



Towards
4+5
Research
Programme
Consortium

Improving birth outcomes in poor, rural communities

The role of women's groups in Nepal, Bangladesh and India

In 2004, research in Makwanpur district in Nepal found that community mobilisation through women's groups greatly improved newborn survival in a poor rural population. Led by a local woman facilitator, women's groups met monthly to share experiences about the health problems and underlying causes leading to poor maternal and newborn health and death. The groups built on these discussions to develop and implement practical strategies to address these issues together with community leaders and men.

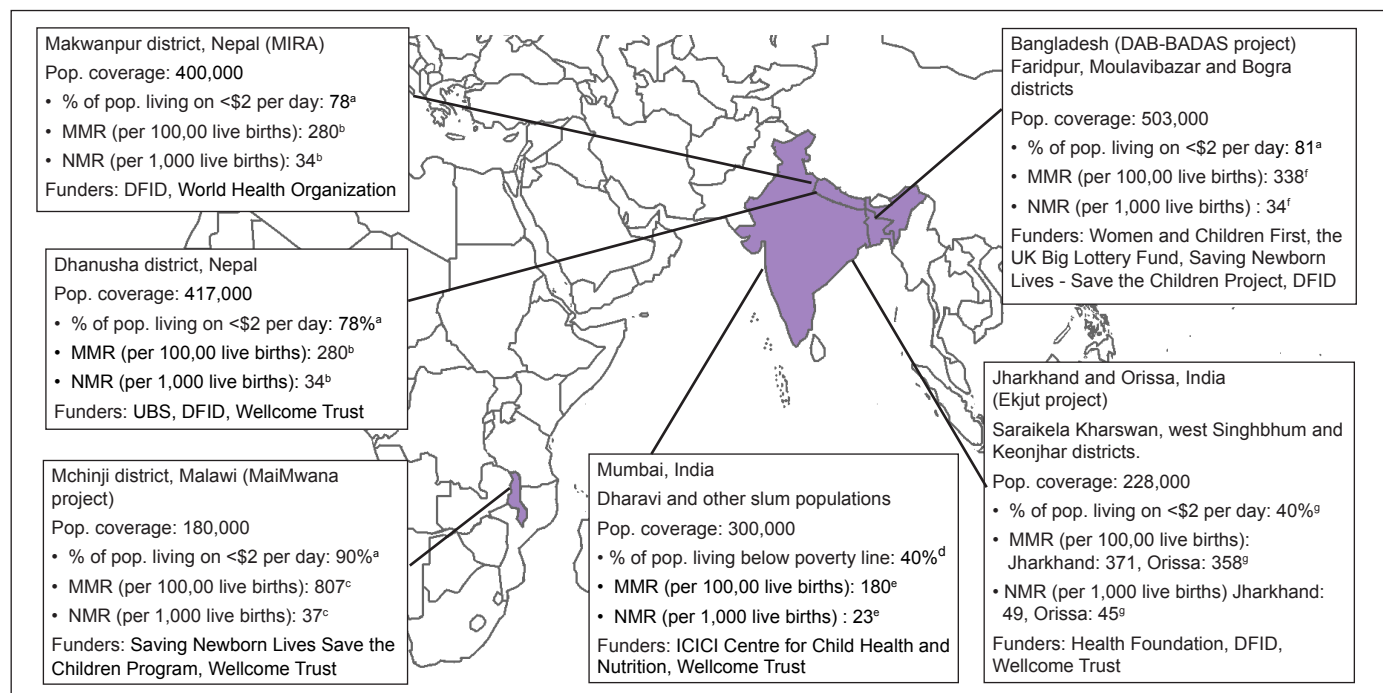
Community mobilisation interventions such as women's groups build the capacities of women and communities to organise themselves and take collective control of the mother and child health issues that affect them. These interventions can be particularly effective in areas where there are considerable barriers to utilising services and most births occur at home as they can play an important role in improving demand for, and access to, maternal and newborn care services.

Cluster randomised controlled trials are being carried out at six sites in four countries to explore the effectiveness of community mobilisation through women's group in different contexts and to assess potential for scale up [Box 1 provides a summary of past and ongoing research trials]. This briefing paper highlights key findings from three of the cluster randomised controlled trials undertaken in Nepal (Makwanpur district), Bangladesh and India (Jharkhand and Orissa States).

Key findings

- Community mobilisation through women's groups led to a reduction in neonatal mortality by 30% in Nepal and 45% in rural India.
- Community mobilisation through women's groups in Nepal and rural India led to improvements in a wide range of antenatal, delivery and neonatal care and care-seeking practices such as hygiene practices and antenatal care attendance.
- Community mobilization through women's groups in Nepal cost \$211 and in India \$33 per life year saved suggesting they are cost-effective and potentially sustainable.

