

## 9 Mental health

This chapter presents available data on mental health problems experienced by young people. These problems may manifest as disturbances of feelings, behaviours and thoughts. If these disturbances are distressing to the young person or to others, or if social functioning (including coping, competency and mastery) are affected, a mental health problem may be identified (AIHW 1998a, Zubrick et al. 1995). More severe forms of mental health problems (in terms of duration of the problem and/or impact on daily activities) are often termed 'mental disorders' (see Glossary) (Disley 1997).

Mental health is one of the six National Health Priority Areas in 'recognition of its enormous social and public health importance' (AIHW & DHFS 1997). Reference is also made to the pain and suffering experienced by families of those with mental illness, as well as that experienced by the individual with the illness.

Adolescence and young adulthood is an important life phase in relation to mental health. Mental disorders increase greatly in frequency during this time, many (including abuse, depression, suicide, eating disorders) reaching their peak in prevalence between the ages of 15 and 25 years (Leffert & Petersen 1995). This age group is also the peak age of first onset for many types of mental disorders (Robins et al. 1991).

There appears to be evidence that the mental health problems among young people are increasing. A comprehensive study conducted in Europe suggests that over the last 50 years there has been an increase in many mental disorders occurring in young people (Rutter & Smith 1995). Studies in New Zealand have also shown increases in mental health problems among young people (Fergusson et al. 1997). It seems likely that a similar situation exists in Australia. Certainly the youth suicide rate has increased substantially over the last few decades (see Chapter 10) and clear relationships between suicide and mental health problems have been demonstrated (Skegg 1997).

Information included in this chapter comes from three main data sources:

- population-level prevalence data from the National Survey of Mental Health and Wellbeing of Adults conducted in 1997 (ABS 1998)
- hospitalisation data from the AIHW National Hospital Morbidity Database
- mortality data from the AIHW Mortality Database.

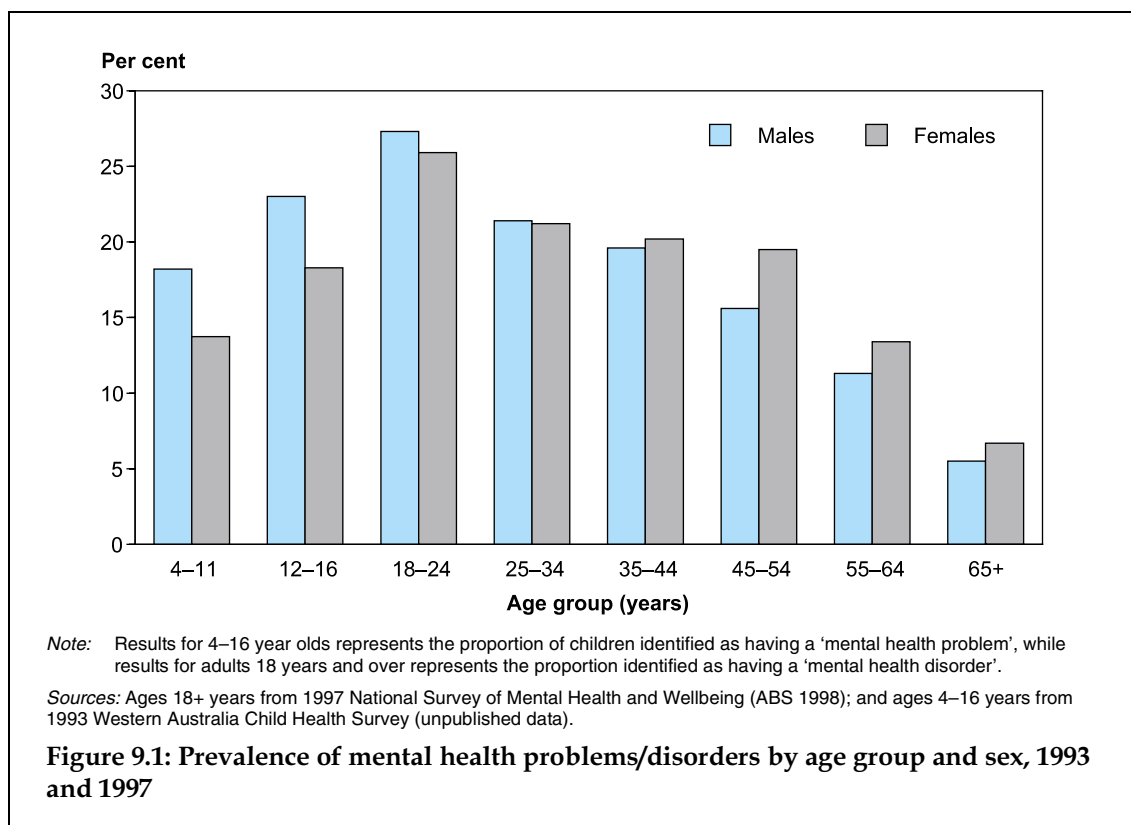
The second and third of these data sources include information on the entire range of young people – 12–24 years. However, the first listed data source covers only adults, which limits the data on young people to those aged 18–24 years. Thus the obvious gap in data for this chapter is on the prevalence of mental health problems and disorders in young people aged 12–17 years. This gap will be reduced, at least somewhat, when results of the child and adolescent component of the National Survey of Mental Health and Wellbeing (conducted in 1998) are released.

