Emergency Triage and Treatment Course in primary care health centres in Guatemala

Emergency triage Assessment and treatment (ETAT) course was developed by WHO in 1999 as part of its Integrated Management of Childhood Illnesses program for improving outcomes for children. It has been devised as a hospital based system for health services of limited resource settings.

This study took ETAT and introduced into the primary care setting, making it a self-sustaining locally led course in a district within Guatemala. The course comprised 5 modules that cover Triage, Airway/breathing, Circulation, Coma/conusions and Dehydration which took 16 hours in total. Two courses were delivered in October 2012, and subsequently candidates were asked to undergo a written test and a survey about their confidence prior to the course and immediately thereafter, and then again at 3 months, 6 months and 12 months after the course. They were asked to take part also in a clinical skills assessment. During this time, a quality improvement program was established to identify and remedy problems that were found to be significant for candidate performance and learning.

There was an improvement in knowledge, from the pre-course to post course tests that was sustained in all subsequent tests. The clinical skills retention, assessed at 3, 6 and 12 months, all scored highly.

There was a boost in confidence before and after the course although this did start to reduce over time (but not to statistically significant standards). The level of confidence remained that that determine in the pre-course assessment.

This paper highlights that ETAT which has been shown to improve care for children in the resource limited care setting and shows that with planning and the use of QI programs, clinical skills knowledge and even confidence in a range of health care practitioners can be enhanced.

Point of care lung ultrasound in young children

This study had a ‘novice’ ultrasound operator look at the lungs of children triaged as having a respiratory problem such as wheeze or respiratory tract infection. The images were captured before any treatment was given to the children; these images were evaluated by an expert in ultrasound to determine if there were any of the following:

- 3 or more B lines per intercostal space, consolidation +/- pleural abnormalities
- Any of these features being present counted as a positive ultrasound.

None of the children with asthma had a positive ultrasound, whereas in pneumonia, all were positive. In children with asthma and pneumonia about half of the cases were positive as was the case in children with bronchiolitis. However, caution must be applied about just using ultrasound as the numbers in the study are small and more validation studies are required.

On a roll!

Why do log rolls in the unconscious adult patient? This retrospective study over 2 years looking at GSC 9 or less +/- intubated patients from the Alfred Trauma registry with major trauma (ISS >12) and compared the log roll findings with the CT/MRI reports on the presence or absence of thoracolumbar injury. Out of the 403 patients, about 85% did not have any abnormal findings on log roll. Out of the patients who had a thoracolumbar fracture(s), 72.5% had a normal log roll. Lesions seen included abrasions, bruising, haematoma, open wounds, foreign bodies and burns which were important in some instances for acute patient management. Using palpation in this group of patients to find any abnormalities is questionable. For determining thoracolumbar fractures, palpation has a specificity of 98.8% but a sensitivity of 8.5%. The authors therefore recommend that visual inspection is important but that palpation may not be as helpful, especially when patients may go onto have CT/MRI imaging to rule in or out thoracolumbar fractures. It should be noted that this idea needs further prospective studies to confirm or repute the proposal!

Sawbones? A potential life-saving intervention

Fortunately pre-hospital limb amputation is not common but when needed, it can be life-saving. The study used cadaver limbs, donated for medical research purposes, to see which was the most effective tool/technique to perform an amputation. Four devices were examined for the time from knife to full amputation, the number of attempts required, and perceived risk to the rescuer or “patient” during the procedure.

After the procedure, an assessment was made of the damage to the soft tissue, skin and bone, by 6 independent clinical rates according to a 5 point scale, with 5 being the most favourable result.

Ninety one seconds was the longest time taken to effect amputation, and all 4 techniques/tools had their advantages and disadvantages—a really important topic to improve patient care in difficult situations, showing practical aspects about a life-saving procedure.

Good communication makes for less ‘traumatised’ patients

Good interpersonal skill can reduce patient worry as seen in this study of acute coronary syndrome patients. The incidence of subsequent posttraumatic stress reactions decreases according to a 5 point scale, with 5 being the most favourable result.

An ebb and flow of patients would be ideal, but as this paper shows that delay in the discharge of patients backs up patients in ED. The authors show this in their setting, in a busy hospital in Dublin and, in the discussion, show that this is a commonplace problem in many different countries throughout the world. How social and community care can improve their ‘joined-upness’ with hospital based care is essential for delivering optimum patient care.