

Change in Participant Knowledge of Neonatal Resuscitation Following the Introduction of a Neonatal Training Course in Ghana.

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Background: The neonatal mortality rate in Ghana is 43/1000 live births; 23% of these deaths are due to birth asphyxia, a potentially modifiable cause. Decreases in deaths due to birth asphyxia have been documented following the introduction of a neonatal resuscitation program (NRP) in the US, India and Central America. It is not known whether the NRP would be similarly beneficial in Africa.

Objective: To assess change in knowledge about neonatal resuscitation following a modified NRP course in Ghana, West Africa.

Design/Methods: Utilizing a train-the-trainer model, a modified NRP training program was offered to skilled birth attendants (SBA) between 2003-2006 in Ghana. Training was assessed by direct observation within delivery rooms, mock clinical scenarios and a written pre and post-test. We present results of the written tests.

Results: A core of 8 providers (6 physicians and 2 nurses) trained as trainers. These trainers then trained 76 physicians, 91 nurses, 32 midwives and 18 nurse anesthetists. Physicians and Nurse Anesthetists had the highest mean pre and post test scores, but the least mean percentage change in knowledge after the course. Nurses and Midwives had the lowest mean pre and post test scores but the highest change in knowledge after the course.

Conclusions: Nearly half of all births in Ghana are attended by SBAs; of these 75% are Nurses and Midwives. Our data suggest that these two groups who are in greatest need of improved cognitive knowledge, benefited most from the modified NRP program. We speculate that this improvement in knowledge translates into improved performance, and SBAs may be able to serve as a resource for unskilled community birth attendants.

Improvement in health care worker post-test scores after NRP training

Health Professional	Mean Pretest Score	Mean Post-test Score	Mean Percentage Change from Pretest	P-Value
Doctors (N=76)	14	20	55	<0.0001
Nurses (N=91)	9	17	90	<0.0001
Midwives (N=32)	8	13	72	<0.0001
Nurse Anesthetists (N=18)	11	18.5	68	<0.0001

E-PAS2007:618413.3

This study was supported by **Kybele, Inc.**, a 501(c)3 organization to promote obstetric anesthesia education.