

Reply to 'Must maternity medicine be reborn?'

To the editor:

In Errol R. Norwitz's review¹ of my book, *Pushed*, he writes that my solution to the problem of overmedicalization of childbirth is "not... a system in which care is provided by certified nurse midwives... Instead, she is proposing the use of community-based lay-midwives, whose only 'training' consists of an unofficial apprenticeship of variable length." Norwitz calls this solution "alarmingly simplistic," and I would agree—directing all women to give birth at home with unrecognized midwives is not a solution at all, and it is certainly not one that I propose in *Pushed*.

As I am a journalist, it is my job to illuminate what I see as a major public health and women's rights issue: women are being physically restricted during labor, subjected to interventions that are not evidence based (such as continuous electronic fetal monitoring), denied vaginal birth after cesarean and vaginal breech or twin deliveries, and prevented from choosing how, where and with whom they give birth.

One could fairly criticize the book for not proposing adequate solutions, but I'm not a policy-maker. Instead, I set out to tell what I felt was an important story and to document it as thoroughly as possible. Part of that story is that out-of-hospital births and the midwives who attend them have been pushed underground, in spite of several large studies showing that such births are safe^{2–5}. Norwitz does not address the research on out-of-hospital births (which is cited in the book) and argues that I make "selective use of case histories."

But the safety of home and out-of-hospital births that are attended by trained midwives for low-risk women is not something that I show with anecdotes; it is something that epidemiologists have shown in peer-reviewed research involving large study cohorts^{2,3}. Norwitz mentions "extensive scientific evidence to the contrary." But the fact is that there is no strong research evidence that home births, for low-risk women, pose any danger to either mother or baby⁶. There is one study⁷ that is sometimes held up as showing that home birth leads to more infant deaths. But this study stands alone, away from the bulk of the research, and has been widely criticized for lumping together unplanned, unassisted home births with planned, midwife-attended home birth.

Though I don't profess to have a simple remedy, I would agree with Norwitz that we shouldn't "throw the baby out with the bathwater." Women must have access to emergency obstetric care, and women must also have support for physiological births.

Jennifer Block

1. Norwitz, E.R. *Nat. Med.* **13**, 899 (2007).
2. Johnson, K.C. & Daviss, B.A. *BMJ* **330**, 1416 (2005).
3. Rooks, J.P. *et al. N. Engl. J. Med.* **321**, 1804–1811 (1989).
4. Anderson, R.E. & Murphy, P.A. *J. Nurse-Midwifery* **40**, 483–492 (1995).
5. Olsen, O. *Birth* **24**, 4–13 (1997).
6. Olsen, O. & Jewell, M.D. *Cochrane Database Syst. Rev.* doi:10.1002/14651858.CD000352 (27 July 1998).
7. Pang, J.W. *et al. Obstet. Gynecol.* **100**, 253–259 (2002).

Reply to 'pH paper trumps expensive kits in measuring acidity'

To the editor:

The simple method of checking vaginal pH discussed by Willyard¹ in your "Science on a Shoestring" special report is truly innovative. However, it is important to consider how safe it is to insert into the vagina a pH paper strip made from lichens and treated with toxic chemicals such as cyanidin, phenolphthalein, thymol blue, phenol red, bromothymol blue, bromophenol blue, methyl red, bromocresol green, methyl orange and cresol red (all commonly used in the production of Universal pH paper).

Phenolphthalein, for example, has been banned by the US Food and Drug Administration on account of its tumor- and infertility-inducing potential (ref. 2 and <http://ntp.niehs.nih.gov/?objectid=071D1613-04B4-DD88-0B81AC15C02061B8>).

The potential hazards of inserting pH paper into the vagina should be given serious thought, and appropriate care should be taken for the safety of patients³. The inability of cotton swabs to collect enough vaginal

fluid has been cited as a reason for inserting pH paper strips directly¹. This problem could be overcome, however, by mixing the swab contents with a tiny amount of water (pH 7) that can then be smeared onto the pH paper.

The need for cheap alternatives to expensive kits is considerable, but the potential for harm should not be overlooked.

Biji T Kurien

Department of Arthritis and Immunology, Oklahoma Medical Research Foundation, 825 Northeast 13th Street, Oklahoma City, Oklahoma 73104, USA.

e-mail: biji-kurien@omrf.org

1. Willyard, C. *Nat. Med.* **13**, 1128–1129 (2007).
2. National Toxicology Program. *Rep. Carcinog.* **10**, 195–197 (2002).
3. Kurien, B.T. *Med. J. Aust.* **179**, 653 (2003).