

# **The Mental Health of Australians**

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# Foreword

In 1995, the Commonwealth Department of Health and Aged Care funded a national project called the National Survey of Mental Health and Wellbeing. It was established to gather baseline information about the prevalence of mental illness in the Australian population, the amount of associated disablement, and the use of health and other services by people with mental disorders or mental health problems.

The National Survey has three components: a household survey of adult Australians aged 18 years and over; a household survey of children and adolescents aged 4-17 years inclusive; and a study of low prevalence disorders covering the age range 15-65 years. Taken together, these three components provide reasonably representative information about the mental health status and needs of the Australian population.

The adult component of the Survey was undertaken by the Australian Bureau of Statistics (ABS). Preliminary findings have been provided in the publication, "Mental Health and Wellbeing: Profile of Adults, Australia 1997" (McLennan, 1997). The report includes information on the prevalence of mental disorders and associated disablement for adult Australians. Information is also included about health service usage as a consequence of a mental health disorder.

As part of their work for the Survey, the ABS prepared a confidentialised unit record file (CURF) of data collected. This enables further analysis of the data by scientific groups, including the authors of the present report. They are: the World Health Organization (WHO) Collaborating Centre for Mental Health and Substance Abuse, St Vincent's Hospital, Sydney (Gavin Andrews); the National Drug and Alcohol Research Centre, University of New South Wales (Wayne Hall and Maree Teesson); and the NHMRC Psychiatric Epidemiology Research Centre, The Australian National University (Scott Henderson).

This report provides a lucid account of how much the Australian population is affected by mental disorders. It goes on to consider the practical implications of these findings. In any twelve months, close to 1 in 5 (17%) of adult Australians have a mental disorder. By far the most common are anxiety or affective disorders and substance misuse. Further, 1 in 4 of them suffer from more than one mental disorder. Mental disorders are

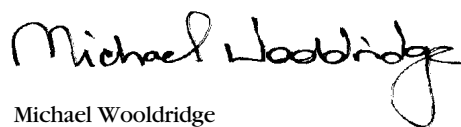
therefore common in the Australian community, and need to be better understood if their impact on individuals and on the community is to be adequately addressed.

The authors have then gone on to consider a significant problem associated with mental illness. While close to 1 in 5 Australians had a mental illness, less than half of those in the study had sought any professional help. The image of mental illness as a long term costly personal burden still persists.

Education about mental illness needs to stress that mental disorders and mental health problems are treatable. Feelings of depression and hopelessness can nearly always be relieved. And people can learn strategies to help themselves cope better with the inevitable buffeting that life brings. Such education needs to start early, during childhood and adolescence, when vulnerable young people first develop mental health problems that may substantially affect their adult lives. More focused information is also required on the impact of substance abuse on the general health and wellbeing of young people. The report presents new information to help understand the barriers that might exist for people to access appropriate mental health services.

The two other components of the National Survey of Mental Health and Wellbeing are close to completion. The Child and Adolescent Survey is being undertaken through the University of Adelaide on behalf of the National Collaborating Centres for the Survey of Mental Health and Young People. The Low Prevalence Disorders Survey is being coordinated through the University of Western Australia. Each of these surveys will be reported on separately and distributed to inform public discussion on this critical health issue.

I commend the authors of this report for their work in this important initiative.



Michael Wooldridge

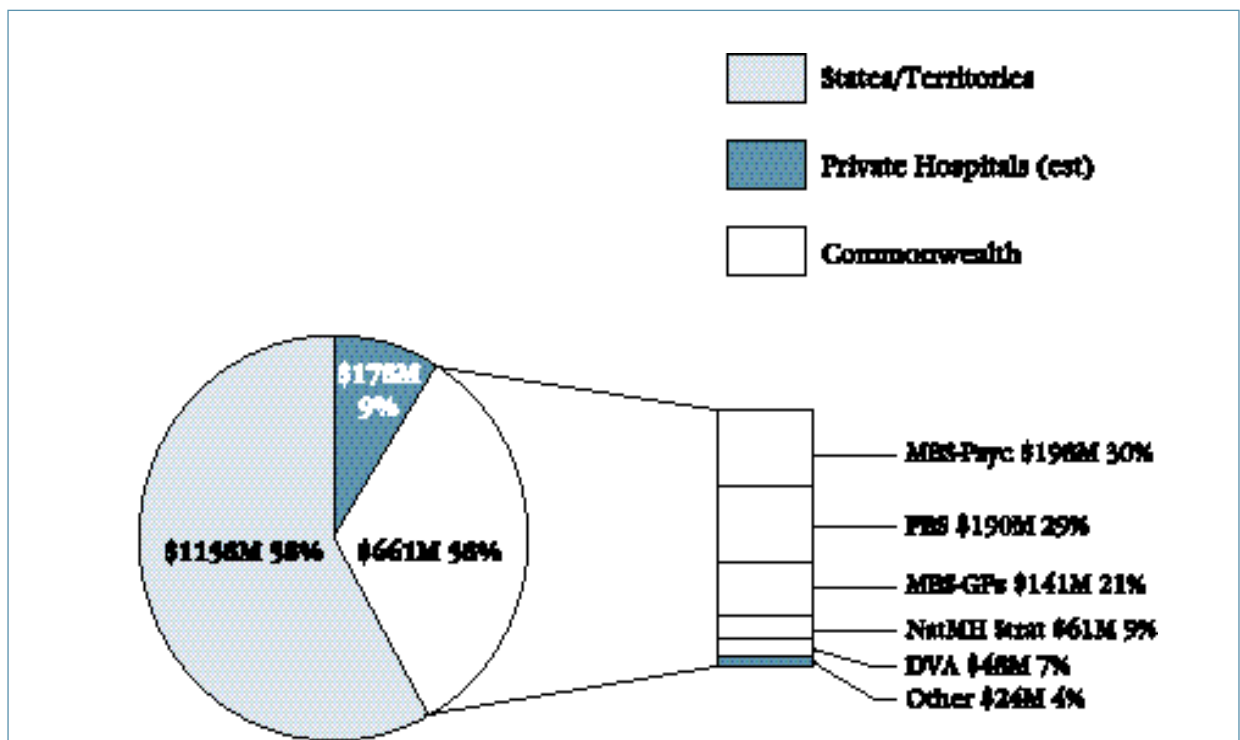


# 1. Introduction

Mental health services in Australia are well studied. Each year, as part of the National Mental Health Strategy set in motion by all Health Ministers in April 1992, a National Mental Health Report is published on the costs and performance of all health sectors involved in the treatment and care of people with mental disorders. The priority areas for reform under the Strategy range from consumer rights, through service provision at all levels, to monitoring and accountability. Services for the mentally ill in Australia are probably among the best in the world but their co-ordination has been less than ideal because they have been developed separately by each State and Territory, and by independent private psychiatrists, general practitioners and other non-government organisations. The Commonwealth's principal role within the National Mental Health Strategy has been to co-ordinate major issues in further structural and system reform of the mental health care system.

One can understand how a system operates by seeing where the money goes. The 1996 National Mental Health Report identifies recurrent spending on mental health services in 1995/96 (Figure 1-1). Two billion dollars were expended, about 5% of the total health expenditure, a proportion of the health budget which is probably lower than that of comparable developed countries, which makes the adequacy of existing services all the more remarkable. Fifty eight percent of the budget is spent by the States and Territories on community services, stand-alone psychiatric and general hospital psychiatric units. Australia is leading the way to ambulatory care for people with mental disorders, with 36 public beds and 8 private beds per 100,000 population, and a well developed community mental health service, complemented by ambulatory services provided by general practitioners and salaried or private psychiatrists.

**Figure 1-1: Mental Health Expenditure 1995-6 (based on figures in the 1996 National Mental Health Report)**



NB: MBS-Psyc = Medicare Benefits Schedule - Psychiatric services; PBS = Pharmaceutical Benefits Scheme; MBS-GPs = Medicare Benefits Scheme - General Practitioners; Nat MH Strat = National Mental Health Strategy; DVA = Department of Veteran's Affairs.

## 1. Introduction

Half the expenditure on direct clinical services is already spent on ambulatory care - a far cry from the days of long term institutionalisation being the dominant environment for the care and treatment of the mentally ill.

The first phase of the National Mental Health Strategy has ended. The second phase will focus on promotion and prevention as well as continuing the previous work on service reform and on ensuring the quality and effectiveness of service provision. However, enumerating and improving the services is only one side of the coin.

### 1.1 Mental Disorders in the Australian Population

We know what is spent on providing mental health services but what is not known is the number of Australians who have what types of mental disorders, how disabled they are by these disorders, and what services they currently use for these disorders. At best we can use American and

British studies to estimate the number of people with mental disorders who currently go untreated, but we have little idea of the services that are accessed by people with various mental disorders and the levels of disability that they suffer. We also do not know how satisfied they are with the services they received, or of any unmet needs for treatment, either more or different types of treatment.

Within the last decade Britain, Canada and the United States have used surveys to determine how many adults in their populations have which mental disorders, how disabled they are by these disorders, and what services they use. The Commonwealth Department of Health and Aged Care convened a meeting of stakeholders in December 1994 to discuss the possibility of conducting a similar survey of the mental health of Australians to answer these questions. As a result of that meeting a National Survey of Mental Health and Well-being was planned in 1995 and 1996 and undertaken in 1997.

#### *Figure 1-2: Diagnosis*

Mental Disorders are defined in the World Health Organisation's International Classification of Disease - 10th revision (ICD-10). This classification lists a set of criteria that are necessary for a diagnosis to be made. For example, the criteria for mild depressive episode would be satisfied if the person reported two weeks of abnormally depressed mood, with loss of interest and decreased energy, and one of the following list of symptoms:

- loss of confidence
- excessive guilt
- recurrent thoughts of death
- poor concentration
- agitation or retardation
- sleep disturbance
- change in appetite

Severe depression requires that five of the eight symptoms are present. The American Psychiatric Association's Diagnostic and Statistical Manual, fourth version, is structured in a similar way but the agreement between the two systems is by no means perfect. The ICD-10 is the official classification in Australia but many psychiatrists use the American system.

## 1.2 The National Survey of Mental Health and Well-being

This report describes the main findings from the National Survey of Mental Health and Well-being (National Survey), which has also become known as the “Adult Survey” of mental health to distinguish it from complementary studies of mental disorders among Australians. Information from the Adult Survey will be complemented by the results of studies of people with “low prevalence disorders” such as psychoses, and by the results of a survey of the mental health of school age children and adolescents. The results of these latter two surveys will be the focus of separate reports at a later date.

The National Survey was designed to answer three main questions:

1. How many Australians have which mental disorders?
2. How disabled are they by these disorders?
3. What services have they used for these disorders?

The National Survey was conducted by the Australian Bureau of Statistics on behalf of the Mental Health Branch of the Commonwealth Department of Health and Aged Care in the second half of 1997. It surveyed adults aged 18 - 99 who were identified in a cluster sample of households selected so that the results would be representative of the Australian adult population.

An hour-long interview was administered from laptop computers by the Bureau’s trained interviewers. The interview comprised sections from the Composite International Diagnostic Interview (or CIDI), a similar interview to that used in the Canadian and US surveys. The CIDI sections covered the most common mental disorders (namely, anxiety, affective and substance use disorders) defined by the diagnostic criteria from the two major psychiatric classification systems, the 10th Edition of the International Classification of Diseases (ICD-10) and the

Diagnostic and Statistical Manual, Fourth Edition, of the American Psychiatric Association (1994) (DSM-IV) (WHO, 1993). The CIDI questions systematically explore the diagnostic criteria required for each diagnosis.

Although data were collected to allow both DSM and ICD diagnoses to be made for the common disorders, this report is concerned only with ICD-10 mental disorders. The prevalence of DSM-IV disorders will be the subject of subsequent technical reports.

There were six anxiety disorders assessed by the CIDI: social phobia, agoraphobia, panic disorder, generalised anxiety disorder, obsessive compulsive disorder, and post-traumatic stress disorder. Five affective disorders were also assessed: major depressive episode, dysthymia, mania, hypomania and bipolar affective disorder. The substance use disorders that were assessed included: abuse/harmful use and dependence on alcohol; and abuse/harmful use and dependence on four types of drug: cannabis, opioids, sedatives and stimulants.

In addition to assessing these broad classes of disorder, people over the age of 65 were given the Mini-Mental State Examination (Folstein, Folstein & McHugh, 1975) to assess cognitive impairment. Five screening questions were also used to identify persons who possibly had a psychosis. Additional questions assessed symptoms of ICD-10 neurasthenia and eight personality disorders.

As well as assessing specific mental disorders, the interview gathered information about a range of chronic physical conditions and the degree of disability associated with specific mental and physical disorders. This was done by using two established scales for measuring disability and the self-reported number of days out of role associated with each mental or physical disorder. Not being able to carry out one’s usual activities and responsibilities at home and at work is called days out of role because it indicates disturbance to the individual’s social role performance as a member of a family or social group, irrespective of age, or as a member of the workforce.

