

New pharmacotherapies for alcohol dependence: are they being used and what do they cost?

Christopher M Doran,^{*} Julia E Fawcett,[†] Anthony P Shakeshaft,[‡] Marian D Shanahan,[§] Richard P Mattick[¶]

* Health Economist, † Research Officer, ‡ NHMRC Fellow and Senior Investigator, § Health Economist, ¶ Director, National Drug and Alcohol Research Centre, University of New South Wales, NSW 2052. C.Doran@unsw.edu.au

TO THE EDITOR: An estimated 512 935 Australian adults satisfy criteria for alcohol dependence (3.5% of the population aged 18 years and over).¹ Pharmacotherapy for this condition typically comprises a benzodiazepine, such as diazepam, for withdrawal and disulfiram for relapse prevention.² Acamprosate and naltrexone have also recently become available for treating alcohol dependence in Australia, but little is known about their uptake or cost.

One indicator of uptake is the proportion of alcohol-dependent individuals who have a script filled. Based on the number of scripts for these drugs filled in Australia in 2001, and assuming 50% compliance with the recommended treatment periods, we estimated that 4602 people took acamprosate and 8899 naltrexone in that year (Box). This is equivalent to a maximum of about 3% of alcohol-dependent individuals

taking either drug (13 501 individuals using either drug/512 935 alcohol-dependent individuals).

We also estimated the cost of visits to medical practitioners for scripts for these drugs, assuming that most were written by general practitioners, and the costs of the drugs themselves to the Australian government and to individual patients (Box). Total treatment and medication cost of the two drugs in 2001 was \$7 420 741.

These estimates are based on assumptions about the relevant population subgroup (age ≥ 18 years), rate of compliance with the recommended regimen (50%), source of scripts (GPs), and GP fees (first visit, \$25.05; subsequent visits, \$11.14). Varying these assumptions makes little difference to the likely uptake of either acamprosate or naltrexone; applying more conservative assumptions suggests that either medication is unlikely to have been used by more than 5% of alcohol-dependent individuals in Australia. Although use of these medications is not necessarily appropriate for all dependent individuals, their low uptake raises serious concerns about why they are being under-utilised: it may be because they are poorly marketed, or it may be that they are of limited effectiveness in Australia outside the context of clinical trials. The latter possibility is exacerbated by the nebulous nature of the comprehensive

treatment programs recommended for their use.⁵ Without methodologically rigorous Australian data, it is difficult to confidently allay such concerns. However, these results indicate a considerable amount of resources are being devoted to acamprosate and naltrexone as treatments for alcohol dependence, with little Australian evidence as to whether this investment represents value for money.

- Hall W, Teeson M, Lynskey M, Degenhardt L. The 12-month prevalence of substance use and ICD-10 substance use disorders in Australian adults: findings from the National Survey of Mental Health and Well-Being. *Addiction* 1999; 94: 1541-1550.
- Mattick RP, Jarvis T. An outline for the management of alcohol problems: Quality Assurance in the Treatment of Drug Dependence Project. Canberra: Commonwealth Department of Human Services and Health, 1993. (Monograph no. 20.)
- Health Insurance Commission. Pharmaceutical benefits schedule items statistics. Available at: www.hic.gov.au/statistics/dyn_pbs/forms/pbs_tab1.shtml (accessed Apr 2003).
- MIMS Australia. MIMS annual. 26th ed. Sydney: Medi Media Australia, 2002.
- Australian Department of Health and Ageing. Schedule of pharmaceutical benefits for approved pharmacists and medical practitioners. Canberra: The Department, 2001.
- Australian Department of Health and Ageing. Medicare statistics. March quarter 2003. Table B6. Average patient contribution per service (patient and bulk billed services out-of-hospital only). Available at: www.health.gov.au/haf/medstats/index.pdf (accessed Jul 2003). □

Gestational diabetes mellitus: accuracy of Midwives Data Collection

Robert G Moses,^{*} Alison J Webb,[†] Christine D Comber[‡]

* Clinical Director, † Nurse, Diabetes Service; ‡ Nurse, Department of Obstetrics and Gynaecology, Illawarra Area Health Service, PO Box W58, Wollongong West, NSW, 2500. mosesr@iahs.nsw.gov.au

TO THE EDITOR: Gestational diabetes mellitus (GDM) is glucose intolerance of variable severity with onset or first recognition during the current pregnancy.¹ GDM is one of the conditions requiring an entry on the New South Wales Midwives Data Form. Effective healthcare planning is dependent on accurate data collection. To our knowledge, the verity of the midwives data with respect to GDM, or indeed other entities, has not been checked for many years.

