

# **GUIDELINES FOR SAFE MOTHERHOOD SERVICES IN REMOTE AREAS**

## **Options for Improving Maternal Outcomes**

**July 2009**

### **1. INTRODUCTION**

#### **1.1 Background on Safe Motherhood in Nepal**

Nepal has embarked on an ambitious effort to improve services for safe delivery and neonatal care; seeking to reduce maternal and neonatal mortality and to meet the national commitment to achieving the Millennium Development Goals. Key to this is increasing skilled attendance at childbirth, through an intensive programme of training all eligible service providers as Skilled Birth Attendants (SBA) and improving the quality and quantity of birthing centres and Emergency Obstetric Care (EOC) facilities. This includes ensuring these facilities are properly equipped and have sufficient trained staff to offer 24-hour delivery and emergency services at the appropriate level. Equally importantly, demand creation activities are being scaled up through provision of safe delivery incentives for women giving birth in a health facility and free delivery care at all public health facilities.

In Nepal, the vast majority (over 80 percent) of births still take place at home, especially in rural areas, with less than a fifth of all deliveries attended by SBAs.<sup>1</sup> However, because complications may occur in any delivery and thereby require professional assistance, the Family Health Division (FHD) has focused its efforts on improving both quality and access to facility based delivery and emergency care services, reflecting internationally accepted evidence that this is critical to reducing maternal and neonatal mortality. However in Nepal there are many remote areas with little or no access to health facilities and this is likely to continue to be the case for the immediate future. Guidelines are therefore required to ensure women in these areas receive the services they need and appropriate interventions that will prevent complications and deaths.

The Nepal Living Standards Survey 2003/04<sup>2</sup> estimates that over the whole country, an average of 62 percent of households have access to a sub-health post within 30 minutes travel time, but in mountain areas this falls to only 37 percent (compared with 51 percent in the hills and 76 percent in the tarai). Even more critically, in mountain areas access to basic and comprehensive emergency obstetric care (BEOC and CEOC) centres for the life-saving obstetric interventions required in serious cases is severely limited compared to hill and tarai areas. These services are only available in zonal/regional hospitals, some district hospitals and a limited number of Primary Health Care Centres (PHCC). At the last count from FHD in 2009 both in public and non-profit facilities, there were only three CEOC sites and 12 BEOC sites mountain districts, compared with 30 CEOC sites and 27 BEOC sites in the hills and 19 CEOC sites and 17 BEOC sites in tarai districts. These figures are subject to change as a result of staffing transfers, especially at senior levels, but the general distribution pattern remains same. Compounding this, safe delivery staffs are less likely to be present at peripheral health facilities in mountain districts than their counterparts in the hill and tarai districts, so that even normal delivery

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<sup>1</sup> Nepal Demographic Health Survey 2006

<sup>2</sup> Nepal Living Standard Survey: Statistical Report 2003/4 Vol. 1, Central Bureau of Statistics, 2004

services are very limited. A recent study<sup>3</sup> showed that in mountain primary health care centres, only 25 percent of sanctioned staff nurse posts were filled and working compared with 49 percent and 56 percent respectively in hill and tarai districts. At health post level the figures for functioning auxiliary nurse midwife posts were 51 percent, 93 percent and 100 percent respectively. Female Community Health Volunteers are one of the few health related human resources which mountain districts have almost at the same level as the other ecological zones.

It is not surprising that the 2006 Nepal Demographic and Health Survey<sup>4</sup> data revealed that 70 percent of women in the mountains saw lack of a service provider as a key barrier to accessing health care, compared with 61 percent in the hills and 52 percent in the tarai. In the mountains 55 percent of women were also reluctant to go to a facility due to the distance to be travelled, compared with 44 percent in the hills and 36 percent in the tarai. The result is that only 6 percent of mountain women deliver in a health facility, compared with 21 percent in the hills and 17 percent in the tarai.