The data sources used in this chapter do not all use the same version of the International Classification of Diseases. The National Survey of Mental Health and Wellbeing uses ICD-10, whereas the hospitalisation and mortality data are classified using ICD-9-CM and ICD-9 (respectively). This results in some differences in the terminology used. The glossary at the end of this report provides some descriptions of the disorders as described in the relevant versions of the classification.

Substance use is included in this chapter when it is considered to be a mental disorder. There is therefore overlap with Chapters 12 and 13, which includes information on all substance use, not just the subset associated with mental disorders.

### Prevalence

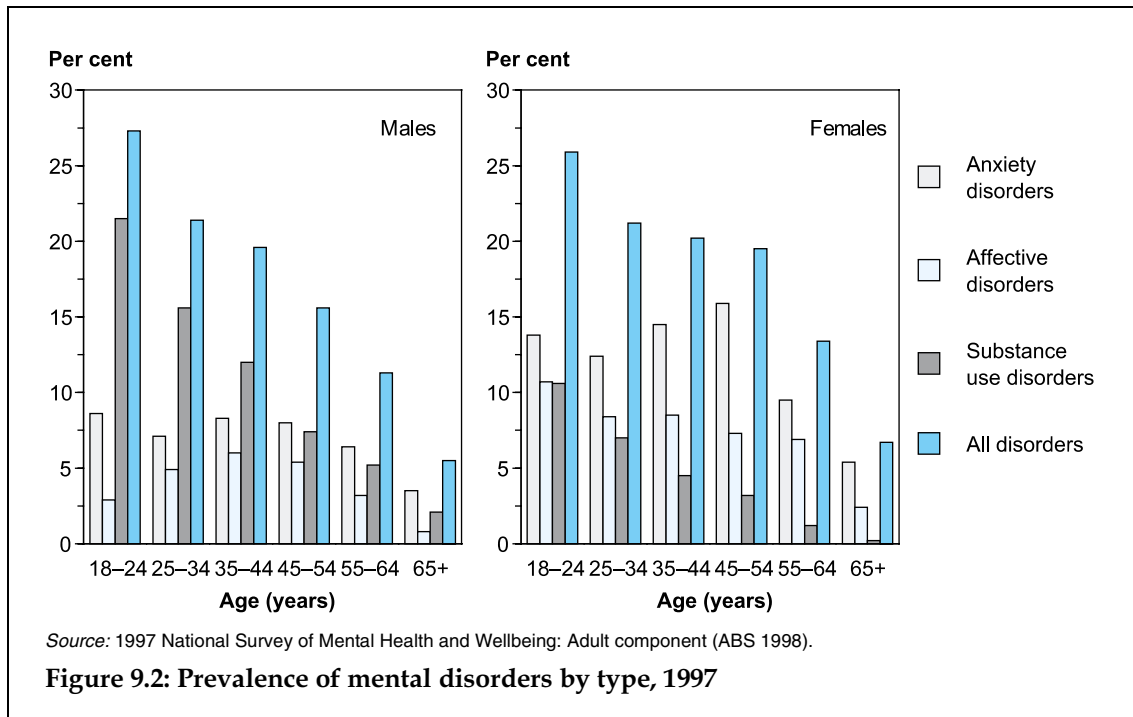
This section presents information on the proportion of young people with mental health problems/disorders compared with other age groups.



- Results presented above for adults aged 18 and over:
  - relate to the whole of Australia
  - relate to 1997
  - represent the proportion of people with mental health 'disorders'.
- In contrast, results for children aged 4–16 years:
  - relate only to Western Australia
  - relate to 1993
  - represent the proportion of people with mental health 'problems'.

Due to the different scope, timing and definitions used, care needs to be taken in comparing results for children and adults. However, the information for children has been included to give a broad indication of patterns in mental health problems over the life course.

- The results above show that just over 20% of young people aged 12–16 years were found to have a mental health problem (23% of males and 18% of females), and 27% of 18–24 year olds had a mental disorder (27% of males and 26% of females).
- The peak in the proportion of people with a mental health disorder occurred at 18–24 years for both males and females. The prevalence of disorders declined steadily over older ages, to 6% for people aged 65 year and over (excluding dementia).



