LETTERS

Physician migration and the Millennium Development Goals for maternal health: the untold story

Onyebuchi A Arah

To the Editor: In 2000, the United Nations Millennium Summit produced an agenda for reducing global poverty. It listed eight Millennium Development Goals (MDGs) and was signed by 189 countries. Improving maternal health (with the aim of reducing the maternal mortality ratio by three-quarters between 1990 and 2015) is the fifth and perhaps the core health-related MDG if we consider the centrality of mothers in social development and health.[1,2] Globally, the number of maternal deaths remains high at 529 000 per annum.[2] Ensuring maternal survival demands functional health care systems with skilled health care workers. However, migration of health care workers (mostly to wealthier English-speaking countries) is a major threat to achieving the MDGs.[3-5] Here, I estimate the associations between maternal health and physician migration and human resources for health.

I used recently updated physician migration[3] and global health workforce data[4] to look at correlations between physician migration and two core maternal health indicators — the maternal mortality ratio, and the percentage of births attended by skilled personnel.[1,2] I also explored the associations between these maternal health indicators and human health care resources. Migration was measured as the number of physician émigrés working in Australia, the United Kingdom, Canada, and the United States during 1999–2002, per 1000 population of their source countries.[5] Physician migration density values for all four countries combined, and for each country individually, were determined (Box). Human health care resources included current densities of health care workers remaining in the source countries (Box).

I calculated the Pearson's correlation coefficients between these variables and the two core maternal MDG indicators.

The Box shows that countries with better maternal health are likely to have higher physician migration and more human resources for health care. For example, higher migration to Australia is seen from countries with lower maternal mortality ($r = -0.29$; $P = 0.011$) and more births attended by skilled staff ($r = 0.25$; $P = 0.037$).

I acknowledge that, like most health system and global health analyses, these correlations are based on an ecological (cross-country) design which does not lend itself to causal inference. These findings are therefore descriptive and require further exploration. Furthermore, the two maternal health indicators used here (which are the core maternal health MDG indicators used by the United Nations) could be viewed as indicators of health system and population health progress. Although physicians and other health care workers play major roles in maternal survival, especially in pregnancy, they cannot be seen as the only requirements for better maternal health. Physicians' roles can also be substituted by other health care workers in many situations in resource-poor settings.

However, less-poor source countries often have higher capacities than poor nations to turn out skilled workers who subsequently migrate. Contrary to conventional wisdom,

Correlations between source countries' core maternal Millennium Development Goal indicators and (A) physician migration to Australia, the United Kingdom, Canada and the United States and (B) human health care resources*

			Maternal Millennium Development Goal indicators in source countries			
(A) Physician migration to Australia, the UK, Canada and the US	No. of source countries†	Mean physician migration density‡ (SD)	Maternal mortality ratio¶	*P*	Births attended by skilled health care staff**	*P*
Total migration	141	0.094 (0.224)	–0.45	< 0.001	0.34	< 0.001
Migration to Australia	75	0.007 (0.040)	–0.29	0.011	0.25	0.037
Migration to the UK	117	0.017 (0.072)	–0.27	0.003	0.17	0.072
Migration to Canada	116	0.008 (0.027)	–0.47	< 0.001	0.45	< 0.001
Migration to the US	124	0.061 (0.158)	–0.55	< 0.001	0.43	< 0.001
(B) Human health care resources		Mean density of health care workers§ (SD)				
Physicians	141	1.655 (1.426)	–0.84	< 0.001	0.67	< 0.001
Nurses	141	3.636 (3.544)	–0.81	< 0.001	0.72	< 0.001
Public and environmental health care workers	64	0.114 (0.169)	–0.56	< 0.001	0.54	< 0.001
Health management and support workers	71	1.488 (2.222)	–0.73	< 0.001	0.51	< 0.001

* Data are those available for 1999–2002, and each variable was transformed into its natural logarithmic form for analysis.

