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Antidepressant use in children: a less depressing story

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TO THE EDITOR: A recent editorial in the *British Medical Journal* reported advice from the UK Committee on Safety of Medicines that most types of selective serotonin-reuptake inhibitors (SSRIs) should not be used in the treatment of major depression in children.[1] The editorial sparked interest in the Australian media, resulting in articles in large metropolitan newspapers with titles such as "Army of kids on anti-depressants".[2] General practitioners were targeted as the cause of reported "over-prescribing".

Unfortunately, while the media drew data from the national BEACH program (Bettering the Evaluation and Care of Health; a continuing study of general practice activity[3]), the data presented were inflated: a "child" was defined as someone aged under 20 years (while the UK advice related to children under 18 years), and national figures were extrapolated from the upper confidence limit.

Reliable estimates of GP prescribing of antidepressants to children in Australia are needed. We derived age-specific rates of antidepressants prescribed per encounter in Australian general practice for the period April 2001 to March 2004 from the BEACH data (Box 1).

The data showed that children were prescribed antidepressants far less often than adults. Those aged under 12 years were rarely prescribed antidepressants. Most of those prescribed were tricyclics, which are more commonly used in management of enuresis than of depression.

The media's inclusion of 18–19-year-olds as "children" greatly increased the reported rate.[2] The prescribing rate of antidepressants in children aged under 18 years was 0.47 per 100 encounters (5 per 1000 encounters), but was six times higher for 18–19-year-olds (2.82 per 100 encounters).

Most antidepressants prescribed for 12–17-year-olds were SSRIs. Fluoxetine is the only SSRI currently approved for use in children in the UK.[4] In Australia, caution is advised when prescribing any antidepressant to children, but venlafaxine and the SSRI paroxetine are specifically advised against.[5] Nevertheless, venlafaxine and paroxetine were more often prescribed (accounting for 10% and 8%, respectively, of total antidepressants for children) than fluoxetine (5%). However, GPs provided concomitant counselling at almost 20% of contacts with children aged under 12 years where an antidepressant was prescribed, and at 40% with 12–18-year-olds (Box 2). GPs were also more likely to refer the children to a specialist than when prescribing antidepressants for adults.

We do not know how many of these children have been referred to a specialist at a previous encounter, nor how often antidepressant medication is initiated by a specialist. However, it will be interesting to see whether the new advice reduces the current level of prescribing of antidepressants (SSRIs in particular) in children.

Acknowledgements: We thank the GPs who participated, and the Australian Department of Health and Ageing; Astra Zeneca Pty Ltd (Australia); Janssen-Cilag Pty Ltd; Roche Products Pty Ltd; and Merck Sharp and Dohme (Australia) Pty Ltd for funding the Bettering the Evaluation and Care of Health (BEACH) study.
The General Practice Statistics and Classification Unit is a collaborating unit of the Australian Institute of Health and Welfare.
Competing interests: This study was researched, analysed and reported as an independent analysis of data from the BEACH study.

1 Antidepressant prescribing in Australian general practice, April 2001 to March 2004

Variable (ATC group)†	Age-specific rate per 100 encounters (95% CI)			
	<12 years (*n* = 31 869)	12–17 years (*n* = 11 576)	18–19 years (*n* = 5823)	⩾ 20 years (*n* = 247 231)
All antidepressants	0.11 (0.07–0.14)	1.48 (1.18–1.77)	2.82 (2.35–3.28)	4.18 (4.05–4.31)
SSRIs (N06AB)	0.03 (0.01–0.05)	1.08 (0.82–1.34)	1.84 (1.49–2.19)	2.38 (2.29–2.46)
Fluoxetine (N06AB03)	0.003 (–)*	0.08 (0.00–0.13)	0.07 (0.00–0.14)	0.28 (0.25–0.30)
Paroxetine (N06AB05)	0.003 (–)*	0.13 (0.06–0.20)	0.22 (0.10–0.34)	0.48 (0.45–0.52)
Other SSRIs	0.02 (0.01–0.04)	0.87 (0.63–1.12)	1.55 (1.22–1.87)	1.62 (1.55–1.69)
Tricyclics (N06AA)	0.07 (0.04–0.10)	0.14 (0.07–0.21)	0.22 (0.09–0.35)	0.92 (0.87–0.97)
Other antidepressants	0.006 (–)*	0.26 (0.16–0.36)	0.76 (0.49–1.02)	0.89 (0.83–0.94)
Venlafaxine (N06AX16)	0	0.17 (0.09–0.25)	0.52 (0.29–0.74)	0.47 (0.43–0.51)

