

MENTAL HEALTH IN NEW ZEALAND FROM A PUBLIC HEALTH PERSPECTIVE

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MANATU HAUORA

CHAPTER 7:

WOMEN

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Traditionally, views on women's mental health have been based on a consideration of reproductive functions or extrapolated from research findings on men. Both of these paradigms fail to acknowledge that female and male biology differ in particular ways and that society limits opportunities for women.

GENERAL CONCEPTS

Biological aspects of psychiatric illness in women remain a neglected area of research. Preliminary evidence suggests sex-based differences in the neurobiological substrates underlying the control of mood and behaviour are important in the development and expression of women's psychiatric disorders.

Proper behaviour for women is tightly prescribed by social mores, which are shared by mental health workers. In the past, mental health services have frequently failed women by not recognising these social prescriptions on behaviour and by diagnosing disorder where nonconformity alone is found.

The high priority women place on social relationships has been misconstrued as psychological dependence and failure to individuate. This sex characteristic has been used to explain differences in the way women ascribe ethical values (Gilligan 1982a, 1982b) and the way women use verbal language compared to men (Tannen 1990). A woman-centred health professional will understand both how these dynamics affect a woman's relationship with her family and others, and how it affects the clinical interview itself. It has been said that women live in a different culture to men. This understanding of women's health problems is doubly compromised when the woman and the health professional come from different cultures, such as the common experience for a Māori woman who is treated by a non-Māori male health professional.

Many of the general prevention concepts available at present apply to women as well as men; girls as well as boys. Thus the importance of preventing birth trauma and infective, traumatic, toxic, nutritional and pathophysiological (hypertensive) damage to the central nervous system is not gender sensitive (Eisenberg 1987). Great advances in recent years have come from our increased understanding of genetic causes of intellectual handicap and severe learning disabilities and from the development of effective medications that reduce the risk of relapse and recurrence of psychiatric disorders and associated disability (Paykel and Jenkins 1994). Further advances can be expected in both these areas and New Zealand will continue to benefit from, and contribute to, international research efforts.

It has been argued that the new preventive public health models, such as the *Ottawa Charter* (WHO et al 1986), which emphasise empowerment, community development and education are particularly relevant for women who network well but frequently feel disempowered. In considering preventive strategies, it will be essential to avoid polarisation of biomedical and psychosocial approaches – both are needed (Nadelson and Raphael 1995).

It is important that preventive strategies that address the needs of Māori women are developed in accordance with the articles of the Treaty of Waitangi. They must take into account the diversity of Māori women's needs.

FEMALE BIOLOGY AND DEVELOPMENT

The biological basis of differences in female biology from male biology will be reviewed briefly, as these underpin some of the later discussion. Sexual differentiation of the human brain begins early in utero during a critical developmental period when neuronal tissue is sensitive to a broad range of gonadal steroids. The resultant differences in gross brain volume, cerebral asymmetry, neuronal morphology and synapse type and number are thought to underpin variations in physiology and behaviour. Sex differences in structure are especially prominent in those areas of the brain important in the regulation of mood and behaviour including the hypothalamus, amygdala and cortex (Goy and McEwen 1980). Sex differences also occur in those brain neurotransmitter systems that are important in controlling psychological functions. Many of these are abnormal during clinical episodes of mental illness. For example, the noradrenergic (NE) and some serotonergic (5-HT) systems appear to age faster in women than men, suggesting sex may be important in the age-related vulnerability to neurotransmitter dysregulation (Halbreich and Lumley 1993).

FEMALE LIFE CYCLE

Early to mid-childhood in both sexes is characterised by very low circulating levels of gonadotropins. In girls, the physiological stage of adrenarche begins as early as six to eight years of age. This precedes the earliest effects of puberty on the hypothalamic-pituitary-adrenal (HPA) axis by two to three years and is characterised by increases in adrenal androgen output. While the precise developmental role of this remains uncertain, adrenarche is thought to facilitate the onset of puberty (Angold and Worthman 1993).