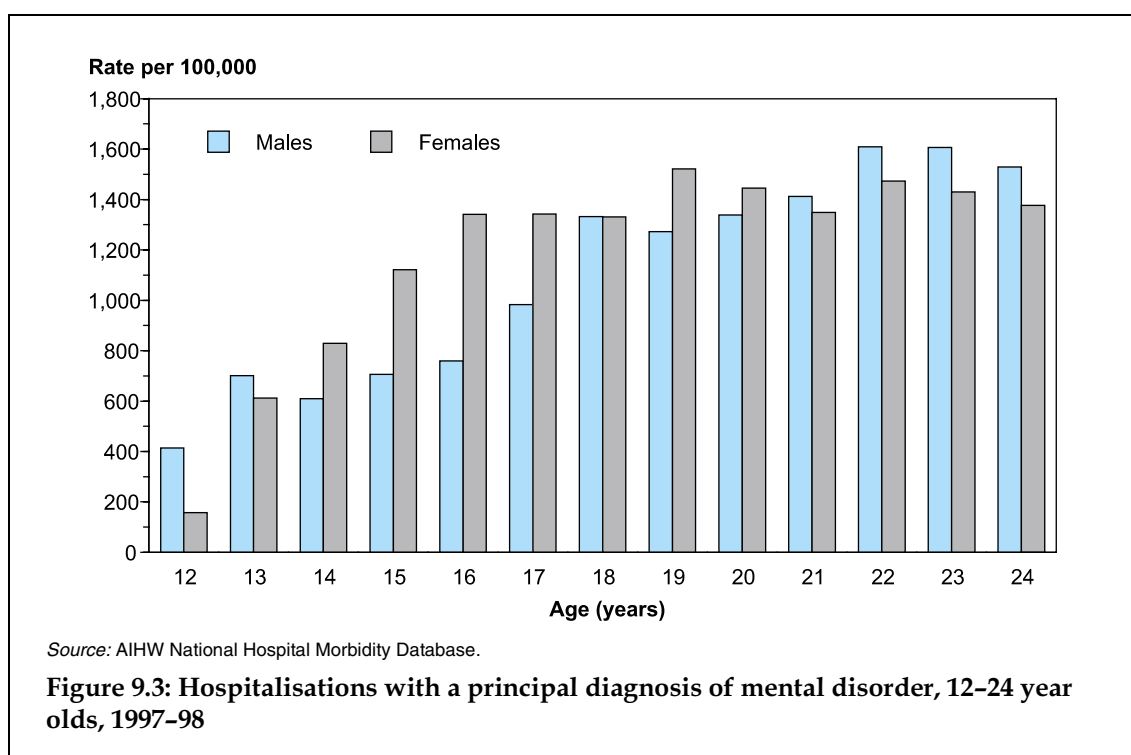
- For both males and females, the presence of disorders shows a declining rate between age 18–24 years and 65 years and over. For males, the prevalence declined from 27% to 6%, and for females the rate declined from 26% to 7%.
- However, patterns in the types of mental disorders differ by sex. For males, substance use disorders dominate the younger ages (22% of 18–24 year olds).
- For 18–24 year old females, there was a more even distribution of disorders, with nearly 14% having anxiety disorders, and approximately equal proportions having affective disorders (mood disturbances, including depression) or substance use disorders (11% for each).

## Hospitalisation

Data for this section come from the AIHW National Hospital Morbidity Database. The scope of the database is all public and private hospitals including public psychiatric hospitals. The database includes information about each hospital episode. However, it is not possible to determine whether individuals have been hospitalised a number of times – from the data we can determine the number of *hospitalisations* for particular conditions, but not the number of *individuals* hospitalised for the condition. The source does not include information on outpatients, only on admitted patients. Further details on the database can be found in Appendix 3.

The ICD-9-CM codes used to identify hospitalisations of interest included codes for all conditions listed in the mental disorders chapter, except for the mental retardation codes. Therefore the codes included are '290' to '316'.

In 1997–98, there were close to 40,000 hospitalisations of young people aged between 12 and 24 years with a principal diagnosis of a mental disorder, and just over 60,000 hospitalisations with an additional diagnosis (a complication or comorbidity) of a mental disorder.



- In 1997–98, hospitalisation rates for mental disorders increased steadily by age for those aged between 12 and 24 years. For 12 year olds, the hospitalisation rates were 410 per 100,000 for males, and 160 per 100,000 for females. For 24 year olds, the difference between the male and female rates was less (1,530 per 100,000 and 1,380 per 100,000 respectively).
- The female rate was substantially higher than the male rate over the ages 14 to 17 years. For females, the rate exceeded 1,000 per 100,000 for 15 year olds (and all older ages). For males, this rate was observed for 18 year olds and older. For ages 18 and over the male and female rates were closer.

Table 9.1: Mental disorder hospitalisations by diagnosis group<sup>(a)</sup>, 12–24 year olds, 1997–98

Main diagnosis groups	Per cent of mental disorder hospitalisations	
	Males	Females
Organic psychotic conditions	6.6	3.4
Schizophrenic psychoses	28.1	10.2
Affective psychoses	14.5	18.5
Other psychoses	5.5	3.4
Neurotic disorders	5.7	10.0
Drug dependence	7.7	5.0
Non-dependent drug use disorder	6.6	4.3
Special symptoms or syndromes, nec	1.5	18.2
Adjustment reaction	6.9	9.5
Other neurotic, personality and non-psychotic disorders	17.1	17.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

(a) Based on the principal diagnosis.

