

6 Pharmaceutical products

Background

The Commonwealth Department of Health and Aged Care has maintained the Community Drug Use Database (CDUD) since 1989 under the auspices of the Drug Utilisation Sub-Committee. The CDUD combines information on the dispensing of prescriptions for which the government pays a subsidy (i.e. under the Pharmaceutical Benefits Scheme), with an estimate of non-subsidised drug use from an ongoing survey of community pharmacies (conducted by the Pharmacy Guild of Australia) to estimate the number of prescriptions dispensed through community pharmacies. The CDUD does not contain information on pharmaceuticals dispensed through public hospitals.

This chapter focuses on pharmaceuticals that affect the nervous system, placing them in context with other drug groups. Drugs that affect the nervous system include analgesics, benzodiazepines, antidepressants and major tranquillisers. The use of such substances for non-medical purposes was discussed in Chapter 5.

Top ten prescription medicines

Three out of the top 10 prescription medicines distributed through community pharmacies are for substances that affect the nervous system (paracetamol, codeine and temazepam, Table 6.1).

Table 6.1: Top ten prescription medicines distributed through community pharmacies, Australia, 1997–98

Substance	Number of prescriptions ('000)
Amoxicillin (antibiotic)	4,876
Paracetamol (analgesic)	4,756
Salbutamol (to treat asthma)	4,624
Simvastatin (to lower cholesterol)	4,299
Codeine 30 mg with paracetamol (strong analgesic)	4,084
Ranitidine (to treat peptic ulcer)	3,536
Temazepam (for sleep)	3,333
Atenolol (to lower blood pressure)	3,057
Cefaclor (antibiotic)	3,045
Enalapril (for heart failure or high blood pressure)	3,021

Source: Commonwealth Department of Health and Aged Care, unpublished data.

Community prescriptions for major drug groups

Of the approximately 183 million prescriptions dispensed through community pharmacies in 1997–98 almost 36 million were for drugs that affect the nervous system (Table 6.2). This accounts for approximately 19% of the total number of prescriptions between 1991–92 and 1997–98, making this the drug group with the largest volume.

Table 6.2: Community prescriptions for major therapeutic drug groups, Australia, 1991–92 to 1997–98

Drug group/subgroup	Year ending 30 June						
	1992	1993	1994	1995	1996	1997	1998
	('000)						
For hypertension	20,229	21,993	23,525	24,536	26,225	27,611	28,854
Non-steroidal anti-inflammatory drugs	9,333	8,920	8,319	8,089	8,161	7,806	7,806
For peptic ulcers/reflux	4,081	5,288	6,377	7,183	7,908	8,501	8,861
Lipid-lowering drugs	2,261	2,372	2,679	3,201	4,265	5,449	6,789
For asthma	11,392	11,609	11,186	10,522	11,211	11,294	11,471
Nervous system							
Analgesics	9,830	10,649	11,832	12,687	13,281	13,416	13,865
Opioids	4,525	4,869	5,473	5,974	6,324	6,435	6,734
Non-opioids	4,857	5,268	5,850	6,220	6,475	6,511	6,548
Psycholeptics	11,401	11,077	11,076	10,999	11,217	11,065	11,181
Major tranquillisers ^(a)	2,262	2,318	2,353	2,325	2,432	2,344	2,402
Anxiolytics & hypno-sedatives ^(b)	9,139	8,760	8,724	8,674	8,785	8,721	8,779
Antidepressants	4,874	5,205	5,622	5,978	6,587	7,141	7,833
Other nervous system	2,173	2,335	2,786	2,943	3,066	3,079	2,995
<i>Total nervous system</i>	<i>28,277</i>	<i>29,266</i>	<i>31,315</i>	<i>32,607</i>	<i>34,151</i>	<i>34,702</i>	<i>35,873</i>
Other drug groups	74,430	77,416	80,883	82,479	84,657	81,733	83,116
Total	150,004	156,865	164,283	168,616	176,577	177,095	182,770

(a) The major component of this category is antipsychotics.

(b) The major component of this category is benzodiazepines.

Source: Commonwealth Department of Health and Aged Care, unpublished data.

The number of prescriptions for drugs that affect the nervous system has been steadily rising from 1991–92. This increase is due to a large increase in the number of prescriptions for analgesics and antidepressants. Of the other major drug groups, prescriptions for hypertension and asthma drugs accounted for approximately 15% and 7% (respectively) of the total number of prescriptions between 1991–92 and 1997–98.

DDDs for drugs affecting the nervous system

The most accurate way to illustrate the use of prescription drugs is by the number of full adult doses available for consumption by a given number of people (usually 1,000) per day. The defined daily dose (DDD) of any particular drug is defined as the amount necessary to treat one adult for one day. The DDD is usually determined by an expert working group. It is a more accurate technique for monitoring changes in prescription drug use as it accounts for changes in dosage, which is not accounted for by looking at the number of prescriptions alone. The DDDs for all drugs affecting the nervous system have not been agreed and as such a total DDD measure is not available for drugs which affect the nervous system. Table 6.3 presents information on drugs affecting the nervous system for which a DDD has been defined.

Table 6.3: Defined daily doses (DDDs) for selected drugs affecting the nervous system, Australia, 1991–92 to 1997–98

Substance	Year ending 30 June						
	1992	1993	1994	1995	1996	1997	1998
	(DDDs per 1,000 population per day)						
Analgesics							
Opioids	6	6	7	8	9	9	10
Non-opioids	10	11	12	12	13	13	13
Psycholeptics							
Major tranquillisers ^(a)	5	5	5	5	5	5	6
Anxiolytics & hypno-sedatives ^(b)	29	27	27	26	27	26	26
Antidepressants	12	13	15	19	24	28	33

(a) The major component of this category is antipsychotics.

(b) The major component of this category is benzodiazepines.

Source: Commonwealth Department of Health and Aged Care, unpublished data.

There has been a steady increase in the number of DDDs for both opioid and non-opioid analgesics from 1991–92 to 1997–98, whilst the number of DDDs for psycholeptics (major and minor tranquillisers) has remained relatively stable. Over this period the DDDs for antidepressants have almost tripled.

Top five analgesics

Analgesics are one of the most commonly used drugs in Australia. For example, the 1996 secondary students survey showed that 98% of people aged between 12–17 years had used analgesics at some point (Chapter 7). The most commonly distributed analgesics through community pharmacies are paracetamol and codeine 30 mg with paracetamol, accounting for almost 9 million prescriptions or almost 70% of the total number of prescriptions for analgesics in 1997–98 (Tables 6.1 and 6.4).

Table 6.4: Top five analgesics distributed through community pharmacies, Australia, 1997–98

Substance	Number of prescriptions ('000)
Paracetamol	4,760
Codeine 30 mg with paracetamol	4,080
Dextropropoxyphene with paracetamol	750
Aspirin	740
Codeine (<20 mg) with paracetamol	280

Source: Commonwealth Department of Health and Aged Care, unpublished data.