Appendix A: Description of DSM-IV Mental Disorders

Introduction

This appendix describes the DSM-IV mental disorders (APA 2000) included in Te Rau Hinengaro: The New Zealand Mental Health Survey.

All mental disorders

The symptoms associated with the individual mental disorders are listed below. These are brief summaries only; they do not itemise all the additional information that was obtained by the survey questionnaire to inform diagnostic classification. *For all disorders, to reach diagnostic threshold the one common criterion required is that the individual must report that their symptoms cause significant disruption in their usual social or occupational functioning, and/or marked distress*. Because this is common to all disorders, it is not restated in the summaries below.

Anxiety disorders

Panic disorder

Panic disorder involves experiencing recurrent panic attacks and, between attacks, being worried and distressed about the possibility of future attacks. Panic attacks are defined as a period of intense fear or discomfort that arises unexpectedly, in which four or more of the following symptoms develop quickly and peak within 10 minutes:

- pounding heart or accelerated heart rate
- sweating
- trembling or shaking
- sensations of shortness of breath or smothering
- feeling of choking
- chest pain or discomfort
- nausea or abdominal distress
- feeling dizzy, lightheaded or faint
- feelings of unreality or being detached from oneself
- fears of losing control or going crazy
- fear of dying
- numbness or tingling sensations
- chills or hot flushes.

At least two panic attacks plus a period of at least a month of persistent worry about having another attack are required for diagnosis.

Agoraphobia

Agoraphobia is anxiety about, or avoidance of, places or situations from which escape might be difficult, or embarrassing, should a panic attack (or panic-like symptoms) occur.

Typically feared situations include being in crowded places, travelling on public transport, and being in shops, elevators or lecture theatres. The feared situations are either avoided altogether (which can then lead to the individual having difficulty leaving the house at all) or are endured with extreme distress. Agoraphobia typically occurs in conjunction with panic disorder (and in such cases it is included in the panic disorder category in this survey), but it may also occur without a history of full panic attacks (in which case it is classified separately as 'agoraphobia without panic').

Specific phobia

Specific phobia is characterised by an intense and enduring fear of a specific object or situation/s. Encountering the feared situation provokes immediate anxiety or panic-like symptoms. Adults with specific phobia usually recognise that the level of fear provoked by the object or situation is excessive, although this insight does not reduce the anxiety they experience. The feared object is avoided or endured with extreme anxiety.

As with all the anxiety disorders, the diagnosis of specific phobia is made only if the fear or the associated avoidant behaviour causes significant interference with the person's usual functioning and/or substantial distress.

Social phobia

Social phobia represents a strong and persistent fear of social or performance situations in which embarrassment might occur. Exposure to the feared situation provokes great anxiety, so it is avoided or endured with dread. Individuals with social phobia are greatly embarrassed by what they consider to be obvious signs of their anxiety (eg, trembling hands, blushing or sweating). They fear others will observe these signs and judge them to be 'weak' or 'stupid' or 'crazy' as a result.

Generalised anxiety disorder

The key feature of generalised anxiety disorder (GAD) is excessive worry and anxiety, occurring on more days than not for a period of at least six months, in connection with several issues or events (ie, not just in relation to one specific issue or event). The individual with GAD finds it difficult to control the worry, and the worry is accompanied by at least three of the following symptoms:

- restlessness or feeling on edge
- being easily fatigued
- difficulty concentrating or mind going blank
- irritability
- muscle tension
- sleep disturbance.

Post-traumatic stress disorder

Post-traumatic stress disorder (PTSD) is characterised by the experience of a specific set of symptoms (see below), of more than one month's duration, which develop following exposure to an extreme traumatic stressor. The stressor is defined as one in which the person has experienced, or witnessed, an event that involved actual or threatened death or serious injury, or threat of physical injury to the individual or others. In response to that event the person must have reacted with fear, helplessness or horror.

The symptom set that subsequently develops involves three components, all three of which must be experienced to receive a diagnosis of PTSD:

- re-experiencing the trauma, as indicated by one or more of the following:
  - recurrent and intrusive distressing recollections of the traumatic event (eg, images or thoughts)
  - recurrent distressing dreams of the event
  - acting or feeling as if the event were recurring (including flashbacks and hallucinations)
  - intense distress or physiological reactivity at exposure to cues that are reminiscent of the event
- avoiding stimuli associated with the traumatic event and the numbing of general responsiveness, as indicated by three or more of the following:
  - efforts to avoid thoughts, feelings or conversations associated with the traumatic event
  - efforts to avoid activities, places or people that arouse recollections of the event
  - an inability to recall an important aspect of the trauma

  - greatly diminished interest or participation in significant activities
  - feelings of detachment or estrangement from others
  - a restricted range of emotion
  - a sense of a foreshortened future
- persistent symptoms of increased arousal, as indicated by two or more of the following:
  - difficulty falling or staying asleep
  - irritability or outbursts of anger
  - difficulty concentrating
  - hypervigilance
  - exaggerated startle response.

Obsessive–compulsive disorder

Obsessive–compulsive disorder (OCD) is characterised by recurrent obsessions and or compulsions (see below) that are severe enough to be time consuming (ie, take more than one hour in the day) or cause marked distress or functional impairment.

Obsessions are intrusive thoughts, ideas, impulses or images the person considers inappropriate or abhorrent, and that they feel they cannot control (although they can recognise they are a product of their own mind). Typical obsessions include thoughts about contamination (eg, from touching doorknobs or shaking hands), repeated doubts (eg, about whether they turned the stove off or whether they have hurt someone in a car accident) or horrific impulses (eg, to harm a loved one or shout an obscenity in church). The individual with obsessions usually attempts to ignore or suppress the obsession or 'neutralise' it with some other thought or action (ie, a compulsion).

Compulsions are repetitive behaviours that are carried out to prevent or reduce the anxiety associated with an obsession or to prevent some dreaded event (eg, washing hands until they are raw to reduce anxiety about contamination or checking doors constantly to ensure they are locked).

Mood disorders

Major depressive disorder

Major depressive disorder consists of one or more episodes of major depression; that is, a period of at least two weeks in which the individual experiences depressed mood (most of the day, nearly every day), or a marked loss of interest in all or almost all usual activities, plus at least four of the following symptoms every day or nearly every day:

- significant weight loss when not dieting, or weight gain or change in appetite
- insomnia or oversleeping
- psychomotor agitation (restlessness) or retardation (being slowed up)
- fatigue or loss of energy
- feelings of worthlessness or excessive or inappropriate guilt
- diminished ability to think or concentrate, or indecisiveness
- recurrent thoughts of death or suicidal thoughts or plans.

These symptoms should constitute a change from previous functioning in order to be criteria for a major depressive episode.

Dysthymia

Dysthymic disorder involves depressed mood for most of the day, for more days than not, for at least two years, plus at least two of the following:

- poor appetite or overeating
- insomnia or oversleeping
- low energy or fatigue
- low self-esteem
- poor concentration or difficulty making decisions
- feelings of hopelessness.

To meet criteria for dysthymia, during the two-year period the person should not have been without the symptoms for more than two months at a time.

Bipolar disorders

Bipolar disorder (subtype I) is characterised by the experience of one or more episodes of mania.

Bipolar II is characterised by the experience of one or more hypomanic episodes, in addition to one or more episodes of major depression.

A manic episode is a distinct period of abnormally and persistently elevated or irritable mood, lasting at least one week, and accompanied by three or more (or, if the mood is only irritable, four or more) of the following symptoms, which should be present to a significant degree:

- inflated self-esteem or grandiosity
- decreased need for sleep (eg, only three hours)

- more talkative than usual or feel pressure to keep talking
- flight of ideas or feeling that thoughts are racing
- distractibility
- increase in goal-directed activity (at work or school, or socially) or psychomotor agitation
- excessive involvement in pleasurable activities that have a high potential for painful consequences (eg, spending sprees, sexual indiscretions, foolish business investments).

