

Towards
4+5
Research
Programme
Consortium

# Encouraging women to use professional care at childbirth

Does Nepal's Safe Delivery Incentive Programme work? Evidence from the district of Makwanpur

In 2005, the Government of Nepal introduced an innovative financing scheme, known as the Safe Delivery Incentive Programme (SDIP), as part of its strategy to increase the use of maternity services. The SDIP provides cash to women who deliver in a health facility and an incentive to health workers for attending deliveries. Across the developing world, there is increasing interest in whether such financing policies work to reduce barriers that women face when seeking health care at childbirth.

This briefing note reports on the impact of the SDIP in Makwanpur, a district of Nepal. It shows that the intervention has proved successful in raising utilisation of professional delivery services, but a high proportion of households continue to incur catastrophic health care payments when seeking care.

### Key findings

- The SDIP has led to a substantial rise in the use of maternity services and skilled attendants at delivery.
- With no targeting mechanism, the cash incentive has reached disproportionately wealthier families, as they are more likely to use health facilities.
- The cost of delivery care is substantial and a high proportion of families incur catastrophic health care payments.
- The amount of cash offered by the SDIP covers only a fraction of the household cost of delivery care and therefore, by incentivising greater use of institutional delivery, the SDIP risks exposing more households to catastrophic payments.
- The SIDP should be linked closely to policies that offer better financial protection to poorer households and women who experience obstetric complications. Nepal's free health policy, recently implemented, may offer a solution.

### **Background**

In Nepal, more than 80 percent of women give birth at home without the presence of a health professional who is trained to recognise and manage complications. Whilst the country has made progress in reducing maternal deaths, the maternal mortality ratio remains high at 281 per 100,000 live births. There are concerns that further reductions in mortality will be hampered by the slow progress made in increasing coverage of skilled birth attendance.

In 2005, the Government of Nepal introduced the Safe Delivery Incentive Programme (SDIP) with the overriding objective of increasing the use of professional care at childbirth. The SDIP provides cash to women who seek care, as well as incentives for staff to provide maternity services.

Cash incentive programmes elsewhere in the world have successfully raised demand for health services. Monetary incentives given to households, on the condition that they engage in certain health seeking behaviours, are known as conditional cash transfers (CCT). Evidence from Latin America suggests that CCT programmes can increase utilisation of preventive services and, in some cases, improve health outcomes.

This briefing note describes the impact of the SDIP in rural Makwanpur, a district of Nepal. It focuses on the impact of the programme on the number of women seeking skilled delivery at birth, and the extent to which the programme has been able to protect households from the high cost of institutional care. Finally, the briefing note discusses implications of the findings within the wider context of low-income countries.

### Catastrophic health care payments

When out-of-pocket expenditures on health care exceed a certain fraction of a household's total income, they may be termed catastrophic. That is, they may seriously disrupt the living standards of a household.

The measure used to estimate the extent of catastrophic payments is the incidence, most commonly defined as the proportion of households exceeding 10 percent of total household consumption.

# What is the Safe Delivery Incentive Programme?

The SDIP comprises several financial benefits to women and health workers. It consists of a CCT to women who deliver in a health facility; an incentive to health workers for each delivery they attend; and free delivery care for eligible women. Figure one details the benefits offered by the SIDP, the eligibility criteria and the conditions for receiving the financial benefit.

The SDIP is one of the first CCT programmes to be implemented at scale in a low-income country. It is managed by the Ministry of Health which provides funds to districts and regional hospitals. There have been several challenges to implementation especially relating to the management of funds and promotion of the programme at the community level. This has resulted in low, albeit increasing, levels of awareness about the programme and eligible women not receiving the cash from facilities.

Figure one: The benefits offered by the SIDP and eligibility criteria or conditions applied

Financial benefit	Eligibility / condition
1. Conditional cash transfer to women 1500 NRS (\$23.5) in mountain districts 1000 NRS (\$15.6) in hill districts 500 NRS (\$7.8) in terai districts	Woman delivered in a public health facility* Woman had an obstetric complication or had no more than two living children**
2. Provider incentive 300 NRS (\$4.7) per delivery	Delivery attended at home or in a public health facility Doctor, nurse, midwife, health assistant, auxiliary health worker or maternal and child health worker
3. Free delivery care	Woman is resident in a low human development district Woman delivered in a public health facility Woman had an obstetric complication or had no more than two living children**

<sup>\*</sup> Since 2007 the programme has expanded to include non-profit and private health facilities

In Makwanpur district, two-fifths of eligible women received the cash incentive after childbirth, with those delivering at a health post being least likely to benefit. Women with no education were less likely to receive CCT, possibly because they found it more difficult to complete the form required to apply for the funding.

### **Findings**

SDIP has led to an increase in the use of professional care during childbirth

The SDIP has been successful in encouraging women to seek professional care at childbirth. It has led to an increase in the use of health facilities and of skilled birth attendants at delivery. Impact estimates show that the programme more than doubled the rate of institutional deliveries (see figure 2).