† Top 10 source countries losing physicians (per 1000 population) to the four destinations combined (in decreasing order): Ireland, Saint Lucia, Lebanon, New Zealand, Jamaica, Iceland, Malta, Dominican Republic, Israel, and Cook Islands. Top 10 source countries for Australia: New Zealand, Ireland, Singapore, Fiji, Malta, Sri Lanka, South Africa, Slovakia, Bahrain, and Hungary. Top 10 source countries for the UK: Ireland, Malta, Barbados, Jamaica, New Zealand, Sri Lanka, Libya, Greece, Iraq, and Iceland. Top 10 source countries for Canada: Ireland, Jamaica, Kuwait, Lebanon, South Africa, New Zealand, Barbados, Bahrain, Saudi Arabia, and Iceland. Top 10 source countries for the US: Saint Lucia, Lebanon, Ireland, Iceland, Dominican Republic, Jamaica, Cook Islands, Israel, Belize, and the Philippines.

‡ Number of source country's physicians working in Australia, the UK, Canada and the US per 1000 source country's population (based on average year-2000 population).

§ Number of health care workers remaining in home/source country per 1000 population.

¶ Correlations between the number of maternal deaths per 100 000 live births and (A) physician migration density and (B) human health care resources.

** Correlations between the percentage of births attended by skilled health care staff and (A) physician migration density and (B) human health care resources. ◆

Australia, the UK, Canada, and the US draw substantially more migrant physicians from countries with higher health care worker capacities. Many countries may be losing physicians just when they should be reaping the benefits of their improving fortune. Given the patchy progress towards achieving the MDGs,[1] health care worker shortages may impede many countries' progress in improving health standards if migration rates exceed workforce replacement in the face of changing but increasingly complex health care needs.[1,2,4]

Physician migration must be taken seriously if the global target of reducing maternal mortality by three-quarters between 1990 and 2015 is to be realised and sustained. Australia and other Western countries must partner with source countries to develop strong political commitment and scaled-up investments in human resources for health.

Onyebuchi A Arah, Assistant Professor
Department of Social Medicine, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands.
o.a.arah@amc.uva.nl

1 World Bank. Global monitoring report 2006. Millennium Development Goals: strengthening mutual accountability, aid, trade, and governance. Washington, DC: The World Bank, 2006. http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALMONITOR/EXTGLOBALMONITOR2006/0,,contentMDK:20810084~menuPK:2199415~pagePK:64218950~piPK:64218883~theSitePK:2186432,00.html (accessed Apr 2007).
2 World Health Organization. The world health report 2005: make every mother and child count. Geneva: WHO, 2005. http://www.who.int/whr/2005/en/ (accessed Apr 2007).
3 Mullan F. The metrics of the physician brain drain. *N Engl J Med* 2005; 353: 1810-1818.
4 World Health Organization. The world health report 2006: working together for health. Geneva: WHO, 2006. http://www.who.int/whr/2006/en/ (accessed Apr 2007).
5 Arah OA, Ogbu UC, Okeke CE. Too poor to leave, too rich to stay? Developmental and global health correlates of physician migration to the United States, Canada, Australia, and the United Kingdom. *Am J Public Health* 2007. In press. ❑

Potential impact of AUSFTA on Australia's blood supply

Albert Farrugia

To the Editor: In reference to the letter by Kennedy et al, reporting two patients who tested positive to human T-lymphotropic virus I/II (HTLV-I/HTLV-II) antibodies after administration of the intravenous immunoglobulin, Octagam (Octapharma Australia, Sydney, NSW),[1] the Therapeutic Goods Administration (TGA) would submit that:

- This product was accepted for review by the TGA at a time when plasma products sourced from overseas had to demonstrate superiority over the local product. This requirement was fulfilled by Octagam on grounds that included pathogen safety issues.
- HTLV-I and HTLV-II are entirely cell-associated viruses and are thus irrelevant to the safety of plasma derivatives. They are in a group of pathogens for which risks, implied by epidemiological factors, apply to cellular but not to plasma products. Another common example is malaria. The Australian plasma pool includes donations from individuals who are at risk of transmitting malaria, so their cells are not used but their plasma is used for fractionation. This situation is well understood and managed by regulators, none of whose standards internationally include the need to test plasma donors for HTLV-I/HTLV-II infection. As the bulk of Australia's fractionation pool is derived as a by-product of whole blood, blood is tested for HTLV-I/HTLV-II in this country, but it is not a mandatory requirement in Australia or anywhere else.
- The exclusion of antibody from the plasma pool, as occurs for HTLV-I/HTLV-II in Australia, may actually lead to the loss of potentially protective antibodies, which may well have a therapeutic effect in protecting patients from HTLV-I/HTLV-II infection.[2] Such considerations apply, for example, in the requirements of the Food and Drug Administration in the United States for source plasma for fractionation. The requirements take care to allow the inclusion of antibody-positive units for some viruses that would be excluded from blood transfusion.
- The incident referred to by Kennedy et al was appropriately reported to the TGA's Adverse Drug Reactions Unit, which concluded that this was not an adverse event.
- A Northern Territory Government document on HTLV reports: "In Central Australia the prevalence of HTLV-I is estimated to be up to 14%, compared to 4.7% in the Northern Territory cattle country . . ."[3] The residual risk of transmission of HTLV-I/HTLV-II infection, while low,[4] clearly varies across the potential donor population, and comparisons that are irrelevant in relation to the safety of specific products would appear to be unwise.
- It is recommended that practitioners seeking to assess causality in putative infectious disease transmission by plasma products follow rigorous scientific processes, such as those recommended by the German regulatory authority.[5]

Albert Farrugia, Head of Blood and Tissues Office of Devices, Blood and Tissues, Therapeutic Goods Administration, Canberra, ACT.
albert.farrugia@health.gov.au

1 Kennedy GA, Cummings J, Durrant ST. Potential impact of AUSFTA on Australia's blood supply [letter]. *Med J Aust* 2007; 186: 427.
2 Kariya N, Hayashi K, Hoshino H, et al. Protection of rabbits against HTLV-II infection with a synthetic peptide corresponding to HTLV-II neutralization region. *Arch Virol* 1996; 141: 471-480.
3 Northern Territory Government. Centre for Disease Control. HTLV-I. http://www.nt.gov.au/health//cdc/fact_sheets/HTLV1.rtf (accessed May 2007).
4 Seed CR, Kiely P, Keller AJ. Residual risk of transfusion transmitted human immunodeficiency virus, hepatitis B virus, hepatitis C virus and human T lymphotrophic virus. *Intern Med J* 2005; 35: 592-598.
5 Schosser R, Keller-Stanislawski B, Nübling CM, Löwer J. Causality assessment of suspected virus transmission by human plasma products. *Transfusion* 2001; 41: 1020-1029. ❑

"Failure to thrive" or failure to use the right growth chart?

Barbara Radcliffe, Jan E Payne, Helen Porteous and Simone G Johnston

To the Editor: Growth charts are important tools in assessing the physical development of infants and children. Understanding and comparing the derivation and applicability of the new World Health Organization Child Growth Standards[1] and the Centers for Disease Control and Prevention (CDC) growth charts[2] is essential.

Arguments for and against the standard use of the new WHO growth charts are being discussed on the basis of differences in study designs used and growth patterns found.[3,4] The WHO charts show the growth of breastfed infants on the basis of data from about 8500 children from widely different ethnic backgrounds and cultural settings (Brazil, Ghana, India, Norway, Oman and

the United States); these children were from selected populations in which no health, environmental or economic constraints on growth existed.[1] In contrast, the CDC charts represent the combined growth pattern of artificial-formula-fed and breastfed infants in the United States, where about 50% of infants are never breastfed and only around 33% are breastfed for 3 months or longer.[2]

Is it possible to misdiagnose breastfed infants who are growing normally as failing to thrive if the CDC growth charts are used? The simplest common definitions used for failure to thrive are a drop below the 3rd or 5th percentile for weight, or when growth deviates from an established growth curve for 3 consecutive months.[5] By the CDC growth charts, the normal growth pattern described by the WHO Child Growth Standards for a 15th percentile, breastfed, female infant at 18 months would meet all three definitions of failure to thrive. The clinical response to this perceived failure to thrive may be to provide additional energy in the form of energy-dense foods or supplements (eg, artificial formula). This would at best be unnecessary, and at worst might contribute to the development of overweight and obesity.

So, where to from here? We recommend that all health professionals who use growth charts be cognisant of which chart they are using and its application, especially for breastfed infants. There is also a need for Australian national and state governments to debate which growth charts should be used and in what contexts. Finally, irrespective of the choice of growth charts, it must be recognised by practitioners and the general public that these charts are guides only, and should be used as part of a holistic approach to infant growth assessment and management.