Hypomania is a milder form of mania. The symptoms of hypomania are much the same as for mania except they need be present for only four days and they are not severe enough to cause marked impairment in usual functioning.

Substance use disorders

The main substance use disorders are substance abuse and substance dependence. This survey collected information that enabled subclassification of the substance use disorders into alcohol use disorders, drug use disorders, and within drug use disorders marijuana use disorders. The summary provided here is generic across these substance types.

Substance abuse

Substance abuse is a maladaptive pattern of substance use that involves recurrent and significant adverse consequences, namely, one or more of the following:

- repeated failure to fulfil major role obligations at work, school or home
- recurrent substance use in situations in which it is hazardous (eg, driving or operating machinery)
- recurrent substance-related legal problems
- continued substance use despite recurrent social or interpersonal problems (eg, arguments with spouse about consequences of intoxication, or fights while intoxicated).

Substance dependence

Substance dependence is a pattern of use that is characterised by three or more of the following symptoms occurring at any time in the same 12-month period:

- tolerance, as defined by either:
  - a need for markedly increased amounts of the substance to achieve intoxication or the desired effect, or

  - markedly diminished effect with continued use of the same amount of the substance
- withdrawal (a substance-specific set of physiological, behavioural and cognitive symptoms associated with stopping regular use of the substance) or the taking of the substance to avoid withdrawal symptoms
- the substance is often taken in larger amounts or over a longer period than was intended
- a persistent desire or unsuccessful efforts to cut down or control substance use
- a great deal of time spent in activities necessary to obtain the substance
- important social, occupational or recreational activities given up or reduced because of substance use
- the substance use is continued despite its known negative effect on a physical or psychological problem (eg, an ulcer made worse by drinking alcohol).

Eating disorders

Anorexia nervosa

The key feature of anorexia nervosa is a refusal to maintain a minimally normal body weight (eg, less than 85% of that expected for age and height), accompanied by an intense fear of gaining weight and a disturbance in body weight perception (such that the individual sees herself to be overweight when she is actually underweight). To meet criteria for anorexia a woman who would normally menstruate should have experienced an absence of at least three consecutive menstrual cycles.

Bulimia nervosa

Bulimia nervosa involves recurrent episodes of binge eating (consuming an objectively much larger amount of food than would normally be consumed under similar circumstances), with inappropriate compensatory behaviour (eg, self-induced vomiting, use of laxatives or diuretics, fasting, excessive exercise). The episodes of binging and compensatory behaviour both occur at least twice a week for at least three months. These behaviours are accompanied by excessive emphasis on body shape and weight in the individual’s self-evaluation and self-esteem.

Appendix B: Screening Section Ethnicity Questions

The following question was asked of the participant at the beginning of the interview to determine the ethnic group the participant regarded herself or himself as belonging to. For more information, see 12.12.1.

*NZRDA2 Looking at showcard 1, which ethnic group or groups do you belong to?

New Zealand European	1
Māori	2
Samoan	3
Cook Island Māori	4
Tongan	5
Niuean	6
Chinese	7
Indian	8
Other (such as Dutch, Japanese, Tokelauan, etc)	9

Specify other ___________________________________

Don’t know	98
Refused	99

Appendix C: Guiding Principles for the Kaitiaki Group and Research Team

The following principles were established to provide support and guidance to the Kaitiaki Group and researchers of Te Rau Hinengaro: The New Zealand Mental Health Survey (initially called the New Zealand Survey of Mental Health and Wellbeing). These principles also accompany the Protocol for Access to Māori Data.

The principle of Partnership: The entire research endeavour will actively recognise the Treaty of Waitangi as the basis of a joint undertaking between Crown and Māori; the principle of Partnership will be reflected in research practice and implementation of findings.

The principle of Active Protection: In all aspects of the research process the New Zealand Mental Health Survey will endeavour first and foremost to 'do no harm' to Māori and Māori interests.

The principle of Relevance: The New Zealand Mental Health Survey through implementation and application will contribute to health gains for Māori.

The Tikanga principle: All aspects of the New Zealand Mental Health Survey must be consistent with tikanga Māori.

The principle of Reciprocity: The relationships between researchers, participants and communities of interest will ensure reciprocal benefits.

The principle of Development: The New Zealand Mental Health Survey will be consistent with the broad directions of positive Māori development.

The Mātauranga principle: The New Zealand Mental Health Survey will contribute to advancements in knowledge and to other understandings of Māori health. The study is not an end point in itself.

The principle of Human Dignity: Participants in the New Zealand Mental Health Survey will be valued as individuals and afforded due respect.

The principle of Enhancement: The New Zealand Mental Health Survey will lead to an expansion of Māori research capacities, including workforce development and methodological innovations.

The Kaitiaki principle: The New Zealand Mental Health Survey will promote the protection and guardianship of Māori contributions and Māori knowledge.

The principle of Elucidation: The New Zealand Mental Health Survey will contribute to a clarification of Māori mental health status, disability and patterns of health service use.

These principles follow a discussion of the Kaitiaki Group at Ngā Whetu Mārama (Tiaho Mai complex) at Middlemore Hospital on 20 August 1999.

Appendix D: Survey Participant Consent Form

Note: Te Rau Hinengaro: The New Zealand Mental Health Survey was initially called the New Zealand Survey of Mental Health and Wellbeing.

New Zealand Survey of Mental Health and Wellbeing Consent Form

I agree to help the Ministry of Health on the New Zealand Survey of Mental Health and Wellbeing by carrying out the interview.

The survey has been explained to me by the NRB interviewer and I have been given a copy of the brochure to keep.

The National Research Bureau Interviewer has told me that:

- My answers are used only for statistical research.
- My name is not put in or with the questionnaire.
- Nobody can know or find out what my answers were.
- My answers are protected by the Privacy Act.
- Only the survey supervisor may call me to check the interview was done correctly and politely.
- It is my choice to take part. I can stop if I want to.
- There is no disadvantage to me if I don’t take part or stop.
- I have been shown the phone number(s) I can call if I feel upset by the interview.

Signed:____

Print name: ____

Date: _____ /______ /_______

Interviewer’s signature:____________________________________ Int. No. ____

Request for interpreters			
English	I wish to have an interpreter	Yes	No
Māori	E hiahia ana ahau ki tetahi kaiwhakamaori/kaiwhaka pakeha	Ae	Kao
Samoan	Ou te mana'o ia i ai se fa'amatala upu	Ioe	Leai
Tongan	Oku ou fiema'u ha fakatonulea	Io	Ikai
Cook Island	Ka inangaro au i tetai tangata uri reo	Ae	Kare
Niuean	Fia manako au ke fakaaoga e taha tagata fakahokohoko kupu	E	Nakai

Appendix E: Mental Health Research and Development Strategy Website Content

Information about Te Rau Hinengaro: The New Zealand Mental Health Survey and the documents listed below are available from the Mental Health Research and Development Strategy website (http://www.mhrds.govt.nz).

Mental Health Research and Development Strategy. 2003. *The Mental Health & Well Being Survey: Te Rau Hinengaro 2003–4*. Brochure. Wellington: Ministry of Health, Health Research Council of New Zealand, Mental Health Research and Development Strategy, Alcohol Advisory Council of New Zealand.

Mental Health Research and Development Strategy. 2003. *The Mental Health & Well Being Survey: Te Rau Hinengaro 2003–4: Information booklet*. Wellington: Health Research Council of New Zealand, Ministry of Health, Alcohol Advisory Council of New Zealand.

Oakley Browne MA, Durie M, Wells JE. 2000. *The New Zealand Survey of Mental Health and Well-being: 'Te Rau Hinengaro': A pilot study*. Auckland: Auckland UniServices Ltd.