Information was also collected about the use of health services for mental disorders, perceived health needs, general symptoms of psychological distress, demographic factors and personality measures that are known to be associated with the risk of mental disorders, and measures of general well-being. The Survey was preceded by an extensive program of interview development and testing to ensure that the interview would prove acceptable to the people who completed it and reliable in the field.

### 1.3 The Sample

Seventy eight percent of eligible adults completed the Survey interview and very few who agreed to begin the interview withdrew. Thus the acceptability of the interview was high. Errors of administration were minimised by the computerised format, which checked on the logic and on each response being within the meaningful range. The results were then weighted to ensure that the figures in this report are representative of the total adult population.

### 1.4 Strengths and Limitations of the Survey

The National Survey was designed to provide reliable estimates of the most common forms of mental disorder in a representative sample of the Australian adult population. As will be shown below, the Survey succeeded in meeting this aim. But in achieving that, sacrifices had to be made. The major ones were that the Survey was not able to provide as good estimates of the prevalence of less common types of mental disorders or to estimate their prevalence in some groups in the population. These limitations need to be briefly described.

Firstly, one group in the population on whose mental health the Survey is able to provide only limited information is **Aboriginal and Torres Strait Island (ATSI) peoples**, for whom a different type of study may be required. For

example, the survey methods may not be acceptable to respondents and community leaders; the sample would have to be large enough to provide useful information and representative of all ATSI peoples; and the assessment of mental health would have to be culturally appropriate. There is also the issue of how the resulting information would be used and by whom. These issues were considered very thoroughly when the National Survey was being designed, including extensive consultation with representatives of the ATSI community. Despite the many methodological difficulties, it is hoped that a study can be done that will produce data that are comparable with the rest of the Australian population. In the interim, Aboriginal and Torres Strait Islander peoples were included in the Survey but there were too few of them in a sample of 10,600 to provide reliable estimates of their mental health.

Secondly, **the elderly** were not represented in the National Survey in the same proportion as the general population, unlike the recent USA and UK surveys where persons aged 65 years and over were omitted altogether. But because persons 65 years and older make up about 16% of the total Australian population, the number of persons interviewed was only about 1,500. As a result, prevalence estimates for less common mental disorders among the elderly will not be reliable. It was also beyond the resources of the Survey to diagnose dementia and related disorders in the elderly because it would have required an extended interview by an experienced clinician. Instead, all persons aged 65 years and over were asked to undertake the Mini-Mental State Examination for the detection of cognitive impairment, in addition to undergoing the same psychiatric assessment as younger persons.

Thirdly, the Survey provides limited information on the mental health of persons from a **non-English-speaking background (NESB)**. Those with poor English could not be administered the standardised psychiatric assessment in their own language because of the costs of translating the

interview and employing interviewers fluent in a range of non-English languages. There are too few persons of NESB in the population whose command of English is sufficient to undertake the Survey interview to provide valid data on the mental health of specific Ethnic groups, even in a sample of over 10,600 persons.

Fourthly, there were a number of smaller groups whose mental health could not be well assessed in a survey of the general population. These include: persons living in institutions, such as hospitals, colleges, sheltered accommodation and prisons, members of the armed services, and homeless persons. Special studies which over-sample each of these groups (e.g. Hodder, Teesson & Buhrich, 1998) are needed to produce reliable estimates of their prevalence of mental disorders.

## 1.5 A Note on Reporting Results

In the interest of readability, the following report does not contain the results of tests of significance or confidence intervals. These statistical details will be provided in a series of more technical reports that will be produced by research groups associated with the design and conduct of the Survey. Differences in rates of particular mental disorders between men and women, age groups or other demographic variables that are statistically and substantively significant will be drawn to the attention of readers. The absence of any discussion of an observed difference in the rates of disorders indicates that the difference was not statistically significant, usually because the estimate was based on too few cases to be trustworthy.



## 2. Anxiety, Affective and Substance Use Disorders

The National Survey found that a little less than one in five Australian adults (17.7%) had an anxiety, affective or substance use disorder (or more than one of these disorders) in the past year (Table 2-1). There was difference between males and females in the prevalence of these disorders, with males (17.4%) a little less likely to have one or more of these disorders than females (18.0%).

Anxiety disorders were the most common. They affected just under one in ten adults (9.7%), followed by substance use disorders which affected 7.7% and affective disorders which affected 5.8% of adults. Men were much more likely to have a substance use disorder than women (11.1% versus 4.5%) and women were much more likely than men to have an anxiety (12% versus 7.1%) or an affective disorder (7.4% versus 4.2%).

These prevalence rates mean that overall, approximately 2,383,000 Australian adults had a mental disorder within the previous 12 months: 1,151,000 men and 1,231,000 women. Anxiety disorders affected about 470,000 adult men and 830,000 women. Substance use disorders affected about 734,000 adult men and 307,000 adult women, while depressive disorders affected about 275,000 men and 503,000 women.

There are a number of reasons why these rates probably underestimate the prevalence of all mental disorders among Australian adults. First, they do not include mental disorders such as

schizophrenia, dementia and the personality and somatoform disorders. These disorders will add some 3% to the overall prevalence, the amount depending upon the extent to which persons with these disorders also have one or more of the mental disorders that were assessed in the Survey.

Second, the sample was based upon households so it excluded homeless people and the residents of nursing homes, hospitals and hostels, and prisons. These groups all have higher rates of mental disorders than the general population but they also comprise a very small proportion of the total Australian population. Several surveys have sampled homeless people and the residents of nursing homes and hospitals, e.g. the Epidemiologic Catchment Area (ECA) study (Regier & Robins, 1991) and the British Household Survey (Meltzer, Gill, Petticrew & Hinds, 1996). These have found that the inclusion of persons in these groups added only a small fraction of 1% to the estimated percentage of the population who have a mental disorder.

Third, a more important reason why the current survey underestimates the prevalence of mental disorders is the rate of mental disorders among the 22% of the sample that were not interviewed. The survey response rate of 78% was a little less than that of other population surveys that have been conducted by the Australian Bureau of Statistics (e.g. the National Health Survey, 1996). It is comparable, however, to response rates reported

*Table 2-1: Prevalence of Mental Disorders in Australian Adult Men and Women in the Past Year*

	MALES		FEMALES	
	%	Population estimate	%	Population estimate
Any Affective Disorder	4.2	275 300	7.4	503 300
Any Anxiety Disorder	7.1	470 400	12.0	829 600
Any Substance Use Disorder	11.1	734 300	4.5	307 500
Any Mental Disorder	17.4	1 151 600	18.0	1 231 500

in household surveys that involve a similarly long interview on a personally sensitive topic. The response rate in the ECA study, for example, was 76% (Regier & Robins, 1991) and that in the National Comorbidity Survey (NCS) was 80% (Kessler et al., 1994).

The NCS made special efforts to estimate the rate of disorders among persons who initially refused to participate in the Survey. NCS interviewers offered persons who refused an interview inducements to undertake a briefer interview. This showed that persons who initially declined to be interviewed had higher rates of mental disorder than did those who agreed to participate (Kessler et al., 1994). If the rate of mental disorders among non-respondents in the National Survey was twice that among sample respondents, then the overall prevalence of any of these disorders in the Australian population would be 21.6%. This is a little closer to the rate of disorders in the past year reported among respondents in the NCS (28%) than the observed rate (17.7%).

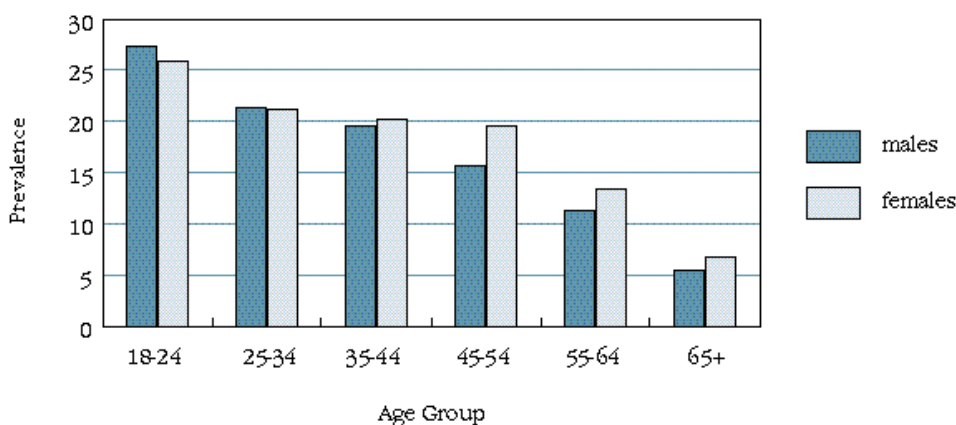
## 2.1 Correlates of these Mental Disorders

### 2.1.1 Age and Gender

Contrary to the common belief that mental disorders are more common among the aged, the National Survey found that the three classes of mental disorder were more common among younger than older adults. One in four (27%) adults between the ages of 18 and 24 had one or more of these disorders, and the percentage declined steadily to only 6% among persons over the age of 65 years (Figure 2-1).

The prevalence of disorders decreased with age among men and women, but the rate of decline was a little faster among men than women after the age of 45. This pattern reflects gender differences in the prevalence of specific types of mental disorder and a difference between disorders in rates of remission (see below).

**Figure 2-1:** *Prevalence (%) of Any Mental Disorder (any Anxiety, Affective or Substance Use Disorder) in the Past Year by Age and Gender*



### 2.1.2 Social and Demographic Correlates of Mental Disorders

The prevalence of these mental disorders was associated with living arrangements, marital status, and employment status. Education, country of birth and location of residence showed smaller associations with the rates of mental disorders. The rates in Table 2-2 have been adjusted for age, which is associated with marital status, living arrangements and employment status, as well as with the prevalence of these mental disorders.

#### 2.1.2.1 Marital Status

The highest rates of disorders were found among persons who were separated or divorced (23.7% of divorced men and 27.4% of divorced women), followed by those who had never married (23% of single men and 20.8% of single women). Rates were also elevated among women who were widowed (19.4%) but rates were unreliably estimated among men who were widowers because the number in the sample was small. Married persons had the lowest rates of disorders: 15.2% of married men and 16.7% of married

women. These relationships probably reflect a number of different social processes. Persons with these mental disorders may be less likely to marry and more likely to divorce; separation and divorce or the death of a spouse may adversely affect a person's mental health; and marriage may benefit a person's mental health. The contributions that these processes make to these prevalence rates cannot be estimated from cross-sectional data such as the National Survey.

#### 2.1.2.2 Living Arrangements

Persons who lived alone had a higher rate of disorders (24% of males and 27.2% of females) than those who lived with one or more other persons (15.8% to 19.6% among males and 16.5% to 19.2% among females). The rate also decreased with the number of persons that lived in the respondent's household (Table 2-2). Among men, for example, the rates of mental disorders decreased from 19% among males who lived with one other person, to 15.8% among males who lived with four or more other persons.

**Table 2-2: Age-standardised Prevalence (%) of Mental Disorders by Gender, Marital Status, Living Arrangements, and Employment**

	Males	Females		Males	Females
<b>Marital Status</b>			<b>Labour force status</b>		
Married	15.2	16.7	Employed full-time	15.1	14.7
Sep/Div	23.7	27.4	part-time	22.4	16.3
Widowed	9.7*	19.4	Unemployed	26.9	26.4
Never married	23.0	20.8	Not in labour force	26.4	21.7
<b>Number of persons in household</b>					
1	24.0	27.2			
2	19.6	19.2			
3	15.7	19.1			
4	15.5	16.5			
5 or more	15.8	16.6			

\* Large standard error

## 2. Anxiety, Affective and Substance Use Disorders

### 2.1.2.3 Employment Status and Education

The prevalence of mental disorders was lower among persons who were in the labour force, employed full-time or part-time (15.1% among men and 14.7% among women) than those who were unemployed (26.9% among men and 26.4% among women) or not in the labour force (26.4% among men and 21.7% among women). These patterns reflect causal processes that operate in both directions: persons with mental disorders may be disadvantaged in seeking work; and being involuntarily unemployed may increase the risk of either developing or continuing to experience symptoms of a mental disorder. Cross-sectional survey data do not permit these possibilities to be distinguished or their respective contributions to be estimated. In the case of education, those with the least and the most years of education had smaller rates of mental disorder than those who had only completed high school (Table 2-3).

### 2.1.2.4 Location of Residence

The rates of mental disorder showed a small difference between persons who resided in capital cities or elsewhere in their state. This difference depended upon their sex. Among men, there was only a small difference in rates, with 17.1% of men resident in capital cities having one or more of these mental disorders as against 17.5% of men who lived outside capital cities. Among women there was a slightly higher rate of mental disorders among women who lived outside capital cities (18.9% compared with 17.5%).

