

16. Mental health problems and disorders

Mental health problems experienced by children may be manifested early on as disturbances of feelings, behaviours and thoughts. If these disturbances are distressing to the child or the parents, and if social and other functioning of the child is affected, then a mental health problem may be identified (Zubrick et al. 1995). Mental disorders are characterised by a clinically significant set of symptoms, as set out in the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV)* (APA 1994; Sawyer et al. 2000). There are clear diagnostic criteria which should be met in order for a diagnosis of mental disorder to be made, including that the symptoms must cause clinically significant impairment in social, academic or occupational functioning.

Because of its enormous social and public health importance, mental health is one of the six National Health Priority Areas (AIHW & DHFS 1997). Families in which there are children with mental health problems face many difficulties, with parents likely to worry more about their children's health, reporting having less time for their own needs, experiencing more stress and being less able to cope than other parents (DHAC 2000a; Dupaul et al. 2001).

While genetic factors have been implicated in some types of mental illnesses, such as schizophrenia, bipolar disorder and depression (Hyman 1999), mental health problems and disorders can be due to an interaction between biological factors and adverse psychosocial experiences (USDHHS 2000). It has been suggested that some children may have a genetic vulnerability to certain disorders, but that these disorders will not develop without the interaction of the genes with non-genetic risk factors. A number of risk factors have been associated with a higher likelihood of developing a mental disorder, but this does not mean that these factors cause mental illness, or that everyone who is exposed to them will develop a mental disorder. In many cases, different risk factors may be closely associated with one another, for example, a child with poor social skills may also experience peer rejection and social isolation. Risk factors can be individual (particular to the person), contextual (a product of the environment), or the result of the interaction between the person and the environment. Risk factors may include:

- Individual factors – prenatal brain damage, insecure attachment in infancy or childhood, low intelligence, difficult temperament, poor social skills, low self-esteem.
- Family or social factors – having only one resident parent, marital discord between parents, parental substance misuse, parental mental disorder, social isolation.
- School context – bullying, peer rejection, inadequate behaviour management, failure to achieve academically.
- Life events and situations – physical, sexual and emotional abuse, divorce and family breakup, physical illness or impairment, poverty, homelessness.
- Community and cultural factors – socioeconomic disadvantage, social or cultural discrimination, neighbourhood violence and crime, population density and housing conditions (DHAC 2000a:16).

This chapter examines the mental health problems and disorders experienced by children. It also examines self-inflicted injury and suicide, which are often associated with mental health problems, particularly depression (Groholt et al. 2000). Prevalence data on mental health problems and disorders are derived from the Child and Adolescent Component of the National Survey of Mental Health and Wellbeing, conducted in 1998 on 4,500 children and adolescents. Data on hospitalisations come from the AIHW National Hospital Morbidity Database, while data on deaths come from the AIHW Mortality Database.

Prevalence of mental health problems

The Child Behaviour Checklist was used in the Child and Adolescent Component of the National Survey of Mental Health and Wellbeing to examine emotional and behavioural problems, and in turn to obtain prevalence data on mental health problems in children aged 4–17 years. The indicator for the prevalence of mental health problems is the number of children aged 4–12 years with a mental health problem in a given year as a percentage of all children aged 4–12 years.

Sawyer et al. (2000) considered children to have mental health problems when they were experiencing a number of emotional and behavioural problems in the range typically seen in children attending mental health clinics. The areas in which emotional and behavioural problems were assessed are presented in Box 16.1.

Box 16.1: Mental health problems assessed by the Child Behaviour Checklist

General areas

Total problems: all mental health problems reported by parents.

Internalising problems: inhibited or over-controlled behaviour (e.g. anxiety or depression).

Externalising problems: antisocial or under-controlled behaviour (e.g. delinquency or aggression).

Specific Areas

Somatic complaints: chronic physical complaints without known cause or medically verified basis.

Delinquent behaviour: breaking rules and norms set by parents and communities (e.g. lying, swearing, stealing or truancy).

Attention problems: difficulty concentrating and sitting still, and impaired school performance.