* Insufficient observations for calculating 95% confidence intervals.
† Drug group according to the World Health Organization Anatomic Therapeutic Chemical (ATC) classification.
SSRIs = selective serotonin reuptake inhibitors.

2 Concomitant management provided at encounters where an antidepressant was prescribed in Australian general practice, April 2001 to March 2004

Management	Concomitant management (% of encounters where at least one antidepressant was prescribed [95% CI])			
	<12 years (*n* = 34)	12–17 years (*n* = 171)	18–19 years (*n* = 164)	⩾ 20 years (*n* = 10 137)
Counselling	17.6% (4.8%–30.5%)	40.4% (32.8%–47.9%)	44.1% (36.1%–52.1%)	30.4% (29.0%–31.8%)
Referral to specialist	5.9% (–)*	6.4% (2.7%–10.2%)	6.8% (2.7%–10.9%)	2.7% (2.4%–3.1%)

* Insufficient observations for calculating 95% confidence intervals.

1 Ramchandani P. Treatment of major depressive disorder in children and adolescents [editorial]. *BMJ* 2004; 328: 3-4.
2 Hannan E, Dunn A, Smith A. Army of kids on antidepressants. *The Sydney Morning Herald* 2004; April 26.
3 Britt H, Miller GC, Knox S, et al. General practice activity in Australia, 2002-03. AIHW Cat. No. GEP 14. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 14).
4 Committee on Safety of Medicines. Use of selective serotonin reuptake inhibitors (SSRIs) in children and adolescents with major depressive disorder (MDD). Available at: www.mhra.gov.uk (accessed Oct 2004).
5 Adverse Drug Reactions Advisory Committee. Use of SSRI antidepressants in children and adolescents. Available at: www.tga.gov.au/adr/adrac_ssri.htm#pdf (accessed Oct 2004). ❑

Postpartum toxic shock syndrome associated with multiple splenic infarcts

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To the Editor: I report a patient with splenic infarction associated with group A streptococcal sepsis that occurred *post partum*. Although spontaneous splenic infarcts have been associated with many types of infections, to my knowledge this is the first published report of an association with this organism.

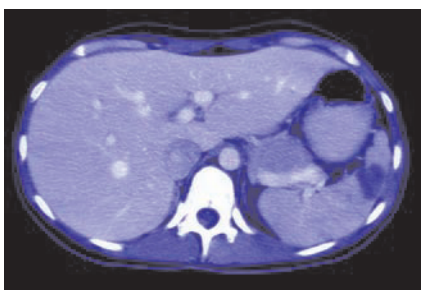
A 29-year-old woman had an unremarkable term labour and vaginal delivery of her third child. On Day 2, she felt feverish, but no abnormalities were detected on clinical examination or pelvic ultrasound examination.

1 Abnormal laboratory results

Investigation	Result	RR
White cell count (x 10^9/L)	11.07*	3.50–11.00
Platelet count (cells x 10^9/L)	63	150–450
Prothrombin time (s)	15.3	12–5
ESR (mm/h)	22	0–12
C-reactive protein (mg/L)	56	< 3
INR	1.2	0.8–1.1
Alkaline phosphatase (U/L)	298	38–126
γ-Glutamyltransferase (U/L)	95	0–30
Albumin (g/L)	18	33–48
Creatinine (μmol/L)	111	60–110

*63% band forms. ESR = erythrocyte sedimentation rate. INR = international normalised ratio. RR = reference range.