### 2.1.2.5 Country of Birth

In the case of country of birth, persons born in Australia had a marginally higher rate of mental disorders than migrants, those who were born outside Australia in English-speaking countries or migrants from any non-English-speaking country. This pattern probably reflects a “healthy migrant effect”: persons who do not have mental disorders are more likely to be interested in migration, and probably more likely to be accepted as immigrants.

**Table 2-3: Prevalence (%) of Mental Disorders by Gender, Education, Country of Birth and Geographic Area**

	Males	Females
<b>Education</b>		
Did not complete secondary	18.2	18.3
Completed secondary only	19.6	21.2
Post-school qualification	16.3	16.3
<b>Country of Birth</b>		
Australia	18.7	18.4
Other English speaking	15.1	16.4
Other country	12.5	16.9
<b>Geographic Area</b>		
Capital city	17.5	17.5
Rest of State	17.1	18.9

## 3. Anxiety Disorders

Being anxious does not qualify one for an anxiety disorder. Diagnosis of an anxiety disorder requires that specific symptoms are present over a period of time and that these symptoms are accompanied by changes in thoughts, emotions and behaviour that substantially interfere with the person's ability to love and work.

Persons who have panic disorders have repeated experiences of sudden, sometimes unexpected, attacks of disabling fear or anxiety. Agoraphobia is the avoidance of situations in which either help is not available, or in which escape is impossible, for fear that a panic attack may occur. Social phobia is the avoidance of situations in which one is perceived to be the centre of attention in case of embarrassment or humiliation. Generalised anxiety disorder refers to months of irrational worry about everyday things. Obsessive compulsive disorder is characterised by repeated, intrusive, repugnant thoughts about blasphemy, contamination or harm, and by repeated acts to neutralise the anxiety generated by the obsessions (e.g. repeated checking or hand washing). Persons with post-traumatic stress disorder suffer from the continuing intrusion of emotionally laden memories of a previous traumatic event.

### 3.1 Prevalence

Anxiety disorders are the most common form of mental disorder: 9.7% of adults reported symptoms that qualified for a diagnosis of one or more of these disorders in the past 12 months (Table 3-1). This comprised 1,300,000 Australian adults, 470,000 men and 830,00 women. Post-traumatic stress disorder was the most common of the anxiety disorders (3.3%). Obsessive compulsive disorder was the least common, with only 0.4% reporting symptoms consistent with this disorder.

### 3.2 Correlates

#### 3.2.1 Gender and Age

The anxiety disorders, especially panic disorder, agoraphobia and post-traumatic stress disorder, are more common in females. This is due in part to the fact that trait anxiety, a risk factor for anxiety disorders, is slightly more common in females than males.

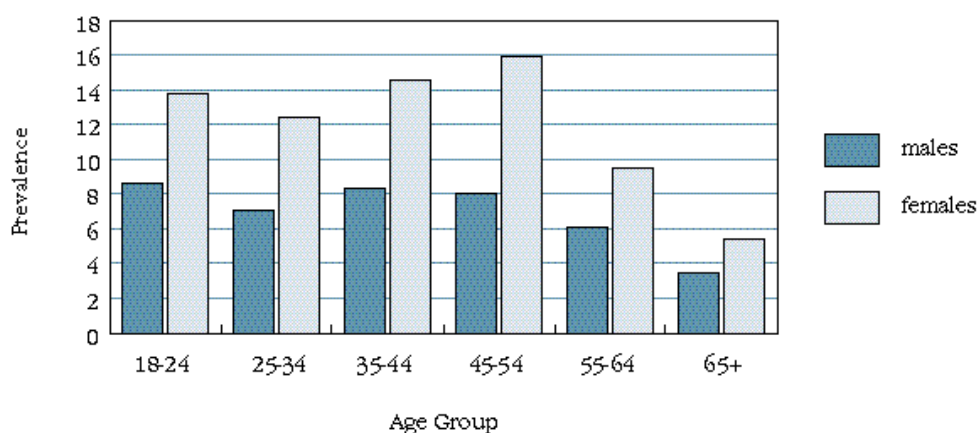
The anxiety disorders are prevalent in people aged 18 to 54. Their prevalence only begins to decline after the age of 55 years, along with that of the other mental disorders. Other surveys have shown that the anxiety disorders often begin in young adulthood and can become chronic disorders. The relationship between age and the prevalence of these disorders in the Survey are consistent with this evidence.

*Table 3-1: Prevalence (%) of Anxiety Disorders by Gender*

	Males	Females	Persons
Panic Disorder	0.6	2.0	1.3
Agoraphobia	0.7	1.5	1.1
Social Phobia	2.4	3.0	2.7
Generalised Anxiety Disorder	2.4	3.7	3.1
Obsessive-compulsive Disorder	0.3	0.4	0.4
Post-traumatic Stress Disorder	2.3	4.2	3.3
Total Anxiety Disorders	7.1	12.1	9.7

## 3. Anxiety Disorders

**Figure 3-1: Prevalence (%) of Anxiety Disorders by Gender and Age**



### 3.2.2 Social and Demographic Correlates

#### 3.2.2.1 Marital Status

The prevalence of anxiety disorders was higher among those who were widowed, divorced or separated compared to those who were currently married (Figure 3-2).

#### 3.2.2.2 Education and Employment

The amount of education completed did not affect the likelihood of having an anxiety disorder (Figure 3-3).

Anxiety disorders were more common among those who were unemployed than among those who were currently employed (Figure 3-4). Those who were not in the labour force were also more likely to have an anxiety disorder.

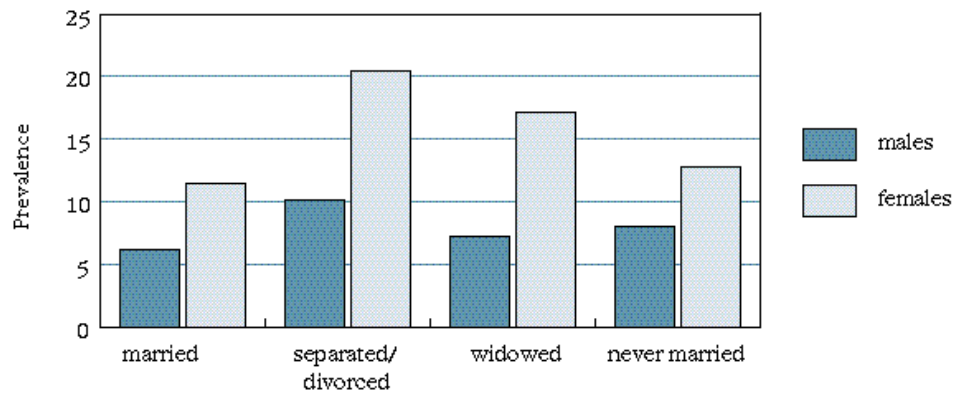
#### 3.2.2.3 Some Unexpected Findings

- Older people were less likely to have anxiety disorders than younger and middle aged persons. Older adults are sometimes thought to be more likely to have these disorders.
- Anxiety disorders were least likely to occur among persons who were currently married.

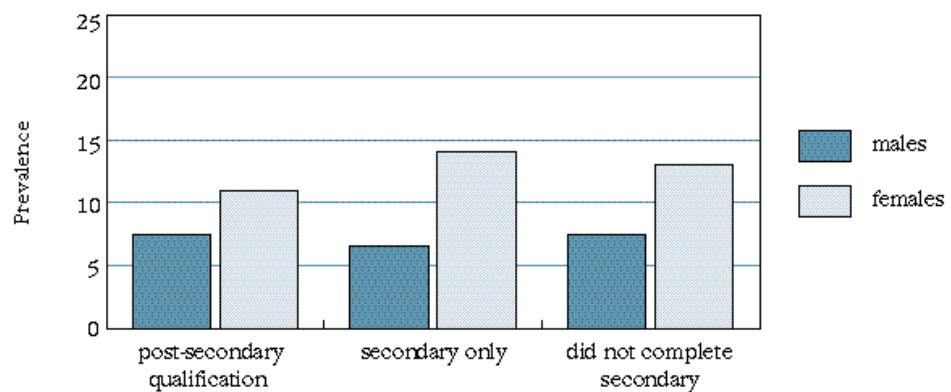
## 3.3 Comorbidity

Approximately 40% of females with an anxiety disorder met criteria for at least one other mental disorder. Of the males who had an anxiety disorder, half (49%) had at least one other type of comorbid mental disorder, such as, an affective or substance use disorder (see Section 7 for more details on comorbidity).

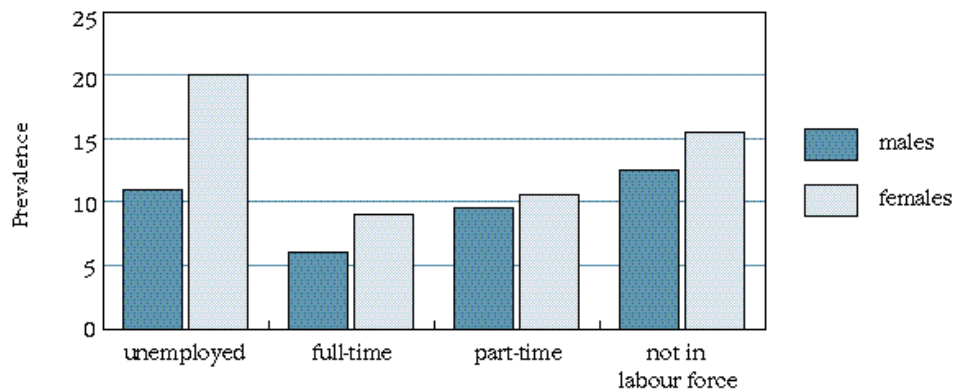
**Figure 3-2: Prevalence (%) of Anxiety Disorders by Gender and Marital Status**



**Figure 3-3: Prevalence (%) of Anxiety Disorders by Gender and Education Status**



**Figure 3-4: Prevalence (%) of Anxiety Disorders by Gender and Employment Status**



#### 3.4 Days Out of Role

The disability data collected in this Survey suggest that anxiety disorders can have a considerable impact on the lives of those who suffer from them. People with anxiety disorders alone reported an average of 2.1 days out of role, and 9.7% of adults met criteria for an anxiety disorder, thus anxiety disorders account for **some 2.7 million person days out of role per month among adults in Australia** (Figure 3-5). The corresponding figures for affective disorders and substance use disorders are 2.1 million and 1.1 million person days per month respectively.

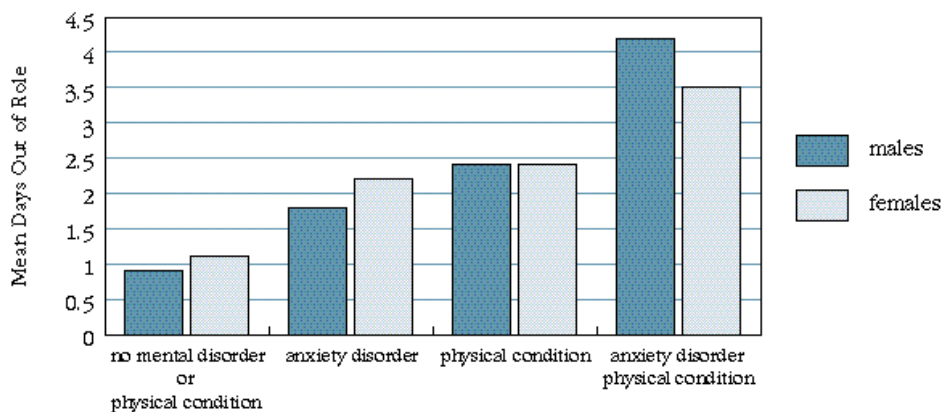
#### 3.5 Health Service Use

The anxiety disorders are frequent and, in total, very disabling. What, then, is the impact of treatment? Studies show that there are a number of potentially effective treatments for each of the

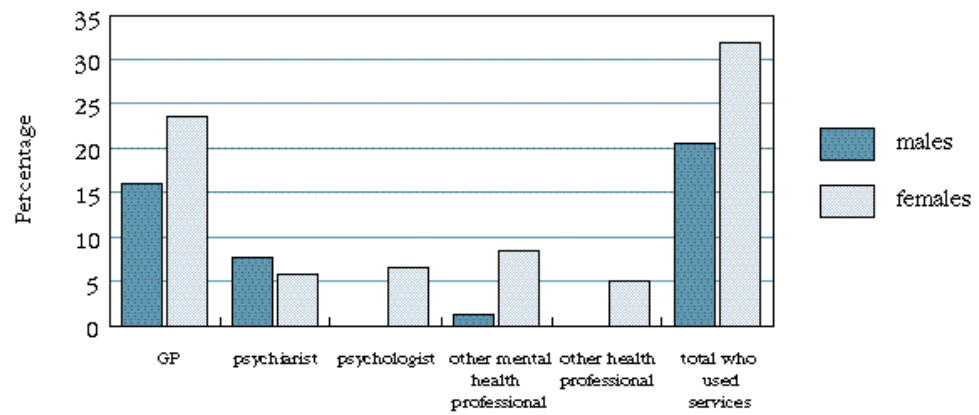
anxiety disorders (Andrews & Hunt, 1998). The problem is that patients are not requesting such treatment, they are not being recognised by health professionals as in need of it, and even when recognised, they are not often appropriately treated by health services. The effectiveness of treatment for anxiety disorders in routine practice is therefore low (Andrews, 1999).

