

Te Rau Hinengaro: The New Zealand Mental Health Survey

Chapter 3: Twelve-month Prevalence

J Elisabeth Wells

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3 Twelve-month Prevalence

Key results

- Anxiety disorders were the most common group of disorders in the past 12 months (14.8%), followed by mood disorders (7.9%), then substance use disorders (3.5%), with eating disorders the least common group (0.5%). Within each group the prevalence of individual disorders varied several-fold.
- Nearly all disorders were most common in the group aged 16–24 and prevalence declined across older age groups. This trend was most marked for substance use disorders. Anxiety disorders and major depressive disorder were more common in females, dysthymia and bipolar disorder occurred equally for females and males, and there was a clear male predominance for substance use disorders.
- Specific phobia produced the least interference with life, and mood disorders produced the most interference. Case severity, which included the impact of a disorder and comorbid disorders, was predominantly serious or moderate for all disorders.
- Unadjusted prevalences, which show the burden of disorder, were generally highest for Māori, intermediate for Pacific people and lowest for the Other composite ethnic group. After adjustment for age, sex, educational qualifications and equivalised household income the results were as follows: there was no difference across the ethnic groups in the prevalence of anxiety disorders; Pacific people had the lowest prevalence of major depressive disorder (3.5%) while Māori and Others had very similar prevalences (5.7% and 5.8%); Māori and Pacific people had a higher prevalence of bipolar disorder (3.4% and 2.7%) than Others (1.9%); and Māori (6.0%) had a higher prevalence of substance use disorders than Pacific people (3.2%) or Others (3.0%).

3.1 Introduction

This chapter reports on 12-month prevalence for individual disorders and disorder groups. The 12-month prevalence of a disorder is the proportion of the population who have ever met criteria for a disorder and who have experienced symptoms or an episode in the past 12 months (see 1.10.3 and 1.10.4). This is the period prevalence most commonly reported in community surveys (Bijl et al 2003; Demyttenaere et al 2004; Robins and Regier 1991). It is useful for health service planning. It also provides a reasonable balance between recall requirements and the precision of prevalence estimates (see 2.1). This is particularly important for estimating the prevalence of individual disorders, some of which are uncommon.

Interference with life and severity are also reported for individual disorders. Secondary analyses (Narrow et al 2002) of earlier surveys have suggested that many 12-month cases are mild. Hence in the WMH-CIDI/CIDI 3.0 (Kessler and Ustun 2004), scales were added to each disorder to measure impact in the past 12 months. A composite measure of severity was developed to take account of all disorders experienced in that period. Therefore, in New Zealand both interference with life and severity were measured. Interference with life is reported for each disorder itself from answers to questions about interference with home responsibilities, work or study, close relationships and social life (see 12.12.2). In contrast, severity is defined for an individual, not a disorder (see 2.3 and 12.12.3). When severity is reported for a particular disorder it shows the overall levels of severity of people with that disorder, including the impact of any comorbid disorders. It indicates the severity of the ‘cases’, not the severity of the disorder.

Age and sex differences in prevalences of individual disorders are reported. Twelve-month prevalence has been found to decrease with age (Kessler et al 1994; Myers et al 1984). While the overall rates of disorder are often similar for men and women, this depends on what disorders are assessed. Men have been found to have higher prevalence of substance use disorders, whereas women have higher prevalence of depression and anxiety (Kohn et al 1998).

Ethnic differences, at least in the United States (US), have been somewhat inconsistent across surveys (Breslau et al 2005; Kessler et al 1994). Non-Hispanic Blacks were found to have lower rates of most disorders than Non-Hispanic Whites, which would not be expected from their socioeconomic position. However, the results for Hispanics were different across the surveys (the Epidemiologic Catchment Area Study compared with the National Comorbidity Survey). In spite of these inconsistencies it is clear that disadvantaged ethnic minorities do not necessarily have higher rates of disorder. In this chapter ethnic comparisons are reported for disorder groups (anxiety disorders, mood disorders and substance use disorders) without adjustment, with adjustment for age and sex, and with adjustment for age, sex, educational qualifications and equivalised household income. In addition, ethnic differences are reported for major depressive disorder and bipolar disorder separately because of the different patterns shown for these two mood disorders.

This chapter reports:

- 12-month prevalence overall and by age and by sex (see 3.2)
- 12-month prevalence and interference with life (see 3.3)
- 12-month prevalence and severity (see 3.4)

- 12-month prevalence and ethnicity (see 3.5)
- comparisons with other surveys (see 3.6).

3.2 Twelve-month prevalence overall and by age and by sex

3.2.1 Twelve-month prevalence overall

Table 3.1 shows that anxiety disorders (14.8%) were the most common disorder group, followed by mood disorders (8.0%) and substance use disorders (3.5%), with a low prevalence of eating disorders (0.5%). The prevalence of individual disorders ranged from 7.3% for specific phobia to less than 0.1% for anorexia and varied several-fold within each disorder group.

The most common anxiety disorders were specific phobia (7.3%) and social phobia (5.1%). Agoraphobia without panic and obsessive–compulsive disorder (OCD) were the least common (0.6%).

Major depressive disorder was the most common mood disorder (5.7%). A broad definition of bipolar disorder was used (see 12.4.1). The diagnosis of bipolar disorder was made on the basis of mania, hypomania or depression ever experienced: bipolar I disorder required full criteria for mania to have been met at some time; bipolar II disorder required hypomania and major depression. Bipolar subthreshold included everyone else who had met criteria for hypomania without major depression. Bipolar disorder in the past 12 months required an episode of mania, hypomania or depression in that period. The 12-month prevalence of bipolar disorder of 2.2% can be subdivided into bipolar I (0.6%; 0.5, 0.8), bipolar II (0.4%, 0.3, 0.6), and subthreshold (1.1%, 0.9, 1.4).

Alcohol disorders were more common than drug disorders. Alcohol abuse (2.6%) was 2.3 times more prevalent than drug abuse (1.2%) and alcohol dependence (1.3%) was 1.8 times more common than drug dependence (0.7%).

Expressing the prevalence of disorder as a percentage of users provides a different perspective. Alcohol was used in the past 12 months by 79.1% and drugs by 13.7%. Among those who drank alcohol in the past 12 months, 3.3% had alcohol abuse and 1.6% had dependence, whereas 8.1% of those who used drugs in that period had drug abuse and 5.0% had drug dependence. Drug users were much more likely to experience disorder than alcohol users, but alcohol caused more disorder in the population because of its more widespread use.

Drug users tended to be young and male, both characteristics associated with abuse and dependence of any substance. Everyone who used drugs in the past 12 months also used alcohol, and these drug users experienced more alcohol abuse and dependence (12.7%, 6.5%) than drug abuse and dependence (8.1%, 5.0%). Therefore, these results show that alcohol caused more disorder than did drugs both in the overall population and in the subpopulation of drug users.