Te Rau Hinengaro: New Zealand Mental Health Epidemiology Study. 2003. *Guiding Principles for the Kaitiaki Group and Research Team* [reproduced in Appendix C].

Te Rau Hinengaro: New Zealand Mental Health Epidemiology Study, Kaitiaki Group. 2003. *Protocols for Access To and Use of Māori Dataset*.

The World Mental Health Organisation (WHO) World Mental Health Initiative: International survey programme [largely reproduced from Oakley Browne et al (2000)].

References

Adolescent Health Research Group. 2003. *New Zealand Youth: A profile of their health and wellbeing*. Auckland: University of Auckland.

Ahmad OB, Boschi-Pinto C, Lopez A, et al. 2000. *Age Standardization of Rates: A new WHO standard*. Geneva: World Health Organization. URL: http://www3.who.int/whosis/discussion_papers/pdf/paper31.pdf (accessed 11 December 2005).

Ajwani S, Blakely T, Robson B, et al. 2003. *Decades of Disparity: Ethnic mortality trends in New Zealand 1980–1999*. Wellington: Ministry of Health and University of Otago.

Allen J, Laycock J. 1997. Major mental illness in the Pacific: a review. *Pacific Health Dialog* 4: 105–18.

Alonso J, Angermeyer MC, Bernert S, et al. 2004a. Disability and quality of life impact of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica* 420 (suppl.): 38–46.

Alonso J, Angermeyer MC, Bernert S, et al. 2004b. Prevalence of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica* 420 (suppl.): 21–7.

Alonso J, Angermeyer MC, Bernert S, et al. 2004c. Psychotropic drug utilization in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica* 420 (suppl.): 55–64.

Alonso J, Angermeyer MC, Bernert S, et al. 2004d. Sampling and methods of the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica* 420 (suppl.): 8–20.

Alonso J, Angermeyer MC, Bernert S, et al. 2004e. Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica* 420 (suppl.): 47–54.

Alonso J, Angermeyer MC, Lepine JP. 2004f. The European Study of the Epidemiology of Mental Disorders (ESEMeD) project: an epidemiological basis for informing mental health policies in Europe. *Acta Psychiatrica Scandinavica* 420 (suppl.): 5–7.

Alonso J, Ferrer M, Romera B, et al. 2002. The European Study of the Epidemiology of Mental Disorders (ESEMeD/MHEDEA 2000) project: rationale and methods. *International Journal of Methods in Psychiatric Research* 11: 55–67.

Andrews G. 1991. *The Tolkien Report: A description of a model mental health service*. Sydney: Clinical Research Unit for Anxiety Disorders, St Vincent's Hospital.

Andrews G. 1996. Comorbidity and the general neurotic syndrome. *British Journal of Psychiatry* 168 (suppl. 30): 76–84.

Andrews G, Anstey K, Brodaty H, et al. 1999a. Recall of depressive episode 25 years previously. *Psychological Medicine* 29: 787–91.

Andrews G, Hall W, Teesson M, et al. 1999b. *National Mental Health Strategy: The Mental Health of Australians*. Canberra, ACT: Commonwealth Department of Health and Aged Care.

Andrews G, Henderson S, Hall W. 2001. Prevalence, comorbidity, disability and service utilisation: overview of the Australian National Mental Health Survey. *British Journal of Psychiatry* 178: 145–53.

Andrews G, Peters L. 1998. The psychometric properties of the Composite International Diagnostic Interview. *Social Psychiatry and Psychiatric Epidemiology* 33: 80–8.

Andrews G, Slade T, Issakidis C. 2002. Deconstructing current comorbidity: data from the Australian National Survey of Mental Health and Well-being. *British Journal of Psychiatry* 181: 306–14.

Anthony JC, Folstein M, Romanoski AJ, et al. 1985. Comparison of the lay Diagnostic Interview Schedule and a standardized psychiatric diagnosis: experience in eastern Baltimore. *Archives of General Psychiatry* 42: 667–75.

APA. 1980. *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed). Washington, DC: American Psychiatric Association.

APA. 1987. *Diagnostic and Statistical Manual of Mental Disorders: DSM-III-R* (3rd ed). Washington, DC: American Psychiatric Association.

APA. 1994. *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV* (4th ed). Washington, DC: American Psychiatric Association.

APA. 2000. *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR* (4th ed, text revision). Washington, DC: American Psychiatric Association.

Baravilala W. 2001. Suicide in the Pacific: a mental health epidemic. *Pacific Health Dialog* 8: 4–5.

Baxter J, Kokaua J, Wells JE, et al. in press. Ethnic comparisons of the 12-month prevalence of mental disorders and treatment contact in Te Rau Hinengaro: The New Zealand Mental Health Survey (NZMHS). *Australian and New Zealand Journal of Psychiatry*.

Beautrais AL. 2001. Suicides and serious suicide attempts: two populations or one? *Psychological Medicine* 31: 837–45.

Beautrais AL, Collings SCD, Ehrhardt P, et al. 2005. *Suicide Prevention: A review of evidence of risk and protective factors, and points of effective intervention*. Wellington: Canterbury Suicide Project, Christchurch School of Medicine & Health Sciences.

Beautrais AL, Joyce PR, Mulder RT. 2000. Unmet need following serious suicide attempt: follow-up of 302 individuals for 30 months. In: G Andrews, S Henderson (eds), *Unmet Need in Psychiatry* pp. 245–55. Cambridge: Cambridge University Press.

Bickenbach JE, Chatterji S, Badley EM, et al. 1999. Models of disablement, universalism and the international classification of impairments, disabilities and handicaps. *Social Science and Medicine* 48: 1173–87.

Bijl RV, de Graaf R, Hiripi E, et al. 2003. The prevalence of treated and untreated mental disorders in five countries. *Health Affairs (Millwood)* 22: 122–33.

Bijl RV, Ravelli A. 2000. Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Psychological Medicine* 30: 657–68.

Boyd JH, Burke JD, Gruenberg E, et al. 1984. Exclusion criteria of DSM-III: study of co-occurrence of hierarchy-free syndromes. *Archives of General Psychiatry* 41: 983–9.

Breslau J, Kendler KS, Su M, et al. 2005. Lifetime risk and persistence of psychiatric disorders across ethnic groups in the United States. *Psychological Medicine* 35: 317–27.

Bridgeman G. 1996. *Mental Illness and People from the Island Nations of the Pacific*. Wellington: Mental Health Foundation of New Zealand.

Brinded PM, Simpson AI, Laidlaw TM, et al. 2001. Prevalence of psychiatric disorders in New Zealand prisons: a national study. *Australian and New Zealand Journal of Psychiatry* 35: 166–73.

Broadhead WE, Blazer DG, George LK, et al. 1990. Depression, disability days, and days lost from work in a prospective epidemiologic survey. *JAMA* 264: 2524–8.

Brown GW, Harris TO, Eales MJ. 1996. Social factors and comorbidity of depressive and anxiety disorders. *British Journal of Psychiatry* 168 (suppl.): 50–7.

Brown S, Inskip H, Barraclough B. 2000. Causes of the excess mortality of schizophrenia. *British Journal of Psychiatry* 177: 212–7.

Brugha TS, Bebbington PE, Jenkins R. 1999. A difference that matters: comparisons of structured and semi-structured psychiatric diagnostic interviews in the general population. *Psychological Medicine* 29: 1013–20.

Buist-Bouwman MA, de Graaf R, Vollebergh WAM, et al. 2005. Comorbidity of physical and mental disorders and the effect on work-loss days. *Acta Psychiatrica Scandinavica* 111: 436–43.

Carney RM, Freedland KE, Miller GE, et al. 2002. Depression as a risk factor for cardiac mortality and morbidity: a review of potential mechanisms. *Journal of Psychosomatic Research* 53: 897–902.

