

Strengthening MNH Services in Rural Nepal



MNH Update participants practicing safe delivery

BACKGROUND

Between 1996 and 2006, the maternal mortality ratio in Nepal decreased by 47% and currently stands at 281 per 100,000 live births.¹ Despite such a drastic reduction, it is still amongst the highest in the world, including developing countries. Neonatal mortality rate is also unacceptably high, at 33 per 1000 live births. It is estimated that each year, nearly 30,000 Nepalese neonates die before completing the first month of their lives, with neonatal asphyxia accounting for about 15% of such deaths.¹ These data strongly indicate an urgent need for improved action to reduce maternal and neonatal mortality in Nepal.

Promoting institutional delivery by skilled birth attendants is a key strategy adopted by the Government of Nepal (GON) to reduce maternal and neonatal mortality in the country. In this context, several programs have been implemented, including training of skilled birth attendants (SBA), maternity care schemes (Aama Program) and expansion of new birthing centers. Despite all these efforts, 72% of births still take place at home, often assisted by family members or without any attendance at all, and only 36% of all births are actually assisted by SBAs.² In this context, the National Health Training Center (NHTC) of the Ministry of Health and Population

(MoHP) has been conducting SBA-training of auxiliary nurse midwives, staff nurses and doctors as defined by the National Policy on Skilled Birth Assistants. Since 2006, NHTC has conducted several batches of trainings and established several new SBA training sites all over the

country. In recent years, this process has gained greater momentum. The GON aims to increase the proportion of SBA-assisted deliveries to 60% by 2015 and to achieve this goal, the NHTC plans to train 1000 SBAs per year³. However, despite the set goal, limitations within the training infrastructure are making it impossible for this target to be fulfilled in the short-term.

As an alternative measure to address this limitation, the Nepal Family Health Program II (NFHP) assisted the MoHP train health workers on selected SBA skills followed by support to enhance the enabling environment.

STRATEGIC APPROACH

“Strengthening Maternal and Neonatal Health Services in Rural Nepal” is a set of interventions aimed at improving the overall quality of maternal and neonatal health (MNH) services in the program districts. This includes: training of service providers on selected SBA skills at recognizing, preventing, managing and/or referring women with complications during labor and childbirth (MNH Update); and the creation of an enabling environment to allow them to translate their new-found knowledge and skills into practice by subsequent on-site facilitative supervision and coaching, supply of essential instruments/ equipment, bi-annual review meetings and promotion of community participation.

This intervention was initiated in two districts (Dailekh and Sindhuli) in 2009/10 and it was later expanded to ten additional districts (Surkhet, Rolpa, Jumla, Kalikot, Dang, Banke, Salyan, Kanchanpur, Bara and Morang) in 2010/11 before being rolled out nationally by the Family Health Division (FHD)/MoHP. These districts were selected to couple with “MNH activities at community level” so as to make a synergistic effort at strengthening overall MNH services in rural districts.

The content for the training was designed based on the findings from the Nepal Maternal Mortality and Morbidity Report which showed that postpartum hemorrhage (PPH), obstructed labor and eclampsia are the major causes of direct maternal deaths in Nepal^{4,5}. Therefore, during the 3-day training, providers were trained to competently identify, prevent and/or manage or timely refer women with these three specific complications through active management of third stage of labor (AMTSL), measures to manage postpartum hemorrhage including aortic

compression, partograph use and Magnesium Sulphate (MgSO₄) administration, respectively. In addition, providers were also trained on immediate essential newborn care and neonatal resuscitation for management of neonatal asphyxia. Orientation in infection prevention practices and waste management, especially appropriate collection and disposal of placenta and training on assistance during normal childbirth were also an integral part of the training. The trainings were conducted by obstetricians and certified SBA trainers.

KEY ACTIVITIES

- Designed, developed and published the MNH update reference manual, trainer's guide and job aids to standardize the training based on the SBA curriculum.
- Conducted need assessments and collected preliminary baseline data for future comparisons.
- Conducted a 3-day MNH Update for all health workers providing childbirth services at government owned 24-hour birthing facilities in the intervention districts.
- Conducted technical support visits and on-site coaching, preferably along with district supervisors at regular intervals.
- Supported the facilities with the provision and repair of equipment and instruments as needed after the MNH Update. Supplied partograph sheets, standard protocols and national guidelines.
- Conducted a 1-day orientation for members of health facility operation and management committees (HFOMCs), female community health volunteers (FCHVs), school teachers, local political and religious leaders and other influential members of the community to promote community involvement in establishing and continuing 24-hour birthing facilities and to further demand-creation efforts.
- Conducted 2-day review meetings at 6-month intervals with the participants to evaluate progress, allow sharing of experiences after the initial training and to help them identify challenges and opportunities for improving the MNH situation in their respective VDCs.

