



## **PRESS RELEASE**

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### **New study shows misoprostol could save the lives of tens of thousands of women each year**

Experts estimate that post partum haemorrhage accounts for about one quarter of the estimated 535,000 women who die each year after childbirth. New evidence from the DFID funded Future Health Systems Research Programme Consortium was recently published in *The International Journal of Gynecology and Obstetrics*. The paper, written by Tori Sutherland and David M. Bishai, researchers from Johns Hopkins Bloomberg School of Public Health, USA, has added to the body of knowledge on the delivery of misoprostol by skilled providers outside the health system.

Tori Sutherland, and David M. Bishai, used what is called a “Monte Carlo simulation” to find out whether administering a commonly used and widely available ulcer medication was a cost-effective way to save mother’s lives in India. According to Dr. Bishai, with misoprostol, a maternal death can be prevented for just \$1400. This means that misoprostol could be one of the most cost-effective interventions in public health today.

“Most studies to date on Misoprostol use amount of blood loss as their endpoint, this computer simulation connects the concept of prevented blood loss to prevented death, which then translates into something much more meaningful for decision-makers”, says Dr. Suellen Miller, Director of Safe Motherhood Programs, University of California, San Francisco.

The computer program was designed to reflect the delivery outcomes of 10,000 women in India and included data about blood loss, hemoglobin levels and the corresponding probability of mortality culled from peer-reviewed literature, population-level datasets and expert consultations. The program then predicted women’s risk of death from both hemorrhage and anemia and the impact of misoprostol on those outcomes.

“We used the simulation because, at this point, we believe it would be unethical as well as impractical – due to the large sample size that would be required – to conduct a clinical trial large enough to measure differences in death rates,” Sutherland explained.

The simulation estimated that when mothers were given misoprostol by trained village workers immediately after delivery, there was a 38 percent reduction in maternal deaths attributable to post partum hemorrhage.

“Because misoprostol is not yet on the formulary in some countries, these results could help persuade some decision-makers to give it some consideration. There are few interventions other than Vitamin A and vaccines that can save as many lives for as little money as misoprostol.” Bishai said.

**Notes to editors:**

1. Sutherland T and Bishai DM. ‘Cost-effectiveness of misoprostol and prenatal iron supplementation as maternal mortality interventions in home births in rural India’ International Journal of Gynecology and Obstetrics, (2008)
2. A ‘Research in Focus’ briefing on ‘The role of misoprostol in making home births safer’ is now available  
<http://www.futurehealthsystems.org/news/home%20birth%20design%20for%20circulation%20Feb%202009.pdf>
3. For further information visit the Future Health Systems website  
[www.futurehealthsystems.org](http://www.futurehealthsystems.org)
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