Puberty is a gradual process. It is initiated by physiological mechanisms one to three years before the onset of morphological puberty (ie, the appearance of secondary sex characteristics such as pubic hair and breast development) (Wennink et al 1990). Endocrinological puberty is heralded by increases in the frequency and amplitude of pulsatile gonadotropin release. An important sex difference that begins during puberty is the development of pulsatile gonadotrophin releasing hormone release along with fluctuating levels of oestrogen and progesterone in females. Development of this pattern begins before menarche (the onset of menstruation) and continues until several months or years beyond the establishment of regular ovulation and luteal function. Morphological puberty is thus a very imprecise index of the individual's endocrine status in females (Angold and Worthman 1993).

The female reproductive years are characterised by cyclical fluctuations in oestrogen and progesterone levels. The resulting menstrual cycle has three stages: follicular, ovulatory and luteal. In the first phase an ovarian follicle develops and in the second a mature egg is released from this follicle. During the luteal phase, the remains of the ovarian follicle secretes high levels of oestrogen and progesterone until it atrophies, signalling the onset of menstruation with sharp falls in both hormones (Leibenluft et al 1994).

At parturition (childbirth), rapid shifts in hormonal levels occur, especially progesterone and oestrogen. The menopause is signalled by cessation of ovarian production of oestrogen and progesterone with resultant decreases in circulating plasma levels.

INFLUENCE OF GONADAL HORMONES ON BRAIN FUNCTION

The effects of ovarian hormones on brain function are not well defined but preliminary evidence suggests they are extensive and carry significant implications for women's mood and behaviour. Epidemiological data clearly demonstrate increased rates of hospitalisation, suicidal behaviour (both attempted and completed) and worsening of pre-existent psychiatric illness in women during the pre-menstrual/menstrual phase (Gladis and Walsh 1987; Cameron et al 1988; Cook et al 1990; Mello et al 1990). Ovarian hormones are known to influence brain neurofunctional processes, including neurotransmitter systems. For example, oestrogen alters neurotransmitter turnover in the brain by influencing the enzyme monoamine oxidase that inhibits the neurotransmitters NE, 5-HT and dopamine (Backstrom 1992).

In summary, our knowledge about links between women's biology and mental disorder has advanced rapidly over the last two decades. However, we are not yet at the point where these insights can be translated into strategies to prevent mental illness.

THE FREQUENCY AND SEVERITY OF MENTAL ILLNESS IN WOMEN

SEVERE MENTAL ILLNESS

Currently the discipline of psychiatry regards severe mental illnesses as more influenced by biological causes than the common mental illnesses such as anxiety and minor depressive disorders, which are seen as more influenced by the interaction of psychosocial factors and a vulnerable temperament. The severe mental illnesses appear to occur with equal frequency in both sexes and any primary prevention strategies will apply to both men and women. At present, these are limited to genetic counselling for potential parents with a family history of an illness, and good antenatal care. Scott and Paykel (1994) have concluded that biological causes of mental illness are not sufficiently clear cut to be amenable to preventive approaches.

COMMON MENTAL ILLNESSES

In contrast to the equal vulnerability of both men and women to the severe mental illnesses, women are disproportionately vulnerable to the common mental illnesses, which include the less severe forms of depression, anxiety and somatisation disorder (Nolen-Hoeksema 1987). Though regarded as less severe, they can be associated with significant disability.

The female preponderance in common mental illness is not present in childhood nor old age but is restricted to the middle years, which is when women's social roles and responsibilities diverge most markedly from those of men (Jorm 1987). Most observers attribute the higher female rates (which are twice the male rates in most epidemiological studies), as arising directly out of women's comparatively adverse social circumstances. However the contribution of biological influences has yet to be determined and the complex matter of possible sex differences in recognising, reporting and recalling affective disorders are still unresolved (Wilhelm and Parker 1994).

THE EPIDEMIOLOGY OF WOMEN'S MENTAL HEALTH

Overseas Studies

Two large-scale United States epidemiological projects, the Epidemiologic Catchment Area (ECA) study and the more recent National Comorbidity Study (Regier et al 1988; Cooper 1990; Kessler et al 1994), show that mental illness is prevalent and that comorbidity (the co-occurrence of more than one mental health problem in a given individual) is common. Women are more likely to experience depression, anxiety and somatisation disorders than men and also seek help more frequently for such problems.