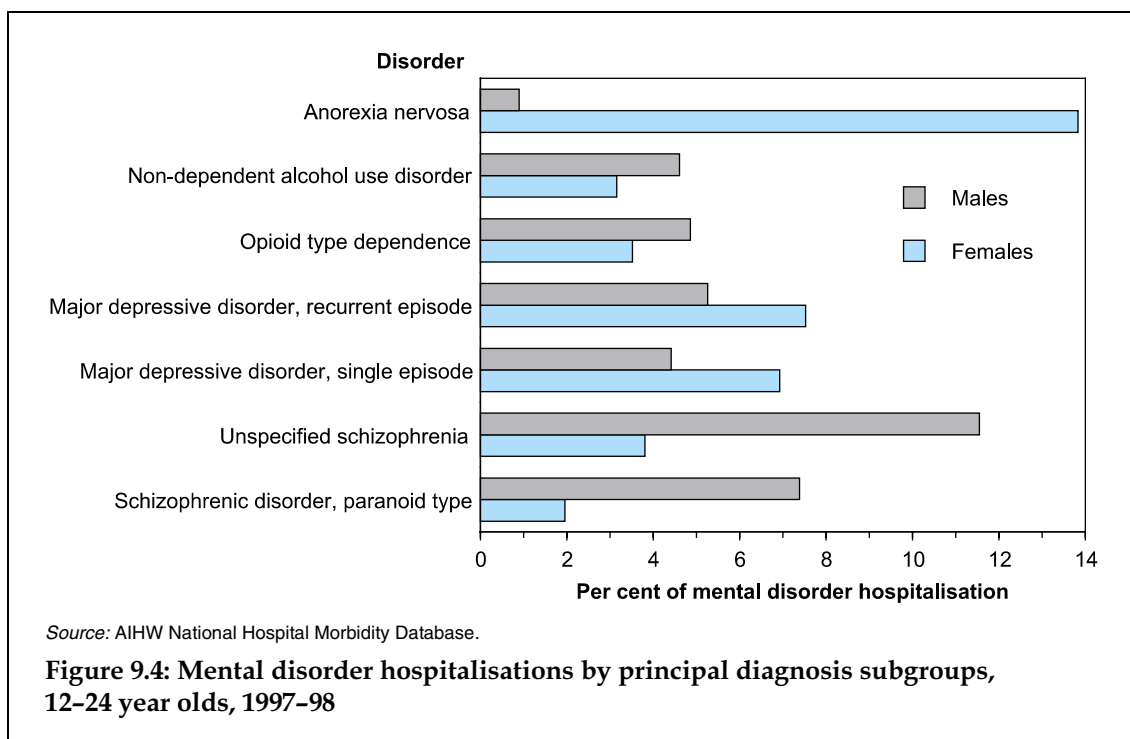
*Notes*

1. nec = not elsewhere classified.
2. Components may not add exactly to 100.0 due to rounding.

Source: AIHW National Hospital Morbidity Database.

- For males, the largest number of mental disorder hospitalisations were for schizophrenic psychoses (28%). Other large groups of hospitalisations included 'other neurotic, personality and non-psychotic disorders' (17%) and affective psychoses (15%).
- The pattern for females was markedly different. The largest proportion of mental disorder hospitalisations were for affective psychoses (19%), followed by 'special symptoms and syndromes' (18%). This second group was mostly made up of eating disorders. 'Other neurotic, personality and non-psychotic disorders' also accounted for a relatively large number of female hospitalisations for mental disorders (18%).

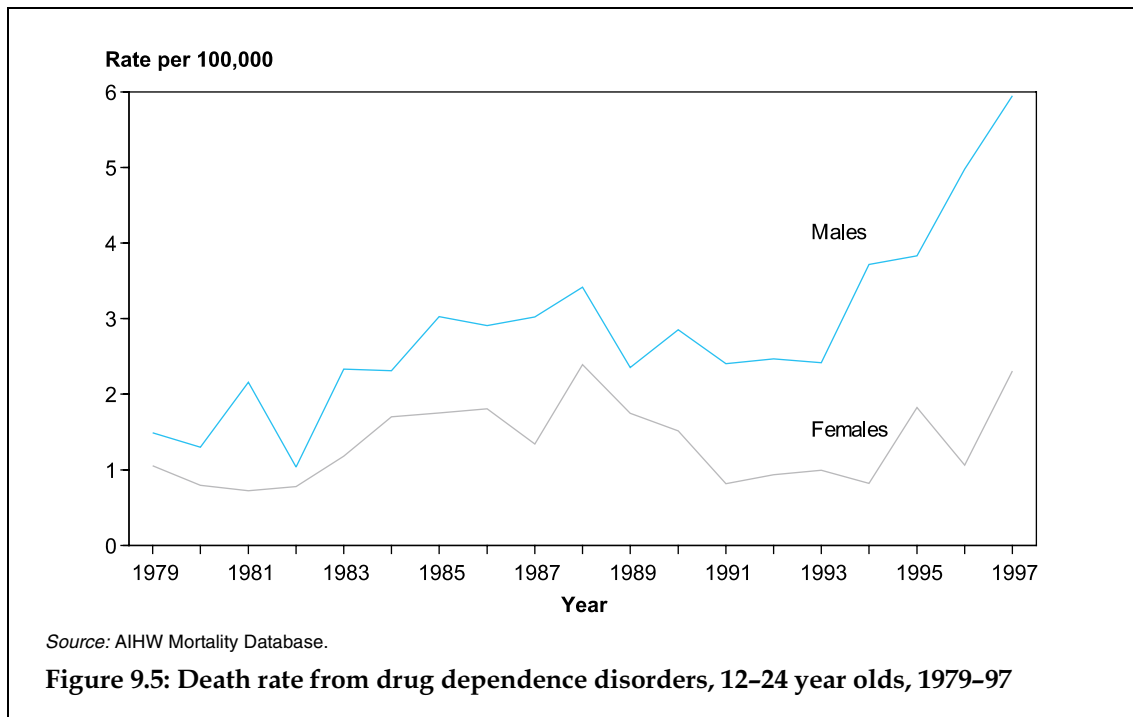
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- Figure 9.4 further breaks down the mental disorder hospitalisations to fine-level diagnoses. The disorders included in this figure are the most common and account for 39% of male mental disorder hospitalisations, and 41% of female mental disorder hospitalisations.
- For females, anorexia nervosa accounted for nearly 14% of mental disorder hospitalisations. Depressive disorders were also common reasons for hospitalisation among young women.
- For males, diagnoses related to schizophrenia accounted for the largest number of mental disorder hospitalisations. Drug and alcohol use disorders and depressive disorders also ranked highly.
- High proportions for particular diagnoses may reflect the disabling impact of the disorder and/or the chronic nature of the condition (and therefore the likelihood of repeat hospitalisations).