Christie KA, Burke JDJ, Regier DA, et al. 1988. Epidemiologic evidence for early onset of mental disorders and higher risk of drug abuse in young adults. *American Journal of Psychiatry* 145: 971–5.

Ciechanowski PS, Katon WJ, Russo JE. 2000. Depression and diabetes. *Archives of Internal Medicine* 160: 3278–85.

Cochran WG. 1977. *Sampling Techniques* (3rd ed). New York: Wiley.

Collings S, Blakely T, Atkinson J, et al. 2004. *Suicide Trends and Social Factors New Zealand 1981 to 1999: Analyses from the New Zealand Census–Mortality Study*. Wellington: Ministry of Health.

Collings SCD, Beautrais AL. 2005. *Suicide Prevention in New Zealand: A contemporary perspective: Social explanations for suicide in New Zealand*. Wellington: Ministry of Health.

Cook L, Didham R, Khawaja M. 1999. *On the Demography of Pacific People in New Zealand*. Expanded version of the Government Statistician's keynote address at the Pacific Vision Conference held in Auckland 27–30 July 1999. Wellington: Statistics New Zealand.

Cooper B, Singh B. 2000. Population research and mental health policy: bridging the gap. *British Journal of Psychiatry* 176: 407–11.

Cooper L, Peters L, Andrews G. 1998. Validity of the Composite International Diagnostic Interview (CIDI) psychosis module in a psychiatric setting. *Journal of Psychiatric Research* 32: 361–8.

Corbett T. 1999. The development of recommendations for the use of physical activity for diabetes management with Pacific people in New Zealand. *Pacific Health Dialog* 6: 245–52.

Crampton P, Davis P. 1998. Measuring deprivation and socioeconomic status: why and how? *New Zealand Public Health Report* 5: 81–4.

Davidson S, Judd F, Jolley D, et al. 2001. Cardiovascular risk factors for people with mental illness. *Australian and New Zealand Journal of Psychiatry* 35: 196–202.

Demyttenaere K, Bruffaerts R, Posada-Villa J, et al. 2004. Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *JAMA* 291: 2581–90.

Demyttenaere K, Enzlin P, Dewe W, et al. 2001. Compliance with antidepressants in a primary care setting, 2: the influence of gender and type of impairment. *Journal of Clinical Psychiatry* 62: 34–7.

Dohrenwend BP. 2000. The role of adversity and stress in psychopathology: some evidence and its implications for theory and research. *Journal of Health and Social Behavior* 41: 1–19.

Dohrenwend BP, Dohrenwend BS. 1982. Perspectives on the past and future of psychiatric epidemiology. *American Journal of Public Health* 72: 1271–9.

EchoHawk M. 1997. Suicide: the scourge of Native American people. *Suicide and Life-Threatening Behavior* 27: 60–7.

Elandt-Johnson RC, Johnson NL. 1980. Estimation of waiting time onset distribution from retrospective data. In: RC Elandt-Johnson, NL Johnson (eds), *Survival Models and Data Analysis* pp. 403–11. New York: John Wiley and Sons.

Everitt BS. 1995. *The Cambridge Dictionary of Statistics in Medical Science*. Cambridge: Cambridge University Press.

Feehan M, McGee R, Raja SN, et al. 1994. DSM-III-R disorders in New Zealand 18-year-olds. *Australian and New Zealand Journal of Psychiatry* 28: 87–99.

Fergusson DM, Horwood LJ. 2001. The Christchurch Health and Development Study: review of findings on child and adolescent mental health. *Australian and New Zealand Journal of Psychiatry* 35: 287–96.

Fergusson DM, Woodward LJ, Horwood LJ. 2000. Risk factors and life processes associated with the onset of suicidal behaviour during adolescence and early adulthood. *Psychological Medicine* 30: 23–9.

Finau S, Tukuitonga C. 1999. Pacific peoples in New Zealand. In: P Davis, K Dew (eds), *Health and Society in Aotearoa New Zealand*. Melbourne: Oxford University Press.

First MB. 2002. DSM-IV and psychiatric epidemiology. In: MT Tsuang, M Tohen (eds), *Textbook in Psychiatric Epidemiology* (2nd ed). New York: Wiley-Liss.

Foliaki SA. 1997. Migration and mental health: the Tongan experience. *International Journal of Mental Health* 26: 36–54.

Freedman DX. 1991. Foreword. In: LN Robbins, DA Regier (eds), *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*. New York: Free Press.

Gaines P, Bower A, Buckingham W, et al. 2003. *New Zealand Mental Health Classification and Outcomes Study: Brief report*. Wellington: Health Research Council.

Galbaud Du Fort G, Newmand S, Bland R. 1993. Psychiatric comorbidity and treatment seeking: sources of selection bias in the study of clinical populations. *Journal of Nervous and Mental Disease* 181: 467–74.

Goldsmith SK, Pellmar TC, Kleinman AM, et al. 2002. *Reducing Suicide: A national imperative*. Washington, DC: National Academies Press.

Graubard BI, Korn EL. 1999. Predictive margins with survey data. *Biometrics* 55: 652–9.

Gray A. 2003. *Impact of Various Oversampling Designs on Key Variables of the New Zealand Health Survey: Summary of findings*. Wellington: National Research Bureau, Ministry of Health.

Gray SA, Haslett. 2004. Confidence intervals for proportion estimated from complex sample designs. *Journal of Official Statistics* 20: 705–23.

Groves RM, Floyd FJ, Couper MP, et al. 2004. *Survey Methodology*. New York: Wiley.

Harris EC, Barraclough B. 1998. Excess mortality of mental disorder. *British Journal of Psychiatry* 173: 11–53.

Harrison G, Glazebrook C, Brewin J, et al. 1997. Increased incidence of psychotic disorders in migrants from the Caribbean to the United Kingdom. *Psychological Medicine* 27: 799–806.

Hasin DS, Grant BF. 2004. The co-occurrence of DSM-IV alcohol abuse in DSM-IV alcohol dependence: results of the National Epidemiologic Survey on Alcohol and Related Conditions on heterogeneity that differ by population subgroup. *Archives of General Psychiatry* 61: 891–6.

Haslett SJ, Statistics New Zealand. c1999. *1996/97 New Zealand Health Survey Statistical Methodology*. Palmerston North: College of Sciences, Massey University.

Hawton K, van Heeringen K. 2000. *The International Handbook of Suicide and Attempted Suicide*. New York: Wiley.

Hays RD, Wells KB, Sherbourne CD, et al. 1995. Functioning and well-being outcomes of patients with depression compared with chronic general medical illnesses. *Archives of General Psychiatry* 52: 11–19.

Henderson S, Andrews G, Hall W. 2000. Australia's mental health: an overview of the general population survey. *Australian and New Zealand Journal of Psychiatry* 34: 197–205.

Hornblow AR, Bushnell JA, Wells JE, et al. 1990. Christchurch Psychiatric Epidemiology Study: use of mental health services. *New Zealand Medical Journal* 103: 415–7.

Horvitz DG, Thompson DJ. 1952. A generalization of sampling without replacement from a finite universe. *Journal of the American Statistical Association* 47: 663–85.

Horwood J, Ferguson DM. 1998. *Psychiatric Disorder and Treatment Seeking in a Birth Cohort of Young Adults*. Wellington: Ministry of Health.

Hunter E, Harvey D. 2002. Indigenous suicide in Australia, New Zealand, Canada, and the United States. *Emergency Medicine* 14: 14–23.

Indian Health Service, Department of Health and Human Services, Office of Public Health, et al. 1999. *Trends in Indian Health: 1998–1999*. Rockville, MD: Indian Health Service Division of Program Statistics, US Department of Health and Human Services.