Aggressive behaviour: bullying, teasing, temper tantrums and fighting.

Social problems: impaired peer relationships.

Withdrawn: shyness and social isolation.

Anxious/Depressed: feelings of loneliness, sadness, being unloved, worthlessness, anxiety and general fears.

Thought problems: strange behaviours or ideas, obsessions.

Source: Sawyer et al. 2000:9.

The survey estimated that 15.0% of boys and 14.4% of girls aged 4–12 years had some type of mental health problem.

Table 16.1: Prevalence of mental health problems among children aged 4–12 years, 1998 (per cent)

	Males	Females
General areas		
Total problems	15.0	14.4
Externalising problems	13.6	12.2
Internalising problems	15.0	11.3
Specific areas		
Somatic complaints	7.2	5.6
Delinquent behaviour	7.4	7.8
Attention problems	7.4	6.2
Aggressive behaviour	5.9	5.2
Social problems	6.5	3.9
Withdrawn	5.4	2.9
Anxious/depressed	4.1	2.9
Thought problems	3.2	2.7

Note: Problem areas are not mutually exclusive, and thus 'total problems' do not equal the sum of internalising and externalising problems.

Source: Sawyer et al. 2000.

- Among children aged 4–12 years in 1998, externalising problems were reported for 13.6% of boys and 12.2% of girls, while internalising problems were reported for 15.0% of boys and 11.3% of girls.
- The specific problems most frequently identified were somatic complaints (identified in 7.2% of boys and 5.6% of girls), delinquent behaviour (7.4% of boys and 7.8% of girls) and attention problems (7.4% of boys and 6.2% of girls). These problems were also the ones most frequently identified among older children.

Sawyer et al. (2000) also investigated the relationship between demographic characteristics and mental health problems. Children and adolescents living in one-parent, step/blended or low-income families were more likely to have mental health problems. Mental health problems were also more prevalent in families with one or both parents unemployed.

Mental disorders

The survey also examined the prevalence among Australian children aged 6–12 years¹ of three mental disorders: depressive disorder, conduct disorder and attention-deficit hyperactivity disorder (ADHD). The Diagnostic Interview Schedule for Children (Version IV) (Shaffer et al. 2000, cited in Sawyer et al. 2000) was used. This Schedule uses the diagnostic criteria described in the DSM-IV, which are shown in Box 16.2.

1. The Diagnostic Interview Schedule is not suitable for use with children under the age of 6 years.

Box 16.2: Symptoms of depressive, conduct and attention-deficit hyperactivity disorders

Depressive disorder: Symptoms include having a depressed mood most of the day, nearly every day; considerably decreased interest or pleasure in activities; failing to make expected weight gains; insomnia; fatigue or loss of energy; feelings of worthlessness or excessive/inappropriate guilt; decreased ability to concentrate; recurrent thoughts of death, suicidal thoughts or suicide attempt.

Conduct disorder: A repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms or rules are violated. Symptoms may include aggression to people or animals (bullying, fighting, being physically cruel to people or animals), destruction of property (lighting fires, deliberately destroying other's property), deceitfulness or theft (breaking into houses or cars, shoplifting) and serious violations of rules (staying out at night against parent's rules, running away from home, school truancy).

Attention-deficit hyperactivity disorder (ADHD): Characterised by symptoms of inattention (e.g. failing to attend to details, not listening when spoken to directly, losing things necessary for tasks or activities, being easily distracted by extraneous stimuli), hyperactivity (e.g. fidgeting with hands or feet, leaving seat in classroom when inappropriate, talking excessively) and impulsivity (e.g. blurting out answer before questions are complete, having difficulty taking turn, interrupting or intruding on others).

Source: APA 1994.

There are many negative psychological and psychosocial factors that are associated with child mental disorders such as depression, ADHD and conduct disorder. Young people who are depressed may be at an increased risk of suicide, with about one-third of depressed adolescents likely to attempt suicide in the next two decades (NHRMC 1997b). Depression can also lead to increased substance abuse, poor family relationships, higher levels of delinquency, and lower self-esteem.