Only 38% of people with mental disorders were seen by the health services during the survey year. Only 28% of people with an anxiety disorder sought treatment (Figure 3-6), half the rate at which people with an affective disorder as their sole complaint did so. Most often this was treatment by a general practitioner rather than by a psychiatrist or clinical psychologist. Given the prevalence and the associated disability, there needs to be more emphasis on the recognition and treatment of people with anxiety disorders.

**Figure 3-5: Reported Disability (days out of role during the past four weeks) Associated with Anxiety Disorders**



**Figure 3-6:** *Percentage of Persons Who Used Health Services for a Mental Health Problem (those with an Anxiety Disorder only)*





## 4. Substance Use Disorders

Consumption of alcohol or drugs does not qualify a person for a substance use disorder. *Substance use disorders* (which include harmful use and dependence on alcohol or other drugs) typically involve impaired control over the use of alcohol or other drugs. Obtaining, using and recovering from alcohol or drugs consumes a disproportionate amount of the user's time, and the user continues to drink alcohol or take drugs in the face of problems that they know to be caused by them. They typically become tolerant to the effects of alcohol or drugs, requiring larger doses to achieve the desired psychological effect, and abrupt cessation of use often produces a withdrawal syndrome. Many experience other psychological and physical health problems, and their alcohol or drug use often adversely affects the lives of their spouses, children, and other family members, friends and work-mates.

The survey obtained information about the experience of symptoms of disorders that were associated with the use of alcohol and the following four drug groups: cannabis, sedatives, stimulants and opiates in the past year. ICD-10 criteria for harmful use and dependence were assessed.

An *ICD-10 Harmful Use* diagnosis requires a pattern of substance use that is causing damage to health. The damage may be physical (e.g. hepatitis from self-administration of injected drugs) or mental (e.g. depression secondary to heavy consumption of alcohol).

An *ICD-10 Dependence* diagnosis requires the presence of three or more indicators of alcohol or other drug dependence. These indicators are: a strong desire to take the substance; impaired control over drug use; the occurrence of a

withdrawal syndrome on ceasing or reducing use; tolerance to the effects of alcohol or other drugs, as indicated by needing larger doses to achieve the desired psychological effect; obtaining, using and recovering from alcohol or other drugs take up a disproportionate amount of the user's time; and the user continues to drink alcohol or take other drugs despite associated problems. The problems should have been experienced for at least one month during the previous year to qualify for a diagnosis.

### 4.1 Prevalence

One in thirteen Australian adults aged 18 years and older (7.7%) had a substance use disorder in the past 12 months. Males were about twice as likely as females to have a substance use disorder, with 11.1% of males and 4.5% of females meeting criteria for the diagnosis of a substance use disorder in the past 12 months. This comprised 1,041,000 Australian adults, 734,000 men and 307,000 women.

Alcohol use disorders were about three times as common as drug use disorders (Table 4-1). 6.5% of Australian adults had an alcohol use disorder in the past 12 months; 9.4% of males and 3.7% of females. In comparison, 2.2% of Australian adults had a drug use disorder in the past year; 3.1 % of males and 1.3 % of females.

Cannabis accounted for more drug use disorders than any other illicit drug: 1.7% of Australian adults had a cannabis use disorder in the past 12 months. In comparison, 0.4% of adults had a sedative use disorder, 0.3% had a stimulant use disorder and 0.2% of Australian adults had an opioid use disorder in the past 12 months (Table 4-1).

## 4. Substance Use Disorders

**Table 4-1: Prevalence (%) of Substance Use Disorders by gender**

	Males	Females	Persons
<b>Alcohol</b>			
Harmful use	4.3	1.8	3.0
Dependence	5.1	1.9	3.5
<b>Cannabis</b>			
Harmful use	0.2	0.1	0.1
Dependence	2.5	0.7	1.6
<b>Stimulants</b>			
Harmful use	0.1	0.0	0.1
Dependence	0.2	0.1	0.2
<b>Sedatives</b>			
Harmful use	0.0	0.0	0.0
Dependence	0.4	0.4	0.4
<b>Opioids</b>			
Harmful use	0.0	0.0	0.0
Dependence	0.2	0.2	0.2
<b>Any substance use disorder</b>	<b>11.1</b>	<b>4.5</b>	<b>7.7</b>

## 4.2 Correlates

### 4.2.1 Gender and Age

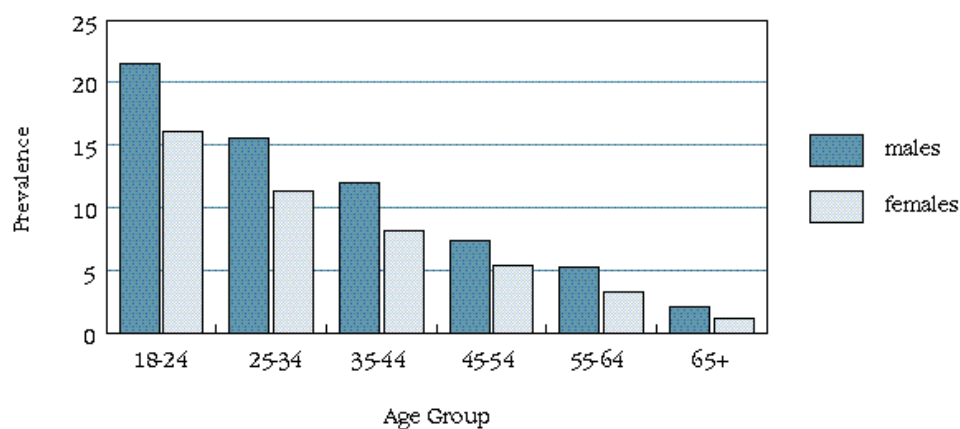
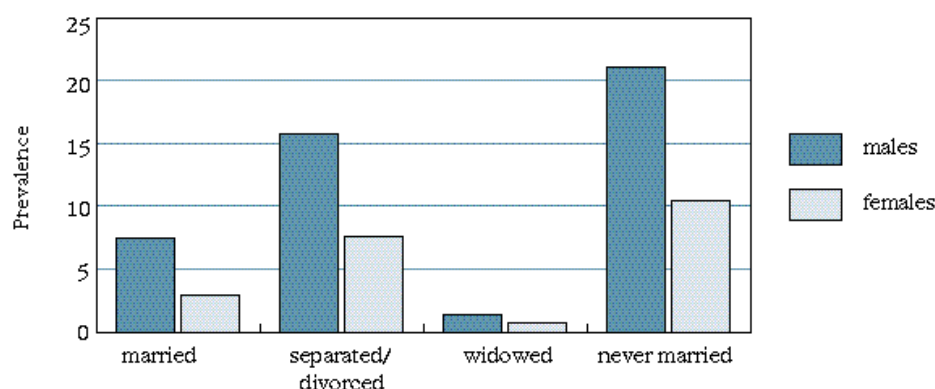
Substance use disorders were most common among adult males. This largely reflects much higher rates among males than females of exposure to heavy alcohol use and drug use. The prevalence of substance use disorders declined steeply with age for both males and females (Figure 4-1). One in six Australians aged 18-24 had a substance use disorder compared to one in 90 Australians aged 65 years and over. This steep decline with age may indicate that substance use disorders have high rates of remission. That is, with time some people stop having the disorder. It may also reflect a higher mortality rate among heavy drinkers.

### 4.2.2 Social and Demographic Correlates

The prevalence of substance use disorders was associated with marital status, employment and living arrangements. The following prevalence rates have been adjusted for age, which is related to marital status, education, employment and living arrangements. The next section discusses each correlate studied separately.

#### 4.2.2.1 Marital Status

Substance use disorders occurred more often among Australians who had never been married (13.1%) than among those who were married (4.5%). These associations are not necessarily causal. It may be that persons with substance use

**Figure 4-1:** Prevalence (%) of Substance Use Disorders by Gender and Age**Figure 4-2:** Prevalence (%) of Substance Use Disorders by Gender and Marital Status

disorder are disadvantaged in seeking partners, or that being unmarried increases the possibility of a person developing a substance use disorder, or both (Figure 4-2). It may also be that a common factor makes the likelihood of substance use disorder higher, as well as reducing the likelihood of marriage.

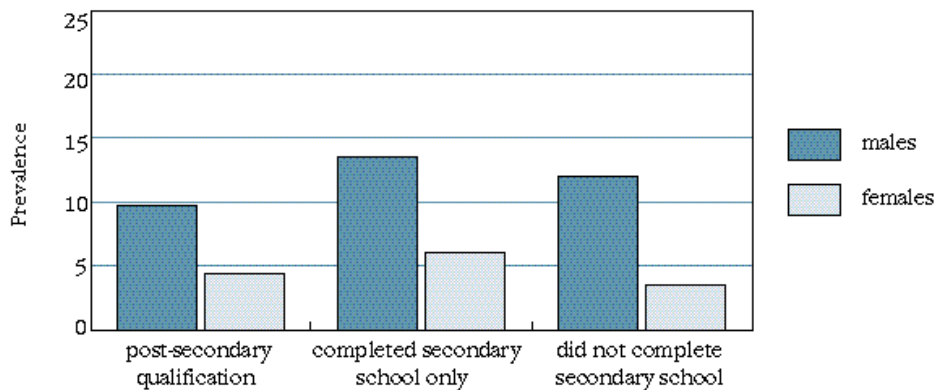
#### 4.2.2.2 Education and Employment

The level of education completed did not have an association with the likelihood of having a substance use disorder (Figure 4-3).

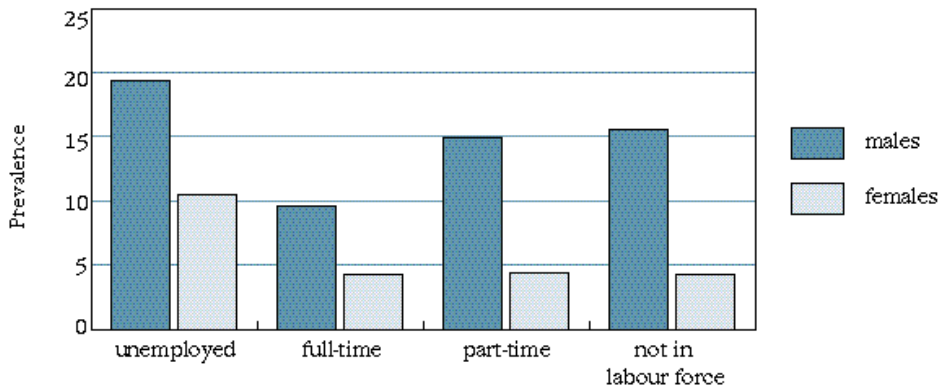
In comparison with employed workers, the unemployed generally had a higher rate of substance use disorders (Figure 4-4). These associations are not necessarily causal. For example we do not know whether persons with substance use disorder are disadvantaged in seeking work, or whether being unemployed increases the possibility of a person developing a substance use disorder, or both. It may also be that a common factor makes the likelihood of both unemployment and a substance use disorder higher.

## 4. Substance Use Disorders

**Figure 4-3:** *Prevalence (%) of Substance Use Disorders by Gender and Education Status*



**Figure 4-4:** *Prevalence (%) of Substance Use Disorders by Gender and Employment Status*



### 4.2.2.3 Living Arrangements

#### Location of Residence

Residents of areas other than capital cities (7.8%) were as likely to have a substance use disorder as those who lived in capital cities (7.7%).

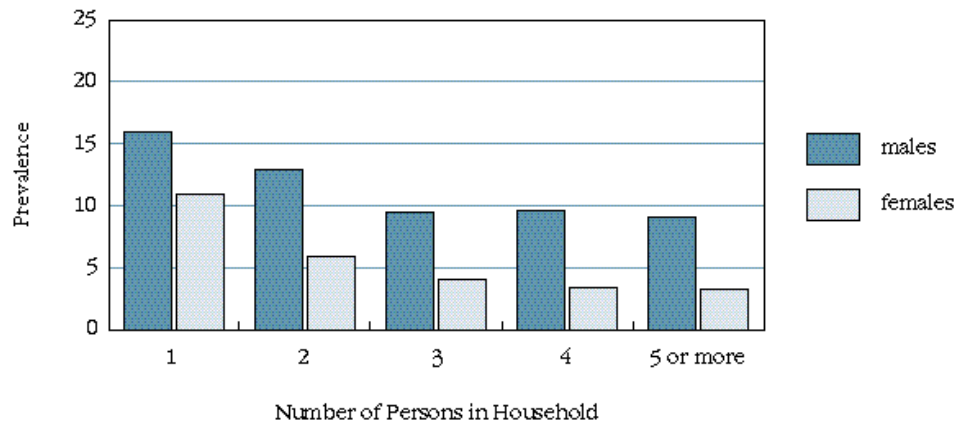
#### Household Composition

Most of the study population were married (65%) or living in a de facto relationship, however, a substantial number of residents (12%) were living alone in their households (Figure 4-5). Compared with those living alone, individuals living with others were less likely to have a substance use disorder.