2 Computed tomography of the abdomen



Scan shows one of multiple splenic infarcts — in the lateral third of the spleen.

Over the next 24 hours, she developed abdominal pain and sweats, and appeared flushed. On Day 3, her temperature was 37.6°C, and she developed nausea and diarrhoea. Empirical treatment was begun with intravenous ampicillin and metronidazole. She developed hypotension (blood pressure, 90/60 mmHg) and an erythematous rash of the legs and diffuse erythema of the trunk, anterior thighs and face. Relevant results of laboratory investigations are summarised in Box 1.

On Day 4, a vaginal swab was taken, and antibiotic therapy changed to ticarcillin–clavulanate and clindamycin on the basis of presumed toxic shock syndrome. The next day, the patient developed oedema of the hands and feet, a sore throat and sore ankles. Group A streptococcus grew from the vaginal swab. Blood cultures showed no growth, but the samples had been taken after antibiotic therapy was begun.

Over the next few days, the patient's condition improved, but on Day 9 again deteriorated, with recurrence of low-grade fever and the development of sharp, retrosternal chest pain. Computed tomography (CT) of the chest with a pulmonary angiogram revealed a small right lower-lobe opacity, suggestive of a pulmonary infarct. The CT scan also revealed multiple splenic infarcts (Box 2). Screening for thrombophilia gave normal results. She was treated initially with intravenous heparin, followed by oral warfarin for 3 months. Her clinical recovery was slow but complete.

This patient had probable toxic shock syndrome caused by group A streptococcus.[1] She had the non-specific features of toxic shock syndrome[2] (fever, nausea, diarrhoea, rash, abnormal hepatic and renal function) and disproportionate abdominal pain as the initial symptom. The only criterion lacking for "definite" toxic shock syndrome was the isolation of group A streptococcus from a normally sterile site (it was isolated only from the vagina). Puerperal toxic shock syndrome caused by group A streptococcus is well reported,[1,2] with mortality of 25%–50%.[2]

The patient's clinical course was complicated by multiple splenic infarcts and a possible pulmonary infarct, thought to have developed *in situ* with no identifiable prothrombotic diathesis. Splenic infarction is not common and is usually associated with a haematological or rheumatological disorder.[3,4] Spontaneous splenic infarcts have been associated with infections, but there is only one report of these infarcts in association with toxic shock syndrome, in that case caused by *Staphylococcus aureus*.[5] The infarcts have been postulated to be caused by circulating endotoxin.[5]

1 Bisno AL, Stevens DV. Streptococcal infections of skin and soft tissues. *N Engl J Med* 1996; 334: 240-246.
2 Noronha S, Yeu CT, Sekosan M. Puerperal group A beta-hemolytic streptococcal toxic shock-like syndrome. *Obstet Gynecol* 1996; 88 (4 Pt2): 728.
3 Toth PP, Reuter RK, MacDonald J. Spontaneous splenic infarction secondary to diabetes-induced microvascular disease. *Arch Fam Med* 2000; 9: 195-197.
4 Nores M, Phillips EH, Morgenstern L, Hiatt JR. The clinical spectrum of splenic infarction. *Am Surg* 1998; 64: 182-188.
5 Cassar SL, Wong AL, Jadavji T, Leung AK. Multiple splenic infarcts associated with toxic shock syndrome. *Pediatr Emerg Care* 2002; 18: 31-32. ❑

Transoesophageal echocardiography in routine cardiac surgery

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To the Editor: Cokis and Faris describe an intraoperative complication detected by transoesophageal echocardiography (TOE).[1] Their letter is interesting in that it describes a rare complication during aortic valve surgery, and it is provocative in that it is critical of the Department of Health and Ageing decision not to rebate TOE (except in valve repair or replacement) to anaesthetists.

A rare complication is not an argument for routine monitoring. Justification for monitoring requires detailed analysis of complication rates. The number needed to monitor for this and other complications is not known. Cokis and Faris do not discuss the rate of complications from TOE, which could be similar to that of the rare complication they describe.