Some studies have shown an association between ADHD and substance abuse disorders, with a high prevalence of ADHD being reported among adults in treatment for substance abuse (Chilcoat & Breslau 1999; Clure et al. 1999). Preschool children with ADHD have more problem behaviours and fewer social skills than their peers, and have deficits in pre-academic skills even before entering school (Dupaul et al. 2001). Boys with ADHD, particularly those who are aggressive, report more depressive symptoms, lower self-esteem and less overall happiness than do boys without ADHD (Treuting & Hinshaw 2001). Girls with ADHD report more depression, anxiety, stress, social concern, and lower self-esteem than other girls (Rucklidge & Tannock 2001).

Children who have conduct disorders are also at increased risk of substance abuse, and have more school behaviour problems, more contacts with police, and more suicidal behaviour than other children (MacDonald & Achenbach 1999). Sanders et al. (2000) suggest that childhood conduct problems result in considerable long-term costs in many areas of life. They are also associated with a high use of clinical, educational, welfare and justice services.

The indicator for the prevalence of ADHD or depressive disorder or conduct disorder is calculated as the number of children aged 6–12 years diagnosed with ADHD or depressive disorder or conduct disorder in a given year as a percentage of all children aged 6–12 years.

The prevalence of these three mental disorders among children in 1998 is shown in Table 16.2.

Table 16.2: Prevalence of mental disorders among children aged 6–12 years, 1998 (per cent)

Disorder	Males	Females
ADHD ^(a)	19.3	8.8
Depressive disorder ^(b)	3.7	2.1
Conduct disorder	4.8	1.9

(a) The high proportion of children with ADHD could be influenced by diagnostic definitions of ADHD.

(b) Includes major depressive disorder and dysthymic disorder, a chronic depressive condition.

Note: The impairment criteria required by DSM-IV could not be incorporated into the criteria for a diagnosis used in the survey. It is also possible that for some children their symptoms may be better accounted for by another mental disorder that was not assessed in the survey.

Source: Sawyer et al. 2000.

- Of these disorders in 1998, ADHD was the most prevalent among children aged 6–12 years, reported in 19.3% of boys and 8.8% of girls. However, Sawyer et al. (2000:20) suggest that the prevalence of ADHD could have been overestimated, as some children reported to have ADHD ‘may have been more appropriately diagnosed with another disorder not included in the survey’.
- Depressive disorder was reported in 3.7% of boys and 2.1% of girls. It has been suggested that the prevalence of this disorder could have been underestimated, as the prevalence was based on parent report and parents may not always recognise subjective distress experienced by children (Sawyer et al. 2000).
- Conduct disorder was reported in 4.8% of boys, and 1.9% of girls.
- All three disorders had a higher prevalence among boys than among girls.

Many children who have one mental disorder may also have another. Of all children in the survey (aged 6–17 years) with ADHD, depressive or conduct disorders, 23% also had symptoms that met the criteria for one of the other disorders. Boys had a higher rate of comorbidity (27%) than girls (15%). Children with comorbid disorders are particularly at risk. For example, children with both conduct and depressive disorders are more likely to engage in substance abuse (MacDonald & Achenbach 1999).

Sawyer et al. (2000) found that, similar to the findings on mental health problems, mental disorders in general were also more prevalent in children from step/blended and one-parent families, families with the lowest incomes, and/or families where one or both parents were unemployed.

Hospitalisations

There are a number of service providers for children with mental health problems or disorders. The most commonly used services are provided by school counsellors, family doctors or paediatricians, private psychologists or social workers, and other community health services. Some children, however, are hospitalised for their mental disorder.

Three main types of information are presented here: time series for hospitalisation rates; most frequent groups of diagnoses (using classification blocks from the F chapter of the

ICD-10-AM, which contain groups of related diagnoses); and most frequent specific diagnosis.²

The indicator for hospitalisations for mental and behavioural disorders is the number of children aged 1–14 years hospitalised for mental and behavioural disorders in a given year as a rate per 100,000 children aged 1–14 years.