New Zealand Studies

CHRISTCHURCH PSYCHIATRIC EPIDEMIOLOGY STUDY (CPES)

This ECA-style random household survey found the groups of psychiatric disorders with a higher female six-month prevalence rate were affective disorders (12.4 percent vs 6.3 percent in men) and anxiety/somatoform disorders (11.9 percent vs 4.7 percent) (Oakley-Browne et al 1989). There were no differences in schizophrenia and schizophreniform disorders, antisocial personality disorder or cognitive impairment. Women however were much less likely to receive a substance abuse classification (3.0 percent vs 15.4 percent). When all these diagnoses were summed, excluding phobia, there was no overall statistical difference in the level of psychiatric morbidity between women and men (16.8 percent vs 21.1 percent).

NEW ZEALAND CHILD DEVELOPMENT STUDIES

There are two child development studies in the South Island and each has provided some data on the prevalence of psychiatric symptomatology and disorder in the mothers of their cohort subjects.

In the Dunedin study, data collected over a 19-year period from a large group of women suggest that depressive symptoms are relatively stable across this time span (McGee et al 1983). Women who left school without proceeding to further education and became mothers before the age of 21 had, on average, higher symptom scores than other mothers throughout this period. They were also more likely to have separated from the father of their child and to be economically disadvantaged. The women who proceeded to further education and postponed motherhood had lower average symptom scores than the other groups, and had higher levels of social support within the family.

The Christchurch child development study has shown that depressive symptoms in the subjects' mothers are more likely following severe life events (Fergusson and Horwood 1984). Child-rearing problems were associated with both maternal depressive symptoms and life events, but the effect of life events was indirect, by their effect on maternal depressive symptomatology (Fergusson et al 1984). Both these studies found that women who had psychiatric symptoms in the past were prone to further similar problems in the future.

An epidemiological study conducted in Otago, in 1985 and 1988, found 7.8 percent of women showed psychiatric disorder, with symptoms at a level that would justify out-patient psychiatric referral (Romans-Clarkson et al 1988; Romans-Clarkson, Walton, Herbison et al 1990). There were no urban–rural differences in the prevalence of psychiatric disorder. Those who had never married or were separated and those of low socioeconomic status had greater levels of psychiatric morbidity. Other risk factors included poor social networks, poor physical health, no children, a high alcohol intake and having been physically and sexually abused.

In contrast to seminal investigations in south London – which found that women with three children under the age of 14, no intimate relationship, no paid employment and loss of their mothers before age 11 had an increased rate of depression (Brown and Harris 1978) – only one of these (poor social networks) was significant in New Zealand. The psychologically healthiest Otago groups were married women and those with children (Romans-Clarkson et al 1988). The authors speculate that good housing conditions and a pro-natalist attitude in New Zealand society in the mid-1980s may explain these findings. These results certainly show that it is crucial to replicate overseas psychosocial studies of mental health problems in New Zealand before accepting the conclusions as valid in our own society: local prevailing social factors are unique to this country and its various communities.

The 7.8 percent figure of Otago women with psychiatric disorders can be compared with other studies using the same case-finding method for women: Canberra 11.0 percent, Camberwell (London) 15.0 percent, Uganda 29.0 percent, Edinburgh 8.7 percent (although not all of these included women over 65 years). The survey validated the British screening instrument, the General Health Questionnaire (GHQ), as a suitable questionnaire for assessing psychiatric morbidity in New Zealand women (Romans-Clarkson et al 1989).

Other papers examined social networks (Romans-Clarkson et al 1992) and smoking. The profile of the women who smoked in these studies (young, low socioeconomic status, poorly educated and caring for small children) (Romans et al 1990) differed substantially from that of the women who drank alcohol in a hazardous manner (younger, well-educated, employed, and using child care) (Romans-Clarkson et al 1991). Different preventive strategies are therefore required for these two risky behaviours. Of note is the finding that socially acceptable drinking by women can be at, or well above, the level reported as being 'at-risk drinking' (Park 1991).

