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# maternal & child health

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## Preventing HIV in Kenya's child rape victims

**Using antiretroviral drugs after unprotected sex has been shown to provide some protection against contracting HIV. This method is recommended for protecting rape victims. Given the huge physical trauma experienced by victims, the risk of contracting HIV following rape is likely to be higher than after consensual sex, especially in children.**

The organisation 'Liverpool VCT, Care and Treatment' began a study in the Thika district of Kenya in 2003. Thika is the first district hospital in Kenya to provide comprehensive post-rape care. All services are provided free of charge, and include 'post exposure prophylaxis' (PEP), emergency contraception, preventive treatment for sexually transmitted diseases, trauma counselling and HIV counselling and testing.

The drugs zidovudine and lamivudine were used over 28 days for PEP, with children's dosages calculated according to their weight. The researchers gathered data for the first eight months of the service from July 2003 to March 2004. During that time 133 rape survivors attended the hospital and data were available for 94 of these, 48 of whom were children. The high number of children seeking treatment was unexpected and presents a challenge for service providers. PEP was given to patients who sought treatment within three days of a rape, and HIV tests were given within a further three days. Treatment was continued for those who tested HIV-negative.

Significant findings include:

- Children were more likely than adults to know their attacker.
- Fourty-eight percent of those who started PEP reported minor side effects, but these were significantly less common in children.
- Blood tests did not show any cases of blood or liver toxicity from PEP treatment.
- Children were just as likely as adults to complete their 28 day course of treatment but less likely to attend follow-up HIV testing after six weeks.
- Dosages of zidovudine were higher than recommended in smaller children and slightly lower than recommended in bigger children. All children received appropriate or high doses of lamivudine.

Even without any publicity, demand for the post rape service in Thika was high. This has significant implications for PEP programmes and wider policy:

- Programmes should anticipate high attendance and use awareness raising to encourage early attendance at clinics.
- Using a child's weight simplified the calculation of dosages, but problems remain. The World Health Organization plans to standardise fixed-dose combination tablets for narrow weight bands.
- Allowing rapid testing to be conducted by counsellors linked to post-rape care clinics may help with this.
- The researchers were unaware of any of the cases of child rape resulting in prosecution of the rapist. A holistic approach to post-rape care of children is needed, including work with police, social and forensic services and legal support.

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## Making childbirth safer for mothers in Nepal

**More than 90 percent of women in rural Nepal deliver at home alone or with relatives. Illiteracy, preference for the home environment, geography, poor quality services and ongoing conflict all limit their access to skilled obstetric care. What impact does affordability have on care seeking?**

The maternal mortality ratio in Nepal is among the highest in Asia, at around 539 per 100,000 live births. Skilled attendance at birth would help to reduce this to the target figure of 300. But how much would this cost? Research involving the London School of Hygiene and Tropical Medicine (UK) measured costs and willingness-to-pay for three levels of delivery care services:

- the current pattern of service use
- all deliveries in a health facility
- skilled attendance at home.

Household surveys covering 720 women across eight districts showed that:

- The average cost to a household of a home delivery ranges from US$5.43 with a friend or relative attending, through US$10.05 with a trained or untrained traditional birth attendant, to US$11.63 with a health worker.
- At a health facility, the average fee for a normal delivery is US$8.97, with additional charges, companion time and transport costs taking it above US$70.
- For the poorest 144 people surveyed, these costs represent three months of household income, compared with just over one month for the wealthier households. More than one in five women delivering at home say cost is the main barrier to delivery at a facility.
- On average, women are willing to pay up to US$9.70 for delivery at home with a trained attendant, or US$64.67 for delivery at an obstetric care facility.
- The annual per capita cost of current practices is US$0.60. Universal facility delivery would cost US$3.15 per capita, while skilled attendance at home and early referrals from remote areas would cost US$1.55.

Governments must consider the costs of strategies to increase the coverage of skilled attendance at delivery and ensure that these can be financed from domestic or external sources. Nepal's annual public health budget is around US$5 per head so cost sharing between households and government is inevitable. The researchers propose a combination of improved financing for demand-side costs and early referral in remote areas plus an increase in the number of comprehensive essential obstetric care facilities. They also recommend:

- encouraging or requiring public facilities to develop and publicise standard charges for services
- making home delivery safer through public funding of safe delivery kits and more trained attendants
- improving mechanisms to direct funds to women in greatest need
- providing better finance for payment exemptions in public facilities for the most vulnerable
- offering public funding for transport for low income households.

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'Financial implications of skilled attendance at delivery in Nepal', *Tropical Medicine and International Health* 11(2), pages 1-10, by Josephine Borghi et al, 2006

# Life saving or money wasting?

## What users think of caesarean sections in Bangladesh

**Bangladesh has a high rate of maternal deaths, one of the world's lowest rates of women using skilled birth attendants and a very low rate of caesarean births. To improve maternal health, a greater proportion of women need access to professional medical care, including caesarean delivery. However, in Bangladesh many women distrust caesarean surgery.**

In Bangladesh, where an estimated 320 to 440 maternal deaths occur per 100,000 live births, only 2.4 percent of children are delivered by caesarean section, whereas the internationally identified need is between five and 15 percent.

