

## **Study Shows Training Improves Care for Mothers**

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A study involving researchers at Tulane University School of Public Health and Tropical Medicine and other institutions showed that hospital education programs can change physician behavior over the long term. An article on the study appears in the May 1 *New England Journal of Medicine*.

The study, which focused on postpartum care, dramatically reduced rates of uterine bleeding by encouraging doctors to prescribe the drug oxytocin to women just after delivery to contract the uterus and prevent hemorrhaging. The program also resulted in fewer episiotomies, an incision made between the vagina and anus to prevent tearing of the vagina during delivery. Although still widely performed many studies have shown the procedure is not beneficial.

"The goal of this study was to change medical behavior and to create a sustainable intervention. We did that, and we found a profound compliance rate," said Pierre Buekens, co-author of the study and dean of Tulane's School of Public Health & Tropical Medicine. "We need strong programs like this to help us change medical behaviors and save more lives."

The study, which was conducted in Argentina and Uruguay, included researchers from the Institute of Clinical Effectiveness and Health Policy, in Buenos Aires; the Research Triangle Institute, North Carolina; the University of North Carolina at Chapel Hill; the World Health Organization; and the Shriver National Institute of Child Health and Human Development. The study's first author was Dr. Fernando Althabe of the Institute of Clinical Effectiveness and Health Policy. Buekens says the findings could greatly affect U.S. healthcare.

Researchers had opinion leaders from 10 public maternity hospitals attend a five-day workshop on how to develop and carry out guidelines for physicians and midwives based on the best scientific evidence available. The guidelines focused on managing the period after birth of the baby and before expulsion of the placenta.

They also stressed limiting the use of episiotomy. Participants also were taught how to communicate what they had learned to their fellow birth attendants. Nine hospitals served as controls for the study. After 18 months, researchers found that oxytocin use increased from 2.1 percent of births before the trial began to 83.6 percent at the 10 instructed hospitals. By comparison, oxytocin use increased from 2.6 percent to 12.3 percent at the control hospitals.

Episiotomies decreased from 41.1 percent of births to 29.9 percent at hospitals receiving the staff instruction and increased slightly at control hospitals, from 43.5 percent to 44.5 percent.

The hospitals where the staff received the instruction also had a 45 percent reduction in postpartum hemorrhages of 500 milliliter (2 cups) or more and a 70 percent reduction on postpartum hemorrhage of 1000 milliliter (4 cups) or more.

After one year, oxytocin use remained high at the hospitals receiving the instruction (73.4 percent) and low in the control hospitals (7.1 percent.). After a year, the episiotomy rate at hospitals receiving the instruction was 28.1 percent and 45.1 percent in the control hospitals.

The change in oxytocin prescription being much larger than the change in episiotomy use suggests that adopting a new practice may be easier than eliminating an established practice.

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