Barbara Radcliffe, Nutritionist[1]
Jan E Payne, Lecturer[2]
Helen Porteous, Nutritionist[2]
Simone G Johnston, Nutritionist[2]
1 Southern Brisbane and Logan Breastfeeding Promotion and Training Coalition, Brisbane, QLD.
2 School of Public Health, Queensland University of Technology, Brisbane, QLD.
j.payne@qut.edu.au

1 World Health Organization. The WHO Child Growth Standards. http://www.who.int/childgrowth/en/index.html (accessed Apr 2007).
2 Centers for Disease Control and Prevention. National Center for Health Statistics. National Health and Nutrition Examination Survey. WHO Child Growth Standards. http://www.cdc.gov/growthcharts/who_standards.htm (accessed Apr 2007).
3 de Onis M, Garza C, Onyango AW, Borghi E. Comparison of the WHO child growth standards and the CDC 2000 growth charts. *J Nutr* 2007 137: 144-148.
4 Binns C, Lee M. Will the new WHO growth references do more harm than good? [letter]. *Lancet* 2006; 368: 1868-1869.
5 Olsen EM. Failure to thrive: still a problem of definition. *Clin Pediatr (Phila)* 2006 Jan-Feb; 45: 1-6. ❑

"Meth mouth"

Anne-Marie L Laslett and John N Crofts

To the Editor: Single case reports of "meth mouth", similar to that recently published in the Journal,[1] exaggerate the dental problems surrounding the use of methamphetamines. Evidence that methamphetamines cause grinding and wear of teeth,[2] xerostomia,[3] and cravings for sweet drinks is weak. The drug use reported by Shetty was intravenous or intranasal, not oral. While systemic effects may contribute to dental problems, local oral effects associated with acidity of methamphetamines would be minimal with intravenous or intranasal drug use.

A more plausible explanation for dental disease may be the years of neglect, trauma and poor diet experienced by many people who use drugs.[4] Many drug users begin using as early as 14 years of age and consume multiple illegal psychoactive and legal antipsychotic and antidepressant medications associated with xerostomia. A comprehensive drug-use history is required before dental problems are attributed to one drug.

Advising treating dentists to avoid the use of analgesics is misinformed and potentially leaves patients in severe pain unnecessarily. People affected by methamphetamines are unlikely to seek dental or medical treatment. A more likely scenario is presentation because of pain between methamphetamine binges, or presentation when they are taking stock of their health problems. At such times, they are unlikely to be affected by methamphetamines, which generally have short half-lives. At these times, non-steroidal anti-inflammatory drugs, nitrous oxides, narcotics (including codeine) or increases in methadone dose may be needed to manage pain. Analgesic depressants are not contraindicated unless other illicit or licit depressants are being used concurrently, as depressants work on different receptors and areas of the brain than amphetamine-type stimulants. Careful discussion with the patient and the patient's general practitioner or alcohol and drug specialist is critical in balancing the need for pain relief with the potential for drug interactions and even overdose, if the patient is taking other depressants (legal or otherwise).

Practitioners can contact a 24-hour drug information line for health professionals for information of this kind in most Australian states and territories (Box).

Drug information contact numbers

Service	Contact number
DACAS (VIC)	1800 812 804
DACAS (TAS)	1800 630 093
DACAS (NT)	1800 111 092
DASAS (NSW)	1800 023 687 or (02) 9361 8006
ADIS (SA)	1300 131 340*
CAS (WA)	1800 688 847 or (08) 9442 5042

ADIS = Alcohol and Drug Information Service. CAS = Clinical Advisory Service. DACAS = Drug and Alcohol Clinical Advisory Service. DASAS = Drug and Alcohol Specialist Advisory Service.
* Clinicians should ask to be put through to the duty doctor service. ◆

Anne-Marie L Laslett, Research Fellow, Epidemiology and Research Department
John N Crofts, Director
Turning Point Alcohol and Drug Centre, Melbourne, VIC.
annel@turningpoint.org.au

1 Shetty K. "Meth mouth". *Med J Aust* 2006; 185: 292.
2 McGrath C, Chan B. Oral health sensations associated with illicit drug abuse. *Br Dent J* 2005; 198: 159-162.
3 Saini T, Edwards PC, Kimmes NS, et al. Etiology of xerostomia and dental caries among methamphetamine abusers. *Oral Health Prev Dent* 2005; 3: 189-195.
4 Robinson PG, Acquah S, Gibson B. Drug users: oral health-related attitudes and behaviours. *Br Dent J* 2005; 198: 219-224. ❑

Men's health

Kenneth W Sleeman

To the Editor: Perusing your long-needed issue on men's health,[1] I was struck by the absence of any mention of obstructive sleep apnoea.

