

POSTER PRESENTATION

Open Access

Capacity building for critical care skills training provision in resource limited settings: the nursing intensive care skills training (NICST) project

T Stephens^{1,2*}, A Beane³, AP De Silva⁴, J Welch⁵, C Sigerá⁴, S De Alwis⁶, P Athapattu⁴, L Peiris⁷, S Siriwardana⁶, KSA Jayasinghe⁸, A Dondorp⁹, R Haniffa^{4,8,9}

From ESICM LIVES 2015

Berlin, Germany. 3-7 October 2015

Introduction

The availability of high quality critical care is increasingly recognised as a global health problem [1,2]. The ability of any health system to scale-up delivery of effective critical care services will be limited by critical care training capacity.

Objectives

Evaluation of a capacity building project to enable local nurses to deliver critical care training courses in a resource limited setting (Sri Lanka).

Methods

A short critical care course for nurses (Nursing Intensive Care Skills Training; NICST) was co-designed & delivered by specialist overseas nurse trainers in partnership with Sri Lankan nurse tutors. The impact of the course was assessed using: a pre & post course Multiple Choice Questionnaire (MCQ); a post course Objective Clinical Skills Assessment (OSCA) station & post course feedback questionnaires. Training was delivered in 7 blocks, from June 2013 to November 2014. A graded handover of training responsibilities occurred with lectures, skills stations & workshops increasingly delivered by local rather than overseas faculty. From March 2014 onwards the course was delivered entirely by local faculty, with coaching by overseas faculty. This process was coordinated with a Train the Trainers (TTT) programme for local faculty. The impact of the TTT for building effective training capacity was assessed by analysing the NICST course participant MCQ marks over time.

Results

In total 584 ICU nurses were trained over 16 NICST courses. Figure 1 shows equitable distribution of training provision between rural & urban areas across the island. Participant post MCQ scores were significantly higher when compared to pre MCQ ($P < 0.0001$; Wilcoxon sign rank test) across all courses. More than 64% passed the OSCA in each course. Participant feedback across all courses was positive with 98% agreeing that the course was relevant to their practice & 96% agreeing that the course was worthwhile. Comparison of MCQ results between 2013 (more overseas faculty input) & 2014 (NICST run by entirely by local faculty) showed no significant difference ($p = 0.186$; independent sample t test; Figure 2). This suggests that the local faculty and organisational development required to deliver NICST effectively has occurred.

Conclusions

This training is highly rated by participants & is effective in improving clinical knowledge. The roll out of NICST has also fostered a new community of practice amongst the nurse tutor workforce in Sri Lanka, focused on delivering improved critical care skills training. The TTT approach provides sustainable training capacity within the local workforce. This approach may be of use in other resource limited settings.

Authors' details

¹Barts Health NHS Trust, Critical Care Research Team, London, United Kingdom. ²Queen Mary University of London, William Harvey Institute, LONDON, United Kingdom. ³Barts Health NHS Trust, Adult Critical Care Department, LONDON, United Kingdom. ⁴National Intensive Care Surveillance, Colombo, Sri Lanka. ⁵University College London Hospital, London, United Kingdom. ⁶Ministry of Health, Office of Deputy Director