Hospitalisation rates for children aged 1–14 years for mental and behavioural disorders are presented only for 1996–97 to 1999–00, as, prior to this time, public psychiatric hospitals were not fully included in the AIHW National Hospital Morbidity Database.

Table 16.3: Hospitalisation rates for children aged 1–14 years for mental and behavioural disorders, 1996–97 to 1999–00 (per 100,000 children)

	Age (years)	1996–97	1997–98	1998–99	1999–00
Males	1–4	100.3	159.1	113.6	126.6
	5–9	378.2	427.1	296.8	283.7
	10–14	583.4	555.8	390.1	416.2
	1–14	370.6	395.5	277.1	285.2
Females	1–4	53.4	64.6	63.4	41.1
	5–9	56.3	74.8	41.3	67.2
	10–14	365.7	353.8	309.9	392.0
	1–14	164.4	170.1	142.2	174.1
Persons	1–14	270.1	285.6	211.4	231.1

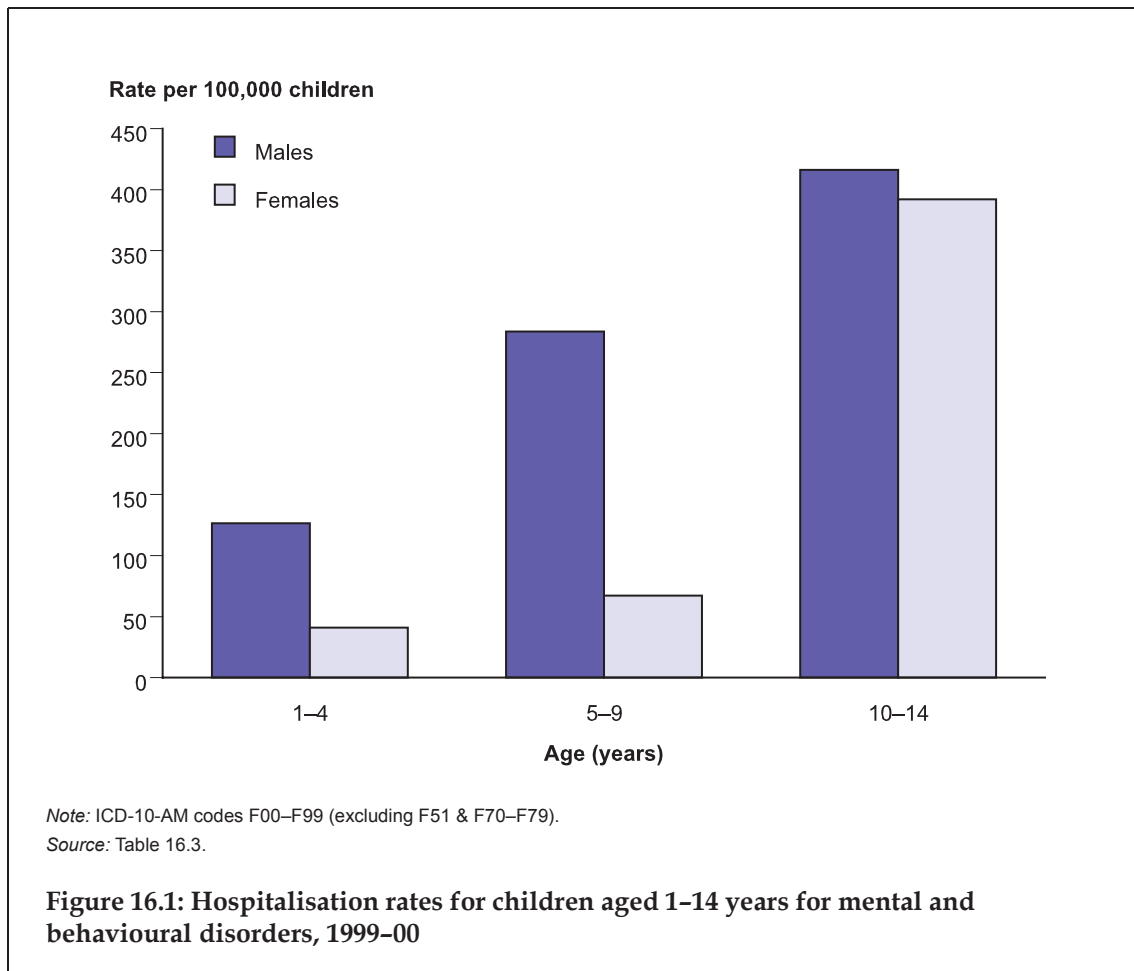
Note: ICD-9-CM codes 290–316 (excluding 307.4) and ICD-10-AM codes F00–F99 (excluding F51 & F70–F79).

