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**Clinical trials of educational interventions**

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**Objective:** To describe the effectiveness and sustainability educational interventions related to toxicological care in the setting of non-tertiary rural Sri Lankan Hospitals.

**Methods:** We performed a number of studies using both brief educational interventions from experts as well as training of local trainer (TTT) approaches in knowledge areas important in the treatment of poisoned patients. A prospective cohort study was done of TTT in resuscitation with effectiveness measured by pre and post testing of students who received interventions from the trained local trainer. Two cluster RCTs of rural hospitals were undertaken promoting the use of specific aspects of the national guidelines using both experts and TTT approaches

**Results:** A train-the-trainer model of resuscitation education was effective in improving resuscitation knowledge and skills in Sri Lankan rural peripheral hospital doctors. Improvement was sustained to 12 weeks for most components of resuscitation knowledge and skills. Mean MCQ scores significantly improved ( $p<0.001$ ), and also quality of resuscitation of a mannequin ( $p<0.01$ ). Both expert intervention and TTT improved utilisation of activated charcoal compared with controls. Expert interventions did not improve documentation of snakebites in primary hospitals where baseline documentation was already of a clinically acceptable standard.

**Conclusion:** Brief educational interventions of targeted messages directed to medical staff in clinical toxicology can be effective and sustained. Train the trainer approaches are as effective as delivery of messages by experts.