

# Throwing out the baby with the spa water?

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**A**ustralia is one of the safest places in the world to give birth and to be born. Australian women are now 40 times less likely to die during pregnancy or childbirth than they were immediately before the Second World War, and perinatal death rates in 2004 are a third of 1972 rates.<sup>1,2</sup> Part of this progress is attributable to improvements in public health, but much is directly due to advances in antenatal, intrapartum and neonatal care. In other areas of medicine, achievements of this magnitude would be an immense source of pride, yet obstetrics is perhaps the most criticised of all specialties. The medical and lay press are replete with titles such as "Has the medicalisation of childbirth gone too far?".<sup>3</sup> Do those involved in caring for pregnant women in Australia deserve the criticism they receive?

Before the 20th century, childbirth was a social event that took place at home. As places of birth, hospitals were often a last resort for the disadvantaged. During the 20th century, increasing involvement of medical practitioners in pregnancy and delivery coincided with the shift of care to a hospital setting for most women. Current rates of obstetric intervention, in particular caesarean section (performed in about one in four Australian births), are presented as evidence of "unnecessary intervention" for which "obstetricians must be held accountable".<sup>3</sup> This view has been championed by many authors: "Western, medicalized, high tech maternity care under obstetric control usually dehumanizes [and] often leads to unnecessary, costly, dangerous, invasive obstetric interventions", to quote one example.<sup>4</sup> As a reaction to this perception of "medicalisation" have come the understandable wishes of women and their families, midwives and, indeed, many doctors for a more "natural" environment for uncomplicated births.<sup>5</sup> Increasingly, emphasis has been placed on the quality of a woman's birth "experience".

Maternal satisfaction is obviously important when outcomes of childbirth are considered. However, it must not be seen as separate from, or of greater priority than, the physical safety of both mother and child. On the occasion of National Babies' Day (15 October), it seems timely to explore birth from the viewpoint of the baby and to examine modern childbirth options from this perspective. How sure are we that birthing environments promoting maternal satisfaction are also safe for babies?

Meta-analyses have shown that, of various models of maternity care, women are most satisfied with care by a midwife or general practitioner in a "low-tech" environment.<sup>6,7</sup> A survey of Australian women found that their main sources of dissatisfaction with birth were perceptions of a lack of involvement in decision-making, having "obstetric interventions", and "unhelpful caregivers".<sup>8</sup> Negative reactions to obstetric intervention during pregnancy and

## ABSTRACT

- Australia is now one of the safest countries in the world in which to be born.
- This is largely a result of the many advances in obstetric and neonatal medicine of the past 50 years.
- However, the "medicalisation" of birth has tended to diminish women's satisfaction with their experience of childbirth.
- It has been shown that women are most satisfied by care from a single practitioner, and when they themselves have input into decision-making.
- Although maternal satisfaction is important, it should not be promoted at the expense of the health of mothers and babies.
- More realistic antenatal education and preparation should be available for all pregnant women so that both maternal satisfaction and good perinatal outcomes can be achieved.

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birth are consistently reported, and there is some evidence of an association between such interventions and longer-term psychological morbidity.<sup>9</sup>

The characteristic of antenatal supervision and birth that women value most highly is consistently shown to be continuity of care.<sup>6,7,10,11</sup> Even when women choose antenatal care and delivery by a private obstetrician, a model with rates of intervention higher than any other, there is no evidence that they are any less satisfied with their care.<sup>11,12</sup> Indeed, women undergoing the ultimate intervention — elective caesarean section at their own request — report high levels of satisfaction, primarily because of their involvement in the decision-making.<sup>13</sup>

Dissatisfaction with unexpected obstetric interventions is understandable, but it is unfortunate when such intervention is necessary for the safe arrival of a healthy infant. It is even more unfortunate that views are so polarised that childbirth is still seen by some commentators in a purely political context: "The battle for the political victories in women's health care will undoubtedly continue for some time."<sup>14</sup>

Let us put politics aside and examine what the increase in caesarean section rates has actually meant for babies. A recent analysis of over 420 000 births at three busy maternity hospitals in Dublin found that "an increasing caesarean section rate was strongly associated with a lower mortality rate in normally formed babies of normal birthweight (greater than 2500 g)". These findings have been confirmed in studies of other large hospitals in the United Kingdom.<sup>15</sup> This conclusion directly contradicts the orthodoxy that caesarean section rates above 10%–15% impart no additional health benefits.<sup>16</sup>