The prevalence of marijuana abuse and dependence was a little below that for drug disorders, indicating that about 0.4% to 0.5% of the population had experienced drug disorders without a marijuana disorder. Those with a marijuana disorder who also used other drugs may or may not have met criteria for drug disorder because of their use of other drugs as well as their use of marijuana; all that is known is that they were positive for a drug diagnosis in general and for marijuana when asked about symptoms due specifically to marijuana. Among those who used only marijuana in the past 12 months, 6.8% had marijuana abuse and 3.6% had marijuana dependence.

The prevalence of some disorders may have been underestimated. For alcohol and separately for drugs, participants who did not report ever experiencing any symptom of abuse were not asked dependence questions. A study by Hasin and Grant (2004) suggests this will have resulted in underestimation. In 2005 the CIDI 3.0 was revised because of concern about underestimation of OCD (WMH, personal communication). The New Zealand interview was before this revision. The observed prevalence of anorexia may have been particularly affected by refusal to participate or disclose. In addition, the recency questions asked about when the participant was last at their lowest weight and had problems. Someone currently at low weight with problems, but not at their lowest weight, would not have been counted for 12-month prevalence.

Table 3.1: Twelve-month prevalence of mental disorders,¹ overall and by age and by sex

| Disorder groups | Total % (95% CI) | Age group (years) % (95% CI) | | | | Sex % (95% CI) | |
|---|----------------------|------------------------------------|----------------------|----------------------|--------------------|----------------------|----------------------|
| | | 16–24 | 25–44 | 45–64 | 65 and over | Male | Female |
| Anxiety disorders | | | | | | | |
| Panic disorder | 1.7 (1.4, 1.9) | 2.4 (1.7, 3.6) | 2.1 (1.7, 2.6) | 1.2 (0.9, 1.6) | 0.6 (0.3, 1.1) | 1.3 (1.0, 1.7) | 2.0 (1.7, 2.4) |
| Agoraphobia without panic | 0.6 (0.5, 0.8) | 0.7 (0.3, 1.2) | 0.8 (0.6, 1.2) | 0.6 (0.3, 0.9) | 0.2 (0.0, 0.5) | 0.4 (0.3, 0.7) | 0.8 (0.6, 1.1) |
| Specific phobia | 7.3 (6.8, 7.8) | 9.3 (7.6, 11.3) | 8.3 (7.5, 9.3) | 6.9 (6.0, 7.8) | 3.2 (2.4, 4.3) | 4.3 (3.7, 5.0) | 10.1 (9.2, 10.9) |
| Social phobia | 5.1 (4.6, 5.6) | 7.0 (5.6, 8.8) | 6.3 (5.6, 7.1) | 4.2 (3.5, 5.1) | 1.4 (1.0, 2.0) | 4.5 (3.8, 5.2) | 5.6 (5.0, 6.3) |
| Generalised anxiety disorder | 2.0 (1.7, 2.3) | 1.6 (0.9, 2.6) | 2.8 (2.3, 3.4) | 1.8 (1.3, 2.3) | 1.0 (0.6, 1.5) | 1.4 (1.1, 1.8) | 2.6 (2.2, 3.1) |
| Post-traumatic stress disorder ² | 3.0 (2.6, 3.4) | 2.4 (1.6, 3.6) | 3.5 (2.9, 4.3) | 3.2 (2.5, 4.1) | 1.7 (0.8, 3.0) | 1.6 (1.1, 2.2) | 4.2 (3.6, 4.9) |
| Obsessive–compulsive disorder ² | 0.6 (0.4, 0.9) | 1.5 (0.6, 3.0) | 0.8 (0.5, 1.2) | 0.2 (0.0, 0.4) | 0.1 (0.0, 0.5) | 0.7 (0.4, 1.2) | 0.5 (0.3, 0.8) |
| Any anxiety disorder ² | 14.8 (13.9, 15.7) | 17.7 (15.1, 20.6) | 18.2 (16.6, 19.9) | 13.2 (11.8, 14.7) | 6.0 (4.7, 7.6) | 10.7 (9.5, 12.0) | 18.6 (17.3, 20.0) |
| Mood disorders | | | | | | | |
| Major depressive disorder | 5.7 (5.2, 6.2) | 8.7 (6.8, 11.0) | 6.3 (5.6, 7.2) | 5.2 (4.4, 6.2) | 1.7 (1.2, 2.4) | 4.2 (3.5, 5.0) | 7.1 (6.3, 7.8) |
| Dysthymia | 1.1 (0.9, 1.4) | 1.5 (0.7, 2.6) | 1.2 (0.9, 1.7) | 1.2 (0.8, 1.6) | 0.4 (0.2, 0.9) | 1.0 (0.7, 1.4) | 1.3 (1.0, 1.6) |
| Bipolar disorder | 2.2 (1.9, 2.5) | 3.9 (2.9, 5.4) | 2.8 (2.3, 3.3) | 1.4 (1.1, 1.9) | 0.2 (0.1, 0.6) | 2.1 (1.6, 2.6) | 2.3 (1.9, 2.8) |
| Any mood disorder | 8.0 (7.4, 8.6) | 12.7 (10.4, 15.4) | 9.2 (8.3, 10.2) | 6.8 (5.9, 7.9) | 2.0 (1.5, 2.7) | 6.3 (5.5, 7.2) | 9.5 (8.7, 10.5) |
| Substance use disorders | | | | | | | |
| Alcohol abuse | 2.6 (2.3, 3.0) | 7.1 (5.7, 8.9) | 3.2 (2.6, 3.9) | 0.8 (0.6, 1.2) | <0.1 (0.0, 0.2) | 3.7 (3.1, 4.4) | 1.6 (1.3, 2.1) |
| Alcohol dependence | 1.3 (1.1, 1.5) | 3.0 (2.2, 4.1) | 1.7 (1.3, 2.2) | 0.4 (0.2, 0.7) | <0.1 (0.0, 0.1) | 1.7 (1.4, 2.2) | 0.9 (0.6, 1.1) |
| Drug abuse | 1.2 (0.9, 1.4) | 3.8 (2.8, 5.1) | 1.2 (0.9, 1.6) | 0.2 (0.1, 0.5) | <0.1 (0.0, 0.1) | 1.6 (1.2, 2.0) | 0.8 (0.6, 1.1) |
| Drug dependence | 0.7 (0.5, 0.9) | 2.1 (1.3, 3.2) | 0.9 (0.6, 1.2) | 0.1 (0.0, 0.3) | <0.1 (0.0, 0.1) | 1.1 (0.7, 1.5) | 0.4 (0.2, 0.5) |
| Marijuana abuse ³ | 0.9 (0.7, 1.1) | 3.2 (2.3, 4.4) | 0.9 (0.7, 1.3) | 0.2 (0.1, 0.4) | <0.1 (0.0, 0.1) | 1.3 (0.9, 1.7) | 0.6 (0.4, 0.9) |
| Marijuana dependence ³ | 0.5 (0.3, 0.6) | 1.5 (0.9, 2.4) | 0.6 (0.3, 0.9) | <0.1 (0.0, 0.2) | <0.1 (0.0, 0.1) | 0.8 (0.5, 1.1) | 0.2 (0.1, 0.3) |
| Any substance use disorder | 3.5 (3.1, 4.0) | 9.6 (7.9, 11.5) | 4.2 (3.6, 5.0) | 1.2 (0.9, 1.6) | <0.1 (0.0, 0.2) | 5.0 (4.3, 5.8) | 2.2 (1.8, 2.7) |
| Eating disorders | | | | | | | |
| Anorexia nervosa ² | <0.1 (0.0, 0.1) | <0.1 (0.0, 0.3) | <0.1 (0.0, 0.2) | <0.1 (0.0, 0.1) | <0.1 (0.0, 0.3) | <0.1 (0.0, 0.1) | <0.1 (0.0, 0.2) |
| Bulimia ² | 0.4 (0.3, 0.6) | 0.6 (0.2, 1.3) | 0.7 (0.4, 1.0) | 0.3 (0.1, 0.6) | 0.1 (0.0, 0.5) | 0.3 (0.1, 0.5) | 0.6 (0.4, 0.9) |
| Any eating disorder ² | 0.5 (0.3, 0.6) | 0.6 (0.2, 1.3) | 0.7 (0.4, 1.1) | 0.3 (0.1, 0.6) | 0.1 (0.0, 0.5) | 0.3 (0.1, 0.5) | 0.6 (0.4, 0.9) |