RESULTS

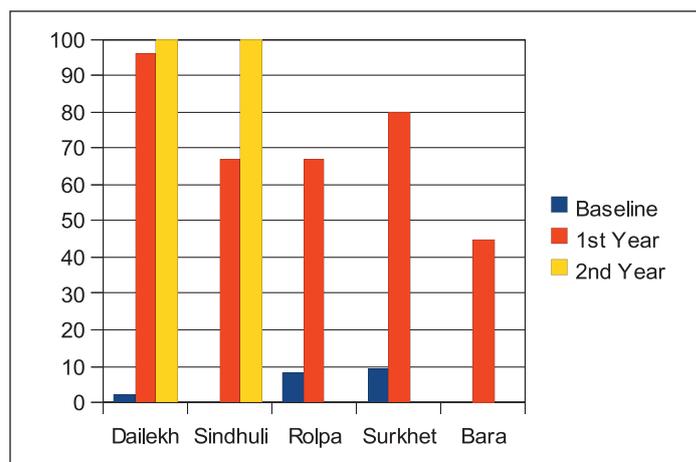
A total of 724 service providers from 259 public sector health facilities were trained in the 12 intervention districts. These service providers included doctors, staff nurses, auxiliary nurse midwives (ANMs) & maternal and child health workers (MCHWs), with or without SBA training from 24-hour birthing facilities in the program districts, from sub-health posts to hospitals. Only those health facilities that provide 24-hour childbirth facilities were selected.

Progress made in each district was closely tracked by means of comparing per-defined indicators, at regular intervals after the intervention.

District-specific monitoring data were collected during technical support visits to selected sites as well those self-reported by the service providers during biannual review meetings. Similarly, HMIS data were also reviewed to analyze some indicators, specifically for comparison of changes in the number of institutional deliveries assisted by SBAs.

There was a significant increase in the use of partographs for monitoring labor in all intervention districts. Service providers reported that partographs not only allowed them to recognize and timely manage possible complications, it also helped in improving the relationship between them and their clients as it gave them the opportunity to come in contact more frequently. Since the intervention was initiated in different districts at different times, a complete evaluation was achieved only for the first five districts. As such, only results from Dailekh, Sindhuli, Rolpa, Surkhet and Bara are presented in this brief.

Figure 1: Percentage of intervention facilities where partographs are in use



Availability of oxytocin and AMTSL became a routine practice in most intervention health facilities.

A significant increase in MgSO₄ availability from 2% to 92% after one year and then to 94% in the second year was reported in Dailekh. Similarly one year after the intervention, it increased from 0% to 100% in Sindhuli, 8% to 71% in Rolpa, 14% to 83% in Surkhet and 9% to 82% in Bara.

Improvement in infection prevention practice was seen in all districts as evidenced by increases in the use of sterilized equipment during delivery from 13% to 39% and then to 58% in Dailekh and 3% to 22% and then to 33% in Sindhuli one year and two years after the intervention respectively. Similarly it increased from 20% to 71%, 44% to 49% and 12% to 34% in Rolpa, Surkhet and Bara respectively.

Table: 1: Routine AMTSL and Oxytocin Availability

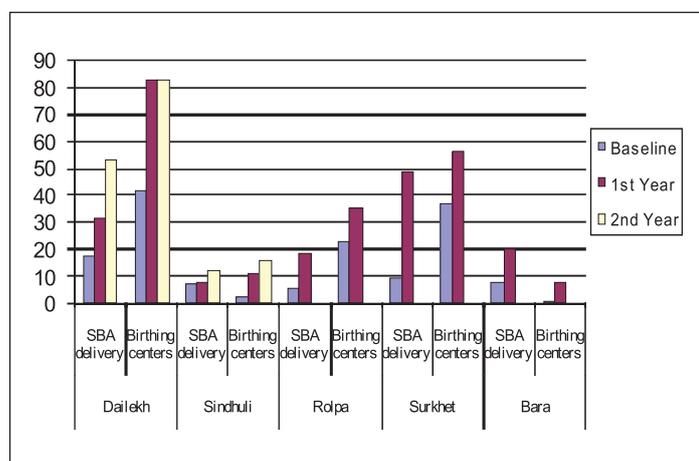
Districts	Characteristics	Baseline*	1 st Year	2 nd Year
Dailekh	Routine AMTSL	60	100	100
	Oxytocin availability	31	73	82
Sindhuli	Routine AMTSL	50	100	100
	Oxytocin availability	11	64	77
Rolpa	Routine AMTSL	38	75	NA
	Oxytocin availability	50	77	NA
Surkhet	Routine AMTSL	77	100	NA
	Oxytocin availability	62	60	NA
Bara	Routine AMTSL	36	73	NA
	Oxytocin availability	41	89	NA

*FY 2064-65 in Sindhuli and Dailekh and 2064-2065 for the Rolpa, Surkhet, Bara

Improvement in waste disposal as measured by construction and usage of a placenta pits was also remarkable, increasing from 4% of facilities having a placenta pit to 18% in Dailekh and 17% to 67% in Sindhuli, 46% to 71% in Surkhet, 0% to 4% in Rolpa and 0% to 9% in Bara.

There was a considerable increase in the number of health facilities providing 24-hour birthing facilities in all districts after the intervention with a resultant rise in the number of institutional deliveries by SBAs as seen by reviews of HMIS data.

