

Homebirth transfers at Lismore Base Hospital

A retrospective review

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Lismore Base Hospital (LBH) is part of the Northern Rivers Area Health Service (NRAHS). In NRAHS, many women plan a homebirth, often from areas such as Nimbin, Mullumbimby and Byron Bay, New South Wales. Unemployment in this region is relatively high and there is a high incidence of substance abuse amongst pregnant women, of teenage pregnancy and of distrust of traditional medicine.

It is difficult to ascertain exactly how many homebirths are planned per annum. The data collection system in New South Wales identifies only one related category, namely that of 'planned homebirth'. Unfortunately, this box is often not ticked in appropriate cases.

Collection of data about homebirth attendants (for example, midwives and alternative birth attendants or 'doulas') is difficult because not all are registered, even if they perform substantial numbers of homebirths. A large number of doulas offer education and emotional support, but are not required to be registered in any way.

As data about homebirths and their outcomes was unavailable, a retrospective review was undertaken on all known planned homebirths that resulted in hospital transfer from January 2005 to December 2006.

The birthing unit register was manually searched to find cases of homebirth transfer. From the notes, the following data was obtained: maternal age; smoking history; drinking history; distance from LBH; reason for transfer; parity; gestational age; booking details; and antenatal workup.

High-risk pregnancy was defined as maternal history of parity more than five; history of postpartum haemorrhage (PPH); cardiac or thyroid disease; significant co-morbidities; and antenatal complications.

Antenatal complications were defined as: multiple pregnancy; Rh negative with raised antibody titres; poor fetal growth; established or gestational diabetes; preeclampsia/pregnancy-induced hypertension; haemoglobin less than 100g/l at booking; and malpresentation after 34 weeks.

A complicated previous obstetric history was defined as: previous preterm or small infant (less than 2.5kg); previous malformed baby/stillbirth/neonatal death; previous caesarean section; previous third stage complications; previous abruption; previous third or fourth degree tear; instrumental delivery; or PPH.

Findings

A total of 21 mothers who had planned a homebirth underwent intrapartum transfer to LBH between January 2005 and December 2006. These planned homebirth mothers were mainly aged 30 to 34 years old. The majority were primigravidae and tended to be non-smokers and non-drinkers. Of the 21 women transferred intrapartum, most lived more than 25km from the hospital. The majority of the women transferred had incomplete antenatal workup (86 per cent) or no booking at all (29 per cent). Of the 21 transfers, six patients had at least one risk factor. Upon arrival to the hospital, nearly half of the patients had a caesarean section and a further quarter had an operative delivery.

There were two intra/postpartum fetal deaths which are described below.

'Ms D' was a G2P1 who presented at LBH with fulminating preeclampsia. She was unsure about the date of her last menstrual period (LMP) with potential dates spanning over two months.

Lack of fetal growth was documented by the homebirth midwife from approximately 28 weeks of gestation, but no action was taken. The patient had consistent symptoms of preeclampsia which she reported to her midwife, who offered reassurance over the phone, however, no face-to-face review was undertaken.

'Ms D' reported to her midwife that there had been no fetal movements for eight days. The patient was then reviewed by the midwife who noted that fetal heart rate was 100 beats per minute and the patient's blood pressure was 170/90. 'Ms D' was advised to go to hospital, however, no information was given regarding the urgency of the situation or the advisability of having an attendant.

'Ms D' attended first to her own personal matters and presented to the hospital several hours later. On arrival at LBH, she underwent an emergency lower section caesarean section for fetal distress. Her infant required full resuscitation and died less than four hours later.

'Ms C', G4P2, presented at LBH with antepartum haemorrhage at term. She discharged herself against medical advice less than five hours after presentation. She continued to bleed for the next two

Table 1. Characteristics

Age	Total
20-24	2
25-29	4
30-34	10
35-39	4
> 40	1
Smoking	Total
Marijuana	1
No	15
Unknown	5
Drinking	Total
< 2 standard drinks/week	2
> 2 standard drinks/week	2
Nil	13
Unknown	4
Parity	Total
0	14
1	5
2	2
Gestational age at transfer	Total
< 37	1
37-41	14
≥ 42	6

Table 2. Transfer to hospital

Distance from LBH	Total
< 10km	3
10-25km	7
25-50km	11
Reason for transfer during labour	Total
Failure to progress	13
Pain relief/exhaustion	1
Placenta/vasa praevia/abruption/bleed	1
Post induction	3
Prolonged rupture of membrane	2
Thick meconium/fetal distress	1

Table 3. Antenatal care

Hospital booking	Total
No booking	6
Usual booking	15
Grand total	21
Antenatal workup	Total
Complete	3
Incomplete	18
Grand total	21

days while at home. The patient was reviewed by her homebirth midwife at home and was reassured that the pregnancy was satisfactory. She had spontaneous rupture of membranes two days later, accompanied by heavy blood loss. The midwife was present at that stage, however, no action was taken for a further four hours. Finally, the decision was made by the midwife to transfer her to hospital.

The patient arrived at LBH five hours later unaccompanied by a midwife, via her family car. Intrauterine fetal demise was subsequently diagnosed and a fresh stillborn male infant was delivered shortly after.

Discussion

The rationale for conducting this review was that in the preceding 12 months, the second author had commenced duty at LBH and been informed there had been twins delivered at home, with neonatal morbidity of the second twin. Therefore the preceding two-year timespan was systematically evaluated (excluding the patient with twins).

It was surprising to find that most patients who had been transferred in to LBH were unbooked or had poor booking records/antenatal workup, so the opportunity to prevent adverse outcome had been missed. In fact, many of the women had high-risk pregnancies but nevertheless planned homebirth. Not surprisingly, there was a high perinatal mortality.