Jablensky A, McGrath J, Herrman H, et al. 2000. Psychotic disorders in urban areas: an overview of the Study on Low Prevalence Disorders. *Australian and New Zealand Journal of Psychiatry* 34: 221–36.

Janca A, Robins LN, Bucholz KK, et al. 1992. Comparison of Composite International Diagnostic Interview and clinical DSM-III-R criteria checklist diagnoses. *Acta Psychiatrica Scandinavica* 85: 440–3.

Jenkins R. 2003. Making psychiatric epidemiology useful: the contribution of epidemiology to government policy. *International Review of Psychiatry* 15: 188–200.

Jenkins R, Bebbington PE, Brugha T, et al. 1997a. The National Psychiatric Morbidity surveys of Great Britain: strategy and methods. *Psychological Medicine* 27: 765–74.

Jenkins R, Lewis G, Bebbingto PE, et al. 1997b. The National Psychiatric Morbidity surveys of Great Britain: initial findings from the household survey. *Psychological Medicine* 27: 775–89.

Jensen J. 1988. *Income Equivalences and the Estimation of Family Expenditures on Children*. Wellington: Department of Social Welfare.

Judd LL, Kessler RC, Paulus MP, et al. 1998. Comorbidity as a fundamental feature of generalized anxiety disorders: results from the National Comorbidity Study (NCS). *Acta Psychiatrica Scandinavica* 393 (suppl.): 6–11.

Kalsbeek WD. 2003. Sampling minority groups in health surveys. *Statistics in Medicine* 22: 1527–49.

Kendler KS. 1996. Major depression and generalised anxiety disorder: same genes, (partly) different environments: revisited. *British Journal of Psychiatry* 186 (suppl.): 68–75.

Kendler KS, Gallagher TJ, Abelson JM, et al. 1996. Lifetime prevalence, demographic risk factors, and diagnostic validity of nonaffective psychosis as assessed in a US community sample: the National Comorbidity Survey. *Archives of General Psychiatry* 53: 1022–31.

Kendrick T. 1996. Cardiovascular and respiratory risk factors and symptoms among general practice patients with long-term mental illness. *British Journal of Psychiatry* 169: 733–39.

Kessler RC. 1994. The National Comorbidity Survey of the United States. *International Review of Psychiatry* 6: 365–76.

Kessler RC, Abelson J, Demler O, et al. 2004a. Clinical calibration of DSM-IV diagnoses in the World Mental Health (WMH) version of the World Health Organization (WHO) Composite International Diagnostic Interview (WMHCIDI). *International Journal of Methods in Psychiatric Research* 13: 122–39.

Kessler RC, Barker PR, Colpe LJ, et al. 2003a. Screening for serious mental illness in the general population. *Archives of General Psychiatry* 60: 184–9.

Kessler RC, Berglund P, Borges G, et al. 2005a. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990–1992 to 2001–2003. *JAMA* 293: 2487–95.

Kessler RC, Berglund P, Chiu WT, et al. 2004b. The US National Comorbidity Survey Replication (NCS-R): design and field procedures. *International Journal of Methods in Psychiatric Research* 13: 69–92.

Kessler RC, Berglund P, Demler O, et al. 2005b. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62: 593–602.

Kessler RC, Berglund PA, Bruce ML, et al. 2001. The prevalence and correlates of untreated serious mental illness. *Health Services Research* 36: 987–1007.

Kessler RC, Berglund PA, Foster CL, et al. 1997a. Social consequences of psychiatric disorders II: teenage parenthood. *American Journal of Psychiatry* 154: 1405–11.

Kessler RC, Borges G, Walters EE. 1999a. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry* 56: 617–26.

Kessler RC, Chui WT, Demler O, et al. 2005c. Prevalence, severity and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62: 617–27.

Kessler RC, Crum RM, Warner LA, et al. 1997b. Lifetime co-occurrence of DSM-III-R alcohol abuse and dependence with other psychiatric disorders in the national comorbidity survey. *Archives of General Psychiatry* 54: 313–21.

Kessler RC, Demler O, Frank RG, et al. 2005d. Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine* 352: 2515–23.

Kessler RC, Foster CL, Saunders WB, et al. 1995a. Social consequences of psychiatric disorders I: educational attainment. *American Journal of Psychiatry* 152: 1026–32.

Kessler RC, Frank RG, Edlund M, et al. 1997c. Differences in the use of psychiatric outpatient services between the United States and Ontario. *New England Journal of Medicine* 336: 551–7.

Kessler RC, McGonagle KA, Zhao SN, et al. 1994. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Archives of General Psychiatry* 51: 8–19.

Kessler RC, Merikangas KR. 2004. The National Comorbidity Survey Replication (NCS-R): background and aims. *International Journal of Methods in Psychiatric Research* 13: 60–8.

Kessler RC, Nelson CB, McGonagle KA, et al. 1996. Comorbidity of DSM-III-R major depressive disorder in the general population: results from the US National Comorbidity Survey. *British Journal of Psychiatry* 168 (suppl.): 17–30.

Kessler RC, Olfson M, Berglund PA. 1998a. Patterns and predictors of treatment contact after first onset of psychiatric disorders. *American Journal of Psychiatry* 155: 62–9.

Kessler RC, Ormel J, Demler O, et al. 2003b. Comorbid mental disorders account for the role impairment of commonly occurring chronic physical disorders: results from the National Comorbidity Survey. *Journal of Occupational and Environmental Medicine* 45: 1257–66.

Kessler RC, Sonnega A, Bromet EJ, et al. 1995b. Posttraumatic stress disorder in the National Comorbidity Survey. *Archive of General Psychiatry* 52: 1048–60.

Kessler RC, Stang P, Wittchen HU, et al. 1999b. Lifetime co-morbidities between social phobia and mood disorders in the US National Comorbidity Survey. *Psychological Medicine* 29: 555–67.

Kessler RC, Stang PE, Wittchen HU, et al. 1998b. Lifetime panic–depression comorbidity in the National Comorbidity Survey. *Archives of General Psychiatry* 55: 801–8.

Kessler RC, Stein MB, Berglund P. 1998c. Social phobia subtypes in the National Comorbidity Survey. *American Journal of Psychiatry* 155: 613–9.

Kessler RC, Ustun B. 2000. World Mental Health 2000 Initiative: mental health can have a serious impact on quality of life. A new initiative has been set up which will study this in more depth. *Hospital Management International*: 195–6.

Kessler RC, Ustun B. 2004. The World Mental Health (WMH) Survey Initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). *International Journal of Methods in Psychiatric Research* 13: 93–121.

Kessler RC, Walters EE. 2002. The National Comorbidity Survey. In: MT Tsuang, M Tohen (eds), *Textbook in Psychiatric Epidemiology* (2nd ed). New York: Wiley-Liss.

Kessler RC, Walters EE, Forthofer MS. 1998d. The social consequences of psychiatric disorders III: probability of marital stability. *American Journal of Psychiatry* 55: 1092–6.

Kessler RC, Zhao S, Katz SJ, et al. 1999c. Past-year use of outpatient services for psychiatric problems in the National Comorbidity Survey. *American Journal of Psychiatry* 156: 115–23.

Kish L. 1965. *Survey Sampling*. New York: Wiley.

Kohn R, Dohrenwend BP, Mirotznik J. 1998. Epidemiological findings on selected psychiatric disorders in the general population. In: BP Dohrenwend (ed), *Adversity, Stress and Psychopathology* pp. 235–84. New York: Oxford University Press.

Korn EL, Graubard BI. 1998. Confidence intervals for proportions with small expected number of positive counts estimated from survey data. *Survey Methodology* 24: 193–201.

Korn EL, Graubard BI. 1999. *Analysis of Health Surveys*. Wiley Series in Probability and Statistics (survey methodology section). New York: Wiley.

