Postpartum haemorrhage occurrence and recurrence: a population-based study

Leslie A Woollard

To the Editor: The Rural Doctors Association (RDA) of New South Wales, of which I am President, has been involved in desperately trying to keep maternity units close to people's homes. The conclusion formed by Ford and colleagues in their recent report,[1] that women with a previous postpartum haemorrhage should only deliver in units with a blood transfusion service, appears extraordinary and contradictory to their own findings.

The authors based this conclusion on their finding that 5.8% of women had a postpartum haemorrhage in their first pregnancy, even though their definition of this was remarkably subjective and largely unscientific.

They recognised in their study that the incidence of postpartum haemorrhage requiring transfusion is only 0.7%. Therefore, 88% of women defined as having a postpartum haemorrhage do not require a blood transfusion. I am bemused why the authors think 88% of women who did not require a blood transfusion but had a "postpartum haemorrhage" should only deliver in a unit with blood transfusion services. I doubt any of my colleagues would wish to deliver women who required a blood transfusion for a previous postpartum haemorrhage in a small unit.

I refer Ford and colleagues, and readers, to a study by Tracy et al reported in January 2006.[2] This was a much larger study of 750 491 women giving birth during 1999–2001. This study concluded that "In Australia lower hospital volume is not associated with increased adverse outcomes for low risk women".

In the past 10 years, we have seen the loss of 50% of our maternity units in NSW, and the rest are under severe stress due to the lack of staffing. I doubt that the sort of extraordinary conclusion made by Ford and colleagues will help us maintain services in rural NSW.

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1 Ford JB, Robers CL, Bell JC, et al. Postpartum haemorrhage occurrence and recurrence: a population-based study. *Med J Aust* 2007; 187: 391-393.

2 Tracy SK, Sullivan E, Dahlen H, et al. Does size matter? A population-based study of birth in lower volume maternity hospitals for low risk women. *BJOG* 2006; 113: 86-96. ❑

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In reply: Safety and appropriateness are important principles underlying the provision of health care. Maternity care in Australia requires that women are offered care in an environment that is appropriate to their level of risk. Such a risk-management approach requires accurate data to inform the process, including accurate identification of women who may access local services as well as those who may benefit from higher levels of care. The aim of our study was to present risk estimates of recurrent postpartum haemorrhage (PPH) to better inform decision making by both clinicians and women about subsequent pregnancies.

While we are aware of the struggles faced by rural maternity units, we estimated that only 0.2% of women giving birth in New South Wales would be affected by our suggestion that women with a history of PPH *consider* delivering at a hospital with onsite cross-match facilities. The definition of PPH that we used is consistent with that of the International classification of diseases[1] and the NSW Department of Health's PPH policy;[2] this policy resulted from a review of hospital PPH policies sparked by a coronial inquest into a maternal death.[3]

In contrast to Tracy et al's study, which only considered low-risk women and had no maternal morbidity outcomes,[4] our study calculated risk among all women. Women with a PPH are at increased risk of transfusion, intensive care unit admission, unplanned procedure in the operating theatre, hysterectomy and major maternal morbidity.[3] Where we have information about an increased risk of a potentially life-threatening event, surely we should communicate and act on this knowledge to achieve the best possible outcome for women and babies.

In Canada, which has similar geographical challenges to those in Australia, it is recommended that where risk factors for PPH are identified, additional precautions such as intravenous access, coagulation studies, and availability of anaesthesia should also be considered.[5] The key to successful regionalised maternity care is ensuring that women give birth in risk-appropriate settings.

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1 National Centre for Classification in Health. The international statistical classification of diseases and related health problems, 10th revision, Australian modification. Sydney: NCCH, University of Sydney, 2004.

2 NSW Department of Health. Postpartum haemorrhage (PPH) — framework for prevention, early recognition and management. Sydney: The Department, 2005. http://www5.health.nsw.gov.au/policies/PD/2005/PD2005_264.html (accessed Feb 2008).

3 Cameron CA, Roberts CL, Olive EC, et al. Trends in postpartum haemorrhage. *Aust N Z J Public Health* 2006; 30: 151-156.

4 Tracy SK, Sullivan E, Dahlen H, et al. Does size matter? A population-based study of birth in lower volume maternity hospitals for low risk women. *BJOG* 2006; 113: 86-96.

5 Schuurmans N, MacKinnon C, Lane C, Etches D. Prevention and management of postpartum haemorrhage. SOGC Clinical Practice Guidelines. Vol. 88. Ottawa: Society of Obstetricians and Gynaecologists of Canada, 2000. http://www.sogc.org/guidelines/public/88E-CPG-April2000.pdf (accessed Feb 2008). ❑

Rural maternity units: how will they have a future?

L Gay Hawksworth

To the Editor: Pesce's criticism of midwifery practice at Mareeba District Hospital[1] requires rebuttal. His implication that the service is inefficient or pandering to "the powerful sway of maternity care politics" is incorrect and insults those who struggle to provide woman-centred care in a system focused on doctors.

A private obstetrician in Sydney cannot understand midwifery workloads in a rural hospital without knowing the local environment and other impacts on the way clinicians work. The small group of midwives in Mareeba provide a highly valued service in their community, with few of the ancillary services taken for granted in metropolitan areas.

In routine antenatal care, Dr Pesce presumably orders blood tests and then reviews the results filed in the chart or placed on his desk. A Mareeba midwife providing the same service will also perform the venepuncture, prepare a slide and spin the blood, arrange transport to the laboratory, make the next appointment, and file the results in the chart.

A Mareeba midwife's workload includes, among other things:

- Comprehensive perinatal care of inpatient midwifery clients;