It is a concern that homebirth midwives are accepting complicated cases of twins, previous caesarean delivery and late reproductive

age. The practice of one midwife has been reviewed by the unit and referred to the Australian College of Midwives and the Health Care Complaints Commission.

In this series, we were concerned to find a remarkably high tendency to accept high-risk cases for homebirth. Homebirth midwives may be placed in a difficult situation by high-risk women who claim that they refuse under any circumstances to deliver in hospital. The reasons are varied, but include previous negative hospital experience, a philosophical opposition to traditional birth practices in hospital and concerns about disempowerment in the hospital situation.

Women with a previous negative hospital experience may often choose homebirth for their next delivery. Their negative experiences include dissatisfaction with protocols, bad experiences with attendants and feelings that a bad outcome might have been preventable. Many of these women fear obstetric intervention, particularly induction, assisted vaginal delivery and caesarean section, which they feel are undertaken too readily and without allowance for natural processes to prevail. A fear of orthodox medical practices is also common. Antibiotic prophylaxis for group B streptococcus (GBS) or treatment of intrauterine infection was often opposed and a number of women reject ‘the entire package’. Some women accepted interventions or medications such as antibiotics after appropriate discussion, but many continued to refuse therapy, often on the advice of the homebirth midwife or doula, whose continuing involvement after transfer can create difficulties.

It is facile to state that the incidence of intervention, regional anaesthesia and indeed neonatal resuscitation will be low in the homebirth setting, because they are simply not available. Many women are not satisfied with the birth centre option and will choose homebirth. It is clear that the RANZCOG recommendation (*C-Obs 2 Home Birth*) that ‘women seeking homebirth should be counselled regarding the significance of risks as applied to their own obstetric condition and cared for by a medical practitioner’ is not occurring. The statement that the ‘numbers are small’ is relative and incorrect. The reasons for and expectations of women choosing to birth at home may be different in metropolitan and rural centres.

Often associated with the above is the issue of disempowerment. This issue of empowerment is frequently advanced by homebirth parturients and homebirth attendants as a primary goal. This issue is often related to those above, but is frequently an issue in its own right. It implies disenchantment with traditional practice but is also more complex than that. It extends beyond gender in that most hospital-based obstetric caregivers are female. Some centres such as St George Hospital in Sydney have extended their birth centre programs to include women who plan homebirth. It would seem beneficial to have these patients at least partially involved with a hospital clinic and booked at the hospital in case transfer is necessary.

The simplistic conclusion by proponents that homebirth is safer than hospital birth is belied by this study. Homebirthers are receiving a considerable amount of misinformation about the safety of their decision.

In contrast, in the Netherlands, 30 per cent of births are planned homebirths. The community has a strong expectation that women can give birth at home. Each woman is cared for by a publicly-funded midwife for the entire pregnancy. All complicated pregnancies are referred to an obstetrician. Midwives are considered as gatekeepers and they have substantial case loads (more than 100 per annum). They are responsible for referral to

an obstetrician if complications arise. Appropriate ambulances are readily available in this small country. The Netherlands is rated among the countries with best maternal and infant health statistics.¹

Studies have shown that planned homebirth for low-risk women using certified professional midwives was associated with lower rates of medical intervention, but similar intrapartum and neonatal mortality to that of low-risk hospital births.¹

An Australian study was conducted by Flinders University of South Australia, *Perinatal death associated with planned homebirth in Australia: population based study*. They found that 'Fifty perinatal deaths occurred in 7002 planned homebirths in Australia during 1985-90; 7.1 per 1000 (95 per cent confidence interval 5.2 to 9.1) according to Australian definitions and 6.4 per 1000 (4.6 to 8.3) according to World Health Organisation definitions.' How disappointing that the death rate was two in 21 (or 9.52 per cent) in our series.

We believe that registration is required for all homebirths so the total picture can be audited. New South Wales Health is to collaborate with the Australian College of Midwives to implement a model for a homebirth program which has been proven successful in other areas.

We recommend homebirth accreditation for all homebirth attendants and a registration system which should be mandatory. All homebirth midwives should follow Australian College of Midwives guidelines.

Acknowledgement

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References

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3. <http://www.homebirthaustralia.org/homebirth.html> .
4. Bastian H, Keirse M, Lancaster P. Perinatal death associated with planned home birth in Australia: population-based study. *BMJ* 1998; 317:384-388 (8 August).
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Significant co-morbidity/antenatal complication	Total
No	15
Unknown	3
Yes	3
Poor fetal growth	Total
No	16
Unknown	3
Yes	2
Diabetes	Total
No	6
Unknown	13
Yes	2
Pre-eclampsia or severe PIH	Total
No	19
Unknown	1
Yes	1
Caesarean section	Total
No	19
Yes	2
Birth requiring pelvic floor repair	Total
Third degree tear	1
No	20

Intervention	Total
Emergency caesar	10
Episiotomy	1
Forceps	3
IOL/Augmentation/ARM	6
Vacuum	1
Intrapartum and neonatal mortality	Total
No	19
Yes	2

Second Hand books wanted for PNG

The College has received a request from Nonga, Rabaul, Papua New Guinea, for some core O and G textbooks for its hospital library. We are hoping to obtain previously loved (but not too old) copies of:

Dewhurst's Textbook of Obstetrics and Gynecology, EDMONDS D
Williams Obstetrics, CUNNINGHAM GARY
Obstetrics by Ten Teachers, BAKER PHILIP
Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology, OATS JEREMY
Obstetrics and the Newborn, BEISCHER NORMAN

Other medical texts (relevant to primary healthcare) will be gladly accepted.

Please email **Carmel Walker (cwalker@rancog.edu.au)** if you have suitable books you can send to College House (preferably no older than ten years).