Kruijshaar ME, Hoeymans N, Bijl RV, et al. 2003. Levels of disability in major depression: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Journal of Affective Disorders* 77: 53–64.

Lee J. 1981. Covariance adjustment of rates based on the multiple logistic regression model. *Journal of Chronic Diseases* 34: 415–26.

Leenaars A. In press. Indigenous suicide: a call to action. *Archives of Suicide Research.*

Leon AC, Olfson M, Portera L, et al. 1997. Assessing psychiatric impairment in primary care with the Sheehan Disability Scale. *International Journal of Psychiatry in Medicine* 27: 93–105.

Macpherson C. 1996. Pacific Islands identity and community. In: P Spoonley, D Pearson, C Macpherson (eds), *Nga Patai: Racism and ethnic relations in Aotearoa/New Zealand*. Palmerston North: Dunmore Press.

MaGPIe. 2001. Psychological problems in New Zealand primary healthcare: a report on the pilot phase of the Mental Health and General Practice Investigation (MaGPIe). *New Zealand Medical Journal* 114: 13–16.

MaGPIe. 2003. The nature and prevalence of psychological problems in New Zealand primary healthcare: a report on Mental Health and General Practice Investigation (MaGPIe). *New Zealand Medical Journal* 116: U379.

MaGPIe. 2005. Mental disorders among Māori attending their general practitioner. *Australian and New Zealand Journal of Psychiatry*: 401–6.

McKibben C. 2004. Assessing disability in older patients with schizophrenia: results from the WHODAS II. *Journal of Nervous and Mental Disease* 192: 405–13.

Mechanic D. 2003. Is the prevalence of mental disorders a good measure of the need for services? *Health Affairs* 22: 8–20.

Mental Health Commission. 1998. *An Amalgamation of the Commission's Two Reports to the Minister of Health for the Period April–June 1998 and for the Period July 1997–March 1998*. Wellington: Mental Health Commission.

Mental Health Commission. 1999. *New Zealand's National Mental Health Strategy: Review of progress*. Wellington: Mental Health Commission.

Mental Health Commission. 2002a. *Report on Progress 2000/2001*. Wellington: Mental Health Commission.

Mental Health Commission. 2002b. *Report on Progress 2001/02 toward Implementing the Blueprint for Mental Health Services in New Zealand*. Wellington: Mental Health Commission.

Mental Health Commission. 2004a. *Journeys towards Equality: Taking stock of New Zealand's efforts to reduce discrimination against people with experience of mental illness*. Wellington: Mental Health Commission.

Mental Health Commission. 2004b. *Report on Progress 2002/2003: Towards implementing the Blueprint for Mental Health Services in New Zealand*. Wellington, New Zealand: Mental Health Commission.

Minister of Health. 1997. *Moving Forward: The National Mental Health Plan for More and Better Services*. Wellington: Ministry of Health.

Minister of Health. 1999. *Taking the Pulse: The 1996/97 New Zealand Health Survey*. Wellington: Ministry of Health.

Minister of Health. 2000. *New Zealand Health Strategy*. Wellington: Ministry of Health.

Minister of Health. 2005. *Te Tāhuhu: Improving Mental Health 2005–2015: The Second New Zealand Mental Health and Addiction Plan*. Wellington: Ministry of Health.

Minister of Health, Associate Minister of Health. 2002. *Whakatātaka: Māori Health Action Plan 2002–2005*. Wellington: Ministry of Health.

Ministry of Health. 1994. *Looking Forward: Strategic directions for the mental health services*. Wellington: Ministry of Health.

Ministry of Health. 2001a. *National Plan 2001–2003: Project to counter stigma and discrimination associated with mental illness*. Wellington: Ministry of Health.

Ministry of Health. 2001b. *Suicide Trends in New Zealand 1978–98*. Wellington: New Zealand Health Information Service.

Ministry of Health. 2002. *Te Puāwaitanga: Māori Mental Health National Strategic Framework*. Wellington: Ministry of Health.

Ministry of Health. 2004a. *The Health of New Zealand: Total population*. Wellington: Ministry of Health.

Ministry of Health. 2004b. *A Portrait of Health: Key results of the 2002/03 New Zealand Health Survey*. Wellington: Ministry of Health.

Ministry of Health. 2005a. *Suicide Facts: Provisional 2002 all-ages statistics*. Wellington: Ministry of Health. URL: http://www.moh.govt.nz/moh.nsf/0/58AF8672C8E29710CC256FDA007BF57A/$File/suicidefacts2002.pdf (accessed 8 September 2005).

Ministry of Health. 2005b. *Te Orau Ora: Pacific Mental Health Profile*. Wellington: Ministry of Health.

Ministry of Health, ALAC. 2001. *National Alcohol Strategy 2000–2003*. Wellington: Ministry of Health and Alcohol Advisory Council of New Zealand.

Ministry of Pacific Island Affairs. 2003. *Ala Fou: New Pathways: Strategic directions for Pacific youth in New Zealand*. Wellington: Ministry of Pacific Island Affairs.

Ministry of Youth Affairs, Ministry of Health, Te Puni Kōkiri. 1998. *In Our Hands: New Zealand Youth Suicide Prevention Strategy*. Wellington: Ministry of Youth Affairs, Ministry of Health, Te Puni Kōkiri.

Murray CJ, Lopez AD (eds). 1996a. *The Global Burden of Disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020.* Vol 1, Global Burden of Disease and Injury Series. Boston: Harvard School of Public Health (on behalf of the World Health Organization).

Murray CJ, Lopez AD. 1996b. *Global Health Statistics: A compendium of incidence, prevalence and mortality estimates for over 200 conditions*. Global Burden of Disease and Injury Series. Cambridge, MA: Harvard University Press (on behalf of the World Health Organization and World Bank).

Murray CJ, Lopez AD. 1996c. *Neuro-psychiatric Disorders and Global Health: The epidemiology of schizophrenia, dementia, substance abuse, epilepsy and affective, neurotic and stress related disorders*. Cambridge, MA: Harvard University Press.

Myers JK, Weissman MM, Tischler GL, et al. 1984. Six-month prevalence of psychiatric disorder in three communities: 1980 to 1982. *Archives of General Psychiatry* 41: 959–67.

Nada-Raja S, Skegg K, Langley J, et al. 2004. Self-harming behaviours in a population-based sample of young adults. *Suicide and Life-Threatening Behaviour* 34: 177–86.

Narrow WE, Rae DS, Robins LN, et al. 2002. Revised prevalence estimates of mental disorders in the United States: using a clinical significance criterion to reconcile 2 surveys' estimates. *Archives of General Psychiatry* 59: 115–23.

Narrow WE, Regier DA, Rae DS, et al. 1993. Use of services by persons with mental and addictive disorders: findings from the National Institute of Mental Health Epidemiologic Catchment Area Program. *Archives of General Psychiatry* 50: 95–107.

New Zealand Health Information Service. 2004. *Mental Health: Service use in New Zealand 2002*. Wellington: Ministry of Health.

New Zealand Health Information Service. 2005. *Selected Morbidity Data for Publicly Funded Hospitals 2001/02*. Wellington: New Zealand Health Information Service.

O'Brien KM, Vincent NK. 2003. Psychiatric comorbidity in anorexia and bulimia nervosa: nature prevalence, and causal relationships. *Clinical Psychology Review* 23: 57–74.

Oakley Browne MA, Durie M, Wells E. 2000. *The New Zealand Survey of Mental Health and Well-being, Te Rau Hinengaro: A pilot study*. Auckland: Auckland UniServices Ltd.

Oakley Browne MA, Joyce PR, Wells JE, et al. 1989. Christchurch Psychiatric Epidemiology Study Part II: six month and other period prevalences of specific psychiatric disorders. *Australian and New Zealand Journal of Psychiatry* 23: 327–40.