### 4.2.2.4 Some Unexpected Findings

- Substance use disorders are most common in the young, affecting as many as one in four young males, declining steeply with age.
- There were only small differences in the rate of substance use disorders between people who live in the city and country in substance use disorders (with country people having marginally more alcohol disorders, while city people had marginally more drug use disorders).
- Persons from non-English-speaking backgrounds were less likely than other Australians to have a substance use disorder.

**Figure 4-5: Prevalence (%) of Substance Use Disorders by Gender and Number of Persons in Household**



### 4.3 Comorbidity

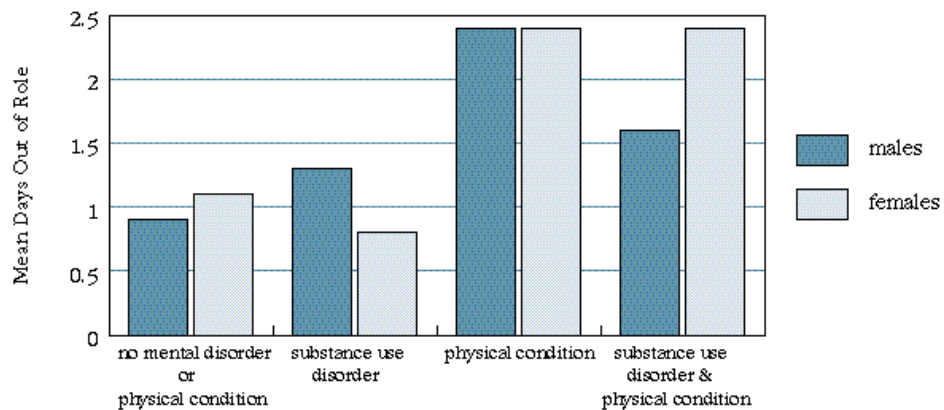
Just under half of females with a substance use disorder (46%) met criteria for an anxiety or affective disorder, and one fifth (18%) met criteria for both an anxiety and an affective disorder. A quarter of males with a substance use disorder (25%) met criteria for another mental disorder, with 10% meeting criteria for both an affective and an anxiety disorder (see section 7 for details).

### 4.4 Disability

Males with substance use disorders and a combination of substance use disorders and

physical disorders had more days out of role in the last four weeks than males with no mental and physical disorders. Females with substance use disorders had fewer days out of role than those females with no mental or physical disorders. Females with both a substance use disorder and a physical condition had more than twice as many days out of role than females with no mental or physical disorders (Figure 4-6). These data should be treated with caution, however, because substance use disorders are more common in younger age groups, so younger women might be expected to have fewer days out of role than older women.

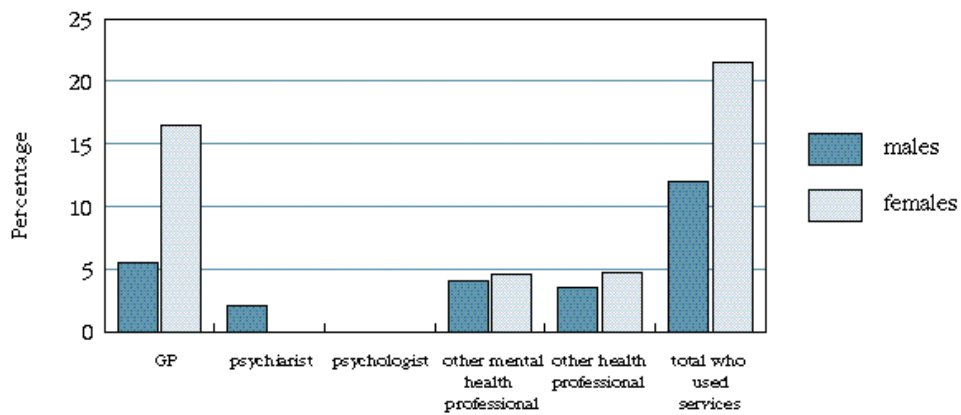
**Figure 4-6: Reported Disability (mean number of days out of role during the past four weeks) Associated with Substance Use Disorders**



### 4.5 Health Service Use

Only about one in seven Australians with a substance use disorder (14%) sought assistance from a health professional for their disorder (Figure 4-7). This is half the rate at which people with an anxiety disorder sought treatment. Almost twice as many females (21%) as males (12%) sought such assistance. Most often this treatment was from a general practitioner rather than from a psychiatrist, psychologist, psychiatrist, psychologist or other mental health professional.

**Figure 4-7:** *Percentage of Persons Who Used Health Services for Mental Health Problems (those with Substance Use Disorders only)*



## 5. Affective Disorders

There were three types of mood disturbance or affective disorder assessed in the National Survey: (1) episodes of *depression* that last two weeks or more and are severe enough to impair functioning at home or at work quite markedly; (2) longstanding states of depression that persist for years with little or no relief, called *dysthymia*; and 3) the less common but severely disabling *bipolar affective disorder*, previously known as manic-depressive illness, in which affected persons may be either severely depressed or disturbingly over-excited and disorganised in their behaviour. Because the latter disorder is relatively rare, there were few persons with bipolar affective disorder identified in the Survey. What follows is therefore primarily about the prevalence and correlates of the first two types of disorder, hereafter referred to as the *depressive disorders* (Table 5-1).

### 5.1 Prevalence

In the twelve months prior to the interview, 5.8% of the adult population had one or more depressive disorders. They were more frequent in women (7.4%) than in men (4.2%). This means that in Australia, about 778,000 adults had experienced these conditions in the previous year, comprising 275,000 men and 503,000 women.

### 5.2 Correlates

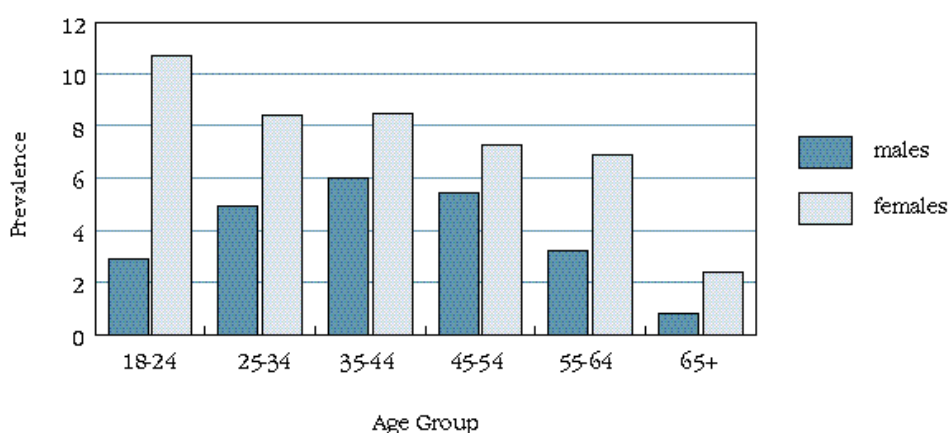
#### 5.2.1 Gender and Age

Age has some association with the risk of being depressed. For men, depression seems to be a little more common in mid-life. But in women, the highest rates are in those aged 18-24 years where one in 10 had had it in the previous year. Thereafter, it gradually decreases with age. The pattern by gender and age group is shown in Figure 5-1.

**Table 5-1: Prevalence (%) of Depressive Disorders by Gender**

	Males	Females	Persons
Depression	3.4	6.8	5.1
Dysthymia	1.0	1.3	1.1
Total affective disorders	4.2	7.4	5.8

**Figure 5-1: Prevalence (%) of Depressive Disorders by Gender and Age**



### 5.2.2 Social and Demographic Correlates

#### 5.2.2.1 Marital Status

Both men and women who are separated or divorced have much higher rates for depression (again, age-standardised) (Figure 5-2). Men and to a greater extent women who have never married also have higher rates of depression. Again, on the data from this survey alone, it is not possible to interpret these differences more deeply.

#### 5.2.2.2 Education and Employment

Depressive disorders are less common among those who have obtained a post-school qualification and most common among those who had not completed secondary school (Figure 5-3). This pattern has been found in surveys in other countries, for reasons that are not fully understood. It could be that receiving an education protects against depression during adult life. Alternatively, the association might be related not so much to education itself but to different levels of environmental stress both at home and in the workplace. For some, being depressed while still at school, or the early symptoms of depression, could impair school performance and lead to early school leaving. These are important issues that deserve to be pursued in future research.

Unemployment is associated with a higher risk of depression. There is a gradient for both men and women: rates for the unemployed are the highest, but they are also quite high for those with only part-time work (Figure 5-4). The highest rates among men are those not in the labour force.

#### 5.2.2.3 Living Arrangements

There is a strong suggestion that depressive disorders are more common among those who are living alone, where the rate rose to nearly 11% or double the national figure. This is after standardising the rates for age, because it could be that those living alone are also more likely to be in

a particular age group. It is impossible to know from this survey whether living alone *itself* contributes to becoming depressed, if persons who are depressed may tend to find themselves living alone, or if there are factors that lead both to depression and to living alone.

#### 5.2.2.4 Some Unexpected Findings

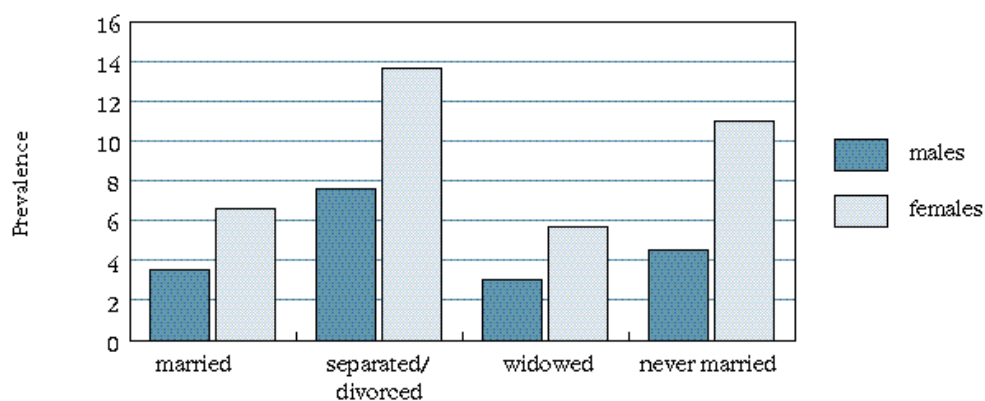
There are some factors commonly considered to increase the risk of becoming depressed but for which there was no evidence in Australia in the present study. Three examples follow.

**The Elderly.** Contrary to the belief of many in the general public and among health professionals, there is some evidence that in the general population, the prevalence of depressive disorders is in fact lower in persons aged 65 and over than in younger adults (Henderson et al, 1998). This has been reported in research in Australia and other industrialised countries. The National Survey has confirmed this trend. The finding applies to the elderly in the community, not those in nursing homes or other special accommodation, where the prevalence of depression is known to be high.

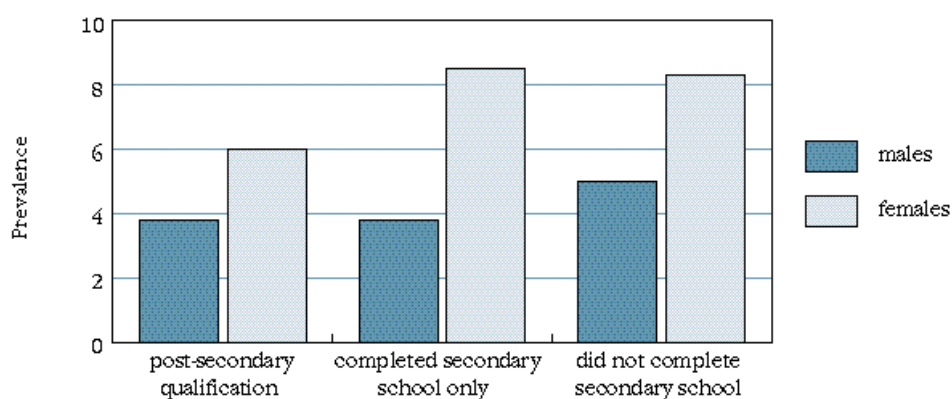
**Country of birth.** Migrants and other persons born outside Australia have slightly less depression than persons born in Australia do. This is consistent with the finding that persons born overseas have much lower rates for alcohol and substance use (see page 20).