A previous article has demonstrated that the accuracy of GDM data collection is poor, with the incidence of GDM being under-reported.² Recently, an article from Victoria also showed a recorded rate of GDM about half that of the acknowledged incidence.³ We

Use and cost of new medications for alcohol dependence in Australia in 2001

	Acamprosate	Naltrexone
Number of scripts filled ³	27 613	13 349
Estimated number of users [*]	4602	8899
General practitioner visits		
Estimated number [†]	13 807	8899
Estimated cost [§]	\$251 129	\$240 794
Medication cost ^{3,5}		
Cost to government	\$4 442 204	\$2 115 315
Estimated cost to patients [¶]	\$252 407	\$118 892
Total cost	\$4 945 740	\$2 475 001

* Number of scripts filled/number of scripts needed for recommended treatment period (12 months for acamprosate and 3 months for naltrexone,⁴ with each script providing one month's supply⁵)/compliance (assumed to be 50%).

† Based on 6 visits per year for acamprosate prescription (12 scripts; 1 repeat per script), and 2 visits per year for naltrexone prescription (3 scripts; 1 repeat per script), but assuming 50% compliance with recommended treatment period.

§ Based on 2001 Medicare rates (85% of MBS code 23 [\$25.05] for first visit, and 85% of MBS code 3 [\$11.14] for subsequent visits) plus mean patient cost per GP/vocationally registered GP visit for 2001 of \$2.62.⁶

¶ Taking into account variation in patient Medicare classification (general, concessional or safety net), which varied over the year.^{3,5}

have recently completed a review of compliance with GDM testing in our area and, knowing the true incidence of GDM, this has allowed us to revisit the accuracy of the data being recorded on the Midwives Data Collection Form.

In the city of Wollongong, NSW, with a population of around 280 000 and about 3000 births each year, all deliveries take place at two public hospitals (Wollongong and Shellharbour) and a private hospital (Illawarra Private Hospital). It is the policy of both the Obstetric Department and the Division of General Practice that all pregnant women should be tested for GDM in accord with the ADIPS guidelines.⁴

All women who delivered at the three hospitals over the 6-month period from January 2002 to June 2002 were identified from the Labour Ward records. A hospital-based delivery is used by 99.3% of women in the area.⁵ The results of testing for GDM were determined for all of these women.

There were 1655 deliveries at the three hospitals over the 6-month period. Seven women with known type 1 or type 2 diabetes were excluded, leaving 1648 women whose data could be examined. Women were considered to have been tested for GDM ($n = 1518$) if they had had either a glucose tolerance test ($n = 1502$) or a glucose challenge test ($n = 16$). There were 101 women diagnosed with GDM, giving an overall incidence rate of 6.6% (prenatal clinic, 7.1%; shared-care, 6.6%; private patients, 6.3%).

The most recent midwives data indicate an incidence of 5.7% at the public hospitals and 3.1% at the private hospital. It is thus apparent that the official statistics still underestimate the incidence of GDM. A similar degree of error may also be found for other entries, and hence data should be extrapolated with caution.

A redesign of the collection form may help remove some of the errors and omissions. For the question regarding GDM, we feel accuracy could be enhanced if there were separate "Yes" and "No" boxes, rather than a single check box. This might encourage further consideration of the problem. Accuracy could be further enhanced by allowing space for the glucose tolerance test results at 0 and 2 hours — these

would also be useful data in their own right.