That there is a link between efficacy and the likelihood of a Medicare rebate is yet to be shown, and the authors themselves allude to this. TOE can be performed without a rebate. This is good for patients and also for a healthcare service which is strapped for funds. There are arguably other pressing needs for Medicare funds in the healthcare system. Presumably, both doctors were remunerated for their presence at the operation.

Eligibility for a Medicare rebate can be a "perverse incentive" leading to overservicing. I have seen this with monitoring with TOE. Procedures have a clinical and financial cost as well as perceived benefit. I have seen other diagnoses missed or misinterpreted because of routine use of TOE, and it has occasionally led to prolonged intensive care unit stays and other complications.

None of my arguments should deny TOE a place as a useful monitoring tool. It may become as routine during cardiac surgery as central venous pressure and arterial pressure monitoring is now. Whether that happens should not depend on whether TOE is eligible for a Medicare rebate. The use of TOE during surgery should depend on whether there is evidence of a meaningful benefit, and it is well to remember that the routine use of any procedure is hard to justify and can sometimes be dangerous. Early in Australian cardiac surgery, it was argued that the rebate for coronary bypass surgery should be related to the number of grafts. This argument was rightly not accepted. Similarly, the rebates for cardiac anaesthesia should not be related to the number of monitors used.

Cokis and Faris should be commended on their excellent care of the patient. However, their argument for a rebate is not compelling.

1 Cokis CJ, Faris J. Transoesophageal echocardiography in routine cardiac surgery [letter]. *Med J Aust* 2004; 180: 650. ❑

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In reply: Stokes raises a number of relevant issues, but we would like to make the following points.

The case we reported occurred in a teaching hospital and neither of us undertakes routine transoesophageal echocardiography (TOE) in a private capacity.

While a Medicare rebate is not directly relevant to the clinical usefulness of a medical procedure, the Medicare Benefits Schedule functions as a surrogate marker for clinical legitimacy.

Stokes quotes anecdotes of occasional misuse or overuse of TOE. We agree that single cases neither justify nor give cause to reject a particular kind of monitoring. However, case reports, although lacking a denominator, are a start.

The main point of our letter was, in fact, to report the complication of surgery and the vital role played by TOE in achieving a good outcome.

Nevertheless, many of us who routinely use TOE consider that its advantages over other kinds of monitoring regularly benefit patients. We agree there is little "hard" evidence to support this, but detailed risk–benefit analysis for many of our routine monitoring devices is similarly non-existent. The Swan–Ganz catheter is a classic example.

We suspect that if a group of cardiac anaesthetists and surgeons was asked to review the usefulness of TOE in routine cardiac surgery, the decision of the Department of Health and Ageing might be different. ❑

Abortion: time to clarify Australia's confusing laws

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To the Editor: de Crespigny and Savulescu[1] criticise legal and media attention given to the abortion of a 32-week fetus with suspected dwarfism in a case in which the expectant mother had become suicidal. At the same time, they appeal to populism to support legislative change in favour of easier access to late-term abortion.

This paradox raises an intriguing point about public opinion and medical ethics. How can members of the public develop opinion unless they are told what is going on? The case was made known to the public (although the patient's name and face were not shown) because a newspaper editor considered it to be of great interest to many people. The public rightly has an interest in this tragic case, as it relates to at least three controversial themes of significance to public and social health — disability, suicide and abortion. Unfortunately, in recent decades, balanced and informed debate about abortion has been lacking. Instead, the issue has been portrayed simplistically in terms of a woman's "right to choose", with little research into the desperate and often coercive circumstances and the harmful consequences of those choices.

That late-term abortions are subject to unclear and complex state laws is testament to the fact that abortion is far from a closed case for the public, healthcare professionals and politicians. de Crespigny and Savulescu acknowledge that the case raises "profound and divisive ethical issues". Yet, they later assure readers that the case "appears to be ethical", adding to their overall implication that, if only Australia's laws were clear, uniform and liberal, the media and the public would not have had any business in the matter.