As an anaesthetist in private practice, I see three or four middle-aged men with previously undiagnosed obstructive sleep apnoea each week. Usually, I also see at least one man who has had the diagnosis confirmed,

but has not persisted with treatment because his wife has become used to his snoring or has moved to another bedroom.

Advising the undiagnosed men of the importance of a sleep test, I refer them back to their general practitioner for follow-up, and suggest a couple of respiratory physicians who could perform the test. On a somewhat random follow-up, I have been disappointed with the results, as the following comments were reported back after men's GP consultations:

- "Most blokes over 50 snore";
- "Your wife will get used to it"; and
- "Surgery doesn't work".

Men who have been diagnosed but haven't persisted with treatment (together with their wives) are often totally unaware of the health risks; they believe that they are only managing the unacceptable noise of their snore!

I would have thought that some of the articles in the issue would have mentioned the contribution of obstructive sleep apnoea to hypertension, atrial fibrillation, erectile dysfunction and sleep disturbances, with resulting poor performance during the day, particularly in the workplace.

This is an extremely important health issue (and not only in men) that appears to be sadly neglected, still.

Kenneth W Sleeman, Anaesthetist
Victorian Anaesthetic Group, Melbourne, VIC.
kenslee@bigpond.net.au

1 Men's health issue. *Med J Aust* 2006; 185: 409-472. ❑

Ann T Gregory

In reply: We thank Sleeman for his astute comment. In the men's health issue,[1] our intention was to highlight several major areas relevant to men's health rather than attempt comprehensive coverage of the field. Sleep apnoea was indeed one of the potential topics we identified when we planned the issue. We anticipated that sleep apnoea would be discussed within some of the key contributions to the issue. Although this did not eventuate, we acknowledge the importance of sleep apnoea in general medical practice, and plan to revisit the topic in future issues of the Journal.

Ann T Gregory, Deputy Editor, and Editor of *MJA* Men's Health Issue
The Medical Journal of Australia, Sydney, NSW.
medjaust@ampco.com.au

1 Men's health issue. *Med J Aust* 2006; 185: 409-472. ❑

Evaluating medicines: let's use *all* the evidence

Mira L Harrison-Woolrych

To the Editor: With the proposed formation of the Australia New Zealand Therapeutic Products Authority (ANZTPA), the recent viewpoint article[1] and accompanying editorial[2] on systems of evaluating medicines were timely. Both reports provided interesting comments on existing systems and proposals for improving these in the future. However, I would like to comment on some omissions and errors in these articles.

In their viewpoint article, Kelman et al stated that "there are as yet no overseas examples of 'routine' medicines monitoring".[1] This is not correct. The New Zealand Intensive Medicines Monitoring Programme (IMMP) has been undertaking routine monitoring of selected medicines since 1977. The IMMP collects nationwide prescription data to form cohorts of patients who are subsequently monitored for adverse events.[3] These patient cohorts provide accurate denominator populations, which, as noted by Kelman et al,[1] is important for risk quantification by measurement of incidence.

The IMMP uses prescription-event monitoring (PEM) methods to perform active postmarketing surveillance of new medicines in New Zealand, and has been successful in identifying numerous new signals of adverse drug reactions and in quantifying risk.[4] The IMMP has developed ways of enhancing PEM methodology by linking records with national morbidity and mortality databases.[3] This methodology was recently successfully applied in a study of the safety and usage of atypical antipsychotic medicines in a nationwide paediatric population.[5]

In their editorial, Stanley and Meslin commented that none of the health care data linkage systems in England, Scotland, the United States or Canada "are nationwide or have the routine ability to link health care records with drug prescription data".[2] As described above, the IMMP has both these abilities. It was somewhat surprising that, although discussions regarding pharmacovigilance in the ANZTPA are now well underway, current systems in New Zealand were not mentioned in either of these Journal articles.

