15 Hypertension

15.1 Background

Hypertension is the most common of all cardiovascular conditions. In the 1995 ABS Health Survey, 67% of males and 76% of females with a cardiovascular condition reported having hypertension (Australian Bureau of Statistics 1997a). Furthermore, hypertension is the most common problem managed in Australian general practice, being managed at a rate of 8.3 per 100 encounters (Britt et al. 1999b). Anti-hypertensives (i.e. beta-blockers, calcium channel blockers, ACE inhibitors) are the drugs most frequently prescribed by GPs for cardiovascular conditions (Waters et al. 1998; Britt et al. 1999b).

Between 1986 and 1993 the types of anti-hypertensive drugs prescribed for hypertension changed, with a decrease in the use of diuretics and beta blockers and an increase in the use of ACE inhibitors and calcium channel blockers (Henry et al. 1994).

Based on public expenditure, it has been postulated that first-line treatment (diuretics) and second-line treatments (beta blockers) are being passed over for calcium channel blockers and ACE inhibitors, which are considered third line therapy. ACE inhibitors ranked second of the highest cost medicine groups subsided by the PBS in 1995–96 with a total cost of \$275 million, behind antacids used for the treatment of peptic ulcer (Waters et al. 1998). Given escalating costs, an apparent shift away from first-line therapy and the drive to encourage GPs to substitute generic drugs for brands, it was considered that a sub-sample of questions which investigated hypertension management and its apparent effectiveness would yield useful data.

15.2 Research questions

- 1. What is the prevalence of hypertension in patients attending general practitioners in Australia?
- 2. What is the prevalence of uncomplicated hypertension and of hypertension with complications in patients attending general practitioners in Australia?
- 3. What is the severity of the hypertension in these patients? (measured by GP assessed ease of control)
- 4. What medication types are being used in the management of hypertension in general practice in Australia?

15.3 SAND questions

| Box 15.1: Hypertension questions | |
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| GPs were asked: | |
| Does this patient have hypertension? | Yes / No |
| If 'yes': | |
| • Is this best described as: Simple hypertension? | <i>Hypertension with complications (i.e. involvement of target organs)?</i> |
| • <i>Has getting control of this patient's hypertension been:</i> | Easy? Relatively easy? Difficult? Extremely difficult? |
| Current BP medications: | |
| Medication type(s) currently being used in the management of this patient's hypertension. (multiple response allowed) (tick box for 'yes') | ACE inhibitors Beta blockers Calcium channel blockers Other anti-hypertensives Diuretics |

15.4 Results

Sample size was 1,908 patient encounters from 95 GPs.

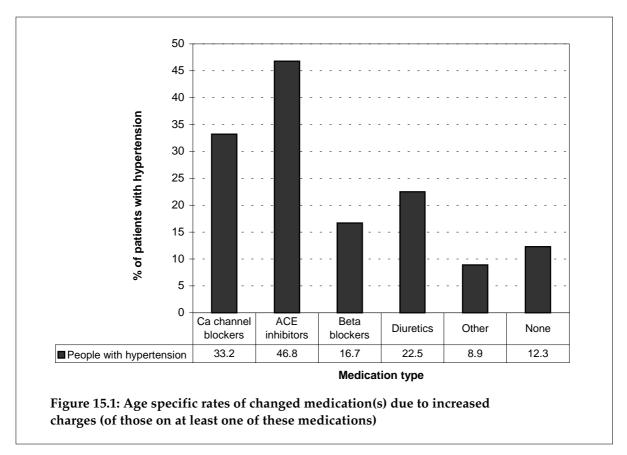
The prevalence of hypertension in general practice patients was 20.1% (95% CI: 17.3–22.8). Of the 383 patients with hypertension, 84.3% were considered to have simple hypertension, while 15.7% were said to have complicated hypertension.

There was no difference in the rate of hypertension for males (19.5%, 95% CI: 15.5–23.4) and females (20.2%, 95% CI: 17.1–23.3). The rate of hypertension increased with age until 75 years, with those aged 65–74 years having the highest rate at 52.5% (95% CI: 41.1–64.0). Age specific rates of simple and complicated hypertension were similar to those for all hypertension.

The GPs stated that it was easy to achieve control of the patient's hypertension for 80.0% of those reported to have hypertension. Not surprisingly, GPs found it more difficult to control complicated hypertension (compared with simple hypertension), with 67.2% finding it difficult or extremely difficult to control, and only 11.4% reporting this for simple hypertension.

Of the patients with hypertension, 12.3% were not taking any medication for their condition, while just over a half (55.4%) were taking only one medication. The remaining 32.4% were taking two or more medications. As would be expected, patients with complicated hypertension were taking more medications than those with simple hypertension.

The most frequently prescribed medications for hypertension were ACE inhibitors (Figure 15.1). Almost one-quarter of patients were using ACE inhibitors only, while 46.8% were receiving an ACE inhibitor only or in conjunction with another class of drug. The next most frequently prescribed medication type was calcium channel blockers, 14.9% receiving a calcium channel blocker only and 33.2% either alone, or in conjunction with another class of medication.



Note: Patients may be on more than one medication type for their hypertension

15.5 Discussion

The results of this study indicate, with good reliability, that one in five people attending general practitioners in Australia has hypertension. The majority of persons with hypertension (88%) take at least one medication for their condition and the most frequently prescribed medications are ACE inhibitors. These data will provide a baseline for future monitoring of the management of this condition, which is a major contributor to the burden of illness in Australia.