## Deaths

For 12–24 year olds, nearly all deaths in the mental disorder section of the ICD-9 classification were classified as ‘drug dependence’ (95% of mental disorders deaths in 1997). Most of these are linked to opioid type dependence or opioids in combination with other drugs. More detail on drug-related mortality is presented in Chapter 12 of this report.



- The death rate from drug dependence disorders has increased over the period 1979 to 1997. The majority of this increase has occurred in the male death rate, particularly in the last 4 years.
- Over this period, the male death rate has remained higher than the female rate. In 1997, the male rate was 2.6 times higher than the female rate (5.9 per 100,000 compared with 2.3 per 100,000).
- The rates presented above are based on 144 deaths in 1997 for young people aged 12–24 years. There were many more deaths in other age groups – in 1997 there were almost 600 deaths from drug dependence across all ages, 266 of these in the age group 25–34 years.

### Specific conditions

This section presents information on three mental disorders that are important for 12–24 year olds – depression, eating disorders and substance use disorders. These conditions increase greatly in frequency among this age group, each generally reaching their peak sometime between the ages of 15 and 25 (Leffert & Petersen 1995).

#### Depression

Episodes of depression vary both in severity and duration, ranging from mild to severe, and lasting from a matter of hours to many years. Depressed moods may last only a matter of hours, but depressive episodes (by definition) last for at least 2 weeks (NCCH 1998). Some people may experience only one episode of depression, whereas others may have recurrent episodes. Episodes may be relatively mild and self-limiting, and others will be more significant, having a large impact on the person's ability to undertake normal activities. This section concentrates on the more serious cases of depression – those that are serious enough to be determined to be a mental disorder<sup>1</sup>. The definition of depressive disorder used here comes from the ICD-10 (NCCH 1998). Under this definition, episodes of depression are characterised by a lowering of mood, reduction of energy, decrease in activity, and reduced capacity for enjoyment, interest and concentration. Sleep may also be disturbed. This classification includes two broad classes of depression: a depressive episode, and a recurrent depressive disorder (repeated episodes of depression).

The causes of depression are understood only to a limited degree, but it is likely that there are several potential environmental risk factors, and some unspecified genetic risk factors (Sullivan & Bulik 1997). Some of the potential environmental and social risk factors relevant to young people include poverty, unemployment, family/relationship conflict, parental mental illness, child abuse and exposure to adverse life events. Some of the protective factors include good interpersonal relationships, family cohesion, social connectedness, academic/sporting achievements, and effective coping skills (DHAC & AIHW 1999).

Severe depression is likely to have an adverse impact in a number of areas including decreased work productivity, days off work, educational failure, poor family/social functioning and a diminished sense of wellbeing (DHAC & AIHW 1999). There have also been links demonstrated between depression and suicide (Fombonne 1995a:571). Depression is the strongest single risk factor for attempted or completed suicides (Beautrais et al. 1996).

The incidence of depression increases during adolescence, and large differences in rates between males and females appear (Fombonne 1995a:568). Figure 6.9 (page 54) shows that depression was a common reason for young people to visit a general practitioner, particularly for young women.

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1. A medically diagnosable disorder, resulting in significant impairment of cognitive, social or emotional abilities.