I would encourage Australia to develop pharmacovigilance systems similar to those established in New Zealand. Of course, these will need to be adequately funded to achieve the expected outcomes. The formation of the ANZTPA is a great opportunity to improve pharmacovigilance in both countries.

Competing interests: The IMMP is partly funded by Medsafe, the regulatory body of the NZ Ministry of Health, and partly by unconditional donations from various sources, including some pharmaceutical companies. Funding providers do not have any role in the design, analysis or interpretation of any of the studies performed by the IMMP.

Mira L Harrison-Woolrych, Director
Department of Preventive and Social Medicine, Intensive Medicines Monitoring Programme, University of Otago, Dunedin, New Zealand.
Mira.harrison-woolrych@otago.ac.nz

1 Kelman CW, Pearson SA, Day RO, et al. Evaluating medicines: let's use *all* the evidence. *Med J Aust* 2007; 186: 249-252.
2 Stanley FJ, Meslin EM. Australia needs a better system for health care evaluation [editorial]. *Med J Aust* 2007; 186: 220-221.
3 Harrison-Woolrych ML, Coulter DM. PEM in New Zealand. In: Mann RD, Andrews EB, editors. Pharmacovigilance. 2nd ed. Chichester, UK: John Wiley & Sons, 2007: 317-332.
4 Clark DWJ, Harrison-Woolrych ML. The role of the New Zealand Intensive Medicines Monitoring Programme in identification of previously unrecognised signals of adverse drug reactions. *Current Drug Safety* 2006; 1: 169-178.
5 Harrison-Woolrych ML, Garcia-Quiroga J, Ashton J, Herbison P. Safety and usage of atypical antipsychotic medicines in children: a post-marketing prospective cohort study in New Zealand. *Drug Safety* 2006; 29: 986. ❑

Research misconduct: can Australia learn from the UK's stuttering system?

Peter T Wilmshurst

To the Editor: In his article on research misconduct,[1] Marcovitch cited my article on institutional corruption in medicine, which was published in the *BMJ* in 2002.[2] He states:

> Readers of the *MJA* will have to find the paper version in their libraries, as the electronic version has been replaced on the *BMJ*'s website ... with the bald statement that it has been removed for legal reasons.

In case any of your readers are concerned that the article has been retracted, I would like to point out that the article was removed from the website on 10 June 2004, when Dr Richard Smith was editor of the *BMJ*. Dr Smith cited my article in his own article on research misconduct in 2006.[3] He would not have done so if the article had been retracted. Neither would Marcovitch.[1]

My article described how some senior individuals in British academic medicine had concealed misconduct for a decade. The article had an editorial footnote stating: "Documentary evidence corroborating this article was made available by Dr Wilmshurst to the *BMJ*." It was cleared for publication by the *BMJ*'s lawyers. An "Editor's Choice" column entitled *Corruption in medicine* accompanied my article online.[4] That column has also been removed from the website. It stated: "The article by Wilmshurst has its origins in a seminar he gave to the *BMJ* in 1996. For years he had been informing us of misdemeanours. Fear of libel stopped us from publishing."[4]

Ironically, it was fear of libel actions that caused the *BMJ* to remove the article from the website. Soon after publication, the *BMJ* received threats of libel actions from academics and their institutions. Dr Smith and I spent considerable time working with lawyers to counter these challenges. None came to court, but the legal costs for the *BMJ*'s insurers mounted. It was pointed out that a libel action must be started within 1 year of publication. Because the article was on the website it was constantly being republished. If it was removed from the website there could be no more threats of litigation after 1 year. Therefore, the insurance company that covers the *BMJ* against libel insisted that the article be removed from the website.

If readers are unable to get a copy, they can email me and I will send a PDF version.

Peter T Wilmshurst, Cardiologist
Royal Shrewsbury Hospital, Shrewsbury, UK.
peter.wilmshurst@rsh.nhs.uk

1 Marcovitch H. Research misconduct: can Australia learn from the UK's stuttering system? *Med J Aust* 2006; 185: 616-618.
2 Wilmshurst P. Institutional corruption in medicine. *BMJ* 2002; 325: 1232-1235.
3 Smith R. Research misconduct: the poisoning of the well. *J R Soc Med* 2006; 99: 232-237.
4 Smith R. Corruption in medicine [Editor's choice]. *BMJ Online* 2002; 325 (23 Nov).

