

2 Introduction

Pharmacists are licensed to prepare and sell or dispense drugs and compounds and to make up prescriptions. Many also provide primary health care and give drug information. Most are community pharmacists who work in retail outlets. Other pharmacists work in hospitals and clinics, and in industry, and a small number work in administration, education and the armed services.

In 1990, the Australian Health Ministers' Advisory Council (AHMAC) commissioned the Australian Institute of Health and Welfare (AIHW) to develop national health labour force statistics about the major registrable health professions. Data collections based on a national minimum data set were developed, addressing the workforce planning needs of the health professions, government, service providers and educational institutions. A national pharmacy labour force survey commenced in 1993 in conjunction with the annual registration renewal of pharmacists. In addition to pharmacy, published data are available for medicine, dentistry, nursing, podiatry, occupational therapy, optometry and physiotherapy.

In February 1997 AHMAC reviewed national health workforce information requirements and decided that national collections should continue annually for medicine, biannually for nursing, and on a rolling three-year cycle for pharmacy, dentistry and several allied health occupations. National pharmacist labour force collections were undertaken in 1994, 1995, 1996 and 1999.

2.1 Pharmacy Labour Force Survey

The AIHW conducted the Pharmacy Labour Force Survey with the assistance of state and territory registration boards. Each pharmacy board sent a survey questionnaire to pharmacists as part of the annual registration renewal process. The pharmacy boards of Victoria and Tasmania conducted the labour force survey towards the end of 1998 while the data for the other states and territories were collected in 1999.

Coverage may exclude pharmacists who registered for the first time during the current year. These pharmacists may not be required to renew their registration at the standard renewal date if the initial registration in that state or territory occurred within the preceding year. Only those industrial pharmacists who are required to distribute drugs and medicines to the public have to be registered. Therefore other industrial pharmacists who are not registered to dispense are not included in this survey.

AIHW labour force estimates

Pharmacists may register in more than one state or territory. In estimating the pharmacy labour force, it is therefore important to reduce as much as possible the consequent duplication in statistics.

The estimation of the number and characteristics of currently employed pharmacists in each state and territory was based on the responses of those pharmacists employed solely or mainly in the state or territory of registration. Pharmacists who were on leave for three months or more, although employed, were excluded from most tables of employed

pharmacists because not all states and territories collected data on pharmacists who were on leave.

It was assumed for all estimates that non-respondents to the survey in each state and territory had the same labour force characteristics as had respondents, and the survey data were scaled up to the registration numbers by distributing the non-response numbers on the basis of this assumption. This process may overestimate the number of pharmacists in the labour force in each state and territory if non-respondents are more likely to be those with multiple registrations not in their home state or territory or those not in the pharmacy labour force. This survey error will be greater in the two territories, which have higher proportions of pharmacists registered in other jurisdictions, and lower proportions of pharmacists practising solely in their own jurisdiction.

Revisions to 1995 data

The number of registrations and the estimated workforce in New South Wales in 1995 has been revised as advised in *Pharmacy Labour Force 1998*, following advice from the Pharmacy Board of New South Wales.

Comparability with data for previous years

Most of the labour force data in this publication are directly comparable with previously published data. However, the survey question concerning classification of main and second job of community pharmacists in New South Wales was changed for the 1996 and 1999 collections, and therefore this data may not be directly comparable with that for 1995.

Response rate

Based on the total number of registrations in each state and territory, the response rate to the survey was 76.3% (Table 1). The estimated state response rate for those surveyed ranged from 65.9% in Victoria and the Australian Capital Territory to 90.6% in South Australia.

The overall response rate can only be estimated and not determined with complete accuracy. It is known that at least some pharmacists who were registered in more than one state or territory completed a questionnaire in just one state or territory. It is not known how often this occurred because it is not possible to match survey records across states and territories.

Table 1: Pharmacy labour force survey response, states and territories, 1999

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Responses	5,389	2,977	2,893	1,304	1,056	327	238	207	14,391
Registrations	7,142	4,518	3,331	1,595	1,165	468	361	273	18,853
Response rate (per cent)	75.5	65.9	86.9	81.8	90.6	69.9	65.9	75.8	76.3

Sources: AIHW Pharmacy Labour Force Survey 1999; Pharmacy Registration Boards.

Complete data were not available for all responding pharmacists, either because not all survey questions were completed or because pharmacy boards' initial registration data were incomplete or not provided. In these cases, the non-response was distributed over the item categories in the same proportion as responses.

2.2 Additional data sources

Additional data in this report came from a variety of sources:

- the Department of Health and Ageing
- the Department of Education, Science and Training
- the Department of Immigration and Multicultural and Indigenous Affairs

The Department of Health and Ageing

The Department of Health and Ageing (DoHA) publishes Pharmaceutical Benefits Scheme data which includes the number and cost of medicines most commonly prescribed under the scheme.

