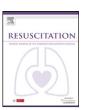


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### Editorial

# Surgical skills training: Does it improve clinical outcome?

Improved training, particularly for emergent care, is a seemingly ubiquitous recommendation to improve clinical care in both the developed and developing world; however, reports of educational interventions often comprise thin descriptions of the intervention, its context and lack robust evaluation.

Bin Nisar et al. should be applauded for addressing this in their recent publication, which uses a robust methodology – a cluster randomised controlled trial – to investigate whether a specific maternal, neonatal and child health emergency training programme (Essential Surgical Skills with an Emphasis on Maternal, Neonatal & Child Health – ESS EMNCH) improved compliance with established care guidelines by doctors working in the emergency departments of three public sector hospitals in Pakistan.

It is encouraging to see that the intervention group, the doctors who were trained, managed more emergencies using the structured ABC approach compared with the control group (67% vs 37.1%). However, the difference was significant in only one of the three hospitals investigated and also only during daytime hours. It is unclear whether differences in the hospitals accounted for these differences and more detail about the context of training would have been very useful; facilitators and barriers to implementation of the training could be potentially generalisable to other training interventions.

It would also have been interesting to determine whether the improved compliance with guidelines (Kirkpatrick level 3 outcome) described translated into improved outcomes for patients (Kirkpartick level 4). $^2$ 

Whilst it is concerning that <50% of doctors managed emergencies using the ABC approach, developing world clinicians should not be falsely reassured that their care is necessarily better. These findings are mirrored in the developing world: one study of simulated performance in obstetric emergencies demonstrated that <50% of staff could manage two standard emergencies, shoulder dystocia<sup>3</sup> and eclampsia.<sup>4</sup> Training is definitely required.

Training doctors locally in their normal multi-professional teams has been demonstrated to be common themes of effective obstetric emergency training programmes<sup>5</sup> and there may be concerns about the long term sustainability of a five-day training course for all staff, particularly in a developing world setting. It is difficult to get all staff through the mandatory one-day course for basic resuscitation, and similar problems have been reported with the Clinical Negligence Scheme for Trusts (CNST) compliant obstetric training programmes in the United Kingdom (UK).

Training is not magic; it should be investigated using robust methodologies, with clear descriptions of the context and ideally using clinical outcomes as the study outcomes. There are many examples in the obstetric literature where very well intentioned and educationally sound training interventions have not improved clinical outcome<sup>6</sup> but this well designed and ambitious study adds to both the developing body of literature that demonstrate improvements in outcome for women and their babies after training,<sup>7–9</sup> and that quantitative methodologies can be employed to investigate training interventions. Other cluster randomised controlled trials in this area are ongoing and we await their results with interest.<sup>10</sup>

### **Conflict of interest statement**

Professor Tim Draycott is a consultant for Limbs & Things Ltd.

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