Antenatal care implications of population-based trends in Down syndrome birth rates

Caroline M De Costa and Cait Calcutt

To the Editor: A further reason for the differences in antenatal Down syndrome screening rates between urban and rural women, reported by Coory and colleagues,[1] is likely to be the relative difficulties many Queensland women face in accessing abortion services. We are aware of several Queensland public hospitals that provide excellent antenatal screening services — testing for chromosomal abnormalities as well as providing the 18–20-week ultrasound scan for structural abnormalities. However, these hospitals do not offer subsequent counselling or abortion for women who make the difficult decision to terminate a pregnancy at this gestation, instead directing them to the private system. Some of these women are undoubtedly among the many Queensland women who travel interstate for abortions each year.[2-5]

First-trimester abortion is difficult to access for women in rural areas throughout Queensland. This is probably an important factor in women making the decision not to have early screening and/or chorionic villus biopsy, and possibly also a factor in doctors not offering it. Having to travel several hundred kilometres for the test, with the possibility of a further journey for an abortion, is beyond the resources of many rural women.

We are in agreement with Coory et al that a majority of the population would support equity of access to services and equal choices for all women in the matter of antenatal screening for fetal abnormality. In fact, amniocentesis for chromosomal abnormalities has been available, with little controversy, for more than 30 years. If early antenatal screening is made available to all women, then it is reasonable to expect that appropriate counselling and access to safe, affordable abortion is also provided.

Caroline M De Costa, Professor of Obstetrics and Gynaecology[1]
Cait Calcutt, Coordinator[2]
1 James Cook University, Cairns, QLD.
2 Children by Choice, Brisbane, QLD.
caroline.decosta@jcu.edu.au

1 Coory M, Roselli T, Carroll H. Antenatal care implications of population-based trends in Down syndrome birth rates by rurality and antenatal care provider, Queensland, 1990–2004. *Med J Aust* 2007; 186: 230-234.
2 Nickson C, Smith AM, Shelley JM. Travel undertaken by women accessing private Victorian pregnancy termination services. *Aust N Z J Public Health* 2006; 30: 329-333.
3 Chan A, Sage LC. Estimating Australia's abortion rates 1985–2003. *Med J Aust* 2005; 182: 447-452.
4 Nickson C, Smith AM, Shelley JM. Intention to claim a Medicare rebate among women receiving private Victorian pregnancy termination services. *Aust N Z J Public Health* 2004; 28: 120-123.
5 Adelson PL, Frommer MS, Weisberg E. A survey of women seeking termination of pregnancy in New South Wales. *Med J Aust* 1995; 163: 419-422.

The difficulty with data: greater accuracy required for policy making

Susan Downes and Sally M Roach

To the Editor: Women of the remote Indian Ocean Territories (Christmas Island and the Cocos Islands [see map]) regularly question why their comprehensive obstetric service, allowing deliveries on the Islands, ceased in 1998. A study in 2005[1] aimed to provide answers for these women.

There is one general practitioner on the Cocos Islands and two on Christmas Island. Previously, procedural GPs attended to most deliveries. Now, pregnant women must leave the Islands 4 weeks before their expected delivery. The financial, physical, emotional, and cultural costs of this are substantial.

Reports published in 2002[2] and 2004[3] identified community concerns, but resisted recommendations to resume on-Island birthing, because of perceived low birth numbers and difficulty sustaining the skills of clinicians. Both studies relied on external birthing data, as the Indian Ocean Territories Health Service (IOTHS; administered by the Department of Transport and Regional Services) had not documented numbers of deliveries.

The Alberton Report,[3] extrapolating from Australian Bureau of Statistics (ABS) data, assumed that the population of children aged less than 1 year in a census year equalled the number of deliveries the year before. The ABS has a system to protect the confidentiality of small isolated populations and purposely does not report these numbers.