While the programme has encouraged women to deliver in facilities, the smaller increase in skilled birth attendance suggests that a lack of skilled staff is a greater constraint than health infrastructure to increased utilisation.

The cost of institutional care represents a high proportion of total household consumption

The average cost to a household of a normal delivery is 4,042 NRS (\$63.2), compared with 22,780 NRS (\$356.2) incurred by those with a caesarean section. For 14% of households, the cost of care is catastrophic, representing over 10% of their total income. The financial burden of care is greater for poorer households.



Tom Kelly photo

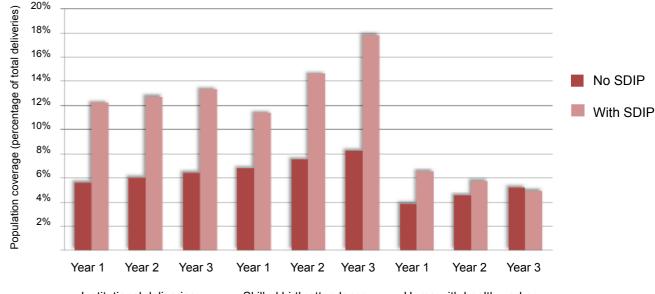
## The SDIP offers little protection against catastrophic payments

The CCT, worth 1000 NRS (\$15.6) in Makwanpur district, represents one quarter of the cost of a normal delivery or one twentieth of the cost of a caesarean section. The reduction in the incidence of catastrophic health care payments due to the CCT (from 14% to 13.7%) was not statistically significant – ie. the CCT offers no financial protection.

Richer households are more likely to receive the conditional cash transfers

Receipt of CCT is heavily concentrated amongst relatively better-off households. The wealthiest 20% of women received 60% of the CCTs. This reflects the fact that, in Nepal, women who use government maternity services are disproportionately wealthier.

Figure 2: The impact of the SDIP on use of professional care during childbirth



Institutional deliveries Skilled birth attendance Note: Estimates modelled using interrupted time series analysis

Home with health worker

<sup>\*\*</sup> This condition has now been removed

### Implications for low income countries

The SDIP in Nepal is the first CCT to be rolled out nationally in a low-income country. The findings from Makwanpur district may have implications for other countries that are considering, or are in the process of, implementing CCT programmes.

- CCTs can increase utilisation of health services in a context where the capacity of government to manage is constrained. Inadequate quality of care may mean that increases in utilisation do not translate into equally impressive improvements in maternal health outcomes.
- 2. The cost to households of institutional delivery care is high and the SDIP offers little protection against catastrophic expenditures. By incentivising greater use of institutional delivery, it risks exposing more households to catastrophic payments.
  - To reduce these catastrophic payments CCT programmes, such as the SDIP, should be linked to policies that offer better financial protection to households especially for obstetric complications and poorer households. Nepal's free health policy, recently implemented, may be one solution.
- 3. The SDIP in Nepal is not targeted at poor households unlike those implemented in Latin American countries. Arguably, this is the right approach given feasibility concerns and the cost of administration associated with targeting. But questions remain whether the SDIP is value for money, particularly given the additional inefficiencies that come hand in hand with not being able to target.

#### **Credits**

This paper was written by Timothy Powell-Jackson and Rebecca Wolfe. It is based on research looking at the impact of Nepal's Safe Delivery Incentive Programme in the district of Makwanpur. The paper draws on data from a community surveillance system that has been running in rural areas of Makwanpur district, as part of a randomised control trial to assess the effectiveness of a participatory intervention with women's groups.

Part of the study received funding from the Support to Safe Motherhood Programme in Nepal, managed by Options UK. The author acknowledges technical support from the Consortium for Research on Equitable Health Systems.

For more information about this publication please contact Timothy Powell-Jackson.

Email: timothy.powell-jackson@lshtm.ac.uk







### **About Towards 4+5**

Towards 4+5 is a five year Research Programme Consortium on maternal and newborn health, funded by the Department for International Development (DFID), UK. The goal is to support evidence based policy and practice for maternal and newborn health to facilitate the achievement of the Millennium Development Goals 4 and 5.

Research is concentrated in five developing countries. These are Bangladesh, Burkina Faso, Ghana, Malawi and Nepal. It focuses on ways to improve mother and infant care at both the facility and community levels.

#### **Partners**

- Institute of Child health, London
- London School of Hygiene and Tropical Medicine
- International Centre for Diarrhoeal Disease Research (ICDDR,B), Bangladesh
- Perinatal Care Project (PCP), Diabetic Association of Bangladesh (BADAS) (formerly DAB)
- Grefsad, Burkina Faso (formerly Centre Muraz)
- Kintampo Health Research Centre (KHRC), Ministry of Health/Ghana Health Services
- Maimwana project, Lilongwe Central Hospital, Malawi
- Mother and Infant Research Activities (MIRA), Nepal

Contact: g.eroglu@ich.ucl.ac.uk

www.towards4and5.org.uk



This document is an output from a project funded by DFID for the benefit of developing countries. The views expressed are not necessarily those of DFID.