**Capital City versus the rest of each State.** The mental health of people in the large capital cities might be expected to be poorer than those in rural and less urbanised environments. On the other hand, some aspects of life are more difficult in the latter, particularly with regard to opportunities for employment. The Survey has shown that depression is no higher in either the capital cities or the rest of each State and Territory. It should be borne in mind that the numbers of persons living in truly rural settings was necessarily small in the Survey.

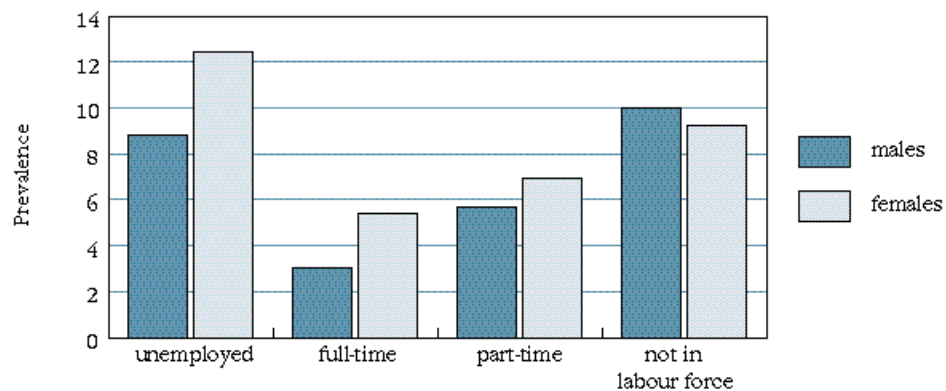
**Figure 5-2: Prevalence (%) of Depressive Disorders by Gender and Marital Status**



**Figure 5-3: Prevalence (%) of Depressive Disorders by Gender and Education Status**



**Figure 5-4: Prevalence (%) of Depressive Disorders by Gender and Employment Status**



### 5.3 Comorbidity

Of females with a depressive disorder, over half (57%) had at least one other mental disorder. Approximately two thirds (66%) of males with a depressive disorder had at least one other mental disorder (see section 7 for details).

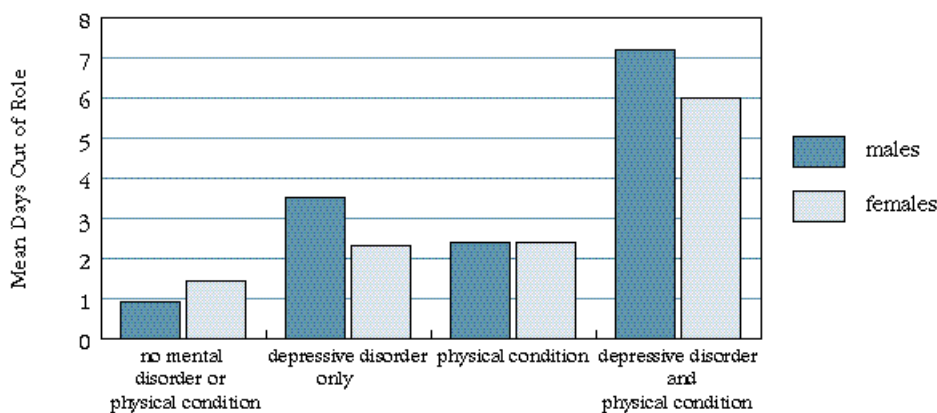
### 5.4 Disability

In the four weeks before the interview, persons who had none of the mental or physical disorders specified in the survey reported that in the past month there had been, on average, one day in which they had not been able to carry out their usual activities fully. We presume that this was mainly because of fleeting and minor conditions, such as, headaches, colds and flu. Persons with depression had, on average 2.7 days out of role (Figure 5-5). If they had both a depressive disorder and a physical condition, it rose to 6.3 days. One interpretation is that in terms of people’s ability to function in day-to-day life, the depressive disorders cause considerable disruption to sufferers and to those around them.

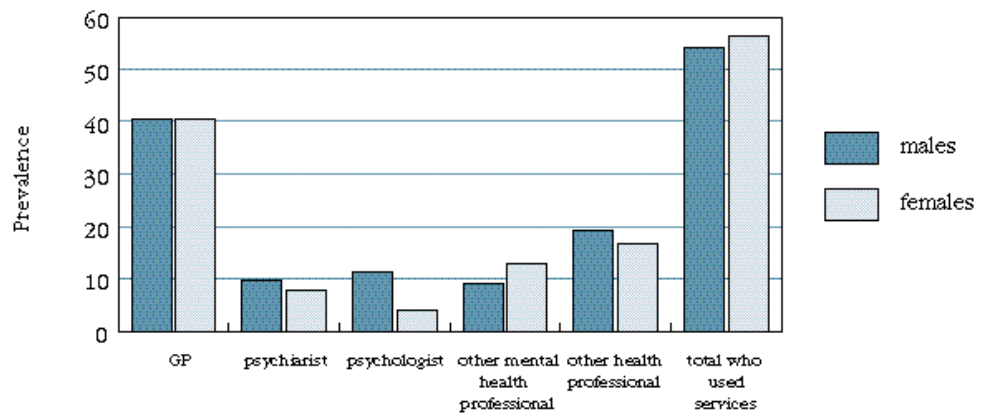
### 5.5 Health Service Utilisation

In the 12 months prior to the interview, only 3% of persons with neither a physical nor a mental disorder had consulted a general practitioner for mental health problems. In contrast, 40% of persons with a depressive disorder had consulted their GP in the previous 12 months (Figure 5-6). It is not known from this survey whether the GP had recognised that the person was clinically depressed, in the same way that the Survey interview had done. But it is clear in Australia, as elsewhere, that GPs are in an excellent position to diagnose a large proportion of all persons who are depressed, and to treat them, if appropriate. Psychiatrists saw only 8.4% and psychologists 6.2% of those depressed, very much less than the GPs. Other health professionals saw 29% of them.

**Figure 5-5:** *Reported Disability (mean number of days out of role during the past four weeks) Associated with Depressive Disorders*



**Figure 5-6:** *Percentage of Those Who Used Health Services for a Mental Health Problem (those who had Depressive Disorders only)*





## 6. Other Mental Health Problems

### 6.1 Neurasthenia

Neurasthenia is a condition characterised by persistent feelings of fatigue after quite minor mental or physical effort, usually occurring with muscular aches, dizziness, tension headaches, sleep problems, inability to relax and irritability. This condition is known to be common in Primary Care in many countries (Üstün & Sartorius, 1995). It is probably insufficiently recognised by health professionals as a syndrome in its own right. The prevalence of neurasthenia by age group and gender is shown in Figure 6-1.

Neurasthenia is somewhat more common in women than men. In both sexes, its prevalence is much lower in persons aged 55 years and over. The amount of disablement it causes in the lives of people is far from trivial: about 28% had been unable to function for two days or more in the previous month. This is over four times higher than in persons without this condition.

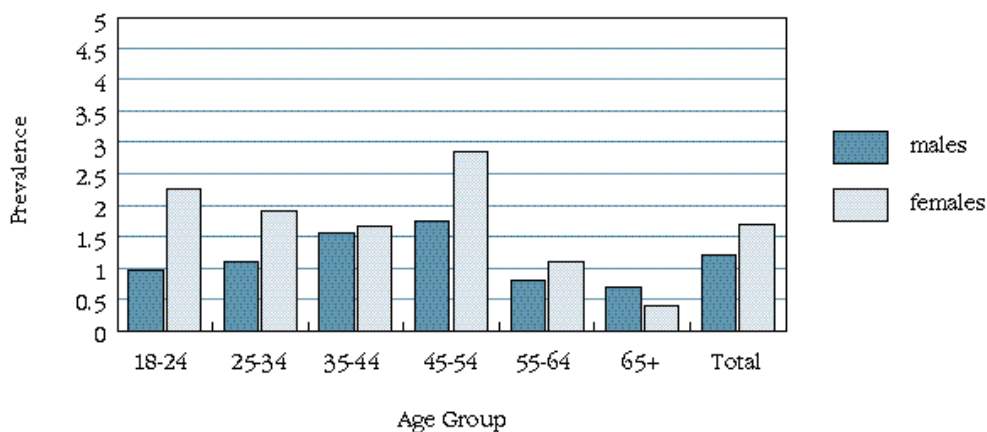
### 6.2 Common Psychological Symptoms

The General Health Questionnaire or GHQ (Goldberg & Williams, 1988) was developed to help identify persons with the common

psychological symptoms of anxiety and depression who were consulting their GP. For over 30 years, the GHQ has proved to be a valuable screening tool to identify persons who probably have clinically significant symptoms of mental disorder, whether or not they can be considered as being “a case” meeting ICD-10 criteria. For this reason, the brief but efficient 12-item GHQ was used in the Survey. The distribution of symptom scores in men and women is shown in Figure 6.2. As in all general populations, the distribution is highly skewed, with most people having none or very few symptoms.

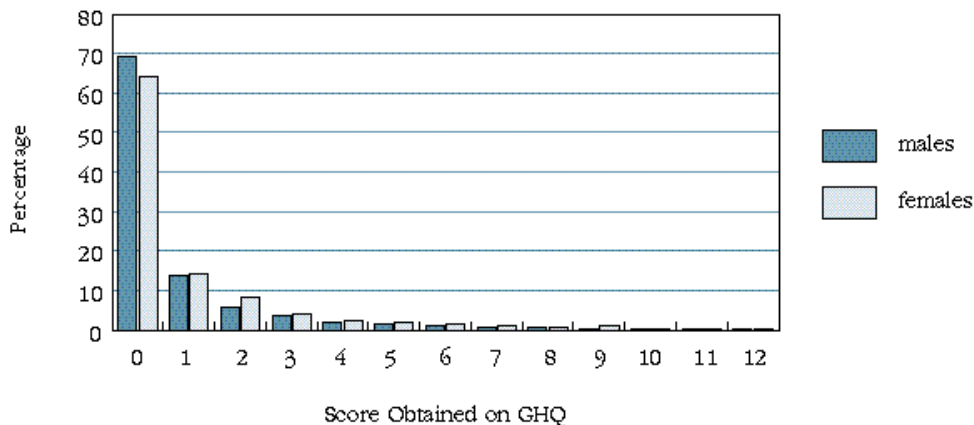
From large studies elsewhere, it is usually accepted that persons with two or more symptoms on the GHQ are likely to have one of the common mental disorders according to the ICD-10 diagnostic criteria. If this cut-point is used, then according to the GHQ estimates, 19.2% of adult Australians are likely to have one or more mental disorders. The prevalence would be 12.1% if the cut-point was raised to 2/3. There is a higher prevalence of disorders in women than men (21.5% and 16.9% for the 1/2 cut-off, and 13.1% and 11.1% for the 2/3 cut-off). Over one in five persons who reported more than four symptoms on the GHQ had more than one day out of role during the previous month.

*Figure 6-1: Prevalence (%) of Neurasthenia by Gender and Age*

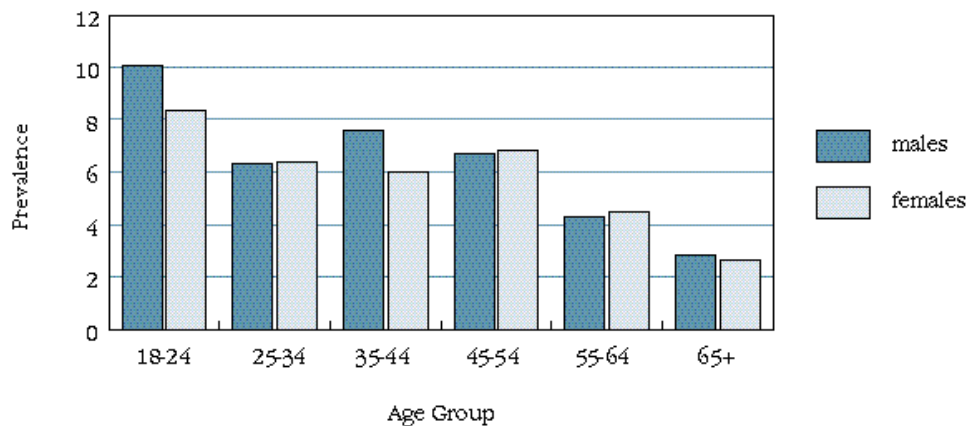


## 6. Other Mental Health Problems

**Figure 6-2: Distribution of Symptom Scores on the General Health Questionnaire by Gender**



**Figure 6-3: Prevalence (%) of Personality Disorders by Gender and Age**



### 6.3 Personality Disorders

Personality Disorders are a group of conditions with the following features in common:

- The person differs markedly from others in ways of perceiving and interpreting things, people, and events, and in forming attitudes and images of self and others;
- The range of emotional arousal and response is either much greater or much less than in most people;
- There is disturbance of control of impulses and gratification of needs;
- There is disturbance in relating to others and handling interpersonal situations;

- These disturbances appear in a wide range of situations;
- The person suffers distress from these disturbances, causes distress to others, or both;
- The onset of the disorders is in late childhood or adolescence.