1. American Diabetes Association. Clinical Practice Recommendations. Gestational Diabetes Mellitus. *Diabetes Care* 2002; 25 (Suppl 1): S94-S96.
2. Moses RG, Colagiuri S. The extent of undiagnosed gestational diabetes mellitus in New South Wales. *Med J Aust* 1997; 167: 14-16.
3. Stone CA, McLachlan KA, Halliday JL, et al. Gestational diabetes in Victoria in 1996: incidence, risk factors and outcomes. *Med J Aust* 2002; 177: 486-491.
4. Hoffman L, Nolan C, Wilson JD, et al. Gestational diabetes — management guidelines. The Australasian Diabetes in Pregnancy Society. *Med J Aust* 1998; 169: 93-97.
5. Public Health Division. New South Wales Mothers and Babies 2000. Sydney: NSW Health, 2001. □

Lee K Taylor

Manager, Surveillance Methods, Centre for Epidemiology and Research, NSW Department of Health, Locked Bag 961, North Sydney, NSW 2059. ltayl@doh.health.nsw.gov.au

IN REPLY: Moses et al are correct in noting that gestational diabetes mellitus (GDM) is under-reported to the New South Wales Midwives Data Collection (MDC). The most recent validation study of the MDC was carried out in 1998. We reviewed a random sample of 1680 medical records from NSW public and private hospitals, representing 1.9% of births reported in 1998. The sensitivity and specificity of reporting of GDM to the MDC were 86.7% and 99.6%, respectively.¹ In this sample, the incidence rate of GDM was 3.5% according to the MDC, and 4.0% according to the medical record review.

These population rates are lower than the rates reported by Moses et al among women attending hospitals in Wollongong. In addition to incomplete recording of diagnosed GDM on the MDC, the low rate of recording of GDM in medical records in our sample suggests that GDM was also under-ascertained at a population level. This is probably due to variations in the implementation of pregnancy screening for GDM between clinicians and across NSW hospitals.

In February 2003, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists endorsed the Australian Diabetes in Pregnancy Society GDM Management Guidelines.² The guidelines recommend universal screening for GDM, noting that selective screening may be appropriate because of limited resources or known low GDM incidence.

The suggestions for trying to improve reporting of GDM by redesigning the MDC form are welcome, and we will certainly consider them at the next review. We are also considering using the hospital Inpatient Statistics Collection (ISC), in which discharge diagnoses are classified according to the International Classification of Diseases, as an alternative source of information on maternal morbidity. We are currently reviewing a random sample of 500 medical records of mothers who gave birth in hospitals throughout NSW. The information obtained will be compared with matched ISC records provided to the NSW Department of Health to determine whether the ISC is a more reliable source of information on maternal morbidity than the MDC. In the longer term, I anticipate that the integration of the MDC with computerised medical records in hospitals will also contribute to improved reporting.

Under-reporting of maternal morbidity, including GDM, is an issue for all state and territory perinatal data collections in Australia. The information is used for planning and evaluation of healthcare services, so it is important that we get it right. I would like to thank Moses et al for raising this issue.

1. Public Health Division. NSW Mothers and Babies 1998. *N S W Public Health Bull* 2000; (S-2).
2. Hoffman L, Nolan C, Wilson JD, et al. Gestational diabetes mellitus — management guidelines. The Australasian Diabetes in Pregnancy Society. *Med J Aust* 1998; 169: 93-97. □

Addressing the shortage of rural physicians in Victoria: maximising rural trainee recruitment

David Simmons,* Amanda Fieldhouse,† Leslie E Bolitho,‡ Grant J Phelps,§ Rob Ziffer,¶ Gary J Disher**

* Professorial Fellow, Department of Rural Health, University of Melbourne, Shepparton; and Professor of Medicine, University of Auckland Waikato Clinical School, Waikato Hospital, Hamilton, New Zealand;

† Health Care Consultant, South Yarra, VIC;

‡ Physician, Wangaratta, VIC; § Physician, St John of God Hospital, Ballarat, VIC; ¶ Physician, Sale, VIC;

** Deputy Director — Health Policy, Royal Australasian College of Physicians, Sydney, NSW.

simmons@waikatodhb.govt.nz

TO THE EDITOR: Rural Australia has a substantial shortage of specialist physicians. In 1999, Victoria had 52 specialist physicians for 1.3 million people (a