Basic Life Support Training in Rural Uganda: A Mixed Methods Study of Training and Attitudes towards Resuscitation

Authors : William Gallagher, Harriet Bothwell, Lowri Evans, Kevin Jones

Abstract : Background: Worldwide, a third of adult deaths are caused by cardiovascular disease, a high proportion occurring in the developing world. Contributing to these poor outcomes are suboptimal assessments, treatments and monitoring of the acutely unwell patient. Successful training in trauma and neonates is recognised in the developing world but there is little literature supporting adult resuscitation. As far as the authors are aware no literature has been published on resuscitation training in Uganda since 2000 when a resuscitation training officer ran sessions in neonatal and paediatric resuscitation. The aim of this project was to offer training in Basic Life Support (BLS) to staff and healthcare students based at Villa Maria Hospital in the Kalungu District, Central Uganda. This project was undertaken as a student selected component (SSC) offered by Swindon Academy, based at the Great Western Hospital, to medical students in their fourth year of the undergraduate programme. Methods: Semi-structured, informal interviews and focus groups were conducted with different clinicians in the hospital. These interviews were designed to focus on the level of training and understanding of BLS. A training session was devised which focused on BLS (excluding the use of an automatic external defribrillator) involving pre and post-training questionnaires and clinical assessments. Three training sessions were run for different cohorts: a pilot session for 5 Ugandan medical students, a second session for a group of 8 nursing and midwifery students and finally, a third was devised for physicians. The data collected was analysed in excel. Paired T-Tests determined statistical significance between pre and post-test scores and confidence before and after the sessions. Average clinical skill assessment scores were converted to percentages based on the area of BLS being assessed. Results: 27 participants were included in the analysis. 14 received 'small group training' whilst 13 received' large group training' 88% of all participants had received some form of resuscitation training. Of these, 46% had received theory training, 27% practical training and only 15% received both. 12% had received no training. On average, all participants demonstrated a significant increase of 5.3 in self-assessed confidence ($p < 0.05$). On average, all participants thought the session was very useful. Analysis of qualitative date from clinician interviews in ongoing but identified themes identified include rescue breaths being considered the most important aspect resuscitation and doubts of a 'good' outcome from resuscitation. Conclusions: The results of this small study reflect the need for regular formal training in BLS in low resource settings. The active engagement and positive opinions concerning the utility of the training are promising as well as the evidence of improvement in knowledge.