Olfson M, Kessler RC, Berglund PA, et al. 1998. Psychiatric disorder onset and first treatment contact in the United States and Ontario. *American Journal of Psychiatry* 155: 1415–22.

Ormel J, Kempen GIJM, Deeg DJH, et al. 1998. Functioning, wellbeing, and health perception in late middle-aged and older people: comparing the effects of depressive symptoms and chronic medical conditions. *American Geriatrics Society* 46: 39–48.

Ormel J, Von Korff M, Oldehinkel AJ, et al. 1999. Onset of disability in depressed and non-depressed primary care patients. *Psychological Medicine* 29: 847–53.

Ormel J, Von Korff M, Ustun TB, et al. 1994. Common mental disorders and disability across cultures. *JAMA* 272: 1741–8.

Patten SB. 2003. Recall bias and major depression lifetime prevalence. *Social Psychiatry and Psychiatric Epidemiology* 38: 290–6.

Pirkis J, Burgess P, Dunt D. 2000. Suicidal ideation and suicide attempts among Australian adults. *Crisis: Journal of Crisis Intervention & Suicide* 21: 16–25.

Pomare EW, de Boer GM. 1988. *Hauora: Māori Standards of Health: A study of the years 1970–1984*. Wellington: Medical Research Council and Department of Health.

Regier DA, Farmer ME, Rae DS, et al. 1990. Comorbidity of mental disorders with alcohol and other drug abuse. *JAMA* 264: 2511–8.

Regier DA, Kaelber CT, Rae DS, et al. 1998. Limitations of diagnostic criteria and assessment instruments for mental disorders: implications for research and policy. *Archives of General Psychiatry* 55: 109–15.

Regier DA, Narrow WE, Rae DS, et al. 1993. The de facto US mental and addictive disorders service system: epidemiologic catchment area prospective 1-year prevalence rates of disorders and services. *Archives of General Psychiatry* 50: 85–94.

Rehm J, Room R, Monteiro M, et al. 2004. Alcohol use. In: M Ezzzati, AD Lopez, A Rodgers, et al (eds), *Comparative Quantification of Health Risks: Global and regional burden of disease attributable to selected major risk factors*, Vol 1, pp. 959–1108. Geneva: World Health Organization.

Rehm J, Ustun TB, Saxena S, et al. 1999. On the development and psychometric testing of the WHO screening instrument to assess disablement in the general population. *International Journal of Methods in Psychiatric Research* 8: 110–22.

Rhodes AE, Fung K. 2004. Self-reported use of mental health services versus administrative records: care to recall? *International Journal of Methods in Psychiatric Research* 13: 165–75.

Rhodes AE, Lin E, Mustard CA. 2002. Self-reported use of mental health services versus administrative records: should we care? *International Journal of Methods in Psychiatric Research* 11: 125–33.

Robins LN, Helzer JE, Croughan J, et al. 1981. National Institute of Mental Health Diagnostic Interview Schedule: its history, characteristics, and validity. *Archives of General Psychiatry* 38: 381–9.

Robins LN, Helzer JE, Weissman MM, et al. 1984. Lifetime prevalence of specific psychiatric disorders in three sites. *Archives of General Psychiatry* 41: 949–58.

Robins LN, Locke BZ, Regier DA. 1991. An overview of psychiatric disorders in America. In: LN Robins, DA Regier (eds), *Psychiatric Disorders in America: The Epidemiological Catchment Area Study* pp. 328–66. New York: Free Press.

Robins LN, Regier DA. 1991. *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*. New York: Free Press.

Robins LN, Wing J, Wittchen HU, et al. 1988. The Composite International Diagnostic Interview: an epidemiologic instrument suitable for use in conjunction with different diagnostic systems and in different cultures. *Archives of General Psychiatry* 45: 1069–77.

Rodriguez BF, Weisberg RB, Pagano ME, et al. 2004. Frequency and patterns of psychiatric comorbidity in a sample of primary care patients with anxiety disorders. *Comprehensive Psychiatry* 45: 129–37.

Romans-Clarkson SE, Walton VA, Herbison GP, et al. 1988. Marriage, motherhood and psychiatric morbidity in New Zealand. *Psychological Medicine* 18: 983–90.

Romans-Clarkson SE, Walton VA, Herbison GP, et al. 1990. Psychiatric morbidity among women in urban and rural New Zealand: psycho-social correlates. *British Journal of Psychiatry* 156: 84–91.

Rowe CL, Liddle HA, Greenbaum PE, et al. 2004. Impact of psychiatric comorbidity on treatment of adolescent drug abusers. *Journal of Substance Abuse Treatment* 26: 129–40.

Roy-Byrne PP, Stang P, Wittchen HU, et al. 2000. Lifetime panic–depression comorbidity in the National Comorbidity Survey: association with symptoms, impairment, course and help-seeking. *British Journal of Psychiatry* 176: 229–35.

Russell DG, Parnell WR, Wilson NC. 1999. *NZ Food: NZ People: Key results of the 1997 National Nutrition Survey*. Wellington: Ministry of Health. URL: http://www.moh.govt.nz (accessed 11 December 2005).

Salmond C, Crampton P, Sutton F. 1998. *NZ Dep 96 Index of Deprivation: Instruction book*. Wellington: Health Services Research Centre.

Sanderson K, Andrews G. 2002. Prevalence and severity of mental health-related disability and relationship to diagnosis. *Psychiatric Services* 53: 80–6.

Sargent M, Baxter J. 2005. *Māori Child and Youth Mortality 2002/2003: A report prepared for the New Zealand Child and Youth Mortality Review Committee*. Otago: Ngai Tahu Māori Health Research Unit, University of Otago.

Sawyer MG, Kosky RJ, Graetz BW, et al. 2000. The National Survey of Mental Health and Wellbeing: the child and adolescent component. *Australian and New Zealand Journal of Psychiatry* 34: 214–20.

Sellman D. 1994. Alcoholism: development of the diagnostic concept. *Australian and New Zealand Journal of Psychiatry* 28: 205–11.

Selten JP, Slaets JP, Kahn RS. 1997. Schizophrenia in Surinamese and Dutch Antillean immigrants to the Netherlands: evidence of an increased incidence. *Psychological Medicine* 27: 807–11.

Selten JP, Veen N, Feller W, et al. 2001. Incidence of psychotic disorders in immigrant groups to the Netherlands. *British Journal of Psychiatry* 178: 367–72.

Shah BV. 1998. Linearization methods of variance estimation. In: P Armitage, T Colton (eds), *Encyclopedia of Biostatistics* pp. 2276–9. Chichester: John Wiley and Sons.

Silva PA. 1990. The Dunedin Multidisciplinary Health and Development Study: a 15 year longitudinal study. *Paediatric and Perinatal Epidemiology* 4: 76–107.

Simpson AI, Brinded PM, Fairley N, et al. 2003. Does ethnicity affect need for mental health service among New Zealand prisoners? *Australian and New Zealand Journal of Psychiatry* 37: 728–34.

Simpson AIF, Brinded PMJ, Laidlaw N, et al. 1999. *The National Study of Psychiatric Morbidity on New Zealand Prisons: An investigation of the prevalence of psychiatric disorders among New Zealand inmates*. Department of Corrections: Wellington.

Somervell PD, Leaf PJ, Weissman MM, et al. 1989. The prevalence of major depression in black and white adults in five United States communities. *American Journal of Epidemiology* 130: 725–35.

Statistics New Zealand. 1997. *New Zealand Census of Population and Dwellings*. Wellington: Statistics New Zealand.

Statistics New Zealand. 1998. *Protocols for Official Statistics*. Wellington: Statistics New Zealand.

Statistics New Zealand. 2002. *Survey on the Health of the Māori Language*. Wellington: Statistics New Zealand.