Additionally only 56% mountain women receive any antenatal care while 69% hill women and 81% tarai women receive antenatal care. Without antenatal care many mountain women have little or no birth preparation or understanding of potential emergencies, and no knowledge of measures for preventing emergencies or how to seek emergency care.

Since only 10 percent of mountain women are attended by a trained health worker (for home or facility delivery), and given the distances involved, it is likely that very few will have access to emergency care if complications occur. Improving facility services, while still important, will not help women who are not able to get to them in time. It is therefore essential to put in place alternative measures for improving the survival chances of these women. It will take time to fulfil the MoHP commitment to ensuring that ultimately all women receive safe and adequate care at a facility, especially in remote areas. Thus it is imperative that special approaches to serving these women be considered.

## 1.2 Definition of Remote Areas

*Definition:* For the purposes of these guidelines a remote area would be any district or geographical area such as a VDC which is not likely to have a functioning health facility with staff capable of providing obstetric first aid services within 4 hours as well access to a facility with signal function of CEOC services within 6 hours using 24 hour locally available transportation.

## 2. GOAL AND OBJECTIVES

### Goal

Women of remote areas have access to quality midwifery service during pregnancy and delivery and in the event of complications can get to life-saving emergency services in time.

### Objectives

- To increase the number of women who deliver in a [SBA staffed](#) health facility in remote areas

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<sup>3</sup> RTI International, 2009, *Human Resource Strategy Options for Safe Delivery*. Research Triangle Park, NC, USA.

<sup>4</sup> *Nepal Demographic and Health Survey 2006*

- To prevent and manage life threatening maternal and newborn complications such as post partum haemorrhage and pre-eclampsia, newborn asphyxia and infection within the community.
- For women who are not within reach of a health facility, to enable them to receive an acceptable level of antenatal, postnatal, normal delivery care and family planning services, including identification of complications and timely referral
- To establish emergency communication and systems for transporting women with life-threatening complications to an appropriate service site.

### 3. GUIDELINES FOR IMPROVING MATERNAL OUTCOMES IN REMOTE AREAS

The purpose of these guidelines is to provide a listing of evidenced based good practices which the Family Health Division can use to encourage district staff and facility management committees as well as safe motherhood partners working in remote areas to develop need and resource based programmes to improve maternal outcomes in their areas. As each remote area will have differing needs and resources, the guidelines would serve to help local planners select feasible and recommended improvements for their safe motherhood services. FHD has access to a Maternal and Neonatal Health GIS based atlas which provide Village Development Committee (VDC) level recent population projections, location of health facilities, road networks, rivers and airport where available. FHD can provide information of availability of health staff and active female community health volunteers in the facility. These information can help to plan and select interventions accordingly. To implement these guidelines, FHD with support from partners will develop a remote area service implementation plan and a performance monitoring package.

### 4. STRATEGIC APPROACH FOR REMOTE AREA

#### Local level Micro-planning:

Because each district and even areas within a district differ in the services and staff available, area-specific micro-planning will be used to plan effective approaches for the delivery of basic maternal health services known to improve maternal health, as detailed on the attached chart. Ideally the local plans will be developed through facility level micro-planning. These planning processes already in place in many districts are best conducted in close coordination with local health facility operation management committees (HFOMC), using participatory planning approaches and coaching to build their capacity to manage this in the future. The goal will be to develop for all remote areas specific plans which will assure in each catchment area the delivery of the basic maternal and neonatal health services, as detailed in the guidelines and on the attached ANC/PNC chart endorsed by FHD. The planners will be guided to assure their plans address expansion of access to facility, outreach services, and home-based measures:

- A. Expanding access to facility services: A plan for improving facility services would be a key requirement of a good safe motherhood plan and should include:
  - Adequate staffing including local contracting of additional staff, especially ANMs, to support 24-hour services (Red Book funding is available through FHD and Health Facility management committees may also identify local funding sources). NHTC should

be able to facilitate SBA training for either type of contract staff from remote areas in the coming year. District Health Offices (DHO) can establish an ANM pool to ensure sufficient coverage at all times. Training may be available for selected MBBS doctors in C-section training and anaesthesia assistants if district hospital has facilities for C-section and interested staff.