**Table 9.2: Prevalence of depression by type, 18–24 year olds, 1997 (per cent)**

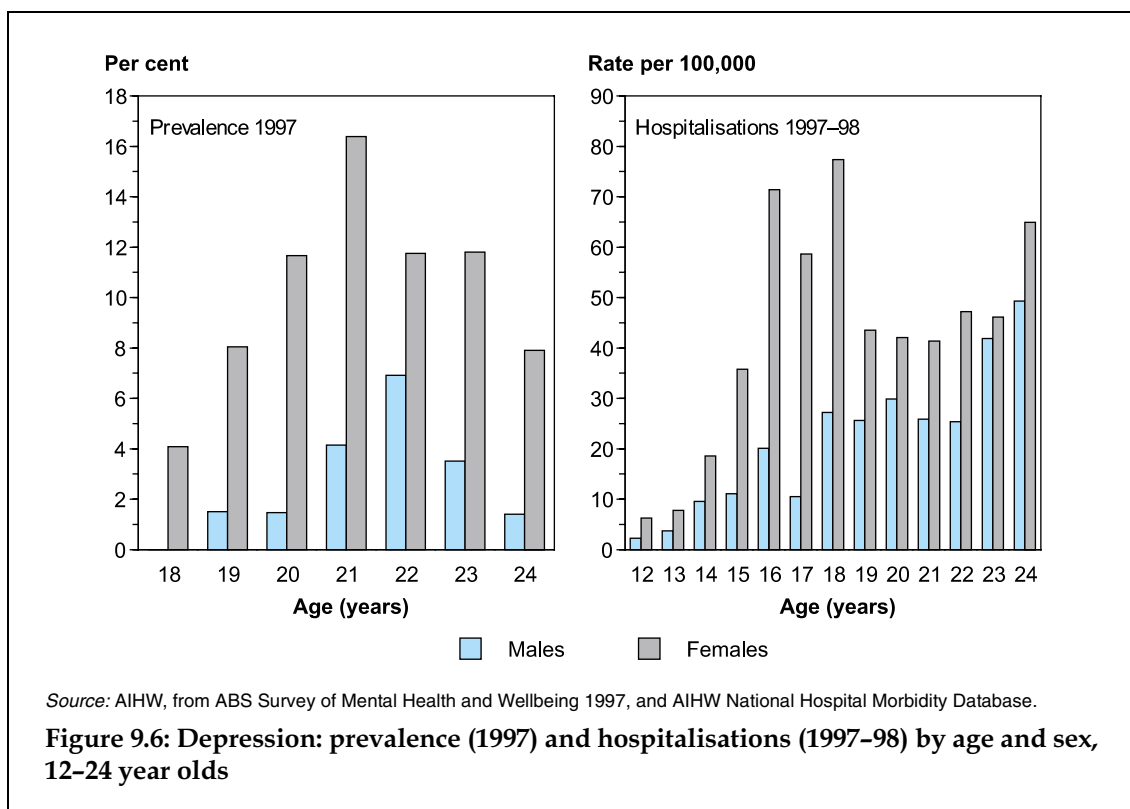
	Males	Females
<i>Depressive episode</i>		
Mild	1.6	4.1
Moderate	1.0	3.6
Severe <sup>(a)</sup>	0.1	1.7
Total depressive episode	2.7	9.4
<i>Recurrent depressive disorder</i>		
Mild	0.0	0.8
Moderate	0.4	0.3
Severe <sup>(a)</sup>	0.0	0.8
Total recurrent depressive disorder	0.4	1.1
<b>Total depressive disorder</b>	<b>2.7</b>	<b>10.2</b>

(a) Without psychotic symptoms.

Source: AIHW, from ABS Survey of Mental Health and Wellbeing, 1997

- Over a 12-month period ending in 1997, 10% of females and 3% of males aged 18–24 years had a depressive disorder. The majority of these depressions were defined as a single depressive episode rather than recurrent.
- For both diagnoses of depression episode and recurrent depressive disorder, females aged 18–24 years had prevalence rates around 3 times higher than their male counterparts.
- The female rate for depressive disorders amongst 18–24 year olds (10%) is higher than the overall female rate of 7% (DHAC & AIHW 1999:10). However, the rate for young males of 3% was about the same as the overall male rate of 3%.

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- The prevalence of depression and hospitalisation rates for depression among females was higher than among males at all ages. This was particularly the case for hospitalisations in the mid to late teens, where the hospitalisation rate for females was between 3 and 6 times higher than the male rate.
- For females, the peak in the prevalence rate for depression was at age 21; just over 16% were classified as having depression in a 12-month period. However, the hospitalisation rate for females peaked at age 18.
- For males, the highest prevalence was at age 22, and the highest hospitalisation rate occurred at age 24 years.

## Eating disorders

The severity and impact of unhealthy eating, including excessive dieting, range from mild to very severe, including death in extreme cases. However, only a small proportion of young people who diet develop an eating disorder (Wilhelm & Clarke 1998). This section presents information on the more severe cases – those with medically diagnosable eating disorders, which are a type of mental disorder.

The highest prevalence of eating disorders occurs among young females. There is believed to be a genetic predisposition for some types of eating disorders. Other risk factors include higher socioeconomic status, and possibly some other psychosocial and family characteristics (Fombonne 1995b:657-8).

The two main types of eating disorders covered in this section are anorexia nervosa and bulimia nervosa. In both of these disorders, the patient has an overconcern with body shape and weight. Anorexia nervosa is characterised by excessive weight loss that is deliberate and sustained by the patient. Bulimia nervosa has a pattern of deliberate bouts of overeating followed by vomiting or use of purgatives (NCCH 1998, Gilchrist et al. 1998, Hay et al. 1998).