Source: AIHW National Hospital Morbidity Database.

- Over this period, hospitalisation rates for mental and behavioural disorders were consistently higher for boys than for girls, in all age groups. In 1999–00, the rate for boys was 1.2 times the rate for girls.
- Rates were generally higher for children in older age groups than in younger age groups. One exception was in 1998–99, when the rate for girls aged 1–4 years was greater than that for girls aged 5–9 years.
- Although hospitalisation rates for children for mental and behavioural disorders seem to have decreased between 1997–98 and 1998–99, this is likely to be influenced by the introduction of the ICD-10-AM coding system in 1998–99.

2. Codes representing 'mental retardation' (F70–F79) and 'non-organic sleeping disorders' (F51) were not included in the analyses. With the introduction of ICD-10-AM, a large increase in the number of infants hospitalised for non-organic sleeping disorders occurred. Non-organic sleeping disorders were omitted because of this large increase from previous years, and because of the likelihood that many of the children who were coded as having these disorders did not meet the criteria for diagnosis, namely that the sleeping disorder was due to emotional disturbance.

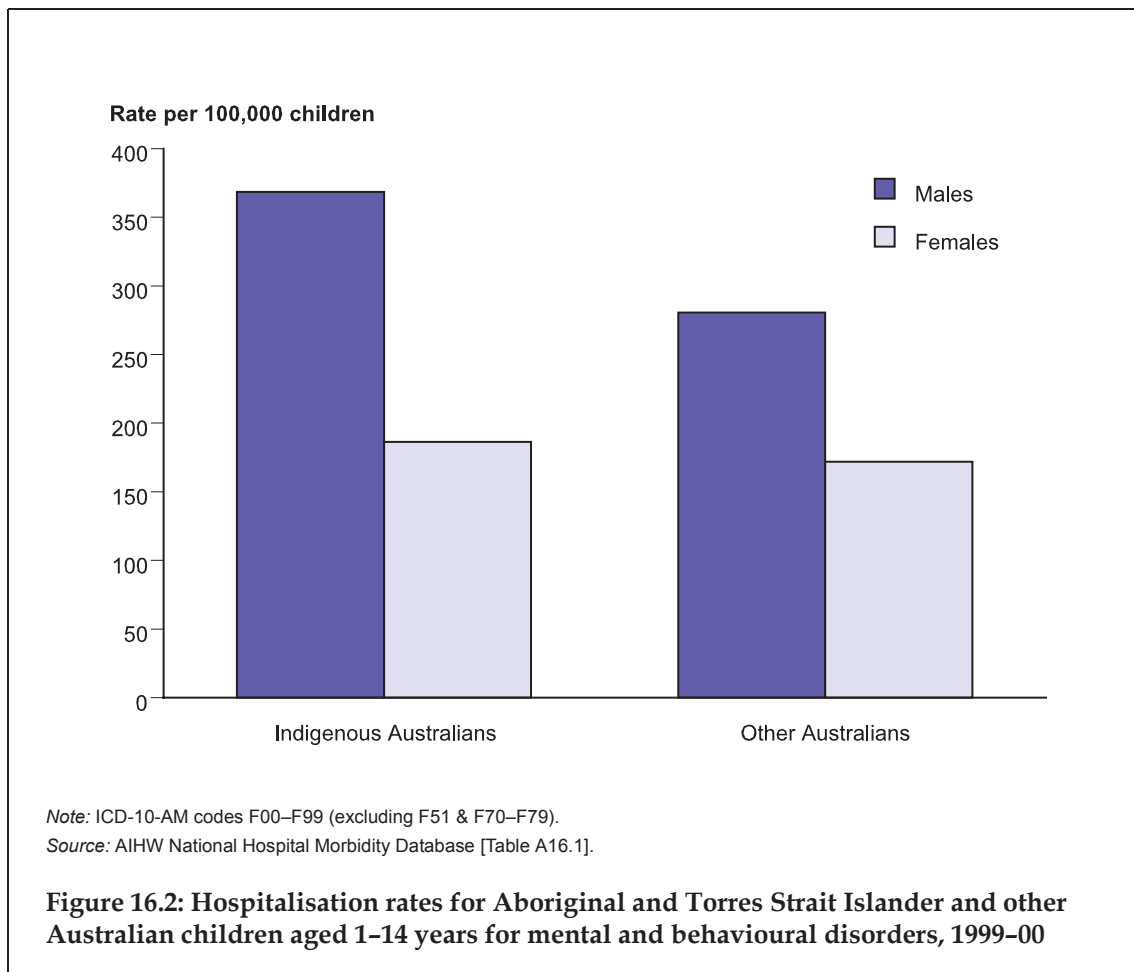
Age-specific hospitalisation rates are shown in Figure 16.1.