Statistics New Zealand. 2003. *National Pacific Population Projections*. Wellington: Statistics New Zealand.

Statistics New Zealand. 2006. *Defining Urban and Rural New Zealand*. Wellington: Statistics New Zealand.

Steffens DC, O'Connor CM, Jiang WJ, et al. 1999. The effect of major depression on functional status in patients with coronary artery disease. *Journal of the American Geriatrics Society* 47: 319–22.

Sullivan MD, LaCroix AZ, Baum C, et al. 1997. Functional status in coronary artery disease: a one-year prospective study of the role of anxiety and depression. *American Journal of Medicine* 103: 348–56.

Surtees PG, Wainwright NWJ, Khaw KT, et al. 2003. Functional health status, chronic medical conditions and disorders of mood. *British Journal of Psychiatry* 183: 299–303.

Te Hoe Nuku Roa. 1999. *Te Hoe Nuku Roa Source Document: Baseline history*. Palmerston North: Māori Profiles Research Project.

Te Puni Kōkiri. 1993. *Ngā Ia o te Oranga Hinengaro Māori: Trends in Māori Mental Health: A discussion document*. Wellington: Te Puni Kōkiri.

Te Puni Kōkiri. 1996. *Ngā Ia o te Oranga Hinengaro Māori: Trends in Māori Mental Health 1984–1993*. Wellington: Te Puni Kōkiri.

Teesson M, Hall W, Lynskey M, et al. 2000. Alcohol- and drug-use disorders in Australia: implications of the National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry* 34: 206–13.

Tertiary Education Commission. 2004. *Inspiring Excellence for Pacific Peoples throughout Tertiary Education: The Tertiary Education Commission's Pacific Peoples Strategy 2004 to 2006 and beyond*. Wellington: Tertiary Education Commission.

Vega WA, Kolody B, Aguilar-Gaxiola S, et al. 1998. Lifetime prevalence of DSM-III-R psychiatric disorders among urban and rural Mexican Americans in California. *Archives of General Psychiatry* 55: 771–8.

Vollrath M, Angst J. 1989. Outcome of panic and depression in a seven-year follow-up: results of the Zurich study. *Acta Psychiatrica Scandinavica* 80: 591–6.

Von Korff M, Ormel J, Katon WJ, et al. 1992. Disability and depression among high utilizers of healthcare. *Archives of General Psychiatry* 49: 91–100.

Wallace B, Tennant C. 1998. Nutrition and obesity in the chronic mentally ill. *Australian and New Zealand Journal of Psychiatry* 32: 82–5.

Wang PS, Lane M, Olfson M, et al. 2005a. Failure and delay in initial treatment contact after first onset of mental disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62: 603–13.

Wang PS, Lane M, Olfson M, et al. 2005b. Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62: 629–40.

WARC. 2004. *World Drink Trends 2004*. Henley-on-Thames: World Advertising Research Centre.

Weich S, Araya R. 2004. International and regional variation in the prevalence of common mental disorders: do we need more surveys? *British Journal of Psychiatry* 184: 289–90.

Weissman MM, Bland R, Joyce PR, et al. 1993. Sex differences in rates of depression: cross-national perspectives. *Journal of Affective Disorders* 29: 77–84.

Weissman MM, Bland RC, Canino GJ, et al. 1996. Cross-national epidemiology of major depression and bipolar disorder. *JAMA* 276: 293–9.

Weissman MM, Bland RC, Canino GJ, et al. 1999. Prevalence of suicide ideation and suicide attempts in nine countries. *Psychological Medicine* 29: 9–17.

Wells JE. 1998. Oversampling through households or other clusters: comparison of methods for weighting the oversampled elements. *Australian and New Zealand Journal of Statistics* 40: 269–77.

Wells JE. 2003. *Targeting and Screening: Equal explanatory power hui*. Wellington: Ministry of Health Public Health Intelligence.

Wells JE. 2005. *Targeting and Screening as Strategies for Oversampling: Cautionary examples*. Wellington: Te Papa Tongarewa/Museum of New Zealand.

Wells JE, Horwood LJ. 2004. How accurate is recall of key symptoms of depression? A comparison of recall and longitudinal reports. *Psychological Medicine* 34: 1001–11.

Wells JE, Joyce PR, Bushnell JA, et al. 1989a. Christchurch Psychiatric Epidemiology Study Part I: methodology and lifetime prevalence for specific psychiatric disorders. *Australian and New Zealand Journal of Psychiatry* 23: 315–26.

Wells JE, Robins LN, Bushnell JA, et al. 1994. Perceived barriers to care in St. Louis (USA) and Christchurch (NZ): reasons for not seeking professional help for psychological distress. *Social Psychiatry and Psychiatric Epidemiology* 29: 155–64.

Wells KB, Golding JM, Burnam MA. 1988. Psychiatric disorder in a sample of the general population with and without chronic medical conditions. *American Journal of Psychiatry* 145: 976–81.

Wells KB, Golding JM, Burnam MA. 1989b. Affective, substance use, and anxiety disorders in persons with arthritis, diabetes, heart disease, high blood pressure, or chronic lung conditions. *General Hospital Psychiatry* 11: 320–7.

Wells KB, Golding JM, Burnam MA. 1989c. Chronic medical conditions in a sample of the general population with anxiety, affective, and substance use disorders. *American Journal of Psychiatry* 146: 1440–6.

Wells KB, Stewart A, Hays RD, et al. 1989d. The functioning and well-being of depressed patients. *JAMA* 262: 914–9.

Whiteford H. 2000. Introduction: the Australian mental health survey. *Australian and New Zealand Journal of Psychiatry* 34: 193–6.

Whiteford H. 2001. Can research influence mental health policy? *Australian and New Zealand Journal of Psychiatry* 35: 428–34.

WHO. 2005. *Country Reports and Charts Available*. Geneva: World Health Organization. URL: http://www.who.int/mental_health/prevention/suicide/country_reports/en (accessed 15 November 2005).

WHO International Consortium of Psychiatric Epidemiology. 2000. Cross-national comparisons of the prevalences and correlates of mental disorders: WHO International Consortium in Psychiatric Epidemiology. *Bulletin of the World Health Organization* 78: 413–26.

Wing J, Babor T, Brugha T, et al. 1990. SCAN: Schedules for Clinical Assessment in Neuropsychiatry. *Archives of General Psychiatry* 47: 589–93.

Wittchen HU. 1994. Reliability and validity studies of the WHO–Composite International Diagnostic Interview (CIDI): a critical review. *Journal of Psychiatric Research* 28: 57–84.

Wittchen HU. 1996. Critical issues in the evaluation of comorbidity of psychiatric disorders. *British Journal of Psychiatry* 168 (suppl.30): 9–16.

Wittchen HU, Lachner G, Wunderlich U, et al. 1998. Test–retest reliability of the computerized DSM-IV version of the Munich–Composite International Diagnostic Interview (M–CIDI). *Social Psychiatry and Psychiatric Epidemiology* 33: 568–78.

Wittchen HU, Ustun TB, Kessler RC. 1999. Diagnosing mental disorders in the community: a difference that matters? *Psychological Medicine* 29: 1021–7.

World Mental Health Survey Consortium. 2005. *The World Mental Health Survey Initiative*. Boston: Harvard School of Medicine. URL: http://www.hcp.med.harvard.edu/wmh/index.php (accessed 3 February 2006).

Zhang X, Norris SL, Gregg EW, et al. 2005. Depressive symptoms and mortality among persons with and without diabetes. *American Journal of Epidemiology* 161: 652–60.

Zolkowska K, Cantor-Graae E, McNeil TF. 2001. Increased rates of psychosis among immigrants to Sweden: is migration a risk factor for psychosis? *Psychological Medicine* 31: 669–78.