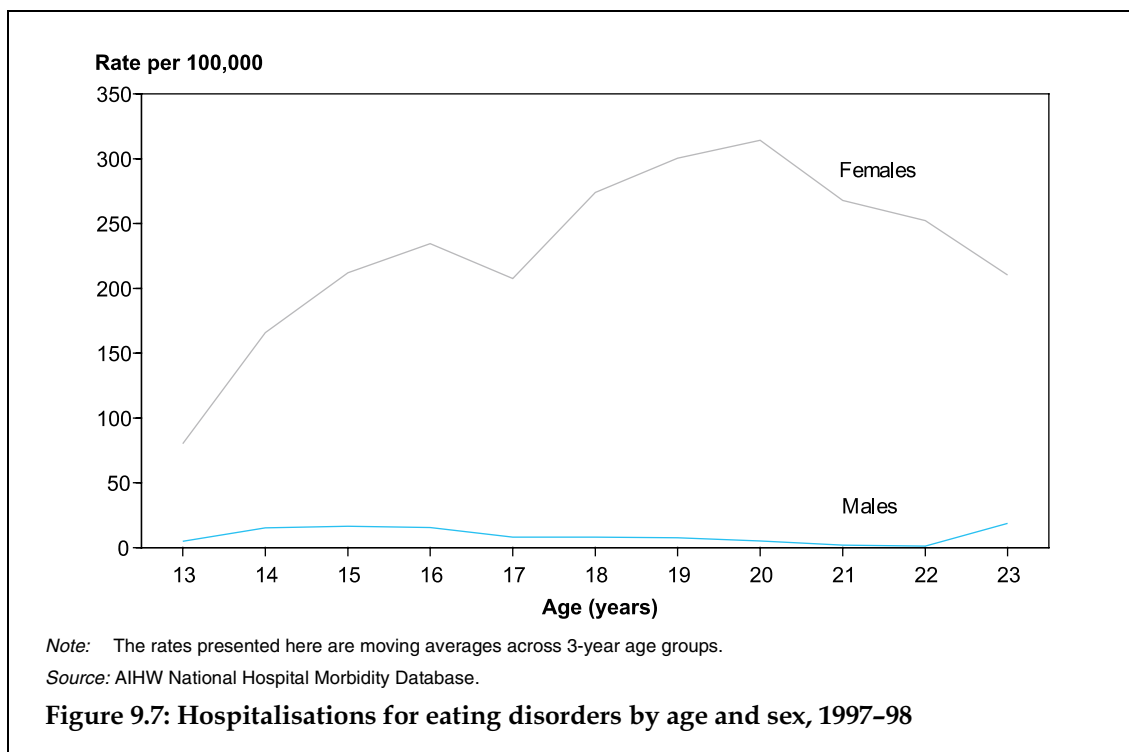
Over the 5 years 1992 to 1997, there were 8 deaths amongst 12–24 year olds due to eating disorders. All of these deaths were of young women. The prevalence of anorexia nervosa and bulimia nervosa in Australia has been estimated to be no more than 0.5% and 0.5–1% respectively (Gilchrist et al. 1998, Hay et al. 1998). More detail relating to hospitalisations for eating disorders is presented below.

**Table 9.3: Hospitalisations for eating disorders by type, 12–24 year olds, 1997–98 (rate per 100,000)**

	Males	Females
Anorexia nervosa	9.9	163.4
Bulimia	0.2	26.3
Other eating disorders	1.0	20.0
<b>Total</b>	<b>11.1</b>	<b>209.7</b>

Source: AIHW National Hospital Morbidity Database.

- In 1997–98, there were 210 per 100,000 hospitalisations for eating disorders among young females aged 12–24 years. The majority (78%) of these were for anorexia nervosa.
- The hospitalisation rate among young males was much lower, with 11 hospitalisations for every 100,000 males.



- For young females, the hospitalisation rate increased over the teen years and into the early twenties, peaking at age 20 with a rate of 314 per 100,000.
- The hospitalisation rate for eating disorders among young males remained low over the ages 12–24 years.

## Substance use disorders

This section includes information about substance use disorders – mental disorders attributable to the use of one or more substances (excluding tobacco). The focus of this chapter is on the mental health component of substance use, whereas the focus of Chapter 12 on substance use mortality and morbidity is wider and not limited to specific mental disorders.

Substance use can have harmful effects on the mental health of individuals, their families and community, including substance dependence and other mental disorders. There is also a tendency for individuals to use substances to lessen the symptoms of other mental disorders (Chetwynd 1997, Silbereisen et al. 1995, Stewart 1997).

Over the 5 years 1992–1997, there were 507 deaths among 12–24 year olds from substance use disorders (382 males, 122 females). Further details on mortality related to substance use is presented earlier in this chapter and in Chapter 12.

**Table 9.4: Substance use disorders: prevalence (1997) and hospitalisations (1997–98) by type, 18–24 year olds**

ICD-10 subgroup	Prevalence 1997 (per cent)		ICD-9 subgroup	Hospitalisations 1997–98 (rate per 100,000)	
	Males	Females		Males	Females
<i>Harmful use<sup>(a)</sup></i>			<i>Non-dependent drug use disorder</i>		
Alcohol	4.4	4.0	Alcohol	52.5	28.0
Opioids	0.0	0.0	Opioids	7.8	4.2
Cannabis	0.2	0.1	Cannabis	5.0	2.3
<i>Total harmful use</i>	<i>4.9</i>	<i>4.2</i>	<i>Total drug use disorder</i>	<i>84.4</i>	<i>47.7</i>
<i>Dependence disorder</i>			<i>Drug dependence</i>		
Alcohol	12.0	4.3	Alcohol	41.1	25.8
Opioids	0.1	0.3	Opioid	89.3	65.2
Cannabis	8.8	2.8	Cannabis	14.0	3.6
<i>Total dependence disorder</i>	<i>18.0</i>	<i>6.9</i>	<i>Total drug dependence</i>	<i>175.0</i>	<i>110.0</i>
<b>Total substance use disorder<sup>(b)</sup></b>	<b>21.2</b>	<b>10.5</b>	<b>Total substance use disorder</b>	<b>259.5</b>	<b>157.7</b>

(a) As defined in ICD-10, and not as indicated by the NHMRC Guidelines for Responsible Drinking.