- In 1999-00, there were close to 8,600 hospitalisations of children aged 1-14 years for a mental and behavioural disorder (a rate of 231.1 hospitalisations per 100,000).
- Boys were hospitalised at a rate 1.6 times that of girls (285.2 compared with 174.1).
- Rates increased with age. Children aged 10-14 years were hospitalised at the highest rate.
- It is not known how many hospitalisations meet the strict diagnostic criteria for mental disorders, particularly for children aged less than 4 years, in whom diagnosis of a specific mental health disorder can be problematic or difficult.

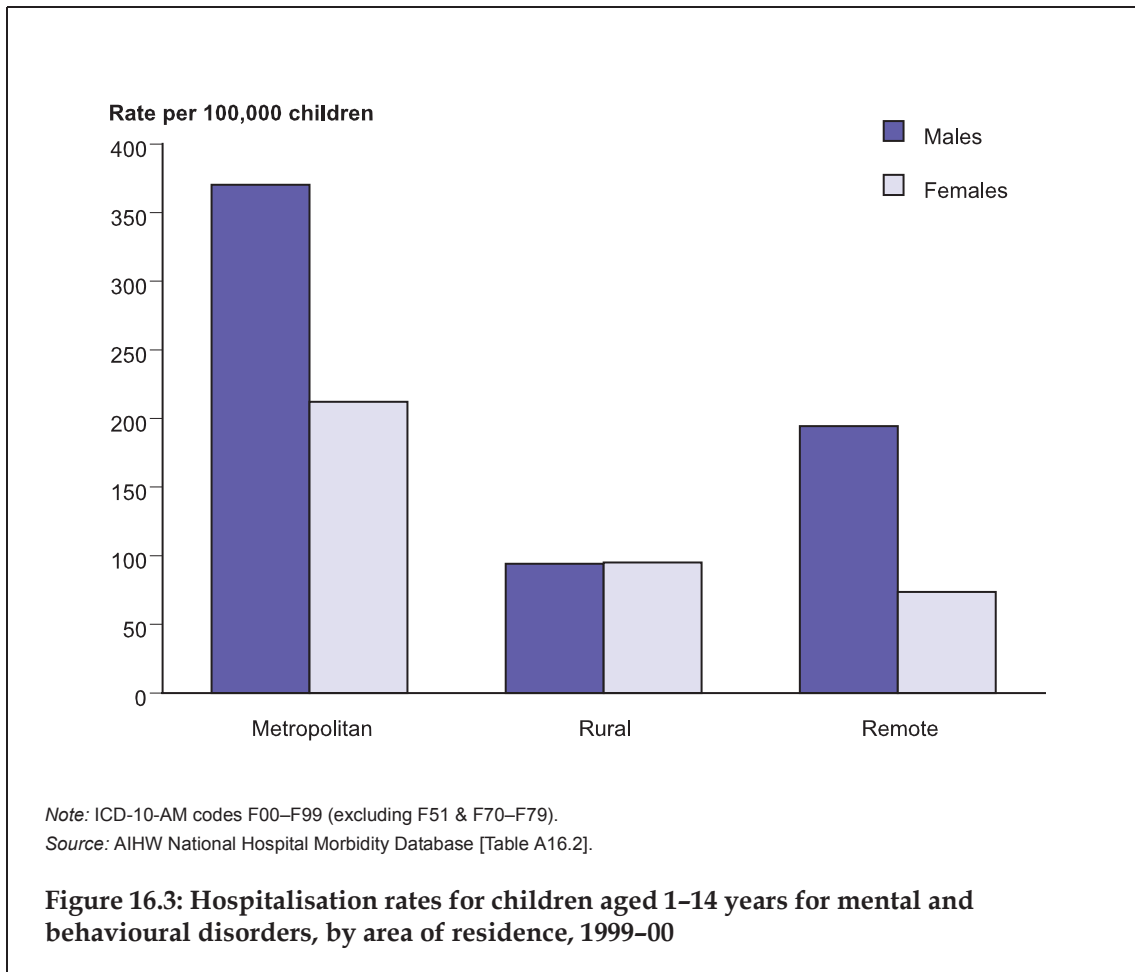
In 1999-00, there were 36,950 hospital bed days for which mental and behavioural disorders were the principal diagnoses, with an average length of stay of 3.9 days. Girls stayed in hospital on average twice as long as boys. Differences in the average length of stay for boys and girls may reflect the type of treatment required for different mental disorders in boys and girls. For example, length of hospitalisation for anorexia nervosa can be quite long, which is reflected in the longer average length of hospital stay for girls. Mental and behavioural disorders were also responsible for an additional 10,338 bed days where they were not the main reason for hospital stay but where they had to be managed during hospitalisations for other conditions.