Personality Disorders include the following types: paranoid, schizoid, dissocial (antisocial), impulsive or borderline, histrionic, anankastic, avoidant and dependent. A more complete account can be found in the ICD-10. To provide an overview of Personality Disorders as they occur nationally, the data presented here describe the prevalence of any of these disorders as one group. In the

National Survey, it was not possible to assess each Personality Disorder separately.

The prevalence of personality disorders in men and women by age group is shown in Figure 6-3. In both men and women there is a notable *decrease with age* in the prevalence of personality disorders. Personality disorders are associated with considerable disablement in day-to-day life: 15% of cases had experienced at least 2 days of impaired functioning in the previous month. This is more than twice as high as the rest of the population.

#### 6.4 Cognitive Impairment

Until this Survey, there was limited information on the prevalence of Dementia and Severe Cognitive Impairment among adults in Australia (Henderson & Jorm, 1998). In the Survey, all persons aged 65 years and over were assessed using the Mini-Mental State Examination (MMSE). This brief but powerful screening test was developed by Folstein, Folstein and McHugh (1974) to identify persons who are likely to have a dementia or severe cognitive impairment. While the MMSE cannot substitute for a clinical diagnosis, it does measure the probability that a person is substantially compromised in memory, thinking and information processing. The test is known to be sensitive to education, so that persons with very limited education may perform poorly

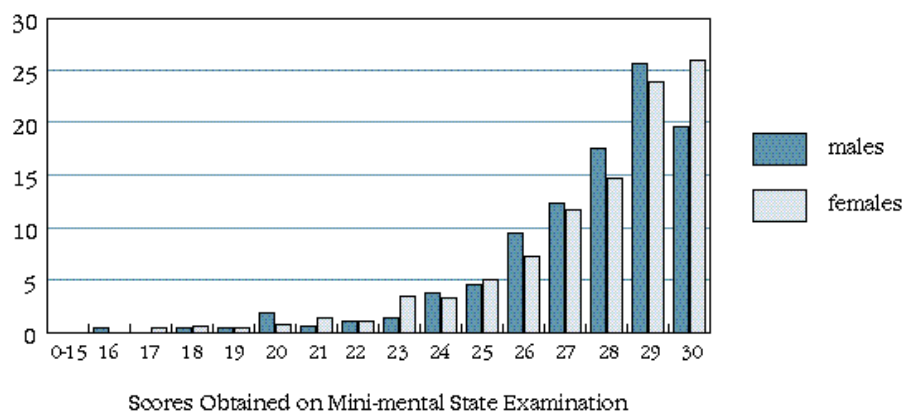
without having declined from a previously higher level of functioning. By convention, persons with a score of 17 or less out of 30 are designated as being likely to have “Severe Cognitive Impairment” and may have a dementia. Those with a score of 18-23 have “Mild Cognitive Impairment” and persons with scores above 23 are considered normal.

The frequency distribution is shown in Figure 6-4. It is highly skewed, with most people having a normal score and progressively fewer with impairment of increasing severity. At the accepted cut-point of 23/24 for the detection of cognitive impairment, the prevalence is 8.6% among those aged 70 and above.

The prevalence of cognitive impairment among older age groups is shown in Figure 6-5. Cognitive impairment becomes more frequent with age, as is shown quite strikingly.

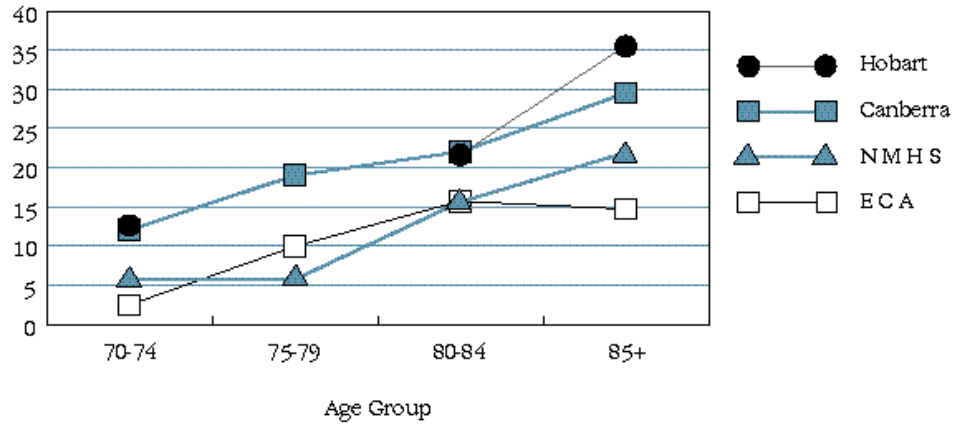
We have considered whether this is similar to the findings in other populations of the elderly. It is not always useful to make comparisons unless the age groups of the elderly that were examined are very similar. The values for Australia are in fact similar to those obtained in comparable samples: the ECA (Robins & Regier, 1991) and two earlier surveys in Hobart and Canberra (Jorm et al., 1994). This is shown in Figure 6-6.

Figure 6-4: Distribution of Mini-Mental State Examination Scores by Gender

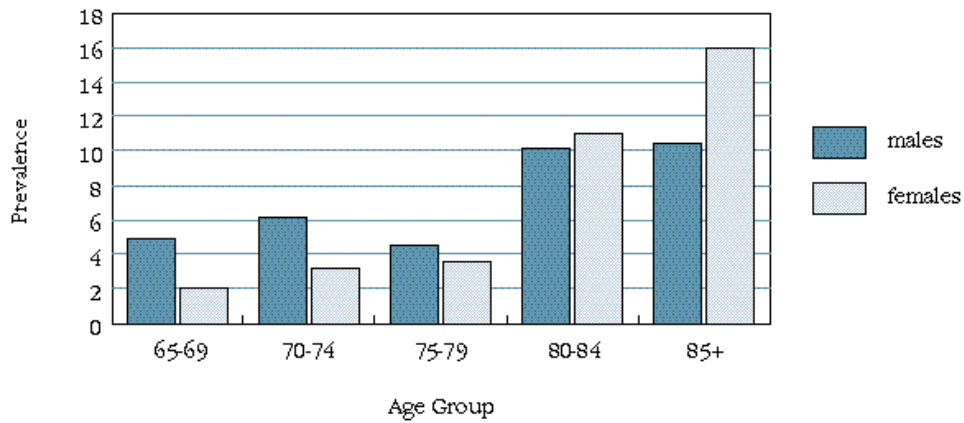


## 6. Other Mental Health Problems

**Figure 6-5:** *Prevalence (%) of Cognitive Impairment Among those Aged 70 years and Older: Comparison of Findings*



**Figure 6-6:** *Prevalence (%) of Cognitive Impairment by Gender and Age*



## 7. Comorbidity

The term “comorbidity” has a number of meanings in the medical and psychiatric literature. It may be used to refer to the co-occurrence of any mental and physical disorders, or it may be used more narrowly to refer to the co-occurrence of mental and addictive disorders. In this report, comorbidity refers to both the co-occurrence of one or more anxiety, affective and substance use disorders and to the co-occurrence of physical and mental disorders.

### 7.1 Comorbid Physical and Mental Disorders

The three main types of mental disorder (affective, substance use and anxiety) often occurred in persons who also had a chronic physical disorder. Just under half of those with any mental disorder had a chronic physical disorder (43%), such as, asthma, chronic bronchitis, anaemia, high blood pressure, heart disease, arthritis, kidney disease, diabetes, cancer, stomach or duodenal ulcer, chronic gall bladder or liver trouble.

Women were more likely than men (8.3% versus 6.8%) to report that they had both a mental and a

chronic physical disorder. Women with mental disorders were also more likely than men to report a chronic physical disorder (46.1% versus 39.1%). There was a small increase in middle age in the proportion of men and women who had both mental and physical disorders, reflecting the increasing prevalence of physical disorders with age. However, the lowest prevalence of comorbid mental and physical disorders was found among those aged 65 and older, principally because of the lower rates of anxiety, affective and substance use disorders in those over 65 years of age.

### 7.2 Comorbid Mental Disorders

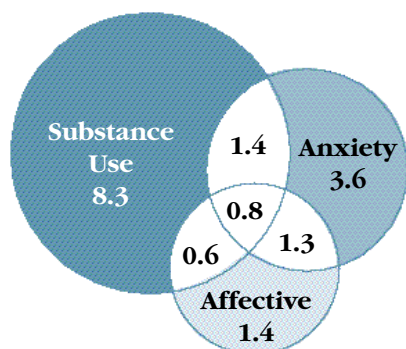
About one in four persons with an anxiety, affective or substance use disorder also had at least one other mental disorder. This meant that they had two or more different classes of disorder, such as an anxiety and affective disorder, or an anxiety and a substance use disorder. A small proportion of men (0.8%) and women (0.8%) had all three types of disorder (i.e. an anxiety, affective and substance use disorder).

**Table 7-1: Prevalence (%) of Comorbid Mental and Physical Disorders by Gender**

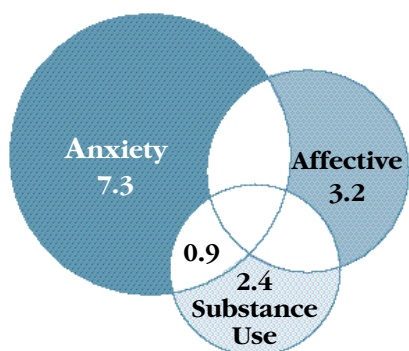
	Males	Females
Physical disorder(s) only	29.3	33.0
Mental disorder(s) only	10.6	9.7
Mental and physical disorder(s)	6.8	8.3
All mental disorders	17.4	18.0
Persons with mental disorders who have a co-occurring physical disorder	39.1	46.1
Persons with physical disorders who have a co-occurring mental disorder	23.2	25.2

Women were very marginally more likely to have a comorbid mental disorder than men (28% of women as against 24% of men with any of these mental disorders). The patterns of comorbidity differed between men and women. Among women, affective and anxiety disorders most often occurred together, accounting for three quarters of women who had more than one mental disorder (Figure 7-1). Among men, comorbid disorders more often involved an anxiety or an affective disorder in combination with a substance use disorder. These combinations of disorders affected two thirds of men who had more than one mental disorder (Figure 7-2).

**Figure 7-1:**  
*Prevalence (%) of Single and Comorbid Affective, Anxiety and Substance Use Disorders Amongst Australian Males in the Past Year*



**Figure 7-2:**  
*Prevalence (%) of Single and Comorbid Anxiety, Affective and Substance Use Amongst Australian Females in the Past Year*



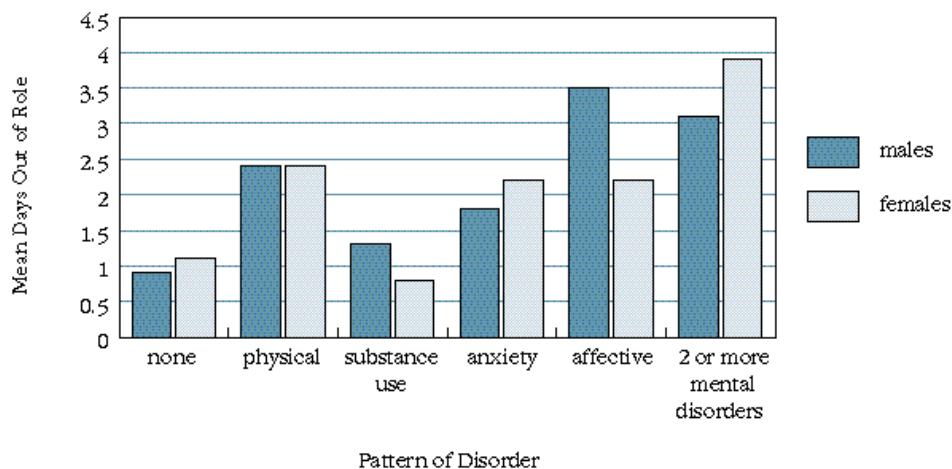
### 7.3 Disability

There was a relationship between having comorbid mental and/or physical disorders and disability, as assessed by the number of days that the person spent out of role in the past month because of these disorders. Persons with comorbid mental disorders reported more days out of role than those who had only a mental or a physical disorder. Persons with substance use disorders had the fewest days out of role among those with mental disorders. Persons with none of these disorders reported approximately one day out of role in the past month. This probably reflects the effects of disorders not assessed on the survey (e.g. minor respiratory disorders, headaches) and persons who had symptoms of a mental disorder who did not meet criteria for one of the disorders studied.