In Australia, about 0.3% of births occur at home.<sup>2</sup> Evaluation of home birth is hampered by a paucity of good-quality data allowing a fair comparison of outcomes with other types of intrapartum care. A recent Cochrane review identified only one clinical trial

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suitable for analysis, and that trial had only 11 participants.<sup>17</sup> The reviewers concluded that there was not enough evidence to favour either home or hospital birth for women at low risk of complications. Reviews of observational data have also proven difficult, but some data suggest that home birth may increase the risk of perinatal death and neonatal respiratory difficulty.<sup>18</sup> Part of the problem with obtaining data may be the result of active resistance by advocates of home birth to participation in trials: "By their very nature [randomised controlled trials] should be ethically unthinkable in the context of woman-centred childbirth. Where is maternal choice and control? Relinquishing control to a brown envelope must be one of the worst forms of loss of control."<sup>19</sup>

Immersion in water during labour and birth has gained in popularity since the 1980s, but, once again, outcome data are sparse. Cochrane surveys have identified few studies of a suitable standard for review. However, pooled data have revealed a tendency towards lower Apgar scores, lower cord pH at birth, and increased rates of neonatal infection associated with water births.<sup>20</sup> A UK study reviewing data from water births in more than 100 National Health Service hospitals found that perinatal mortality and morbidity were similar for babies delivered in water compared with those delivered conventionally to low-risk women, but the authors cautioned that the figures may mask specific complications of water birth, including water aspiration and snapped umbilical cord.<sup>21</sup> The review also lists one baby's cause of death as drowning. In what should be a low-risk setting for birth, is such a death acceptable?

The above examples are models of care that strongly promote maternal satisfaction. Admittedly, they are not available to many women, but they illustrate well the difficulties in evaluating safety from the point of view of the baby. Birth centres located within hospitals have been an accessible option for Australian women, at least in metropolitan areas, for more than 20 years, and now account for about 2% of all births.<sup>2,5</sup> Some studies imply that rates of adverse outcomes for women delivering in birth centres are no higher than in standard maternity units and that women are more satisfied with birth-centre care.<sup>22,23</sup> However, an analysis of perinatal outcome data from birth centres in Scandinavia suggested that birth-centre care may be less safe for babies of first-time mothers.<sup>23</sup> The most recent Cochrane review of the topic analysed six studies involving nearly 9000 women.<sup>7</sup> Between 29% and 77% of "low-risk" women assigned to birth-centre management were transferred (either antenatally or during labour) to a standard delivery suite. A trend towards higher mortality was detected among babies born in birth centres. The authors concluded that, just as a focus on the abnormal in "medicalised" settings may increase the rate at which "abnormalities" are diagnosed, so the concern with "normality" in low-risk settings may obscure the recognition of developing complications. It is clear from all studies that we still have an imperfect ability to predict obstetric risk.

Rates of caesarean and instrumental delivery, perinatal mortality rates and Apgar scores are all crude indicators of the success (or otherwise) of obstetric care. The true evaluation of the outcome of a birth may not be possible until a child reaches adulthood. Maternal satisfaction is certainly one valid measure of outcome, but other consequences — maternal and paediatric, physical and psychological — must also be considered. Continuity of care is desirable from the maternal point of view, but it must be appropriate to the situation, and there must be understanding between all those participating, including women themselves, that sometimes

transferring responsibility of care is in the best interests of the baby.<sup>24</sup> Within the hospital settings that most Australian women currently choose for the births of their babies, maternal satisfaction will be greatest, and outcomes for mothers and babies best, when midwives and obstetricians work in a complementary way, the first dealing largely with the normal, and the second largely with the abnormal. To these ends, antenatal education should be realistic in informing women and their partners about likely events and outcomes during labour and birth. A "birth plan" should include the possibility that obstetric intervention may in fact be needed.

We now have 50 years of experience with "medicalised" birth, and the objective record of safety is good. In comparison, there is scant evidence on even short-term outcomes of less "interventionist" models of intrapartum care, and virtually no long-term information. Obstetricians have embraced evidence-based practice, and the onus should be on proponents of "demedicalisation" to prove their case.<sup>25</sup> It should not be a heresy to ask whether an increase in maternal satisfaction is a fair and reasonable trade for a decrease, however slight, in safety for the baby. After all, our babies will have to live with the consequences.

### Competing interests

None identified.

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## VIEWPOINT

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