Figure 2: Percentage of health facilities providing 24-hour birthing facilities and Institutional delivery by SBA as % of expected live births



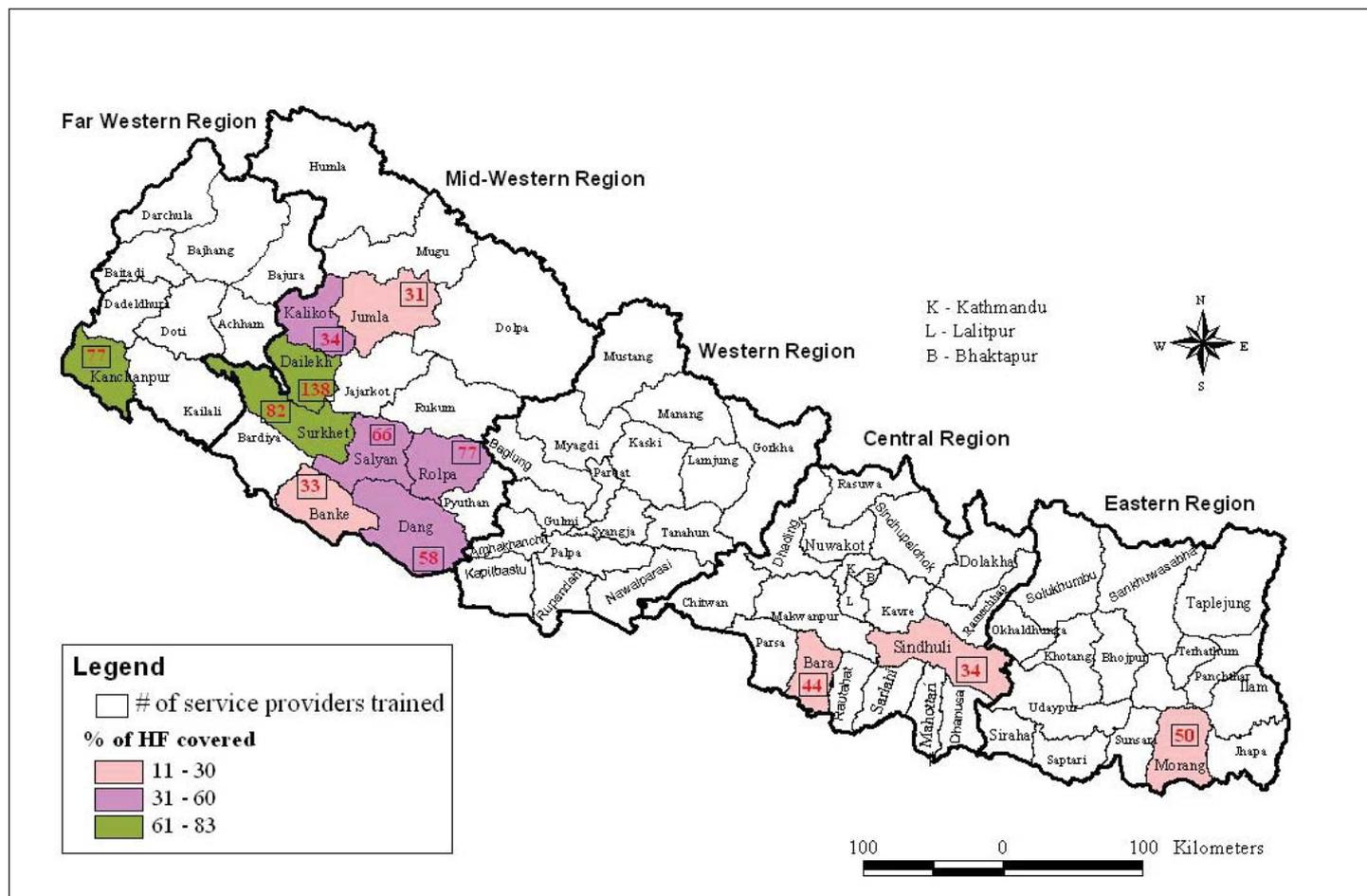
CHALLENGES

- Due to frequent transfer of staff, several providers who received the training were no longer available at the facility a year after the training and their position was inevitably taken by another health worker who had not been trained. The higher transfer of personnel could have directly contributed to a smaller improvement in districts like Sindhuli and Bara.
- Rapid expansion in the number of birthing centers, without ensuring optimal infrastructure, led to difficulty in maintaining the quality of care in districts like Dailekh.

LESSON LEARNED

- Training of health workers on selected SBA skills focused on prevention and/or management of the major killers of mothers and newborns can be an effective short term strategy to strengthen the overall quality of MNH services in the implemented districts. Based on the success of this approach in 2011, the FHD/MOHP, in partnership with UNICEF, Care Nepal, Health Right International and Plan Nepal, scaled up the MNH update in all 75 districts.
- Training of health workers must be combined with subsequent on-site follow up, coaching and efforts at creating enabling environments for optimal outcomes.
- Community engagement is a very effective approach for establishing and continuing services especially in new birthing centers.

Figure 3: Total providers trained and sites covered



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