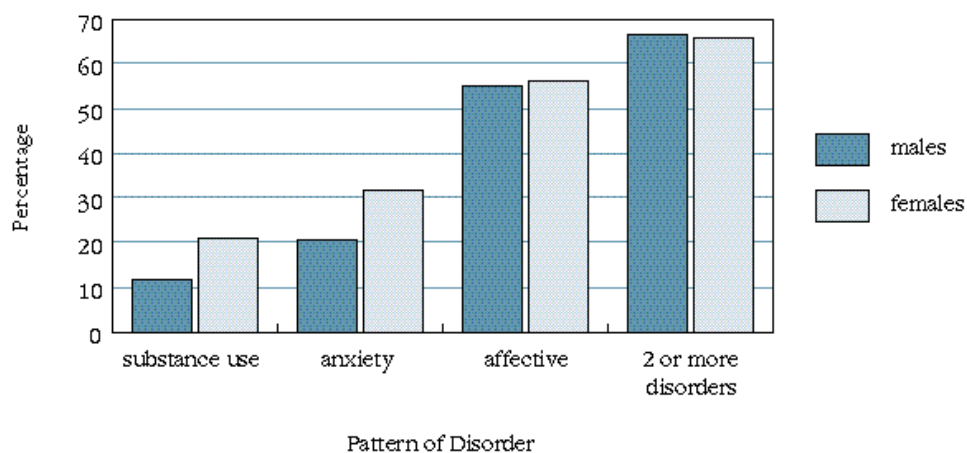
### 7.4 Health Service Utilisation

As expected from previous research (Hall, 1996), persons with comorbid physical and mental disorders were more likely to report using health services for a mental disorder than persons who had only a mental or only a physical disorder (Figure 7-4). Persons with comorbid mental disorders were much more likely to report health service use for a mental health problem than those with one mental disorder (Figure 7-5).

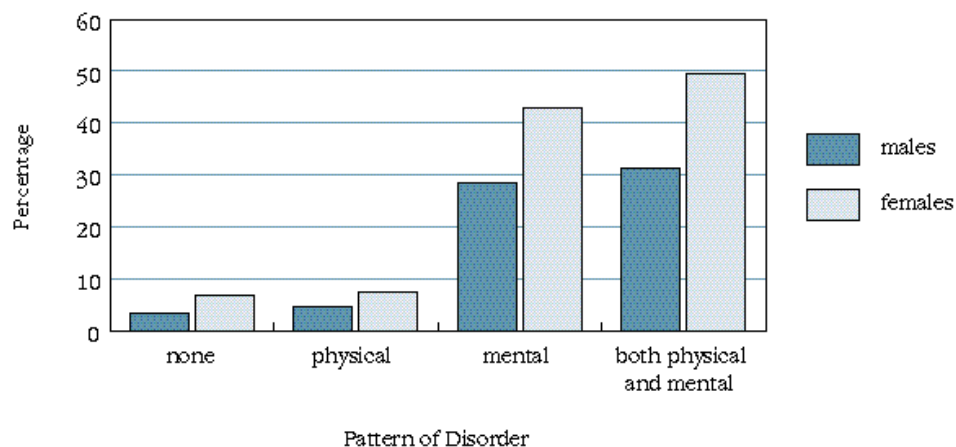
**Figure 7-3: Average Days Out of Role in the Past Four Weeks by Gender and Mental Disorder**



**Figure 7-4: Prevalence (%) of Men and Women Who had Used a Health Service in the Past Year for a Mental Health Problem**



**Figure 7-5: Health Service Use (%) Among Men and Women with Mental and Physical Disorders During the Past Year**





## 8. Implications of the Survey Findings

### 8.1 Key Findings

This is the first time that a survey of the mental health of a representative sample of Australian adults has been attempted. A key message from the Survey is that mental disorders can be reliably identified by a standardised interview in a population survey. Like physical disorders, mental disorders can be diagnosed by interview, and the level of suffering they cause can be quantified in terms of symptoms experienced, the disability produced and services used. Mental disorders are no longer an obscure entity.

The main finding from the Survey is that some 17.7% of adult Australians meet criteria for the common anxiety, affective or substance use disorders. **The overall figure for any mental disorder is likely to be more than one in five** after neurasthenia, psychosis, personality disorder and cognitive impairment are included, and after one adds in the fifth of the population who could not be contacted or who refused to be interviewed in the Survey. The most prevalent mental disorders were the anxiety disorders, followed by substance use and affective disorders. One in four persons with a mental disorder had one or more other mental disorders.

Mental disorders are therefore not rare in the Australian population. Approximately half as many Australians have a mental disorder as have a chronic physical disorder, like kidney disease or chronic bronchitis. In the present Survey, half the population reported symptoms indicative of either a physical or a mental disorder. Physical disorders were more frequent in the aged, whereas mental disorders were more prevalent in the young, and may be a cause of continuing disability.

The degree of disability associated with mental disorders varied. Persons with anxiety disorders reported more disability than persons with affective disorders and substance use disorders, and persons with more than one mental disorder reported more disability than persons with only one. Further detailed analyses of the different measures of disability will enable a better picture

to be provided of the disability that mental disorders cause among Australian adults.

Of those with a mental disorder who had sought help from a health professional for their disorder, in most cases this was from a General Practitioner rather than from a specialist mental health professional such as a psychiatrist, psychologist or mental health worker. Women were generally more likely than men to have sought help. The highest rates of service use were among persons with mental and physical disorders, followed by those with more than one mental disorder, and those with depression. Persons with substance use disorders were the least likely to have used services, and persons with anxiety disorders fell between affective disorder and substance use disorders in their use of services.

**What is striking is that 62% of persons with a mental disorder did not seek any professional help for mental health problems.** The reasons for this now need to be pursued by investigating the following possible explanations. First, the National Survey interview may be identifying persons as having mental disorders who, while distressed and unhappy, do not clinically have a mental disorder. This is plausible, but it is unlikely that the interview is identifying mental disorders in people who are free of psychiatric symptoms. Second, some may have treated themselves in some way or used forms of treatment that were not inquired about in the National Survey. Others may have a mental disorder without realising it, or not known that what they were experiencing was a treatable condition.

Third, some may have recognised that they were out of sorts but felt that they should cope with it themselves, or believed that doctors would not be able to help. Finally, some may have had other barriers to care, such as inaccessibility of services or their cost. Further light will be shed on this finding by further analyses that determine how much disablement was associated with mental disorder and what reasons people with mental disorders gave for not seeking help.

### 8.2 Comparison with Other Mental Health Surveys

The overall rate of mental disorders in the National Survey seems to be a little lower than that in recent US Surveys. Formal comparisons of the overall rate of mental disorders in Australian adults with that in the UK, the USA and Canada will require comparisons of age and sex-matched samples that use the same diagnostic criteria. If the apparently lower prevalence of mental disorders in Australia and Canada than the USA is real, it is more likely to be attributed to a national health service in both the Commonwealth countries, rather than to the intrinsic sanity of Australians and Canadians. It is unfortunate that the UK mental health survey used an instrument so different from that used in Australia, Canada and the USA that the results cannot be meaningfully compared.

It is reassuring that despite differences in diagnostic criteria and the age range of the samples, the pattern of mental disorders revealed in the National Survey is consistent with that in the Canada, the US and the UK. Anxiety disorders are among the most common disorders, followed by substance use disorders and depression. There are marked sex differences in pattern of disorders, with males more likely to have substance use disorders while females are more likely to have anxiety and affective disorders. Substance use disorders show a marked decline in prevalence with age group. Around one in four persons who has one mental disorder has another, with characteristic sex differences in the pattern of comorbidity.

The National Survey is unique among national mental health surveys in the amount of detail that it provides on disability, health service use and self-perceived met and unmet need for services. These data will provide a valuable source of information for better characterising the mental health of Australians and for improving the design of services that aim to prevent mental disorders, and cure and care for those with these disorders.

When these results are coupled with the results from the low prevalence survey and survey of children and adolescents, Australia will know more about the mental health and well being of its citizens than most other countries.

### 8.3 Mental Disorders: Burden of Disability and Service Use

In the World Bank and World Health Organization Burden of Disease project, the impact of a disease was estimated from two sources - the years of life lost through premature mortality and the years lived with a disability - which were summed to give a measure of Disability Adjusted Life Years lost. In established market economies like Australia, mental disorders account for 22% of all Disability Adjusted Life Years lost. This reflects the reduced impact of physical disorders and the fact that mental disorders begin at an early age and disable a substantial proportion of those who are affected by them. The World Bank has argued that because no country has the resources to treat everyone who has a disorder, diseases should be prioritised in terms of the burden of disease they cause and the cost and effectiveness of interventions to prevent, cure or care for them.

Mental disorders account for some 20% of the burden of disease in Australia and yet, as noted earlier, only 5% of the health budget is spent on services to the mentally ill. Clearly there is some imbalance. This does not arise because treatments for mental disorders are more costly or ineffective than treatment for other disorders. There are a number of recent publications (see *Treatments that Work*, Oxford 1998) that list the treatments for individual mental disorders that have been shown to be efficacious in randomised controlled trials. None of these treatments is costly to deliver.

Why then are effective treatments not more widely used to treat mental disorders? Why do only a third of people with a mental disorder seek help from the health services? It would be easy to say that

the public perception of treatment for mental disorders as long term, costly and unlikely to be effective, still influences funding agencies and the health providers. To some extent this is true. The Second Plan of the National Mental Health Strategy that aims to promote better mental health and prevent disorders, to reform services, and to improve the quality and effectiveness of mental health services will play an important role in changing this situation.

### 8.4 Preventing, Curing and Caring for Mental Disorders

The Netherlands has accepted that the tasks of prevention, cure and care have different cost efficiencies and that each task needs a sequestered budget. In Australia, we might also accept a stepped care model that apportions funds for mental health services in the following way.

#### 8.4.1 Prevention

Prevention of mental disorders requires education of the community about the ubiquity of anxiety, depression and substance use, and about things that can be done to prevent these disorders from occurring. “Face fears, be active if depressed, count the units of alcohol you drink” are sensible rules for living that should be as important in education as looking to the right when crossing the street. We also need to vet self-help activities, whether self-help groups or resource materials and endorse good material, as the Heart Foundation does. And we need to identify groups at risk and intervene before the disorder has developed. The Survey showed that the peak prevalence was in the 18 to 24 year old group. Prevention, clearly, has to be done at school, for that is when vulnerable adolescents are developing disorders that will affect substantial numbers for much of their young adult lives.

#### 8.4.2 Treating Mental Disorders

The third of persons with mental disorders who seek help need to be confident that the professional they go to is expert in diagnosis and treatment. The Commonwealth, via the Mental Health Branch and the General Practice Branch, are active in training general practitioners to better diagnose and treat common mental disorders. Such treatment includes counselling and brief psychotherapy, as well as appropriate use of psychotropic drugs. Better training is a priority for two powerful reasons: this Survey has shown that GPs are the sole source of treatment for two thirds of people with mental disorders; and the cost to the Commonwealth of the new and highly effective drugs is now very high.

Given the availability of treatments that are efficacious, the next task is to ensure that effective treatments are delivered in practice. “Other health professionals” and “psychologists”, largely four-year trained psychologists, saw 16% of people with mental disorders. Mostly they appear to function as counsellors. Few have had training in the recognition and treatment of people with mental disorders. It is time that we established a system of credentialling to ensure that we distinguish between those professionals who are able to provide effective treatment and those who only offer well-intentioned care.

The role of psychiatrists and clinical psychologists needs to be better defined. These highly skilled professionals need to triage their expensive services, consulting with others on diagnosis and treatment planning, practising and teaching evidenced-based medicine, and engaging in routine outcome measurement. They should take direct responsibility for the care only of the minority of patients who need their specialised skills.

### 8.4.3 Caring for Chronic Mental Disorders

Patients with chronic, unremitting mental conditions need care. The survey of low prevalence disorders will better inform us about people with psychosis who comprise a substantial proportion of persons with chronic disorders. The National Survey has indicated that some people with anxiety and affective disorders have chronic disorders. Substance use disorders remit steadily with age but anxiety and affective disorders, which have peak ages of onset in young adulthood, do not begin to decline in prevalence until the fifth or sixth decade. This suggests that effective treatment is not reaching people with chronic and disabling anxiety and affective disorders. Certainly, some people will have chronic unremitting or deteriorating mental disorders, but the number is small. We already have adequate resources to deal with them if we can better treat persons with potentially curable disorders so that they make fewer demands on the mental health care system. Service reform to improve the quality and effectiveness of treatment is a worthy goal of the Second Phase of the National Mental Health Strategy.

## 9. Conclusion

The National Survey of Mental Health and Well-being has provided a rich body of information on the prevalence of mental disorders and mental health problems throughout the Australian population. It provides information about the occurrence of mental conditions regardless of whether or not they have been treated in health services. It also provides information on the amount of disability that mental disorders produce, something that no other national mental survey has done. The Survey is especially valuable in revealing the extent to which persons with mental disorders have or have not received services and what barriers may have prevented persons from seeking care. In these three ways, the Survey has fulfilled its original aims. The practical benefits from this very large undertaking will continue to accrue as the survey data are subjected to more detailed analyses over the coming years.



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