Private obstetric intervention: good, bad or whatever?

Andrew F Pesce

Challenging the assumption that higher rates of intervention provide no benefits for babies

Hardly a week seems to pass in Australia without an article in national newspapers drawing attention to the differences in obstetric intervention rates between private patients cared for by obstetricians and public patients who receive various models of care.[1] The reported assumption has consistently been that the higher intervention rates observed in private patients are of no benefit to women or their babies, and possibly cause harm. This opinion has inevitably led to suggestions that federal support for private obstetric care be scaled back and redirected to models of care with lower intervention rates.[2]

An article by Robson and colleagues in this issue of the Journal reporting the results of a review of births in Australia (*page 474*)[3] thus achieves increased significance by being published at a time when the federal Health Minister has received and is preparing her response to the report of the Maternity Services Review.[4] Robson and colleagues report a retrospective analysis of the 789 240 singleton births occurring between 37 and 41 weeks' gestation in Australia during 2001–2004, excluding about 15% of pregnant women for methodological reasons.[3] Outcomes reported in the National Perinatal Data Collection (NPDC) were adjusted for recorded risk factors.

Their study confirms increased intervention rates in private patients. A previous study by Roberts and colleagues reporting higher instrumental delivery rates for low-risk private patients found a higher risk of low Apgar scores in babies of public patients,[5] which might have implied a possibility of poorer outcomes for these babies, but perinatal mortality and morbidity data were otherwise lacking. Robson et al's study demonstrated a twofold increase in risk of perinatal death for babies delivered in public hospitals, as well as significant increases in risk of low Apgar scores, need for high-level resuscitation, and admission to a special care or neonatal intensive care nursery. Of the two maternal outcomes available in the NPDC, only perineal trauma was reported, and, somewhat unexpectedly given the higher rate of instrumental deliveries in private patients, the rate of third- and fourth-degree lacerations was lower in private patients (also confirming the findings of Roberts et al's study[5]). Unfortunately, incomplete data precluded reporting of maternal blood loss, and the NPDC does not report other maternal complications. This situation should hopefully be addressed in the future by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists' planned maternal morbidity audit.

So what can we learn from this study? It is always more difficult to rely on retrospective data, especially when gathered from populations with different sociodemographic factors, even when adjusting as far as possible for known risk factors. However, unless we are to conduct randomised controlled trials of private versus public models of maternity care (unlikely) or planned caesarean versus planned normal delivery (even more unlikely), the quality of these data is as good as any we are likely to obtain.

It is worth noting that in restricting their analysis to women with singleton pregnancies delivered between 37 and 41 completed weeks' gestation, Robson et al minimise the bias that follows from the fact that women with preterm deliveries, which are at highest risk of perinatal morbidity, are generally transferred when possible to tertiary referral centres in the public system. However, failure to similarly exclude outcomes for predictably high-risk pregnancies delivered at term at these centres (eg, babies with antenatally diagnosed major congenital abnormalities) introduces a numerically small but possibly significant bias towards a relatively higher risk of adverse outcomes in the public patient group. Adjusting for other known risk factors also minimises to the extent possible the differences in outcomes attributable to different prevalences of these risk factors in populations of differing socioeconomic background, but cannot eliminate them altogether. Notably, some of these socioeconomic differences would be expected to increase the risk for babies of private patients (higher proportions of primigravidae, maternal age of 40 years or older, and history of previous caesarean delivery).

In addition, the exclusion of babies delivered after 41 completed weeks' gestation is likely to reduce the rate of adverse outcomes in the public patient group, as allowing pregnancies past 41 weeks — when perinatal mortality is 70% higher than for babies delivered at 40 weeks[6] — is virtually unknown in private patients, but does occur in the public system.

This study has inevitably generated some media controversy[7] because for the first time there are national data, albeit with methodological limitations, to suggest that private obstetric care and its associated higher rates of intervention might actually be benefiting babies, if not their mothers. The study is silent on major maternal problems other than severe perineal trauma, which might be associated with the increased obstetric intervention rates associated with private care and especially with caesarean delivery (haemorrhage, hysterectomy, wound complications and venous thromboembolism).

Is it possible to extrapolate the findings of this study to conclude that private care provided by obstetricians, with its increased intervention rates, prevents perinatal mortality and morbidity in Australia? No, but it must make us at least consider the possibility, and challenge the tacit assumption that continuity of care with a private obstetrician and/or higher intervention rates do not prevent perinatal morbidity and mortality.

Historically, it was always assumed that a decision in favour of intervention (especially caesarean delivery) presented a balance of risks — babies benefited, but this benefit was bought at the cost of increased maternal risk. More recently, some studies have been published which suggest that babies born by caesarean delivery are actually at higher risk of adverse outcomes, including perinatal death.[8] Robson et al's study supports a return to the previous understanding that, in choosing obstetric intervention, clinicians and their patients need to balance the potential benefits for the baby with the risks borne by the mother.

Competing interests

I am currently Chairman of the National Association of Specialist Obstetricians and Gynaecologists.

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