A 1988 follow-up study provided information about sociodemographic factors associated with the onset and remission of psychiatric disorder after two and a half years (Romans et al 1993a, 1993b). Factors preceding the development of psychiatric disorder were being separated or divorced, coming from a large family, having poor social networks, living alone, having few social responsibilities such as paid employment or motherhood, and poor physical health. Those who later developed psychiatric disorder had more psychiatric symptoms at the time of the initial study. An additional factor present at the follow-up stage was poor financial security. Similar factors were related to remission patterns among those who originally showed psychiatric disorder. Less than half of these women (25/57, 44 percent) were still cases at follow-up. Women less likely to experience remission of their psychiatric disorder were of mid-age (45–64 years), with poor finances and with diffuse, poor social relationships at the initial assessment.

OTHER ETHNIC GROUPS

Cheung and Spears reported the overall rate of psychiatric morbidity of Dunedin Chinese women did not differ from their European counterparts (Cheung and Spears 1992). The sociodemographic factors associated with psychiatric morbidity included having no children and being either very highly or very poorly educated. Among those born in China, those who migrated for family reunion reasons, who had been in New Zealand 10 or more years or who did not speak English frequently, had higher rates of psychiatric morbidity.

OVERSEAS STUDIES: SOCIODEMOGRAPHIC RISK FACTORS FOR PSYCHIATRIC DISORDER

Women's Social Roles

Many sociodemographic factors may place women at greater risk of mental health problems. These include poverty, single parenthood and educational and work inequities. The sexist accounting systems used worldwide, which fail to assess the ongoing work of women in providing unpaid and undervalued care for children, the sick and the elderly, have been elegantly analysed by a high-profile New Zealand woman writer (Waring 1988). Such inequities were baldly reflected in the figures promulgated at the Nairobi conference to mark the end of the Decade for Women, which noted that women undertake two-thirds of the world's work, receive one-tenth of the world's income and own one-hundredth of the world's property. As women move increasingly into the market-place, the types of jobs they undertake are being assessed; for an excellent recent review see Lennon (1995). Women and people of lower socioeconomic status are more likely to hold jobs with low levels of control over work, low substantive complexity (a polite term for boring), poor job security and low wages. Lennon suggests that these characteristics explain, at least in part, women's higher risk of psychological disorder, especially depression. Not all women can choose whether they take paid employment or work at home; frequently the economic status of a woman's family requires that she work in a poorly paid job, when her primary wish may be to be with her children.

A large number of studies in the United Kingdom and US have examined the correlates of poor mental health in different groups of women. George Brown and his group at Bedford College in London see such women as being vulnerable to depression if they have low self-esteem. In women with low self-esteem, depression is often precipitated by the occurrence of a life event (Brown and Harris 1978). An alternative hypothesis has been provided by another group in Edinburgh, who see low self-esteem as the consequence of mental illness, as well as a vulnerability factor (Ingham et al 1986). A sustained research focus on the role of life events in precipitating common mental illness has led to the conclusions that such events interact in a complex manner with socioeconomic status, social support and social networks, and probably explain less than 10 percent of the variance in the rate of depression.

Feminisation of Poverty

The link between poverty and mental disorder is one of the best established relationships in psychiatric epidemiology (Belle 1990). Poverty is a particular problem for those women who head single-parent families and who are concentrated in poorly paid jobs. Two solutions are commonly offered: one is to encourage men to take a full role in child-rearing and the other is to reimburse women for the work they undertake in raising the next generation, a resource for society as a whole.

Employment

In general, unemployed people, including women, have poorer health indices than do the employed, but the matter is complex and is influenced considerably by the level of satisfaction a worker gains from their employment (Graetz 1991).

Homelessness

Homelessness has been identified overseas as a significant problem for women as well as men (Buckner et al 1993). It involves a loss of identity, self-worth and self-efficacy as well as of a home, with erosion of human dignity and stigmatisation. Homeless women are more likely than other women to be poor, abused physically and sexually, badly educated, and unemployed with sole responsibility of dependent children, to have inadequate social support and to suffer from physical and mental health problems and substance abuse disorders. The causal sequences involved have not been elucidated clearly. The prevalence of mental disorders among homeless women is probably higher than among homeless men in overseas studies, but substance abuse problems are less frequent (Fischer 1991). New Zealand information on female homelessness is needed urgently.