Many aspects of the doctor–patient relationship are regulated by legislation — an "intrusion" that is accepted in jurisdictions in which democracy and state-funded healthcare coexist, and necessarily so, to protect both doctor and patient. If legislative change is to occur, public consultation must be sought, and the public must be given more, not less, information about abortion.

1 de Crespigny LJ, Savulescu J. Abortion: time to clarify Australia's confusing laws. *Med J Aust* 2004; 181: 201-203. ❑

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To the Editor: The article by de Crespigny and Savulescu is certainly thought provoking and timely. The harms they cite as caused by an uncertain legal environment are lamentable, although the outcomes were probably the result of multiple factors in addition to the justice system.

To bring order, reason, compassion and justice to a clinical problem as complex as termination of pregnancy — especially late termination — requires a framework for decision-making. This should operate at the hospital level, at the national level among the professionals involved, and, as de Crespigny and Savulescu contend, in the national legal system.

Most hospitals have now developed consistent guidelines to assist clinicians and patients in decisions regarding pregnancy termination (in the past, there was significant intrahospital diversity and uncertainty). More recently, clinicians involved with late termination of pregnancy for fetal abnormality in eight centres in six states and the Australian Capital Territory met in Melbourne to develop a consistent national set of guidelines. There was adequate consensus to produce a document that will soon be submitted for publication for wider community comment. Hopefully, this will facilitate better outcomes for all and perhaps even provide a stimulus for review and consistency of abortion laws. ❑

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In reply: Reti is correct that the outcomes of the late abortion case probably resulted from multiple factors in addition to the justice system. A pivotal one was the decision to divulge confidential patient information before there had been a thorough internal review.

It is pleasing that hospitals are developing consistent guidelines, although, as we indicated in our article, these guidelines should not include responsibility for clinical decision-making by committee. The responsibility for clinical decision-making should reside with the doctor, and committees should have a purely advisory role.

Consistent national professional guidelines are needed. These could be a stimulus for law reform. Without reform, it is only a matter of time before a single complaint about a case leads to a similar succession of adverse outcomes.

Ewing writes that we "criticise legal and media attention given to the abortion". We have no criticism of the media attention and would not presume to criticise the legal processes. Our criticism was of the "*decision to expose* the events to legal and media scrutiny". That is, we criticised the decision to expose the case and those involved before a thorough internal review had been conducted. We support transparency and believe that secrecy in relation to medical procedures is contrary to public interest.

We agree with Ewing that public consultation must be sought before legislative change. But one thing is clear — abortion law reform is essential. It is unacceptable that, in some cases, such as the late-abortion case we described, doctors may be charged with an indictable offence *whether they agree to perform the abortion or not* — under the law on abortion or child destruction if they agree to abortion, or under the law of homicide by negligence if they refuse abortion and the patient subsequently commits suicide. ❑

Throwing the baby out with the spa water?

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TO THE EDITOR: In a recent article, de Costa and Robson[1] suggest that Australia's high rates of caesarean surgery — currently among the highest in the Western world — may be beneficial, and causally related to our low perinatal mortality rate.

In support, they cite a single article that reports the outcomes from three large hospitals in Dublin between 1979 and 2000.[2] In these hospitals, as in most of the Western world, caesarean rates increased and perinatal mortality rates declined over this 21-year period. The authors of the article ascribe a causal relationship, but admit that "… it was not possible to allow for the confounding effect of time".[2] The time factor also confounds the interpretation of Australian data.

Furthermore, results from an earlier Dublin study "… do not support the contention that the expansion in cesarean birth rates has contributed significantly to reduced perinatal mortality in recent years,"[3] and there are many other articles with similar conclusions.[4]

Moreover, de Costa and Robson do not acknowledge the significant morbidity associated with caesarean surgery, nor the risks to mother and baby in subsequent pregnancies. A recent large retrospective cohort study in Scotland found that women whose first baby had been born by caesarean section had twice the risk of unexplained stillbirth at term in the subsequent pregnancy.[5] There are also well documented increased risks of placental pathology (placenta praevia, accreta and percreta) in this group. Such problems are likely to increase in Australia in proportion to the increase in caesarean rate.