| Disorder groups | Total % (95% CI) | Age group (years) % (95% CI) | | | | Sex % (95% CI) | |
|--|----------------------|------------------------------------|----------------------|----------------------|-------------------|----------------------|----------------------|
| | | 16–24 | 25–44 | 45–64 | 65 and over | Male | Female |
| Any disorder Any disorder ² | 20.7 (19.5, 21.9) | 28.6 (25.1, 32.3) | 25.1 (23.2, 27.1) | 17.4 (15.7, 19.2) | 7.1 (5.7, 8.8) | 17.1 (15.5, 18.8) | 24.0 (22.4, 25.6) |

- 1 DSM-IV CIDI 3.0 disorders with hierarchy, see 12.4.1.
- 2 Assessed in the subsample who did the long form interview, see 12.4.2.
- 3 Those with marijuana disorder are a subgroup of those with drug use disorder. They may or may not have met criteria for abuse or dependence on other drugs.

3.2.2 Twelve-month prevalence, by age and by sex

Table 3.1 shows that the prevalence of any 12-month disorder declined across the age groups from 28.6% in the youngest age group to 7.1% in the oldest age group. It also shows that this pattern was seen within most individual disorders. The oldest age group always had the lowest prevalence.

For anxiety disorders the pattern of a monotonic decline was clear ($p < .0001$) for panic disorder, specific phobia, social phobia and OCD, with the youngest age group having prevalences about three times higher than those of the oldest age group. However, the prevalence of generalised anxiety disorder (GAD) was higher in the group aged 25–44 than in the youngest age group (2.8% compared with 1.6%; $p < .02$) and a similar trend was seen for post-traumatic stress disorder (PTSD) (3.5% compared with 2.4%; $p < .1$). Agoraphobia without panic differed little across the two youngest age groups (0.7%, 0.8%).

The prevalence of all three mood disorders also declined with age ($p < .002$ for all), with a three-fold higher prevalence in the youngest age group relative to the oldest for dysthymia, and a five-fold difference for major depressive disorder. For bipolar disorder there was a similar decline in prevalence with age. Bulimia was uncommon in all age groups but particularly in those aged 45 and over.

The 12-month prevalence of alcohol and drug disorders declined dramatically with age, with very few cases among those aged 65 and over ($p < .0001$ for all). For example, for alcohol abuse the prevalences were 7.1%, 3.2%, 0.8% and less than 0.1% across the four age groups. For dependence, the decline with age may be exaggerated because of the version of the CIDI interview used in New Zealand, which skipped dependence questions if there were never symptoms of abuse. Therefore, as reported lifetime abuse declined with age, older participants were less likely to be asked about dependence. For drug dependence, the decline with age must also reflect the lower proportions who had ever used drugs.

The overall prevalence of any 12-month disorder was higher for females than for males (24.0% compared with 17.1%; $p < .0001$). However, in contrast to age, where a fairly similar pattern was seen across disorders, sex predominance varied markedly across disorders.

For all anxiety disorders except OCD females had significantly higher prevalences than males. The ratio of prevalences was highest for specific phobia (10.1% compared with 4.3%; $p < .0001$) and PTSD (4.2% compared with 1.6%; $p < .0001$).

Within mood disorders two patterns of sex differences were found. Major depressive disorder was much more common for females than for males (7.1% compared with 4.2%; $p < .0001$), whereas there were no significant differences between females and males in the prevalence of dysthymia (1.3% compared with 1.0%; $p = .2$) or bipolar disorder (2.3% compared with 2.1%; $p = .5$). Bulimia showed a higher prevalence for females than for males (0.6% compared with 0.3%; $p = .02$).

For alcohol and drugs there was a clear and significant male predominance for abuse and dependence, with males having prevalences around double those for females ($p < .0001$ for all comparisons). For example, for any substance use disorder the prevalence for males was 5.0% (4.3, 5.8) but 2.2% (1.8, 2.7) for females.

The joint effects of age and sex are such that overall prevalences can conceal markedly higher prevalences in some subgroups. This is particularly true for substance use disorders. The overall twelve-month prevalence of substance use disorder was 3.5% but it was 12.5% (9.6, 15.4) in males aged 16–24 and in young Māori males it was 22.0% (14.8, 29.3).

3.3 Twelve-month prevalence and interference with life

Interference with life was assessed for each disorder over four domains (home responsibilities, work or study, close relationships and social life) using a modified version of the Sheehan Disability Scales (Demyttenaere et al 2001; Leon et al 1997). At the end of each disorder section, participants who had experienced symptoms or episodes in the past 12 months reported for the worst month in that period how much that disorder had interfered with their life in each domain. The specific questions are in 12.12.2. The verbal descriptors and scores for interference with life were ‘none’ (0), ‘mild’ (1–3), ‘moderate’ (4–6), ‘severe’ (7–9) and ‘very severe’ (10). The interference with life measure is specific to a particular disorder, in as much as people were able to separate out what impact a single disorder had on their lives.