Using a skilled birth attendant during birth is one of the most recommended forms of intervention to reduce maternal deaths in low-income countries. Yet in many regions the proportion of women who do so is low as they face a number of obstacles to seeking professional medical help in childbirth. A major reason that skilled birth attendance is encouraged is that it can lead to women being referred for professional medical help if they are experiencing difficulties during birth or pregnancy. In certain instances, a caesarean section may be needed to save the mother and/or her baby. Many women, however, may not believe a caesarean procedure to be useful.

A study by the London School of Hygiene and Tropical Medicine (UK) in collaboration with the Bangladesh Ministry of Health and Family Welfare, explored the experiences and views on caesarean sections of 30 women who recently gave birth in a health facility in a rural district of Bangladesh. The research found that:

- Women's distrust of doctors' recommendations for caesarean sections was due to the high cost of this surgery and a belief that it was not always medically necessary.
- In some cases, this distrust results in women avoiding or leaving medical facilities.
- Some cases showed that there were differences of opinion among medical staff about whether or not a caesarean was necessary.
- This was further complicated by financial incentives for doctors to carry out caesareans and for nurses and midwives to perform normal deliveries.

Bangladeshi women understand the need for professional medical care but it appears that they have good reason not to trust doctors' advice to have a caesarean delivery. Their fear of caesarean delivery is not simply based in ignorance but may reflect real concerns about medical practice. The study recommends that:

- As there is a social stigma attached to caesarean deliveries and the cost of these deliveries is too high for many families, the medical profession should only recommend caesareans when absolutely necessary and should not charge unaffordable fees.
- Policymakers need to address problems in the health system that may lead to improper service provision.
- They must not only regulate and prevent unnecessary procedures but also address the underlying factors that provide health staff with the incentive to push for these procedures.

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'Life saving or money wasting? Perceptions of caesarean sections among users of services in rural Bangladesh', *Health Policy* 80(3), pages 392-401, by Justin Oliver Parkhurst and Syed Azizur Rahman, 2006

# Women's groups' perceptions of maternal health issues in rural Malawi

**Progress in preventing and seeking care to reduce maternal deaths in rural Africa depends on women's and communities' knowledge and attitudes to maternal health. Research has shown that women individually have little knowledge of maternal health problems. What are the perceptions of women's groups in rural Malawi and what are the implications for strategies to reduce maternal mortality?**

Malawi has one of the highest maternal death ratios in the world (984 deaths per 100,000 live births). Women have on average six children and only slightly more than half of all births are assisted by a skilled attendant or take place at a health facility. As most births and maternal deaths occur at home, behaviour at the village and community levels, especially the seeking of timely and appropriate care, can significantly affect maternal mortality.

Interventions that stir communities into action have successfully improved neonatal health. The success of such interventions to decrease the number of maternal deaths hinges on an understanding of women's perception of the health problems they experience. This knowledge could be useful in developing more successful interventions, especially in rural Africa, where women's concerns are largely not heard and not taken into consideration by community leaders and policymakers.

A study conducted by MaiMwana Project (Mchinji, Malawi) in collaboration with the Institute of Child Health (London, UK) looks at the perceptions of 172 groups made up of 3,171 women in the rural district of Mchinji in Malawi. The women were asked about the maternal health problems they experience and which issues they feel are most important.The study finds that:

- More than half the women's groups commonly identified the following maternal health problems: anaemia (87 percent), malaria (80 percent), retained placenta (77 percent), obstructed labour (76 percent), malpresentation (71 percent), antepartum and postpartum haemorrhage (both 70 percent) and pre-eclampsia (56 percent).
- They prioritised five problems as the most important: anaemia (sum of rank score 304), malpresentation (295), retained placenta (277), obstructed labour (276) and postpartum haemorrhage (275).
- HIV and AIDS and sepsis received a much lower ranking as they were not given due consideration because of their relative complexity and the context within which they occur.

Within the discussion groups, the women developed a greater awareness of maternal health problems and they became motivated to move from identifying and prioritising problems to addressing them. The research suggests that:

- Strategies that mobilise people within communities can draw on people's collective ability to identify and solve problems and can help tackle serious health issues such as high maternal deaths.
- Increasing people's knowledge and changing their attitudes is needed in order to improve preventive and care-seeking behaviour.

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**Keywords**: HIV, Kenya, child rape victims, post exposure prophylaxis, safe childbirth, Nepal, maternal mortality, skilled birth attendance, access to care, willingness-to-pay, obstetric care, caesarean section, Bangladesh, user perceptions, women's groups, Malawi, maternal health