Box 1: Cluster randomized controlled trials of women's groups



Sources: ^aUNDP, 2007 ^bNepal DHS, 2006 ^cMultiple Indicator Cluster Survey, Malawi ^dHuman Development Report Mumbai, 2009 ^eSociety for Nutrition, Education and Health Action ^fAzad et al, 2010 ^gTripathy et al, 2010.

Background: Research in Makwanpur, Nepal, 2001-2003

A cluster randomised controlled trial was undertaken in Makwanpur district, Nepal between 2001 and 2003. Women's groups met monthly with a local female facilitator to discuss and develop strategies to overcome maternal and newborn health problems using a community-action cycle [see figure 1].

The local female facilitators were not health workers and each had the responsibility for facilitating nine groups in their cluster. Strategies implemented by the women's groups varied according to the different problems they identified and included: the preparation of clean home delivery kits, setting up local funds for maternal and child health emergencies and stretcher schemes for transport.

Figure 1: Meetings in women's group cycle



Key findings from the research

- An analysis of nearly 7000 births showed a 30% reduction in newborn mortality: the neonatal mortality rate (NMR) was 26 per 1000 live births in intervention clusters, compared with 37 in control clusters.
- The maternal mortality rate was 69 per 100,000 live births in intervention clusters, compared with 341 per 100,000 live births; however this was not a significant finding.
- There were only small increases in delivery at a health institution or with a skilled attendant, but there were larger changes in hygiene practices and antenatal care. There were also considerable improvements in care-seeking when mother or baby was ill.
- The cost of the intervention was \$110 per group per year, plus \$203 for supervision; the cost per life year saved was \$211. According to World Bank criteria, this is cost-effective.

Emerging findings from India and Bangladesh

Impact on newborn mortality rates

- In India, for women's group areas, the NMR was 32% lower in intervention clusters during the three years of the trial and 45% lower in years 2 and 3. The significant effect of the women's group intervention on NMR corresponds with the findings from the Nepal trial.
- In contrast, participatory women's groups did not significantly reduce neonatal mortality in poor rural populations in Bangladesh. This may in part be explained by the low ratio of women's groups to population size and the relatively low success of the groups in mobilising newly pregnant women to attend meetings. In Bangladesh, the percentage of newly pregnant women who joined the groups was less than a third of the coverage achieved in the India trial and less than half that in the Nepal trial.

Changes in home care practices

- In India there were significant changes in home-care practices. In particular, there were increases in birth attendants washing hands with soap, using a safe delivery kit, using a plastic sheet and using boiled thread. There was also increased exclusive breastfeeding for the first 6 weeks.
- There was little change in health service utilisation and care-seeking behaviour for antenatal, delivery and postnatal care in India. This suggests that most of the changes in mortality could have been due to changes in practices at home.



Members of a women's group prepare safe delivery kits



Administration of a women's group maternal child health fund

- In Bangladesh, whilst no significant differences were noted in most home-care practices, there were higher frequencies of delayed bathing and exclusive breastfeeding for the first 6 weeks in the intervention groups compared with the control groups.

Maternal depression

- A 57% reduction in moderate depression among mothers in the intervention clusters was recorded in the third year of the India trial compared with control clusters.
- This might have occurred through improvements in social support and problem-solving skills of the women's groups. Adequate social support reduces the risk of depression during pregnancy and is an important social determinant of mental health.

Conclusions

The research findings from Nepal and India show that community mobilisation through women's groups has the potential to bring about cost effective improvements in maternal and child health amongst poor people living in rural areas.

Findings from Bangladesh, where the intervention was less successful in reducing newborn mortality, suggest that population coverage is an important factor in determining the impact of women's groups. Unless a high enough proportion of newly pregnant women are enrolled in groups, they are unlikely to have an effect on birth outcomes. Successful scale-up also requires adequate human resources to support community mobilisation.

The impact of women's groups on health outcomes can be explained through two major mechanisms. Firstly, the groups changed care and care-seeking behaviours. This was achieved through the group discussions where women developed a broader awareness of health problems, their causes and behaviours effective at addressing them and the attitudes, motivation and social support to change their behaviours in this way. These changes were communicated outside the groups as group members commonly shared this new information with other members of their communities. Secondly, the groups empowered women and communities. The groups built the capacities of women and communities to organise themselves and take control of the mother and child health issues affecting them. By taking control of these decisions women and communities addressed some of the broader disadvantages and inequalities underpinning their poor health and high mortality rates.

Overall, these trials demonstrate that community mobilisation interventions, such as women's groups, have the potential to achieve great improvements in mother and child health and reductions in neonatal mortality.

References and further reading

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About Towards 4+5

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