The Bath Report[2] relied on data from the Western Australian Midwife Notification System (MNS). The MNS reported 136 births to Island women from 1995 to 2004, while our study (Western Australian Centre for Remote and Rural Medicine)[1] recorded 326 births. Thus, the MNS attributed only

41% of known births to Island women during 1995–2004, and only 23% during the period considered by the Bath Report.

We believe that the MNS data shortfall occurred for two reasons. Firstly, women frequently provide their temporary mainland address on the MNS form for practical reasons. Secondly, one in seven women leaving the Islands to deliver their babies choose to give birth in a state other than Western Australia to be closer to family, and these births are not attributed to women from the Islands.

The methods used by the Alberton Report, the MNS and the Bath Report result in underestimations of the number of confinements for Island women by up to 77%.

It is regrettable that this situation has not been previously recognised or acknowledged, and that recommendations for the resumption of obstetric services by the IOTHS have repeatedly been based on incomplete data. If records of the numbers of births for Island women had been collected and considered by the IOTHS, Island families might again enjoy a comprehensive on-Island delivery service for low-risk pregnancies.

Competing interests: Susan Downes was paid a modest honorarium by the Department of Transport and Regional Services to assist her in undertaking a research study, of which this was one aspect.

Susan Downes, General Practitioner[1]
Sally M Roach, Associate Director of Research[2]
1 Royal Flying Doctor Service of Australia, Fremantle, WA.
2 Western Australian Centre for Remote and Rural Medicine, University of Western Australia, Perth, WA.
semarabali@hotmail.com

1 Downes S, Roach S. Obstetric services in the Indian Ocean Territories. Perth: Western Australian Centre for Remote and Rural Medicine, 2006.
2 Bath R. Indian Ocean Territories Health Services Development Project — report to the Commonwealth Department of Transport and Regional Services. Perth: Department of Health Western Australia, 2002.
3 Indian Ocean Territories Health and Community Services needs assessment — a combined consultative and evidence based approach. Perth: Alberton Consulting, 2004. ❑

Read on the Web — eMJA

Most popular articles from 2/16 April 2007 issues

Ice: cool drug or real problem?
http://www.mja.com.au/public/issues/186_07_020407/ful11359_fm.html

Accidental paracetamol poisoning
http://www.mja.com.au/public/issues/186_07_020407/lub11145_fm.html

Amphetamine-related presentations to an inner-city tertiary emergency department: a prospective evaluation
http://www.mja.com.au/public/issues/186_07_020407/gra10484_fm.html

Late-term abortion: what can be learned from *Royal Women's Hospital v Medical Practitioners Board of Victoria*?
http://www.mja.com.au/public/issues/186_07_020407/ger11260_fm.html

Hospital separations for cannabis- and methamphetamine-related psychotic episodes in Australia
http://www.mja.com.au/public/issues/186_07_020407/deg11127_fm.html

A woman with abnormal ears and an unusual voice
http://www.mja.com.au/public/issues/186_08_160407/sha11255_fm.html

Challenges and change in medical training: the Australian Curriculum Framework for Junior Doctors
http://www.mja.com.au/public/issues/186_07_020407/van10276_fm.html

The Surge Capacity for People in Emergencies (SCOPE) study in Australasian hospitals
http://www.mja.com.au/public/issues/186_08_160407/tra10812_fm.html

Disaster surge planning in Australia: measuring the immeasurable
http://www.mja.com.au/public/issues/186_08_160407/rob10218_fm.html

MJA Advertisers Index

The Medical Journal of Australia
MJA

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: medjaust@ampco.com.au. The Journal is printed by Webstar Australia, 83 Derby Street, Silverwater, NSW 2128.

MJA on the Internet: http://www.mja.com.au/

Published in 2 volumes per year.
Annual Subscription Rates for 2007 (**Payable in Advance**) to: **AMPCo**, Locked Bag 3030, Strawberry Hills, NSW 2012
Individual Subscriptions (includes 10% GST)
Australia: $A368.50, Medical students (Australia only): $A60.00
Overseas: $A474.00
Indexes are published every 6 months and are available on request as part of the current subscription.
Single or back issues contact: **AMPCo (02) 9562 6666.**
Advice to Authors—
http://www.mja.com.au/public/information/instruc.html

27,887 circulation as at 26 October 2006

ISSN 0025-729X