The overall prevalences in Table 3.1 are repeated in Table 3.2 to enable easy comparison of interference with life and prevalence. Table 3.2 shows that disorders affected all four domains assessed, generally at similar levels except that for social phobia the home maintenance domain mean was only 2.0 (mild) but the mean for the social life domain was 5.1 (moderate).

For specific phobia the mean interference with life was 1.7, well within the mild range of 1–3. Social phobia had mean interference on the border between mild and moderate (3.8), whereas all the other anxiety disorders had means within the moderate interference range of 4–6 (panic disorder, 4.1; agoraphobia without panic, 4.2; GAD, 4.5; PTSD, 4.1; and OCD, 4.7).

Table 3.2: Twelve-month prevalence and interference with life from mental disorders

| Disorder groups ¹ | Twelve-month prevalence ¹ % (95% CI) | Interference with life ² Mean (95% CI) | | | | |
|---|---|---|-------------------|-------------------|-------------------|------------------------------|
| | | Home | Work or study | Intimacy | Social life | Mean across all four domains |
| Anxiety disorders | | | | | | |
| Panic disorder | 1.7 (1.4, 1.9) | 3.4 (2.9, 3.9) | 4.1 (3.6, 4.7) | 4.4 (3.8, 4.9) | 4.6 (4.1, 5.2) | 4.1 (3.7, 4.6) |
| Agoraphobia without panic | 0.6 (0.5, 0.8) | 2.5 (1.7, 3.3) | 3.7 (2.8, 4.6) | 4.7 (3.6, 5.8) | 5.4 (4.5, 6.3) | 4.2 (3.4, 5.0) |
| Specific phobia | 7.3 (6.8, 7.8) | 1.8 (1.5, 2.0) | 1.7 (1.5, 2.0) | 1.5 (1.3, 1.7) | 1.9 (1.7, 2.1) | 1.7 (1.6, 1.9) |
| Social phobia | 5.1 (4.6, 5.6) | 2.0 (1.7, 2.3) | 3.5 (3.2, 3.9) | 4.2 (3.8, 4.5) | 5.1 (4.7, 5.4) | 3.8 (3.5, 4.0) |
| Generalised anxiety disorder | 2.0 (1.7, 2.3) | 4.1 (3.7, 4.5) | 4.7 (4.2, 5.3) | 4.5 (4.1, 4.9) | 4.9 (4.4, 5.3) | 4.5 (4.2, 4.9) |
| Post-traumatic stress disorder ³ | 3.0 (2.6, 3.4) | 3.8 (3.2, 4.3) | 4.0 (3.5, 4.5) | 4.0 (3.5, 4.6) | 4.5 (3.9, 5.1) | 4.1 (3.7, 4.5) |
| Obsessive–compulsive disorder ³ | 0.6 (0.4, 0.9) | 3.6 (2.5, 4.6) | 5.2 (4.2, 6.2) | 4.8 (3.9, 5.7) | 5.1 (4.2, 6.0) | 4.7 (3.9, 5.4) |
| Mood disorders | | | | | | |
| Major depressive disorder | 5.7 (5.2, 6.2) | 5.1 (4.8, 5.3) | 5.5 (5.3, 5.8) | 5.1 (4.9, 5.4) | 5.9 (5.6, 6.1) | 5.4 (5.2, 5.6) |
| Dysthymia | 1.1 (0.9, 1.4) | 5.5 (4.6, 6.3) | 6.0 (5.3, 6.6) | 5.7 (5.0, 6.4) | 5.8 (5.1, 6.4) | 5.7 (5.1, 6.3) |
| Bipolar disorder | 2.2 (1.9, 2.5) | 5.1 (4.7, 5.5) | 5.5 (5.1, 5.9) | 5.5 (5.1, 6.0) | 5.4 (4.9, 6.0) | 5.3 (5.0, 5.7) |
| Depression only | 0.4 (0.3, 0.5) | 5.3 (4.5, 6.0) | 5.8 (5.0, 6.5) | 5.7 (4.8, 6.5) | 5.8 (4.8, 6.7) | 5.6 (4.9, 6.3) |
| Mania or hypomania only | 1.1 (0.9, 1.4) | 3.7 (3.1, 4.2) | 4.1 (3.5, 4.7) | 4.2 (3.5, 4.8) | 3.9 (3.2, 4.6) | 4.0 (3.5, 4.5) |
| Both depression and mania or hypomania | 0.7 (0.5, 0.9) | 7.1 (6.5, 7.7) | 7.4 (6.9, 7.8) | 7.7 (7.3, 8.1) | 7.7 (7.1, 8.4) | 7.4 (7.0, 7.7) |

| Disorder groups ¹ | Twelve-month prevalence ¹ % (95% CI) | Interference with life ² Mean (95% CI) | | | | |
|------------------------------|---|---|-------------------|-------------------|-------------------|------------------------------|
| | | Home | Work or study | Intimacy | Social life | Mean across all four domains |
| Eating disorders | | | | | | |
| Anorexia ^{3,4} | < 0.1 (0.0, 0.1) | – | – | – | – | – |
| Bulimia ³ | 0.4 (0.3, 0.6) | 2.2 (1.2, 3.2) | 1.9 (1.1, 2.8) | 2.4 (1.4, 3.4) | 2.7 (1.7, 3.8) | 2.3 (1.5, 3.1) |

1 DSM-IV CIDI 3.0 disorders with hierarchy, see 12.4.1.

2 Based on Sheehan Disability Scales reported for an individual disorder, see 12.12.2.

3 Assessed in the subsample who did the long form of the interview, see 12.4.2.

4 A dash (–) in a cell indicates fewer than 30 with the disorder.

Within mood disorders all three disorders had means in the moderate interference range (5.4, 5.7, 5.3). The moderate interference with life for dysthymia may have arisen from major depressive episodes as these could not be distinguished from dysthymia in the past 12 months for those who had ever met criteria for both major depressive disorder and dysthymia (see 12.4.1); 89.7% of those classified with 12-month dysthymia had also met lifetime criteria for major depressive disorder. Those with 12-month dysthymia had a mean interference with life of 5.9 (5.3, 6.5) if they had ever also had major depression whereas those who had only ever had dysthymia had mean interference of 4.2 (3.0, 5.4). Those with bipolar disorder were subdivided into those who experienced only depression in the past 12 months, those who experienced only mania or hypomania, and those who experienced both. Those with depression only had interference with life that was very similar to that seen for people with major depressive disorder. Those with mania or hypomania only were on the border between mild and moderate interference. Those who had both highs and lows experienced significantly more interference with life than was reported for any other disorder with a mean of 7.4, in the severe range of 7–9.