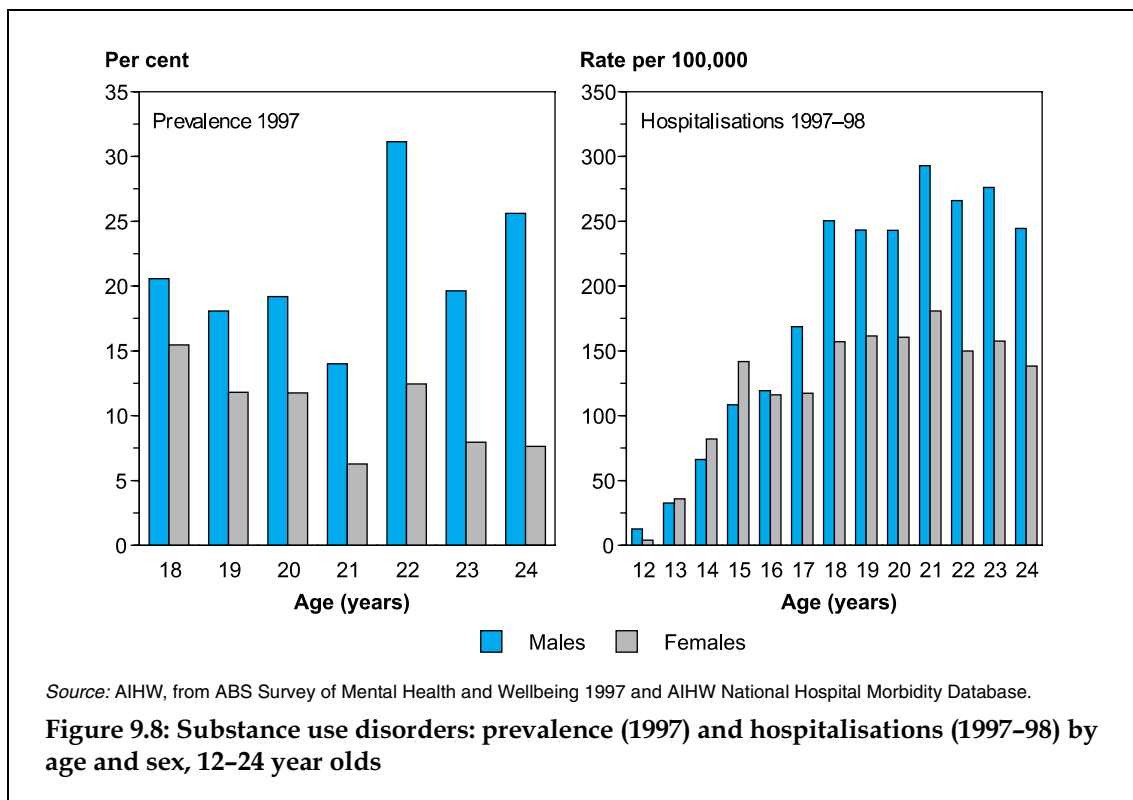
(b) Individuals can have more than one type of substance use disorder, therefore components may not sum to total.

Source: Prevalence estimates from AIHW, from ABS Survey of Mental Health and Wellbeing 1997, and hospitalisations data from AIHW National Hospital Morbidity Database.

- During a 12-month period ending in 1997, just over 1 in 5 males and 1 in 10 females aged 18–24 years were found to have a substance use disorder. A higher proportion of these individuals were categorised as having a dependence disorder, rather than categorised as ‘harmful use’, particularly for males.
- For both sexes, alcohol-related disorders were the most common. Around 4% of male and female 18–24 year olds were classified as having used alcohol to a harmful level. A similar proportion of young females was found to have an alcohol dependence disorder. However, among young males, 12% were found to have an alcohol dependence disorder.
- Nearly 9% of males aged 18–24 years were classified as having a cannabis dependence disorder.
- Hospitalisations for substance use disorders occurred at a higher rate among 18–24 year old males than 18–24 year old females. In total there were some 260 per

100,000 of these hospitalisations for males in 1997–98, and nearly 160 per 100,000 for young females.

- These hospitalisation rates are influenced by both the physical and mental health problems associated with substance use disorders. The physical harm associated with opioid use is potentially very serious and acute, including overdoses. In contrast, direct harmful effects from alcohol use are likely to be long-term (for example, liver damage).
- This is reflected in the hospitalisations for opioid dependence disorders. Although the prevalence of these disorders is substantially lower than that for alcohol dependence disorders, hospitalisations related to opioid dependence were 2–2.5 times higher than the corresponding alcohol-related hospitalisation for this age group in 1997–98.
- There were, however, relatively high hospitalisation rates for non-dependent alcohol use disorders (53 per 100,000 for males, 28 per 100,000 for females).



- Age-specific patterns in substance use disorders are shown in Figure 9.8. The prevalence of substance use disorders among 18–24 year olds is quite variable for young males but appears to be highest in the early 20s, with just over 30% of 22 year olds having a substance use disorder. For females, the prevalence of substance use disorders appears to be highest among the younger end of this age group.
- For hospitalisations across the age range 12–24 years, highest rates occurred at the older ages (between 18 and 24 years).

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