The Department of Education, Science and Training

The Department of Education, Science and Training (DEST) requires all universities to provide data on students and university course completions. This information provides the number and characteristics of most of the new entrants to the pharmacy labour force.

The Department of Immigration and Multicultural and Indigenous Affairs

The Department of Immigration and Multicultural and Indigenous Affairs (DIMIA) obtains data on the number of pharmacists arriving in Australia to work, and the number of Australian (permanent resident) pharmacists leaving Australia to find employment overseas. This information is retrieved from incoming and outgoing passenger cards distributed to all air and sea passengers.

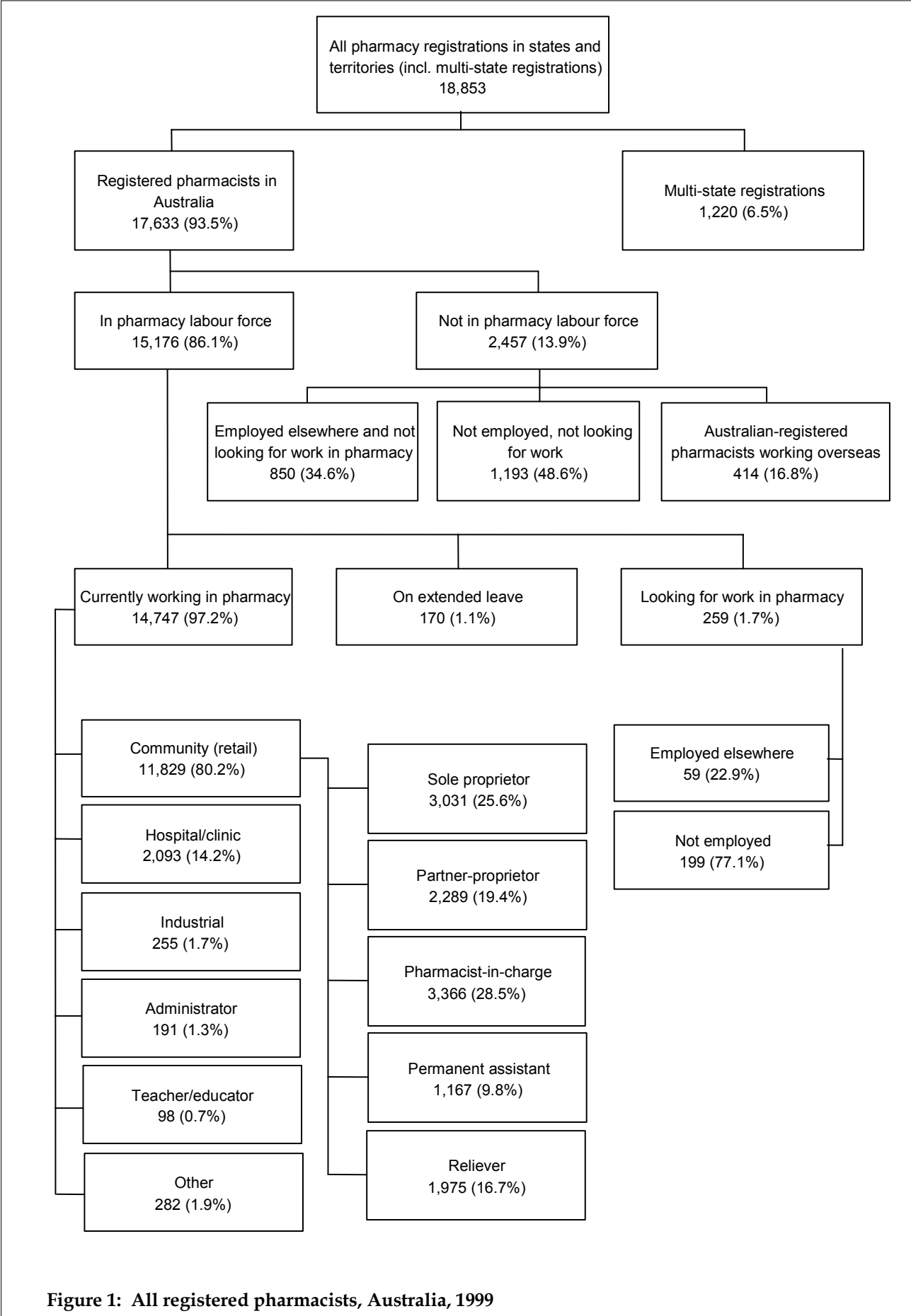


Figure 1: All registered pharmacists, Australia, 1999