- Public private partnership agreements can be used to enable private NGOs or medical colleges to supplement or support health workers, especially medical doctors. In the case of medical colleges, this can be mutually beneficial, giving clinical exposure to newly trained doctors as well as providing services for a remote area. In certain district facilities this arrangement may allow establishment of CEOC services.
  - Updating current equipment and supply inventories and ensuring timely procurement in line with needs through central and/ or district authorities.
  - Commitment of facilities to provide antenatal/post natal check-ups for pregnant women and newborns on any day of the week they are able to come, with an undertaking not to send them away without services.
  - Providing 24-7 BEOC services further if birthing home can be established. For women who live over 1 hour distance and have no access to waiting homes, best practice would be to keep them at facility for 24 hours after delivery, a critical period for complications to develop. At release, clients must be provided counselling on post natal maternal and neonatal complication signs and steps of good post natal care.
  - For districts without CEOC services, organize effective emergency transport through community groups and establish emergency support to field staff through phone consultation.
  - Establishing maternity waiting homes possibly with local NGOs to enable women from remote villages to travel to a facility ahead of their expected delivery date and remain long enough for post natal care.
  - Expanding access to family planning services to help women space their children and thus improve their general health through such measures as including this service in routine EPI contacts. Pre-identify during antenatal sessions clients for long term methods, including post-partum IUD and promote pre-delivery counselling and consent.
  - Encouraging women and their husbands to do birth registration
- B. Outreach services: To increase basic service coverage of remote areas and to take advantage of every contact women make with the health system, HFOMCs could, by using effectively available staff and FCHVs, scale up and improve quality of outreach antenatal, postnatal and family planning services by considering the following in their plans:
- Antenatal and post natal services may need to be timed differently in the very remote areas where a woman may only be able to come once or twice for antenatal and post natal care. For example, a women in 8<sup>th</sup> month of her pregnancy for her first visit and unlikely to return for a second and certainly not a third or fourth should be able to receive as many services as useful so late in the pregnancy.
  - Encourage women to have more antenatal and post natal visits possibly at sites with more services by advising pregnant women of the services, medications and supplements that are available. Advice for antenatal and post natal care visits either at the current or nearest better equipped site in future.
  - At the time of first immunization contact, assure counseling given to the mother on breast-feeding, complementary feeding and birth spacing.

- To increase the number of women who receive as much service as possible including Birth Preparedness Package (BPP) and SBA delivery, all health related staff and volunteers should be able to give information about where the nearest facility with professional SBA services are available and when and where they should have antenatal and post natal visits.
  - If a nearest facility is too far to reach in emergency and/or has no waiting home, women from these areas should be advised on home based measures addressed in C that go beyond the BPP and the importance of 4 ante and 3 post natal visits as possible.
  - Staff/volunteer training plan can be developed to assure appropriate staff/volunteer can competently provide services as shown on the attached ANC/PNC chart. For any staff/volunteer assigned by the HFOMC plan to provide services at an outreach clinic, if the person is not already competent in skills needed at a clinic, the HFOMC must work with DHO to arrange training prior to the person serving at the clinic.
- C. Home-based measures: Improved education/ awareness and following services and preventive measures to be used in case of home deliveries;
- Using BPP improve education/awareness about care during pregnancy, about accessible antenatal services with details on services and medications/supplements available at these services, about recognising risks or danger signs, and about basic home based clean and safe delivery practices for safe motherhood and about the importance of post natal visits and family planning services,
  - Dosing during any antenatal care visits for all pregnant women with tetanus toxoid, iron folate, albendazole, clean delivey kit
  - Assuring SBA or trained health workers who attend home deliveries have emergency delivery kit and that they are competent in *assessment/ management* of post partum haemorrhage (PPH) using active management of third stage of labour (AMTSL), treating pre-eclampsia/eclampsia (PE/E) with  $Mg_2SO_4$ , handling prolonged labour with partogram and referral, managing neonate asphyxia with resuscitation and keeping a supply of oxytocin in regions where it can be stored successfully with clear guidelines indicating its use only after delivery.
  - Providing misoprostol tablets to women planning to have an unattended home delivery to be taken upon delivery after assuring clear instructions are given along with pictorial handouts during either the 8<sup>th</sup> or 9<sup>th</sup> month when the mother comes for an antenatal visit (even if first visit). The misoprostol can be given by any health worker or volunteer in an antenatal setting who has been trained and is competent to provide counselling on the use of this medicine. Any district selecting this measure for implementation should have prior approval of FHD.
  - Working with community leaders or groups to establish emergency transport options if deliveries develop complications,
  - Encouraging women and their husbands to do birth registration during post natal visit.