In the version of the interview used in New Zealand the Sheehan Disability Scales were not used in the substance section, although they have since been added to the CIDI 3.0. The impact of substance dependence was assessed separately for alcohol and for drugs. Five consequences of drinking or of drug use were asked about over the past 12 months with responses of ‘not at all’, ‘a little’, ‘some’ and ‘a lot’ (see 12.12.2). These effects of drinking and drug use are presented for alcohol dependence and for drug dependence in Table 3.3. The full questions asked are given in 12.12.2.

Participants with alcohol dependence in the past 12 months were consistently less likely than those with drug dependence to report each consequence of their substance use (Table 3.3). For each consequence, fewer than half reported that the consequence had occurred ‘a lot’. Of those with drug dependence, 29.4% were marijuana dependent and had used only marijuana in the past 12 months. This marijuana-only group experienced less impact from their drug use than those who used other drugs either with or instead of marijuana. The difference was particularly clear for the health impact of drug use (9.8% for the marijuana group, 37.2% for the whole drug dependence group).

Table 3.3: Effects on life in the past 12 months from alcohol dependence and drug dependence

| Dependence ¹ | Effects on life experienced ‘a lot’ ² % (95% CI) | | | | |
|--|---|----------------------|-----------------------------|----------------------|----------------------|
| | Health harmed | Family hurt | Impulsive actions regretted | Failed to do things | Unhappy |
| Alcohol dependence | 22.3 (15.6, 30.8) | 20.1 (14.2, 27.7) | 30.8 (22.5, 40.4) | 20.7 (14.5, 28.6) | 24.4 (17.6, 32.9) |
| Drug dependence ³ | 37.2 (24.4, 52.2) | 36.5 (23.8, 51.4) | 39.5 (26.3, 54.5) | 40.0 (26.9, 54.7) | 35.0 (22.2, 50.4) |
| Marijuana dependence in those using only marijuana in past 12 months | 9.8 (2.4, 24.7) | 23.8 (7.4, 49.0) | 19.2 (7.1, 38.0) | 24.8 (11.1, 43.6) | 20.4 (8.5, 37.8) |

1 DSM-IV CIDI 3.0 alcohol and drug dependence disorders, see 12.4.1.

2 See 12.12.3.

3 Those with a marijuana disorder are a subgroup of those with a drug use disorder. They may or may not have met criteria for abuse or dependence on other drugs.

3.4 Twelve-month prevalence and severity

Severity across disorders is defined as in chapters 2 and 12 (see 2.3 and 12.12.3). The severity reported for a particular disorder depends on how severely individuals with that disorder have been affected by it in the past 12 months plus the impact of any other disorders also experienced by those individuals in the past 12 months.

The 12-month prevalence of any disorder was 20.7% (Table 3.4). For these cases who had all met full criteria for disorder during their lifetime and experienced symptoms or an episode in the last 12 months, the distribution of severity was 22.7% with serious disorder, 45.6% with moderate disorder and 31.7% with mild disorder. Severity increased with the number of disorders in the past 12 months: 11.7% of those with one disorder, 27.5% of those with two disorders, and 59.6% of those with three or more disorders were classified as serious.

The rankings of disorders on the basis of interference with life from the disorder itself (Table 3.2) and severity of cases (Table 3.4) are generally similar ($r = 0.49$ between mean interference and percent serious). The only major exception occurred for bulimia, which had a mean interference with life in the mild range (2.3) yet 47.8% of cases with bulimia were classified as serious, indicating that for people with bulimia much of the impact on their lives came from comorbid disorders rather than from bulimia itself.

3.4.1 Anxiety disorders: twelve-month prevalence and severity

Cases with the most common disorder assessed in the survey, specific phobia, were more likely to be mild cases (39.6%) than cases with any other disorder. Nonetheless, 21.6% of those with specific phobia were classified as serious cases; this arose because specific phobia was often comorbid with other disorders (48.5% comorbid).

Social phobia had a prevalence of 5.1% and a mid-range severity distribution.

GAD and PTSD had similar prevalences (2.0% and 3.0%), very similar percentages of cases with serious disorder (34.3% and 35.9%), but very different percentages who were mild cases, with only 7.4% of GAD cases being mild whereas 27.2% of PTSD cases were mild.

Panic disorder (1.7%), OCD (0.6%) and agoraphobia without panic (0.6%) were all uncommon and serious, with 44.9%, 40.1% and 45.5% classified as serious cases. OCD had the lowest percentage of cases classified as mild across all disorders (4.6%). We have been advised by the World Mental Health (WMH) Data Coordinating Center at Harvard University (January 2006) that clinical re-appraisals have indicated that the version of the CIDI 3.0 we used underestimates the prevalence of OCD and that consequently the OCD section was revised in 2005; it is likely that milder cases were not detected in New Zealand.

Table 3.4: Twelve-month prevalence and severity of mental disorders

| Disorder groups ¹ | Twelve-month prevalence ¹ % (95% CI) | Distribution of overall severity of cases with each disorder ¹ % | | |
|---|---|--|----------|------|
| | | Serious | Moderate | Mild |
| Anxiety disorders | | | | |
| Panic disorder | 1.7 (1.4, 1.9) | 44.9 | 34.5 | 20.6 |
| Agoraphobia without panic | 0.6 (0.5, 0.8) | 45.5 | 35.4 | 19.2 |
| Specific phobia | 7.3 (6.8, 7.8) | 21.6 | 38.8 | 39.6 |
| Social phobia | 5.1 (4.6, 5.6) | 30.4 | 48.3 | 21.2 |
| Generalised anxiety disorder | 2.0 (1.7, 2.3) | 34.3 | 58.3 | 7.4 |
| Post-traumatic stress disorder ² | 3.0 (2.6, 3.4) | 35.9 | 36.9 | 27.2 |
| Obsessive–compulsive disorder ² | 0.6 (0.4, 0.9) | 40.1 | 55.3 | 4.6 |
| Any anxiety disorder ² | 14.8 (13.9, 15.7) | 23.8 | 43.3 | 32.9 |
| Mood disorders | | | | |
| Major depressive disorder | 5.7 (5.2, 6.2) | 34.7 | 55.9 | 9.4 |
| Dysthymia | 1.1 (0.9, 1.4) | 50.6 | 34.1 | 15.3 |
| Bipolar disorder | 2.2 (1.9, 2.5) | 54.9 | 36.5 | 8.6 |
| Any mood disorder | 7.9 (7.3, 8.7) | 40.2 | 50.3 | 9.5 |
| Substance use disorders | | | | |
| Alcohol abuse | 2.6 (2.3, 3.0) | 25.9 | 36.8 | 37.3 |
| Alcohol dependence ³ | 1.3 (1.1, 1.5) | 42.2 | 57.8 | 0.0 |
| Drug abuse | 1.2 (0.9, 1.4) | 41.1 | 33.9 | 25.1 |
| Drug dependence ³ | 0.7 (0.5, 0.9) | 58.8 | 41.2 | 0.0 |
| Marijuana abuse ⁴ | 0.9 (0.7, 1.1) | 47.1 | 26.9 | 26.0 |
| Marijuana dependence ⁴ | 0.5 (0.3, 0.6) | 62.7 | 37.3 | – |
| Any substance use disorder | 3.5 (3.0, 4.0) | 29.5 | 37.1 | 33.4 |
| Eating disorders | | | | |
| Anorexia ^{2,5} | < 0.1 (0.0, 0.1) | – | – | – |
| Bulimia ² | 0.4 (0.3, 0.6) | 47.8 | 29.4 | 22.8 |
| Any eating disorder ² | 0.5 (0.3, 0.6) | 46.2 | 28.5 | 25.3 |