¹Barts Health NHS Trust, Critical Care Research Team, London, United Kingdom

Full list of author information is available at the end of the article

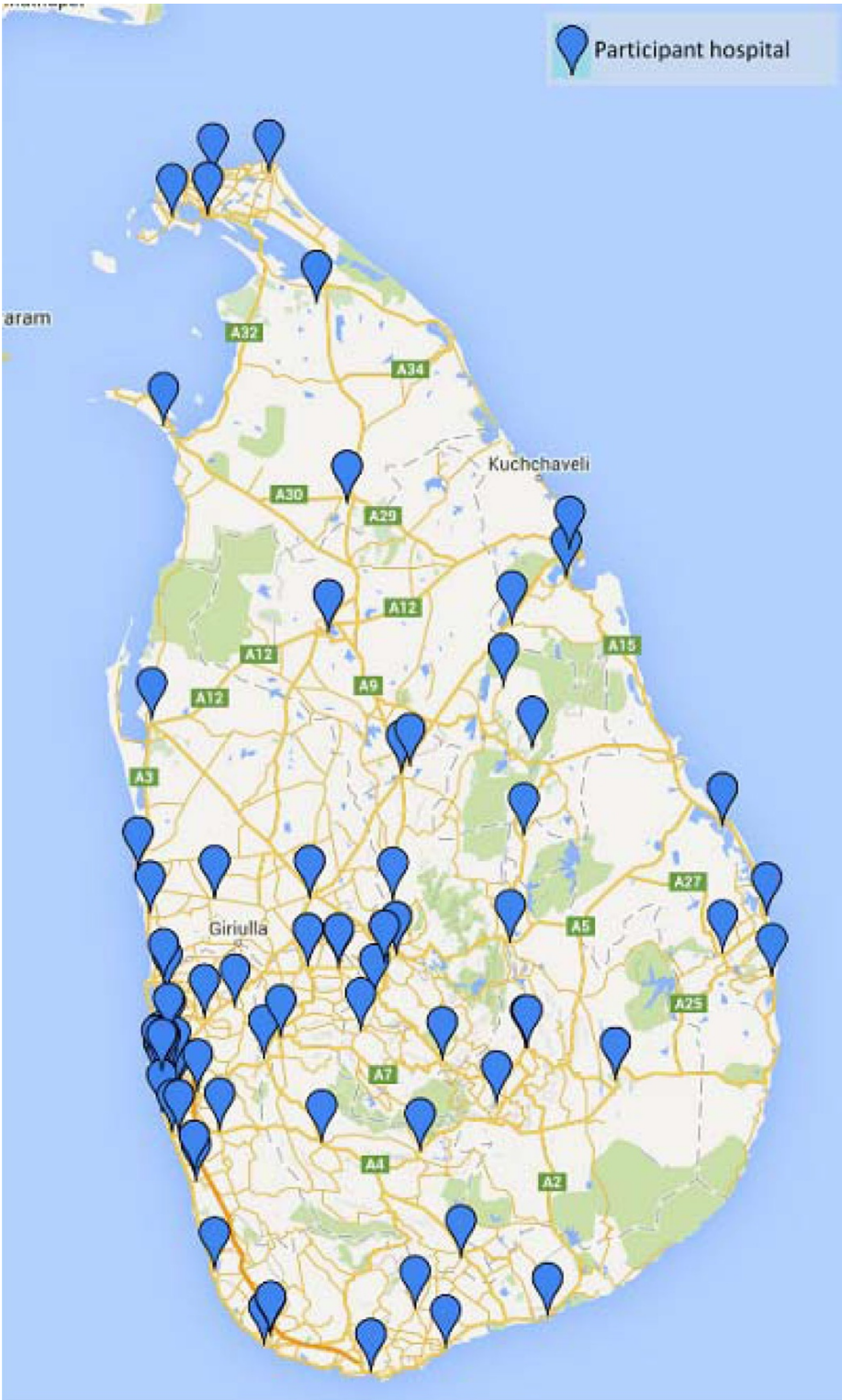
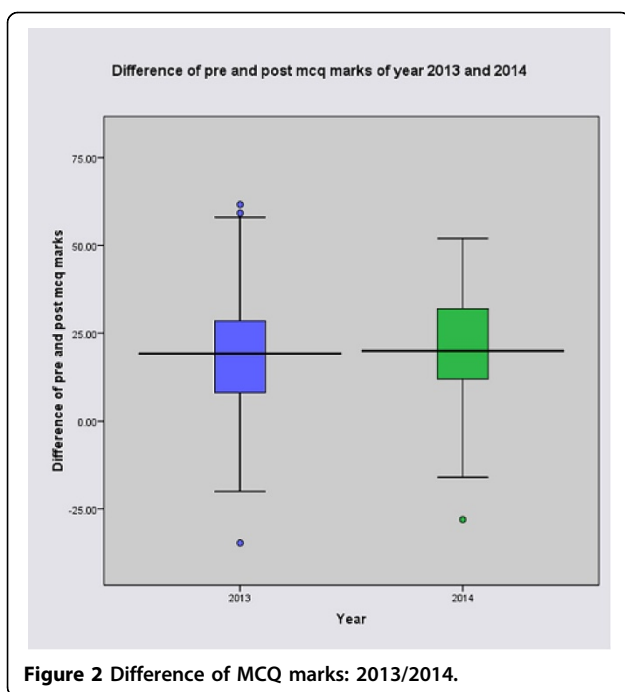


Figure 1 NICST reach island wide.



General (Education, Training and Research), Colombo, Sri Lanka. ⁷Nursing Council of Sri Lanka, Colombo, Sri Lanka. ⁸University of Colombo, Department of Clinical Medicine, Faculty of Medicine, Colombo, Sri Lanka. ⁹Mahidol Oxford Tropical Medicine Research Unit (MORU), Bangkok, Thailand.

Published: 1 October 2015

References

1. Adhikari NKJ, Fowler RA, Bhagwanjee S, Rubenfeld GD: **Critical care and the global burden of critical illness in adults.** *Lancet* 2010, **376**(9749):1339-1346.
2. Riviello ED, Letchford S, Achieng L, Newton MW: **Critical care in resource-poor settings: Lessons learned & future directions.** *Crit Care Med* 2011, **39**(4):860-867.

doi:10.1186/2197-425X-3-S1-A444

Cite this article as: Stephens *et al.*: Capacity building for critical care skills training provision in resource limited settings: the nursing intensive care skills training (NICST) project. *Intensive Care Medicine Experimental* 2015 **3**(Suppl 1):A444.

Submit your manuscript to a SpringerOpen[®] journal and benefit from:

- Convenient online submission
- Rigorous peer review
- Immediate publication on acceptance
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at ► springeropen.com