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Improving Emergency Obstetric Care in a Context of Very High Maternal Mortality: The Nepal Safer Motherhood Project 1997–2004

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Abstract: *The Nepal Safer Motherhood Project (1997—2004) was one of the first large-scale projects to focus on access to emergency obstetric care, covering 15% of Nepal. Six factors for success in reducing maternal mortality are applied to assess the project. There was an average annual increase of 1.3% per year in met need for emergency obstetric care, reaching 14% in public sector facilities in project districts in 2004. Infrastructure and equipment to achieve comprehensive-level care were improved, but sustained functioning, availability of a skilled doctor, blood and anaesthesia, were greater challenges. In three districts, 70% of emergency procedures were managed by nurses, with additional training. However, major shortages of skilled professionals remain. Enhancement of the weak referral system was beyond the project's scope. Instead, it worked to increase information in the community about danger signs in pregnancy and delivery and taking prompt action. A key initiative was establishing community emergency funds for obstetric complications. Efforts were also made to develop a positive shift in attitudes towards patient-centred care. Supply-side interventions are insufficient for reducing the high level of maternal deaths. In Nepal, this situation is complicated by social norms that leave women undervalued and disempowered, especially those from lower castes and certain ethnic groups, a pattern reflected in use of maternity services. Programming also needs to address the social environment.* ©2007 Reproductive Health Matters. All rights reserved.

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THE Nepal National Safe Motherhood Programme was initiated in 1997 with the goal of reducing the maternal mortality ratio, at that time among the highest in South Asia at 539 per 100,000 live births (Nepal Family Health Survey 1996). It was designated a national priority programme, receiving financial and technical support through a wide range of donor projects. The Nepal Safer Motherhood Project (NSMP), which operated from 1997 to 2004, was a collaborative

intervention between the Nepal Ministry of Health and Population and the UK Department for International Development (DFID), managed by Options Consultancy Services. It was one of the first large-scale projects to focus on access to quality emergency obstetric care.

High maternal mortality and morbidity in Nepal are associated with both socio-economic and health system issues. The low status of women, their lack of voice in reproductive health matters and adherence to cultural practices and taboos around pregnancy and childbirth continue to have significant repercussions. Education and literacy levels, though now rising, are generally low, especially among women, making it difficult to change established practices and improve understanding of safe motherhood issues.

Nepal's challenging terrain and poor communication network mean that travel to a referral centre is often expensive and difficult. During the last ten years, the armed conflict has further exacerbated the situation. A project study in 2003 found that the armed conflict had affected women's access to emergency obstetric care through raised financial and travel barriers.[1]

Efforts to improve maternal health need to be informed by critical accounts of the complexities of programme implementation. Case studies of safe motherhood programmes from a range of developing countries with successful maternal mortality reduction are instructive. Koblinsky and Campbell,[2] for example, identified six factors for success in reducing maternal mortality ratios in a review covering Bolivia, China, Egypt, Honduras, Indonesia, Jamaica and Zimbabwe:

- high availability of birthing facilities,
- increased availability of a skilled birth attendant located near the home,
- formalised referral links between facilities, beginning with providers at the community level,
- free or reduced costs for services and transport to services,
- public accountability for providers' performance, and
- strong government policy guidance.

We use Koblinsky and Campbell's framework to analyse the Project's contribution to safe motherhood in Nepal. In Phase 1, the Project focused mainly on improving midwifery and emergency obstetric services in selected health facilities in three districts (Baglung, Kailali and Surkhet). Two main components were developed: i) management of service provision for women of reproductive age, including improvements to the physical infrastructure of hospitals, equipment and supplies, and training of personnel; and ii) increasing access to midwifery and obstetric services by improving the social context to enable women to utilise services. Following a mid-term review in 2000, Phase 2 extended the Project to six more districts (Parbat, Myagdi, Rupendehi, Nawalparasi, Jumla and Dailekh), covering in total approximately 15% of the population. Project districts were located in the poorer regions of the mid- and far west regions of the country.

This paper draws upon extensive project documentation: seven internal evaluations and activity-to-output reviews, ten external evaluations and studies of key project components[3–12] as well as research studies commissioned during the Project,[1,13] other published papers,[14–17] and a project evaluation synthesis report.[18]

Findings

Availability of birthing facilities

Birth at home is the prevalent form of delivery in Nepal. In 2001, 88.9% of deliveries occurred at home with little change over the previous decade[19] and the proportion was still high at 81.0% in 2006.[20] Pregnant women conceive of hospital care as emergency care, and home births tend to be preferred because of the flexibility of payment, convenience and the comfort of a familiar birth attendant.[7]

The central aim of the Nepal Safer Motherhood Project was to bring about an increase in utilisation of quality basic and comprehensive essential obstetric care to avert deaths from complications. Progress during the project showed a slow but steady advance in meeting the need for emergency obstetric care, as measured by the UN process indicators. Met need for emergency obstetric care was <5% in the Phase 1 districts in 1997.[21] The average annual increase in met need has been 1.3% per year over the intervention period, bringing it to the 2004 level of 14% in public sector facilities in project-supported districts,[22] In a further four districts supported by UNICEF, met need increased from 1.9% to 16.9% between 2000 to 2004.[23] Pooling district data masks large inter-district variation in annual met need increases, which ranged from -0.1% to 3.3%