Testing a community based intervention to reduce neonatal deaths in rural Ghana

In the central Brong Ahafo region of rural Ghana, half of all births occur at home, and these home deliveries account for a large proportion of all neonatal deaths. In other countries where utilisation of maternal and newborn health facilities is also low, trained community health workers have played an important role in providing newborn care. Currently, researchers based at the Kintampo Health Research Centre in Ghana and the London School of Hygiene and Tropical Medicine, UK, are working closely with the District Health Management Teams in the Brong Ahafo region to investigate whether a similar approach, where community volunteers provide home-based care to pregnant women and newborns, can improve neonatal survival.

This collaborative trial, called the Newborn Home Intervention Study (Newhints), is funded by Save the Children – Saving Newborn Lives Program, the World Health Organization and DFID through the Towards 4+5 Research Programme Consortium. The core component of the Newhints intervention is to train the current network of community based surveillance volunteers (CBSVs) to identify pregnant women in the community and to conduct two home visits during pregnancy and three in the first week of the baby's life. During these visits the volunteers are taught to address essential maternal and neonatal care practices such as preparing for delivery, using bed-nets, advising on clean delivery techniques and early breast feeding, and to assess and refer sick babies.

CBSVs are presented with a Newhints bag which contains all the essential materials needed to counsel a pregnant or recently delivered woman and examine a newborn baby. Materials include picture cards that are used to tell stories and discuss essential care practices with families. For example, during the first visit, pregnant women are shown a picture card illustrating a family preparing for a health facility delivery. Notes on the back of the card prompt the volunteers to discuss what this involves (arranging transport, saving money, collecting supplies etc), and the feasibility of a facility based delivery for each family.

The Newhints bag also contains instruments for CBSVs to use to assess newborns including a timer, thermometer and weighing scale with sling. The weighing scale is divided into 3 colours to denote weight category: Green = >2.5kg, Yellow = 1.5kg - 2.49kg, and Red = <1.5kg. This has been designed specifically so that volunteers can easily identify low birth weight babies.

Following piloting and finalisation of the materials, the Newhints intervention has been delivered in half of the Newhints zones chosen at random in each of the seven districts in the Brong Ahafo region. Training of all CBSVs in the intervention zones was completed in June 2008. Evaluation of an impact on newborn deaths and neonatal care practices will use data collected through 4-weekly surveillance for all babies born between 31 December 2008 and 1 January 2010.

For more information about the Newhints please contact Guus Ten Asbroek. email: Guus.tenAsbroek@lshtm.ac.uk
For more information about Towards 4+5 please go to www.towards4and5.org.uk

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