

## **Evaluating the Effectiveness of a Training Intervention in Neonatal Resuscitation in a developing country setting: Establishing Grounds for Further Rollout**

### **Abstract**

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**Objective:** To evaluate the effectiveness of an educational intervention in neonatal resuscitation in Zambia in order to establish grounds for further rollout.

**Design:** Single case study approach using semi-structured interviews, focus groups, participant questionnaires, observation and document analysis.

**Setting:** Lusaka including the main teaching hospital and surrounding district health centres, the school of nursing, and Livingstone.

**Participants:** At three levels: (a)92%(n=11) trainers trained to train (Nurses, midwives, paediatricians and anaesthetists) participated in focus groups, observation and a structured questionnaire; (b)42% (n=16) staff (midwives, nurses and anaesthetists from among candidates who underwent the initial training) took part in semi-structured interviews; and (c)42% (n=27) of staff (a mixture of nurses, midwives, paediatricians, anaesthetists, and student paediatric nurses) who underwent secondary training took part in focus groups and observation. Relevant data was also collected from analysis of training records.

**Findings:** A number of formal and informal training sessions had been delivered and more staff trained since the initial training. There was consistent evidence of knowledge increase among those who underwent secondary training as shown by pre- and post-test scores and overwhelming consensus that most of the goals set out by the trainers at the initial training had been achieved. More importantly staff reported a positive impact on clinical outcomes and a positive shift in clinical knowledge; the quality of training and content had been fundamentally maintained and the trainers demonstrated ownership of the programme moving forward. At the same time however many participants reported challenges with funding and recognition from government and professional authorities to support further rollout and clinical application. Strategies and suggestions to address these were being proactively explored.

**Key conclusions:** the project appears to have achieved its main objectives at times beyond the targets initially set. Zambian partners have demonstrated commitment to, and ownership of, the programme and vision to reduce neonatal mortality through training and are making concerted efforts for further rollout. However relevant support from professional and governmental authority is key to further progress.

**Implications for the future:** Trainers would benefit from support to strengthen teaching skills. Evaluation of practice in the clinical setting, mentorship and continuing Professional Development (CPD) strategies are useful considerations moving forward. Therefore it is vital that the government recognises and funds the effective rollout and application of the training programme in practice, supported by a programme of national standardisation of neonatal resuscitation.