| Disorder groups ¹ | Twelve-month prevalence ¹ % (95% CI) | Distribution of overall severity of cases with each disorder ¹ % | | |
|---------------------------------|---|--|----------|------|
| | | Serious | Moderate | Mild |
| Any disorder² | | | | |
| Any disorder ² | 20.7 (19.5, 21.9) | 22.7 | 45.6 | 31.7 |
| One disorder ² | 13.0 (12.1, 14.0) | 11.7 | 44.8 | 43.5 |
| Two disorders ² | 4.4 (3.9, 4.8) | 27.5 | 55.5 | 16.9 |
| Three disorders ² | 3.3 (2.9, 3.7) | 59.6 | 35.8 | 4.6 |

1 DSM-IV CIDI 3.0 disorders with hierarchy, see 12.4.1. For severity, see 2.3 and 12.12.3.

2 Assessed in the subsample who did the long form of the interview, see 12.4.2.

3 Dependence is moderate or serious by definition, so never mild.

4 Those with a marijuana disorder are a subgroup of those with a drug use disorder. They may or may not have met criteria for abuse or dependence on other drugs.

5 A dash (–) in a cell indicates fewer than 30 with the disorder.

3.4.2 Mood disorders: twelve-month prevalence and severity

Major depressive disorder was the most common mood disorder (5.7%) with 34.7% of cases classified as serious, 55.9% as moderate and only 9.4% as mild. This distribution indicated that people who had ever met full criteria for a major depressive disorder and who had experienced an episode in the past 12 months were mostly classified as moderate or severe cases, considering their depressive episode and all comorbid disorders. For their depression itself, on average they reported moderate levels of interference with life (Table 3.2), which partly explains why so few were classified as mild on the severity classification (Table 3.4).

A similar pattern of severity was seen for those with dysthymia, with an even higher percent classified as serious (50.6%), although the prevalence (1.1%) was much lower than for major depressive disorder. The high percentage of those with 12-month dysthymia classified as serious may actually reflect major depressive episodes in those who had ever met criteria for both dysthymia and major depression (see 3.2).

The prevalence of an episode of bipolar disorder in the past 12 months was 2.2% using a broad definition of bipolar disorder (see 12.4.1). Bipolar I disorder was classified as serious regardless of reports of interference with life, so the severity distribution partly reflects the proportion of those with bipolar disorder who had ever met criteria for bipolar I disorder. However, the reports of interference with life also show that most of these episodes had non-trivial impact.

3.4.3 Substance use disorders: twelve-month prevalence and severity

Overall, cases with substance use disorders were about equally likely to be classified as serious (29.5%), moderate (37.1%) and mild (33.4%). Alcohol disorders were more common than drug disorders but were less likely to be classified as serious. By definition, dependence could not be mild. The definition of serious disorder for substance dependence (2.3, 12.12.3) was that developed for the US WMH survey, the National Comorbidity Survey Replication (NCS-R) (Kessler et al 2005c), which required substantial impairment in the past 12 months, not just physiological symptoms ever as in the WMH definition. In New Zealand use of the NCS-R definition instead of the WMH definition reduced the proportion whose substance dependence was classified as serious from 90.4% to 25.7%, leaving the remainder with dependence classified as moderate.

3.4.4 Eating disorders: twelve-month prevalence and severity

Eating disorders were uncommon, particularly anorexia. Participants reporting symptoms of anorexia at any time nearly all reported that the last time when they were at their lowest weight and had symptoms was some years ago, sometimes decades ago. It is possible that some of them were still underweight and still had problems but were no longer at their lowest weight. Because the recency question asked about when they were last at their lowest weight they were not diagnosed with 12-month disorder.

Severe low prevalence disorders are always susceptible to non-response bias, both because of refusal to participate or refusal to disclose symptoms in the interview. It is not possible to assess the extent of such bias in this survey.

The prevalence of bulimia was 0.4%, with almost half (47.8%) classified as serious cases. As their mean interference with life from bulimia was in the mild range (2.3, see Table 3.2) much of this severity must come from comorbidity.

3.5 Ethnic comparisons of prevalence

Ethnic comparisons were carried out with the sequence of adjustments outlined in chapter 2 (see 2.5) to account progressively for sociodemographic correlates. Technical details are given in chapter 12 (see 12.10.2).

3.5.1 Ethnic comparisons for anxiety disorders

Table 3.5 shows that the prevalence of any anxiety disorder was highest for Māori, followed by Pacific people, with the lowest prevalence for the Other composite ethnic group. The pattern was also seen for most individual disorders, and where it did not hold the pattern was for Pacific people and Others to have similar prevalences.

Once the prevalence of any anxiety disorder was adjusted for age and sex, the prevalence for Māori and Pacific people decreased from the unadjusted prevalence, whereas that for Others increased very slightly, showing that part of the differences in prevalence between the ethnic groups was accounted for by a predominance of younger people among Māori and Pacific people. After further adjustment for socioeconomic characteristics (education and income), the ethnic group differences were even smaller and were no longer significant ($p = .2$).

Māori carry a higher burden of anxiety disorders, but this is accounted for by age, education and household income. For Pacific people the burden is not significantly higher than for Others and after adjustment it is non-significantly lower.

