Train-The-Trainer in Neonatal Resuscitation in Rural Uganda: A Model for Sustainability and the Barriers Faced

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Abstract : Unfortunately, it is well known that neonatal deaths are a common and potentially preventable occurrence across the world. Neonatal resuscitation is a simple and inexpensive intervention that can effectively reduce this rate, and can be taught and implemented globally. This project is a follow-on from one in 2012, which found that neonatal resuscitation simulation was valuable for education, but would be better improved by being delivered by local staff. Methods: This study involved auditing the neonatal admission and death records within a rural Ugandan hospital, alongside implementing a Train-The-Trainer teaching scheme to teach Neonatal Resuscitation. One local doctor was trained for simulating neonatal resuscitation, whom subsequently taught an additional 14 staff members in one-afternoon session. Participants were asked to complete questionnaires to assess their knowledge and confidence pre- and post-simulation, and a survey to identify barriers and drivers to simulation. Results: The results found that the neonatal mortality rate in this hospital was 25% between July 2016- July 2017, with birth asphyxia, prematurity and sepsis being the most common causes. Barriers to simulation that were identified predominantly included a lack of time, facilities and opportunity, yet all members stated simulation was beneficial for improving skills and confidence. The simulation session received incredibly positive qualitative feedback, and also a 0.58-point increase in knowledge (p=0.197) and 0.73-point increase in confidence (0.079). Conclusion: This research shows that it is possible to create a teaching scheme in a rural hospital, however, many barriers are in place for its sustainability, and a larger sample size with a more sensitive scale is required to achieve statistical significance. This is undeniably important, because teaching neonatal resuscitation can have a direct impact on neonatal mortality. Subsequently, recommendations include that efforts should be put in place to create a sustainable training scheme, for example, by employing a resuscitation officer. Moreover, neonatal resuscitation teaching should be conducted more frequently in hospitals, and conducted in a wider geographical context, including within the community, in order to achieve its full effect.

Keywords : neonatal resuscitation, sustainable medical education, train-the-trainer, Uganda