Aboriginal and Torres Strait Islander children



- In 1999–00, there were 402 hospitalisations of Aboriginal and Torres Strait Islander children aged 1–14 years for mental and behavioural disorders (a rate of 279.0 per 100,000 children).
- Aboriginal and Torres Strait Islander boys were hospitalised at a rate 1.3 times that for other Australian boys (368.4 compared with 280.5). This difference was mainly due to a higher rate of hospitalisations for Indigenous boys aged 10–14.
- Aboriginal and Torres Strait Islander girls were hospitalised at a rate only slightly higher than that for other Australian girls (186.4 compared with 171.8). However, a large difference was seen for girls aged 5–9 years, with Indigenous girls being hospitalised at a rate 3.6 times as high as that for other Australian girls.

Children in metropolitan, rural and remote areas



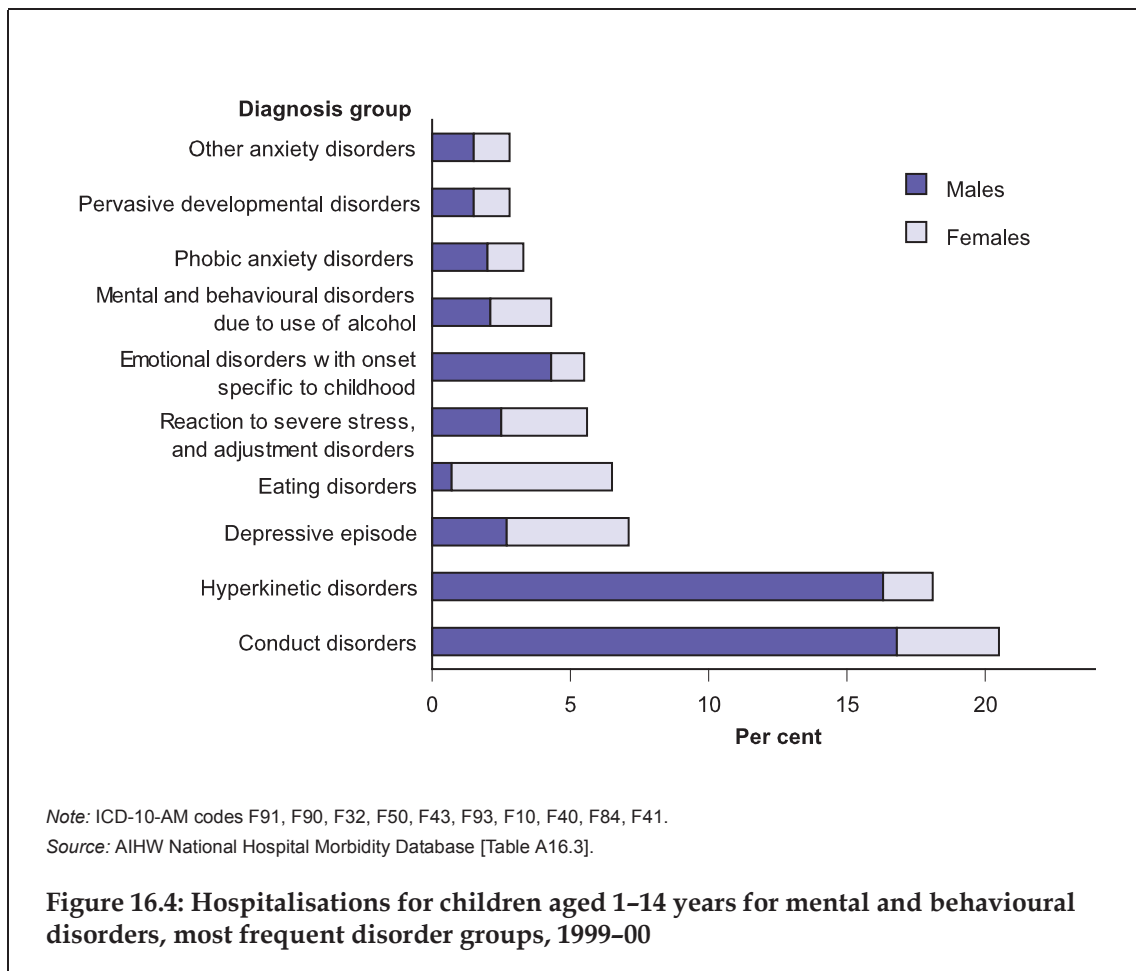
- Hospitalisation rates in 1999–00 for mental and behavioural disorders for both boys and girls aged 1–14 years were highest for those living in metropolitan areas.
- Boys in remote areas were hospitalised at a rate twice that of boys in rural areas.
- Rates for girls in rural and remote areas were fairly similar.

Main causes of hospitalisation for mental and behavioural disorders

The indicator for hospitalisations for mental and behavioural disorder groups is the number of children aged 1–14 years hospitalised due to a mental and behavioural disorder group in a given year as a percentage of the number of hospitalisations of children aged 1–14 years for all mental and behavioural disorders.³

3. This indicator needs further development. As the denominator is the total number of hospitalisations for mental and behavioural disorders each year, and this number varies from year to year, the proportion of children in a particular disorder group could vary even if the number of children hospitalised for these conditions remained the same from one year to the next.

In 1999-00, the 10 most frequent groups of mental and behavioural disorder diagnoses accounted for 76% of all hospitalisations for mental and behavioural disorders among children aged 1-14 years (Figure 16.4).



- For children aged 1-14 years in 1999-00, the most frequent diagnosis groups resulting in hospitalisation for mental and behavioural disorders were conduct disorders (21%), hyperkinetic disorders (18%) and depressive episode (7%).
- For boys aged 1-14 years, the most frequent diagnosis group resulting in hospitalisation was conduct disorders (17% of all hospitalisations for mental and behavioural disorders). The next most frequent group was hyperkinetic disorders (16%). Most boys hospitalised for these disorders were aged 5-14 years.
- For girls aged 1-14 years, the most frequent diagnosis group was eating disorders (6%). The majority of girls hospitalised for eating disorders were aged 10-14 years. The next most frequent diagnosis group for girls aged 1-14 years was depressive episode, accounting for 4% of all hospitalisations with mental and behavioural disorders.