I note also that King et al, who discuss maternal mortality in the same issue of the Journal, specifically mention the contribution of previous caesarean surgery to severe obstetric haemorrhage and emergency hysterectomy.[6] They report that maternal death from amniotic fluid embolism occurred in association with induction in five of seven cases. Australian rates of induction and augmentation are among the highest in the Western world.

Finally, as regards onus of proof, I agree with the statements by Enkin et al[7] that "… the only justification for practices that restrict a woman's autonomy, her freedom of choice, and her access to her baby, would be clear evidence that these restrictive practices do more good than harm; and second, that any interference with the natural processes of pregnancy and childbirth should also be shown to do more good than harm", and "… the onus of proof rests on those who advocate any intervention that interferes with either of these principles".

1 de Costa CM, Robson S. Throwing out the baby with the spa water? *Med J Aust* 2004; 181: 438-440.
2 Matthews TG, Crowley P, Chong A, et al. Rising caesarean section rates: a cause for concern? *BJOG* 2003; 110: 346-349.
3 O'Driscoll K, Foley M. Correlation of decrease in perinatal mortality and increase in cesarean section rates. *Obstet Gynecol* 1983; 61: 1-5.
4 Sepkowitz S. Birth weight-specific fetal deaths and neonatal mortality and the rising cesarean section rate. *J Okla State Med Assoc* 1992; 85: 236-241.
5 Smith GC, Pell JP, Dobbie R. Caesarean section and risk of unexplained stillbirth in subsequent pregnancy. *Lancet* 2003; 362: 1779-1784.
6 King JF, Slaytor EK, Sullivan EA. Maternal deaths in Australia, 1997–1999. *Med J Aust* 2004; 181: 413-414.
7 Enkin M, Keirse MJNK, Neilson J, et al. A guide to effective care in pregnancy and childbirth. 3rd ed. Oxford: Oxford University Press, 2000: 486. ❑

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IN REPLY: Buckley makes some important points regarding caesarean section, but overlooks the fact that our brief was to explore childbirth options from the viewpoint of the baby, not the mother.

The Irish study of Matthews (a paediatrician) and colleagues took as its outcome measure deaths during pregnancy or within one week of birth of normally formed infants weighing > 2.5 kg.[1] This was done because two of the main contributors to crude perinatal mortality rates (in Australia and other developed countries) are lethal abnormalities and very low birthweight — neither of which is likely to be improved by increasing caesarean section rates. More than 400 000 births over 22 years were studied retrospectively. While the time factor is acknowledged, the authors clearly show that as caesarean section rates have risen mortality among these normally formed babies of normal weight has fallen. They state that "… the caesarean section rate is an important part of the overall package of care delivered", a "package" that includes the advances in antenatal surveillance and neonatal care of the past 22 years, as well as wider indications for caesarean section. The authors invite other centres to publish "similar matching caesarean section and mortality rates … to see whether some hospitals are capable of delivering packages of care that include low caesarean section rates (? < 15%) and perinatal mortality rates of < 1.5/1000 for normally formed babies of normal birthweight". To date, none have done so, but there have been reports from other large maternity hospitals of similar findings to those of Matthews et al. One of these adds that "[our] low incidence of intrapartum hypoxic ischaemic encephalopathy (1.3/1000 births) … suggests that a policy of more liberal caesarean section may benefit babies in ways other than simply avoiding death".[2,3] In other words, this very large and careful study, and others resulting from it, strongly support the view that current caesarean section rates are good for babies.

