

Social and Behaviour Change Interventions for Promoting

Newborn Care

Statement of Issue

Each year, of almost 27 million infants born in India, about 0.88 million die in the first 28 days of life, a time referred to as the neonatal period and a total of one million die before their first birthday (MoHFW, 2011). The neonatal mortality rate is 33 per cent and the percentage of neonatal deaths to total infant deaths is 69 per cent (SRS, 2010). Up to two-thirds of the neonatal deaths can be prevented if mothers and newborns receive known, effective interventions (Darmstadt et al., 2005). Increased coverage and quality of preconception, antenatal, intrapartum, and postnatal interventions by 2025 could avert 71 per cent of neonatal deaths (1.9 million [range 1.6–2.1 million]), 33 per cent of stillbirths (0.82 million [0.60–0.93 million]), and 54 per cent of maternal deaths (0.16 million [0.14–0.17 million]) per year. These reductions can be achieved at an annual incremental running cost of US dollars 5.65 billion (US dollars 1.15 (INR 75.44) per person), which amounts to US dollars 1928 (INR 126,476.70) for each life saved, including stillbirths, neonatal, and maternal deaths (Bhutta, Z.A., 2014). The recent Million Death study showed that three causes – preterm and low birth weights, infections, and birth asphyxia – accounted for 78 per cent of neonatal deaths (Million Death Study Group, 2010). In India, 18.6 per cent of children aged 0–35 months had birth weight less than 2500 gms (RSOC, 2013–14).

The World Health Organisation recommends essential newborn care practices which include (a) clean cord care: includes cutting the umbilical cord with a sterile and sharp instrument, tying it, keeping the cord stump

Methodology

Under Call to Action, Population Council in partnership with UNICEF and USAID conducted an evidence review to identify key social and behaviour change (SBC) strategies and health outcomes supporting child survival in the South Asia region, especially in India. More than 7605 articles on Maternal and Child Health published during the last 13 years (2002–2015) were scanned after database searching, and of these, 159 intervention studies were selected for analysis. On Newborn care behaviour, a total of 309 articles were identified and screened, 76 abstracts were read, 51 articles were downloaded and reviewed and 24 were selected for final review. The outcome of the review was a Report, “*Evidence Review on Population Level Social and Behaviour Change in South Asia for Enhancing Child Survival and Development*” on which this policy brief is based. In addition, a technical group in UNICEF India has enhanced the findings and recommendations with new literature and relevant evidence.

clean and dry, and not applying anything on the cord stump to hasten the healing process (b) thermal care: keeping the newborn warm in order to prevent neonatal hypothermia and (c) initiating breastfeeding within first hour after birth in order to reduce neonatal mortality and morbidity.

The Government of India has recommended that all mothers and newborns should receive at least three postnatal checkups (PNC) within 7 days of delivery (MoHFW, 2011). However, the RSOC (2013-14) data shows that only 39.3 per cent of women received PNC within 48 hours of discharge/delivery and newborn who received first check-up within 24 hours of birth discharge were 33.6 percent only. Further, only 14 per cent of women availed benefit from national program for safe motherhood namely Janani Shishu Suraksha Karyakaram (JSSK).

Malpractices around the newborn care are prevailing across the country. Cultural barriers such as myths and misconceptions associated with prevailing practices and the fear of harming the baby by not following certain traditions are important reasons for not adopting healthy newborn care behaviours. Specifically, lack of awareness among women and family members regarding possible adverse effects of applying substances on baby's cord stump, skin to skin care, danger signs that a newborn may face and the perception that an unbathed newborn is impure are the key barriers to healthy newborn care practices (Khan et al., 2011, Varma et al., 2012a, 2012b).

Literature Review: Key Findings

The results of the evidence review indicate that in spite of a weak health system either in terms of poorly trained human resources, lack of adequate infrastructure or the limited supply of medicines, simpler approaches or interventions at the family and community levels led to improved health behaviours and thus reduced neonatal mortality.

1. Use of women's groups for disseminating health messages among women in the community through group meetings and interpersonal communication. Examples of this intervention emerged from three studies – one each from Nepal, India and Bangladesh. All the three studies used almost identical approaches including randomised controlled trial (RCT) design, covered a large population and used women's groups as platform. A participatory learning and action cycle approach was used to empower women to identify maternal and neonatal problems, understand reasons for such problems, share information with other women in the community, prioritise important maternal and neonatal health problems, plan for best methods/strategies to resolve them and finally encourage the community to adopt identified healthy practices including putting pressure on the health system to meet their health needs. In each of these interventions conducted in three different settings, the neonatal mortality rate dropped by one third (32-34 per cent).