Other home-based measures such as preventive dosing of pregnant women with calcium in areas where eclampsia is a threat, providing Vitamin A for newborns or use of chlorohexadine for immediate newborn care may be recommended once their effectiveness and/or affordability/ acceptability in Nepal is determined. Additionally, the Nepal Maternal Mortality Morbidity Study conducted under the direction of FHD may have useful findings for improving services in remote areas and the guidelines can be expanded accordingly.

Inform women about the safety of facility delivery and free service and maternity scheme. The remote area guidelines aim to link women to their nearest functioning facility, ensure they know the staff and the services offered, and provide support for those unable to reach facilities. District officials and collaborating partners working in remote areas wishing to deviate from these guidelines should seek prior FHD approval.

### **Options for developing maternity waiting homes, private ANM services and emergency transport**

HFOMCs may also consider encouraging interested civil society groups to support safe delivery through the following initiatives:

- *Maternity waiting homes:* To encourage facility deliveries for women more than four hours' walk from a facility, simple waiting homes that are mother/ family friendly are needed at 24-hour delivery centres. These can also be used for immediate post natal care in situations where women are discharged within a few hours of delivery and need to rest before walking home. Several districts have successfully tried these at the instigation of NGOs that manage and promote their use. In CEOC sites districts with full emergency care services at the district centre, these homes could be particularly valuable for women who are aware of a high risk situation prior to delivery, for example expecting twins, breech, or a repeat caesarean section etc. Health facility management committees need to identify funding for establishing, equipping and running these homes, and it is important to ensure they are well managed and comfortable.
- *Private ANM services:* To increase trained health worker services, HFOMCs can encourage NGOs and civil society organizations to support ANMs located in areas without facilities to start their own private clinics with small start up grants and thus bring trained health care closer to the women not currently served by existing facilities.
- *Emergency transport:* District Development Committees (DDC) and Village Development Committees (VDC), Chief District Offices (CDO), DHOs, in combination with radio equipped police stations, should be encouraged to organise emergency airlifts or few seats reserved for emergency patients in aeroplane or similar measures for rescuing women requiring emergency services not available in the district. In the Midwest region, SSMP/Options has currently facilitated Regional Health Directorate/ FHD negotiations with airlines to prioritise transport of EOC cases at reduced rates or paid for by local emergency funds. Additionally, community members may encourage local Red Cross to participate in arranging emergency transport.
- *Telemedicine:* This includes provision of telephone guidance from an experienced emergency care provider from hospital to the peripheral health workers for onsite management and timely referral. This is currently being piloted in two districts in Solukhumbu and Dailekh which has shown that many lives of mother and newborn saved through telephonic guidance from hospital to peripheral health workers to provide obstetric first aid and improved timely referral to hospital.
- *Rural Ultrasound:* The experience of Solukhumbu district has shown that regular outreach ultrasound screening of pregnant women by trained staff nurse or ANM has attracted many pregnant women for antenatal and delivery care and also improved

referral to hospital for many high risk cases like placenta pravea, twin, breech, transverse lie, intra uterine death etc