1 Matthews TG, Crowley P, Chong A, et al. Rising caesarean section rates: a cause for concern? *BJOG* 2003; 110: 346-349.
2 Alfirevic Z, Edwards G. Impact of rising caesarean rate on stillbirths in Merseyside. *BJOG* 2003; 110: 964.
3 Burke C, Skehan M, Stack T, Burke G. Rising caesarean section rates: a cause for concern? *BJOG* 2003; 110: 966. ❑

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To the Editor: The article by de Costa and Robson[1] is a timely reminder that the ideology and politics surrounding maternity services could have an adverse impact on Australia's excellent record as one of the safest countries in the world in which to be born.[2] de Costa and Robson highlighted continuity of care as the attribute of antenatal supervision and birthing that women value most highly, and they quote evidence of the safe care provided by a midwife or general practitioner in a "low-tech" environment.

This type of care is currently provided by a diminishing number of GP obstetricians and midwives in small obstetric units throughout rural Australia, where continuity of carer ensures the continuity of care that leads to maternal satisfaction and good health outcomes.

Data show a lower rate of adverse events in small rural hospitals compared with urban hospitals. Studies in diverse environments suggest communication breakdowns and handovers between multiple carers are major risk factors.[3,4] These points of vulnerability are minimised in the close environment of a small rural hospital. National and international data demonstrate the safety of small rural maternity services,[5] and yet rural obstetric units continue to be closed at an alarming and accelerating rate.

The proponents of "de-medicalising" birth and improving maternal satisfaction through continuity of care are focused on perceived problems in the delivery of obstetric care in large urban hospitals. The evidence presented by de Costa and Robson confirms that women are most satisfied with care by a midwife and GP in a "low-tech" environment. While this option may now be unavailable in many urban areas, it is generally the model that exists in rural areas.

Unfortunately, the politics of change is resulting in the application of urban- and ideology-based processes to rural maternity units, where they are often inappropriate and can lead to reduced support for rural procedural obstetricians. This is likely to result in the eventual closure of the maternity units — a situation in which women, their babies, local healthcare professionals and their communities will all lose out in the end.

For rural communities, the risk in local maternity services is not to the standard of care, but to the continued existence of their services.

Transferring alternative urban models of maternity care to country hospitals may be superficially attractive to budget-focused health authorities or ideologues, but it is rural people and their babies who will have to live with the consequences.

1 de Costa CM, Robson S. Throwing out the baby with the spa water? *Med J Aust* 2004; 181: 438-440.
2 Laws PJ, Sullivan EA. Australia's mothers and babies 2001. Sydney: Australian Institute of Health and Welfare National Perinatal Statistics Unit, 2004.
3 Baker GR, Norton PG, Flintoft V, et al. The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada. *CMAJ* 2004; 170: 1678-1686.
4 United Medical Protection and Royal Australian and New Zealand College of Obstetrics and Gynaecology. Obstetric claims review May 2004. Melbourne: UMP and RANZCOG, 2004.
5 Society of Rural Physicians of Canada, College of Family Physicians of Canada and Society of Obstetricians and Gynaecologists of Canada. Rural obstetrics: joint position paper on rural maternity care. *Can J Rural Med* 1998; 3(2): 75. ❑

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Correction

Re: "**Prescribing of amino acid formula**", by Andrew S Kemp in the 15 November 2004 issue of the Journal (*Med J Aust* 2004; 181: 574-575). The author's position and address were omitted. Dr Kemp is Professor of Paediatric Allergy, The Children's Hospital at Westmead, Locked Bag 4001, Westmead, NSW 2145. **andrewk5@chw.edu.au** ❑

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The Medical Journal of Australia (MJA) is published on the 1st and 3rd Monday of each month by the Australasian Medical Publishing Company Proprietary Limited, Level 2, 26-32 Pyrmont Bridge Rd, Pyrmont, NSW 2009. ABN 20 000 005 854. Telephone: (02) 9562 6666. Fax: (02) 9562 6699. E-mail: ampco@ampco.com.au. The Journal is printed by Offset Alpine Printing Ltd, 42 Boorea St, Lidcombe, NSW 2141.

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Published in 2 volumes per year.
Annual Subscription Rates for 2005 (**Payable in Advance**) to: **AMPCo**, Locked Bag 3030, Strawberry Hills, NSW 2012
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28,516 circulation as at 30 September, 2004

ISSN 0025-729X