anaesthesia

1. Dr Md Malbubur Rahman
2. Dr Meekeel Rajon Chakabuty
3. Dr S M Manfuzanwap
4. Dr Muhammad Faruqulislam
5. Dr SM Ziaal Hoque
6. Dr Ramondra Singha
7. Dr Sarbani Biswas
8. Dr Anik Roy
9. Dr Sholel Ahmmad Sarker
10. Dr Md Sirajis Salehian
11. Dr Syed Taherul Islam
12. Dr Md Rokanul Haque
13. Dr Md Asaduzzaman Howlader
14. Dr Mirza Omar Beg
15. Dr Jibon Kumar Paul
16. Dr Md Abdul Hasnat
17. Dr Md Mosaddek Hossain
18. Dr Md Shakilur Rahman
19. Mr Md Delwar Hossain Physiotherapist
20. Dr Abdul Latif
21. Dr Umma Samia
EPM Day 3 (28 May)
Primarily DA Students in Anaesthesia

1. Dr Syed Abdusobhan
2. Dr Syed Mahbubul Hasan
3. Dr Zahurul Islam
4. Dr Fuzael Ahmed
5. Dr Munalisa Singha
6. Dr Md Chowdhoury
7. Dr Md Zakiul Alam Khan
8. Dr Md Atikur Rahman
9. Dr Md Ferdoush Rayhan
10. Dr Sayeedur Rahman
11. Dr Manash Talukdar
12. Dr Md Adnan Choudhury
13. Dr Md Nagmul Hoque
14. Dr Astaque Uddih Arif
15. Dr Gias Kamal Chowmasum
16. Dr Zahirul Hasan Khan
17. Dr Md Hasinur Rahman
18. Dr Minhasul Jolem
19. Dr Faysal Ahmed Mohin
20. Dr Abdus Samad
21. Dr Anwar Jahan Khan
22. Dr Nazim Hussain Chowdhury
23. Dr Maruf Ahmed Chowdhury
### Appendix 2: EPM Workshop Program

26-28 May 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Duration (mins)</th>
<th>Lecture / Discussion</th>
<th>Instructor/s</th>
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<tr>
<td>08:30-09.00</td>
<td>30</td>
<td>Welcome Local perspective Pre-test</td>
<td>Prof AKM Akhtaruzzaman</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Dr Moira Rush</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dr. Dilip Kumar Bhowmick</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dr Rashmi Patel</td>
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<tr>
<td>09:00-9:15</td>
<td>15</td>
<td>Introduction</td>
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<tr>
<td>09:15-09:25</td>
<td>10</td>
<td>What is pain?</td>
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<tr>
<td>09:25-09:35</td>
<td>10</td>
<td>Why should we treat pain?</td>
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<tr>
<td>09:35-09:50</td>
<td>15</td>
<td>Classification of pain</td>
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<tr>
<td>09:50-10:20</td>
<td>30</td>
<td>Physiology and pathology</td>
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<tr>
<td>10:20-10:40</td>
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<td>Pain treatment overview</td>
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<td>10:40-11:00</td>
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<td>11:00-11:20</td>
<td>20</td>
<td>Pain drugs</td>
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<td>11:20-11:50</td>
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<td>Barriers to pain management</td>
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<td>11:50-12:20</td>
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<td>Basic approach to pain management</td>
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<td>12:20-13:20</td>
<td>60</td>
<td>Case discussions</td>
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<td>13:20-13:50</td>
<td>30</td>
<td>Overcoming barriers</td>
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<td>13:50-14:30</td>
<td>40</td>
<td>Post-test – Feedback Certificates Group photo</td>
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<tr>
<td>14:30</td>
<td></td>
<td>Lunch</td>
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# Appendix 3: Analysis of Participant Feedback

## 57 responses

<table>
<thead>
<tr>
<th>1 Strongly disagree</th>
<th>2 Disagree</th>
<th>3 Not sure</th>
<th>4 Agree</th>
<th>5 Strongly agree</th>
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<tbody>
<tr>
<td>EPM will be useful in my daily work</td>
<td>16</td>
<td>41</td>
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<tr>
<td>EPM has improved my understanding of pain</td>
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<td>23</td>
<td>33</td>
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<tr>
<td>I will now be able to assess pain better</td>
<td>22</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will now be more willing to prescribe or give opioids</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>32</td>
</tr>
<tr>
<td>The training today was effective</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
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## Comments

**Most important things learned**

- RAT approach to pain management
- Appropriate opioid dosing
- Importance of non-drug treatments/multidisciplinary approach to pain
- Superstitions surrounding opioids
- Opioid use in cancer pain
- Overcoming barriers
- Management of different types of pain

**Will EPM change how you work?**

- Proper assessment of pain
- Prescribe oral morphine with confidence
- Use opioids appropriately (not just pethidine)
- Treatment of neuropathic pain
- Consider non-drug treatments
- Better management of chronic/cancer pain
- Use of pain scales for ongoing assessment
- Use of adjuvants where appropriate

**How can the EPM Workshop be improved?**

- Regular workshops
- Better audio-visual material
- Assistance with establishing pain management protocols for use nationally
- Encourage attendance by doctors from other disciplines/junior doctors/nurses
- Longer course / more frequent breaks
- More problem oriented
- Include interventional pain management

**Other comments**

- Every physician should have good pain education
- Program should include young doctors and health care workers
- Form a pain centre in Sylhet
- Highlight regional blocks
- Labour analgesia should be encouraged in Bangladesh
- Program should be practical and address specific needs of Sylhet Medical College
- Use more up to date audio-visual equipment
- Thank you