Table 3.5: Ethnic comparisons of the 12-month prevalence of any anxiety disorder using prioritised ethnicity

| Comparison ³ | Twelve-month prevalence of any anxiety disorder ^{1,2} % (95% CI) | | |
|--|---|----------------------|----------------------|
| | Māori | Pacific | Other |
| Unadjusted | 19.4 (17.1, 21.7) | 16.3 (13.8, 18.9) | 14.1 (13.0, 15.1) |
| Adjusted for age and sex | 17.6 (15.4, 19.7) | 14.8 (12.4, 17.3) | 14.4 (13.3, 15.5) |
| Adjusted for age, sex, educational qualifications ⁴ and equivalised household income ⁴ | 15.6 (13.6, 17.6) | 12.9 (10.6, 15.1) | 14.8 (13.7, 15.9) |

1 DSM-IV CIDI 3.0 anxiety disorders, see 12.4.1.

2 Assessed in the subsample who did the long form of the interview, see 12.4.2.

3 For the method of adjustment, see 12.10.2.

4 Sociodemographic correlates are defined in 12.12.1.

3.5.2 Ethnic comparisons for mood disorders

Comparison of prevalences for individual mood disorders across the three ethnic groups showed that aggregating across disorders concealed some different trends, so Table 3.6 presents results not just for any mood disorder but also for major depressive disorder and bipolar disorder separately.

The prevalence of major depressive disorder was lowest for Pacific people for all three types of comparison, with the difference between Pacific people and Others increasing with each adjustment. The unadjusted prevalence for Māori was significantly higher than for Pacific people ($p = .01$) and marginally significantly higher than for Others ($p = .06$). After full adjustment, prevalences for Māori and Others were the same and both were significantly higher than for Pacific people ($p \leq .003$).

For bipolar disorder Māori had the highest prevalence, followed by Pacific people, with both higher than Others for all types of comparison ($p \leq .008$ overall, $p \leq .006$ for Māori, $p \leq .06$ for Pacific). The difference between Māori and Pacific people was not significant with or without adjustment ($p \leq .3$).

Table 3.6: Ethnic comparisons of the 12-month prevalence of mood disorders using prioritised ethnicity

| Comparison ¹ | Twelve-month prevalence of disorder % (95% CI) | | |
|--|---|--------------------|-------------------|
| | Māori | Pacific | Other |
| Any mood disorder² | | | |
| Unadjusted | 11.6 (10.1, 13.2) | 8.3 (6.6, 10.0) | 7.5 (6.8, 8.2) |
| Adjusted for age and sex | 10.1 (8.8, 11.5) | 7.2 (5.8, 8.7) | 7.7 (6.9, 8.4) |
| Adjusted for age, sex, educational qualifications ³ and equivalised household income ³ | 9.3 (8.0, 10.6) | 6.4 (5.1, 7.8) | 7.9 (7.1, 8.6) |
| Major depressive disorder | | | |
| Unadjusted | 6.9 (5.7, 8.1) | 4.4 (3.0, 5.8) | 5.6 (5.0, 6.2) |
| Adjusted for age and sex | 6.0 (5.0, 7.1) | 3.9 (2.7, 5.1) | 5.7 (5.1, 6.4) |
| Adjusted for age, sex, education qualifications ³ and equivalised household income ³ | 5.7 (4.7, 6.6) | 3.5 (2.4, 4.6) | 5.8 (5.2, 6.5) |
| Bipolar disorder | | | |
| Unadjusted | 4.6 (3.6, 5.6) | 3.7 (2.7, 4.7) | 1.8 (1.4, 2.1) |
| Adjusted for age and sex | 3.9 (3.0, 4.7) | 3.1 (2.2, 4.0) | 1.8 (1.5, 2.2) |
| Adjusted for age, sex, educational qualifications ³ and equivalised household income ³ | 3.4 (2.7, 4.2) | 2.7 (1.9, 3.6) | 1.9 (1.5, 2.3) |

1 For the method of adjustment, see 12.10.2.

2 DSM-IV CIDI 3.0 mood disorders, see 12.4.1.

3 Sociodemographic correlates are defined in 12.12.1.

3.5.3 Ethnic comparisons for substance use disorders

The prevalences of abuse and dependence for alcohol and for drugs were all highest for Māori, intermediate for Pacific and lowest for Others.

However, for alcohol diagnoses (abuse or dependence) the Pacific prevalence (4.2%) was midway between that for Māori (7.4%) and that for Others (2.2%), whereas for drug diagnoses the Pacific prevalence (1.3%) was only slightly and non-significantly higher than that for Others (1.0%) and well below that for Māori (4.0%). Table 3.7 presents the ethnic comparisons for any substance use disorder.

Table 3.7: Ethnic comparisons of the 12-month prevalence of any substance use disorder

| Comparison ² | Twelve-month prevalence of any substance use disorder ¹ % (95% CI) | | |
|--|---|-------------------|-------------------|
| | Māori | Pacific | Other |
| Unadjusted | 9.1 (7.6, 10.6) | 4.9 (3.6, 6.1) | 2.7 (2.3, 3.2) |
| Adjusted for age and sex | 7.1 (6.0, 8.3) | 3.8 (2.8, 4.8) | 2.9 (2.4, 3.4) |
| Adjusted for age, sex, educational qualifications ³ and equivalised household income ³ | 6.0 (5.0, 7.1) | 3.2 (2.3, 4.0) | 3.0 (2.5, 3.6) |

1 DSM-IV CIDI 3.0 substance use disorders, see 12.4.1.

2 For the method of adjustment, see 12.10.2.

3 Sociodemographic correlates are defined in 12.12.1.

The burden of substance use disorder is highest for Māori and second highest for Pacific people. However, for Pacific people full adjustment almost completely removed differences between Pacific and Others ($p = .8$). Full adjustment halved the difference between Māori and Others, but Māori still had double the prevalence of substance use disorder (6.0% compared with 3.0%; $p < .0001$) and were also significantly above the prevalence for Pacific people (3.2%; $p < .0001$).

3.5.4 Summary of ethnic comparisons

Tables 3.5–3.7 show that the ranking of prevalences across ethnic groups depends on the disorders considered and on the demographic and socioeconomic factors taken into account. The unadjusted prevalence of any disorder, as shown in chapter 2, is highest for Māori, second highest for Pacific people and lowest for Others. This pattern is seen for the unadjusted prevalences for anxiety disorders, but after adjustment all three groups have similar prevalences. For major depressive disorder Pacific people had the lowest prevalence, and after adjustment it was significantly below prevalences for both Māori and Others, who had the same prevalence, although the unadjusted prevalence for Māori was higher. A different pattern was seen for bipolar disorder, where the ranking was Māori, Pacific, Others, with Others being significantly lower than the other two groups for all types of comparison. Māori and Pacific people did not differ significantly in the prevalence of bipolar disorder. For substance use disorder the unadjusted ranking was Māori, Pacific, Others. Adjustment reduced differences, and with full adjustment the prevalence of any substance use disorder was the same for Pacific and Others, but twice as high for Māori.