(Manadhar et al., 2004, Tripathy et al., 2010, Azad et al., 2010)

2. Home based newborn care and routine home visits by health volunteers or health workers and *Dais* during antenatal and postnatal period. Studies conducted in Bangladesh, India and Pakistan have shown that home visits by trained health volunteers or health workers and *Dais* can

reduce deaths of newborns by 30 to 61 per cent. Home-based health education, routine neonatal assessment and antibiotic treatment of serious infections by community health workers decreased neonatal mortality in rural India, rural Bangladesh and Pakistan. In the home-based newborn care model developed by SEARCH Gadchiroli, a trained community health worker identified pregnant women, conducted group health education, carried out two antenatal and 8-12 postnatal home visits, attended deliveries, gave infants a vitamin K injection, identified and managed high risk infants who had signs of sepsis by providing injectable antibiotics in the home and encouraged appropriate referral. Studies published before May 2013 on the pre-defined community level interventions and report findings from 43 systematic reviews (Lassi, Z. et al., 2014) suggest that home visits significantly improve antenatal care, tetanus immunization coverage, referral and early initiation of breast feeding with reductions in antenatal hospital admission, cesarean-section rates birth, maternal morbidity, neonatal mortality and perinatal mortality. Task shifting to midwives and community health workers also significantly improves immunization uptake and breast feeding initiation with reductions in antenatal hospitalization, episiotomy, instrumental delivery and hospital stay.

(Bang et al., 1999; Bang et al., 2005; Bhutta et al., 2008; Baqui et al., 2008; Kumar et al., 2008; Darmstadt et al. 2010; Bhutta et al., 2011 ; Lassi, Z. et al, 2014)

- 3. Training of community health workers on issues related to maternal, neonatal and child health.** An extra 5-6 days' training in addition to the standard training of lady health workers (LHWs) in preventive newborn care encouraged them to identify all pregnant women in their area, provide basic ANC and work with *Dais* to identify births. Training in mouth-to-mouth resuscitation was also given. A separate training programme for *Dais* in basic newborn care including basic resuscitation (through skin rubbing, sole flicking, and immediate newborn care), recognising serious complications of pregnancy and delivery, and referral to public health services was found to be effective in reduction of neonatal mortality.

(Bhutta et al., 2008; Bhutta et al., 2011 ; Jokhio et al. 2005 ; Lassi, Z. et al, 2014)

- 4. Forming village or community health committees to increase the sense of ownership of the intervention programme and health care facility.** Creation of community organisations for mobilisation and conducting group education sessions to promote maternal and newborn care, establishing and strengthening Community Based Organisations (CBOs), including Village Coordination Committees (VCCs), Self-Help Groups (SHGs), Kishori Panchayats (KPs) or Adolescent Girls' Forums etc. play crucial role in changing communities' health behaviours and generating demand for health care, especially for the youngest and most vulnerable members of the village. Formation of community based support groups decreases maternal morbidity, neonatal mortality, perinatal mortality with improved referrals and early breast feeding rates. At community level, home visits, community mobilization and training of community health workers and traditional birth attendants have the maximum potential to improve a range of maternal and newborn health outcomes (Lassi, Z. et al., 2014).

(Bhutta et al., 2011, Aga Khan Foundation, 2008;; Lassi, Z. et al, 2014)

5. Training of nurses and doctors of health facility. One intervention aimed at increasing knowledge and skills of essential newborn care among midwives, nurses and doctors in the maternity units of selected hospitals. The health care providers were trained to educate mothers on caring for their newborns before, during and after the delivery, and specifically through a health education session before discharge from the hospital. Results revealed that there was a significant improvement in umbilical cord care practices at home following the intervention. Another intervention using the standard guidelines adapted the generic training modules of the integrated management of childhood illness strategy and then strengthened the sections on counseling and communication. In another study, it was proved that a programme to reduce newborn mortality through the training and deployment of community health workers (CHWs) can lead to significant improvements in survival rates of newborns and mothers. A fundamental principle underpinning the delivery of effective maternal, newborn and child health interventions is the continuum of care. CHWs can also promote adherence to treatment and follow-up (Aboubaker, S. 2014).
(Senarath et al., 2006, Mohan et al., 2004, Aboubakar, S., 2014)

Policy Recommendations

- 1. Formation and involvement of women's groups within the community** to discuss issues related to antenatal, natal and postnatal care is critical. Existing platforms like self-help-groups (SHGs) may be used for greater information dissemination and community involvement. Qualitative investigation alongside RCTs and other quantitative studies may be conducted to understand complex interventions in context, describe predicted and unforeseen impacts, assess potential for generalisability, and capture the less easily measurable social/political effects of encouraging participation.
- 2. Implement and supervise routine visits during antenatal and postnatal period** by the health volunteers of such women's groups or existing community health workers like ASHAs. Government of India has introduced incentive for a set of six home visits by ASHAs during the postnatal period. However, performance and monitoring of this activity is yet to be evaluated.
- 3. Training of CHWs on recognising serious complications of pregnancy and delivery**, and referral to public health services may also be considered as an option. Since a significant proportion of deliveries in India still takes place at home and even in case of institutional delivery, majority of women go back home within 12 hours of delivery, the TBAs or *Dais* may be trained and encouraged to join hands with the existing community health workers. However, effective implementation of CHW strategies require policy support, training, supervision, performance maintenance and regular supplies. Since community health workers are increasingly responsible for many health and development tasks, and expansion of their duties needs to be carefully considered in this light.
- 4. Form or strengthen village or community health committees** to create awareness as well as generate demand for health care. The National Rural Health Mission envisaged the importance of forums like Village Health Sanitation and Nutrition Committees (VHSNCs).

However, in many parts of the country they are non-functional. Such committees need to be made functional and strengthened for effective implementation of strategies/schemes at grassroots level.

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