



PULSE

UPDATING YOU ON HEALTH DEVELOPMENTS

RESPONDING TO INCREASED DEMAND FOR CHILDBIRTH AT REFERRAL HOSPITALS IN NEPAL

Situational Analysis and Emerging Options

MAIN POINTS

Hospital facilities have not kept pace with the rapidly increasing number of births taking place in referral hospitals in recent years. A study of six referral hospitals and 12 birthing centres in six districts of Nepal found the following:

- ▲ Women who choose to deliver in a health institution strongly prefer to deliver in a hospital, expecting reduced risks and higher quality care.
- ▲ Bed occupancy rates of 80–145% were observed in the maternity wards of the six study hospitals.
- ▲ The 12 birthing centres were underused with an average of only 60 deliveries per skilled birth attendant (SBA), and only 12% of institutional births in the six districts happening in the birthing centres.

The study gives a number of recommendations to make birthing centres more attractive for normal deliveries and to improve the levels of care in hospitals.

OVERCROWDING STUDY

The Government of Nepal is committed to providing skilled care for mothers during childbirth and achieving the MDG target of 60% of births assisted by a skilled birth attendant (SBA) by 2015. Institutional childbirths in Nepal



The study observed the use of floor mattresses and unused beds from other departments to accommodate the large number of delivery cases. Janakpur Zonal Hospital, 2012.

increased four-fold from 9% in 1996 to 35% of all births in 2011 and the rate of increase is accelerating. Progress in expanding service provision has been good, but referral hospitals in Nepal's southern plains (the Terai) are finding it difficult to cope with the demand while lower-level birthing facilities are under-used.

A cost and use survey of six referral hospitals (Seti, Bheri, Janakpur and Koshi Zonal Hospitals, Bharatpur Hospital and Western Regional Hospital) and twelve birthing centres was carried out in August–September 2012. Maternity and operating theatre registers and financial records were consulted. In-depth interviews were conducted with hospital managers, health workers and pregnant women and mothers.

STUDY FINDINGS

The study confirmed a serious mismatch in Terai areas between the wishes and expectations of pregnant women and the public provision of maternity services.

- 1. Rapidly increasing demand for maternity services in hospitals** - In the Terai, hospitals have become the strongly preferred location for childbirth. In the last four years 88% of all institutional births took place in either a public (65%) or a private (23%) hospital in the six districts. Many women travel from afar to deliver at these hospitals by-passing their local birthing centres. Mothers believe that hospitals are superior facilities being equipped and staffed to provide higher quality care and to cope with complications.
- 2. Seriously over-stretched hospital maternity wards** - Quality of care is being seriously compromised as maternity wards manage high volumes in under-resourced facilities. Over the past four years, the bed occupancy rate in the maternity wards of the six hospitals rose ten times faster than the general bed occupancy rate and by 2011/12 stood at 80–145% occupancy. The World Health Organisation (WHO) recommends a maximum bed occupancy rate of 80%. Back-up facilities and water supply, toilets and other amenities are in short supply. In all six hospitals the medical superintendent, matron and nursing supervisor posts were vacant.

3. **Under-used birthing centres** - Mothers think that birthing centres provide poorer quality services because they have young and inexperienced nurses and lack 24 hour–7 days a week (24/7) services. The 12 birthing centres were underused, averaging 57 deliveries per SBA per year against the WHO guideline of 175 per antenatal midwife. The low use rates in the birthing centres meant that the average cost of each birth was Nepalese rupees (NPR) 3,625.

The picture was variable though with only 2.5%–6% of institutional childbirths taking place in birthing centres in Chitwan, Kaski and Morang district in fiscal year 2011/12 compared to 45% in Kailali district. This probably reflects the superior transport infrastructure and higher socioeconomic development in the former three districts. The study also found that birthing centres further from referral hospitals had higher levels of use.

4. **Overcrowded hospitals** - The high maternity bed occupancy rates, the advanced age of much of the infrastructure and the use of locally hired medical staff, volunteers, and students on lower pay scales resulted in a unit cost of only NPR 1,847 per normal delivery in the six hospitals in 2011/12.
5. **Significant potential to meet additional future costs through efficiency improvements** - Adjusting the study data to assume 80% bed occupancy in hospitals and no staff vacancies would increase hospital unit costs by 33%, while assuming 60% occupancy in birthing centres would halve the unit costs there (see Table 1). These adjusted estimates suggest that major efficiency improvements are possible in birthing centres as more women could be served using the same resources. The savings due to reduced case loads would go a long way to covering the cost of improving facilities in hospitals.

Table 1: Unit cost of normal deliveries (NPR 2011/12)

	Actual	Adjusted
Hospitals (6)	1,847	2,458
Birthing Centres (12)	3,625	1,873

6. **Aama payments are an important source of income for public hospitals** - The proportion of the income of the six hospitals coming from payments under the Aama Programme increased from 12% in 2008/09 to 22% in 2011/12. These payments are deposited in pooled funds and are used to cover general recurrent expenditure. The level of Aama payments was set in 2009 to cover hospitals' non-salary costs. However, private hospitals must use the same payments to meet all their costs including salaries. This means that the Aama scheme is unattractive to well-used private hospitals, although less used ones still welcome it for providing cases for their student doctors and nurses.



The study found that many birthing centres were under-used. A birthing centre in a Kaski primary health care centre.

RECOMMENDATIONS

1. Prepare an investment plan for new birthing and maternity units in zonal hospitals to increase their capacity to handle deliveries.
2. Review the Nepal Health Sector Programme (NHSP-2) plan to increase the number of birthing centres in health posts. It is strongly suggested that increasing the use of strategically located birthing centres will provide better value for money.
3. Make birthing centres more attractive by ensuring there are trained staff on call 24/7 and an effective referral system including free transfers from birthing centres to hospitals.
4. Review the level and use of Aama Programme funds for improving maternity services at the facility level.

MoHP and NHSSP contributions

The Family Health Division of the Department of Health Services facilitated the study, which was carried out with support from NHSSP.

More information: See the full study report "FHD and NHSSP (2013) Responding to Increased Demand for Institutional Childbirths at Referral Hospitals in Nepal: Situational Analysis and Emerging Options" at: www.nhssp.org.np/ehcs.html