3.6 Comparisons with other surveys

The prevalence of any psychiatric disorder reported from a survey depends on the definition used for the disorder, the instrument used to measure it and the response rate, as well as level of morbidity in the population. Therefore, comparisons of prevalence rates from various surveys must be made with due consideration of all these factors.

Results from other WMH Survey Initiative countries are the most comparable with those from New Zealand, as they used the same interview (CIDI 3.0), the same DSM-IV criteria and the same algorithms to calculate diagnoses. New Zealand has high 12-month prevalences of anxiety, mood and substance use disorders relative to the 15 sites reported in 2004 (Demyttenaere et al 2004). For anxiety, New Zealand was second to the US (14.7% compared with 18.2%), whereas for mood disorders the US, the Ukraine and France had higher prevalences (9.6% for the US; 9.1% for the Ukraine without bipolar disorder; 8.5% for France without bipolar disorder; 7.7% for New Zealand).

For substance use disorder the Ukraine, which did not assess drug disorder, still had a substantially higher prevalence (6.4%) than New Zealand (3.5%), with the US (3.8%) non-significantly higher than New Zealand.

Prevalences for individual disorders are available for the US (Kessler et al 2005c) and for the six European sites in the European Study of the Epidemiology of Mental Disorders (ESEMeD) combined (Alonso et al 2004b). For every disorder assessed at both sites, New Zealand had a slightly lower prevalence than the US, except for alcohol dependence (1.3% for both) and drug dependence (0.7% compared with 0.4%, $p \approx .05$). Comparisons with the six European countries showed New Zealand had higher prevalences for major depressive disorder (5.7% compared with 3.9%), GAD (2.0% compared with 1.0%), social phobia (5.1% compared with 1.2%), specific phobia (7.3% compared with 3.5%), panic disorder (1.4% compared with 0.8%), alcohol abuse (2.6% compared with 0.7%) and alcohol dependence (1.3% compared with 0.3%). However, given the variation in prevalence for disorder groups across the ESEMeD countries (Demyttenaere et al 2004), it is not straightforward to interpret the prevalences for individual disorders that have been combined across countries. The response rates in the ESEMeD countries varied from 46% in France to 79% in Spain, which may have introduced bias into prevalence estimates from those countries with a low response rate. The response rates for New Zealand and the US were 73% and 71%.

The 1997 Australian National Survey of Mental Health and Well-being (Andrews et al 2001) used a variant form of the CIDI interview that asked only about the past 12 months. A diagnosis was given only if all criteria were met within the past 12 months. All other versions of the CIDI ask about all of life before interview and then, for each disorder, ask how recently symptoms or episodes had occurred. Full criteria for a diagnosis may not have been met within the past 12 months. Therefore, the New Zealand and Australian 12-month prevalences are ascertained in different ways. Although the 12-month prevalences are very similar for many disorders, social phobia and PTSD were more common in New Zealand than in Australia (5.1% compared with 1.3% for social phobia; 3.0% compared with 1.3% for PTSD). It is likely that these differences reflect changes made to these sections in the interview, particularly to the PTSD section, as well as the need to meet full criteria in the past 12 months in Australia.

The prevalence of DSM-IV alcohol dependence was 4.1% in the Australian study, but only 1.3% in New Zealand. As Australia and New Zealand have similar per capita consumption and patterns of drinking (Rehm et al 2004: Table 12.3; WARC 2004) this difference is unexpected. The skip past dependence in the New Zealand interview may have resulted in dependence being underestimated, but this is unlikely to account all of the difference. Hasin and Grant (2004), using the AUDADIS-IV interview, found that 13.9% of those with lifetime alcohol dependence did not ever have alcohol abuse. Applying such a correction would increase the lifetime prevalence of alcohol dependence in New Zealand from 4.0% to 4.6%. Even if all those ever dependent without abuse were still dependent in the past 12 months this would raise the New Zealand prevalence only from 1.3% to 1.9%. It seems likely that the higher estimates of 12-month prevalence from the AUDADIS-IV of 3.8% and the CIDI 2.1 estimate of 4.1% arose because both interviews asked more specific questions.

The only previous New Zealand community-wide survey was the Christchurch Psychiatric Epidemiology Study (CPES) (see 1.7.2) (Oakley Browne et al 1989; Wells et al 1989a), which interviewed people aged 18–64, not 16 years and over as in the present survey. The CPES used the Diagnostic Interview Schedule on which the first CIDI interview was based. At that time DSM-III criteria were used for diagnosis and there are many differences between DSM-III and DSM-IV diagnoses. One consistent difference is that DSM-IV has a requirement for ‘substantial impairment’ in many diagnoses. Therefore, this could reduce prevalence, as appears to have happened for GAD (12.7% compared with 2.0%).

Diagnostic changes are particularly marked for substance abuse and dependence. In DSM-III, abuse is much closer to a lay concept of abuse and consists of a considerable list of symptoms of excessive use, any of which results in diagnosis. In DSM-IV, abuse requires repeated failure to meet obligations, continued use despite repeated arguments with family, friends or workmates, repeated use in situations where use could be dangerous, or repeated contact with police. Dependence has been broadened as a concept (Sellman 1994) but now requires that at least three symptoms must have occurred within one year. In addition, within the version of the CIDI 3.0 used in Te Rau Hinengaro, dependence may have been underestimated because of the failure to assess dependence in those who did not ever meet criteria for abuse. The 12-month prevalence of alcohol abuse or dependence was 9.3% in the CPES and 2.9% in the present survey. In spite of all the technical reasons for an apparent decline in prevalence a real decline may have occurred. In 1986 per capita alcohol consumption for those aged 15 and over was 11.3 litres per year. In 2004 it was 18% lower at 9.2 litres per year, having declined fairly steadily throughout the 1980s and 1990s until 1997, since when it has fluctuated slightly or risen a little (<http://www.stats.govt.nz/>).

3.7 Conclusions

The prevalences of 12-month disorders from this national New Zealand survey, Te Rau Hinengaro, were lower than those from the US but higher than those for most other countries. Prevalences declined with age for almost all disorders. Females had higher prevalences of anxiety and depression but males and females were equally likely to experience OCD, dysthymia and bipolar disorder. Males had double the prevalence of substance use disorders compared with females.

Across disorders the general pattern was for Māori to have the highest prevalence, followed by Pacific people, with the lowest prevalence for Others. However this pattern changed after adjustment for sociodemographic correlates. The ethnic differences that could not be accounted for by age, sex, educational qualifications and equivalised household income were bipolar disorder (higher for Māori and Pacific people) and substance use disorder (higher for Māori). For depression Māori and Others had the same prevalence after adjustment, but Pacific people had a lower prevalence.

Most people with disorder were classified as serious or moderate rather than mild. Reports of interference with life were higher for mood disorders than for anxiety disorders.