Physical Health

A frequently reported finding is the close link between poor physical health and poor mental health. This association is seen in the higher rates of psychiatric symptomatology found in general practice attenders and hospital medical and surgical in-patients when compared with the general population.

Goldberg and colleagues have clearly established that patients with depression and anxiety presenting to their general practitioners fail to have their psychiatric disorder diagnosed and treated approximately half the time (Goldberg and Huxley 1980; Goldberg 1984). While this work has not been directly replicated in New Zealand, there are no reasons to assume that the findings do not apply here.

REPRODUCTION

Birth rates for New Zealand women in 1992 (age-specific rates per 1000 females) were 69.3 for Māori, 105.3 for Pacific women, and 56.5 for other women (Caucasian, Asian etc), giving a total of 60.1 for all women aged 10–49 years (NZHIS 1994). Data showed that birth rates to single Māori women were higher than other ethnic groups, as were Māori birth rates in the 10–14 and 15–19 years age groups.

In 1992, the total abortion rate was 11.3 per 1000 women aged 10–49 years. For Māori women, the rate was 15.9 per 1000 and for Pacific women, 26.6 per 1000. Rates of abortions among Māori appear to be rising steadily. As unwanted and teenage pregnancies are associated with a range of health and socioeconomic problems, this suggests increasing health problems for these young women.

PSYCHIATRIC ILLNESS RELATED TO THE MENSTRUAL CYCLE

The symptoms of anxiety (Cameron et al 1988), panic (Cook et al 1990), drug and alcohol abuse (Mello et al 1990) and eating disorders (Gladis and Walsh 1987) have been shown to fluctuate through the menstrual cycle. Food preference and intake, too, varies across different phases of the menstrual cycle in normal women (Goodall et al 1991).

Of all the female-specific mood disorders, premenstrual dysphoric disorder (PDD) (APA 1994) is probably the most controversial and is more studied. In this condition a woman meets cross-sectional diagnostic criteria for major depression during the late luteal phase of her menstrual cycle. While older studies report that between 20–90 percent of women suffer from premenstrual syndrome (PMS), more recent surveys have put the prevalence of severe premenstrual symptoms at between 3 and 8 percent, while the ECA community study reported an overall prevalence rate for PDD of 6.8 percent (Steiner 1992). As anovulatory cycles are symptomless, an aetiological role for a corpus luteum factor has been suggested (Backstrom 1992). No significant differences in hypothalamic-pituitary-adrenal (HPA) functioning between the follicular and luteal phases of the menstrual cycle have been found in women suffering from premenstrual symptoms compared to controls, but ovarian hormones may act as ‘permissive agents’ in vulnerable individuals, perhaps inducing central neuroendocrine changes (Steiner et al 1984; Steiner 1992). Recent studies have suggested dysregulation of 5-HT neurotransmitter systems may be important in the aetiology of premenstrual dysphoric disorder (Menkes et al 1994).

The relative neglect by the research community of psychiatric syndromes related to the menstrual cycle is one of its worst failures to address women’s health needs.

PSYCHIATRIC ILLNESS RELATED TO CHILDBIRTH

There is some evidence that the post-partum period, broadly defined, is one of high risk for women and provides a window of opportunity for intervention.

Overseas Studies

Numerous overseas studies have shown that 10–15 percent of all women who give birth will develop post-partum depression, and that more than half of these women will not be fully recovered by the end of the first post-partum year (Cox et al 1982; O’Hara et al 1984). Women with a previous history of affective disorder have a 30-fold higher risk of postnatal depression than the general population, and women with a history of affective psychosis, whether or not related to childbirth, have relapse rates of up to 50 percent (Kumar and Issacs 1983). Studies examining the impact of postnatal depression on children have found more behavioural disturbance (Wrate et al 1985; Philipps and O’Hara 1991) and poorer cognitive development (Cogill et al 1986) in children of depressed mothers.

Parturition is characterised by sharp falls in circulating ovarian steroid concentrations (ie, oestrogen, progesterone and their metabolites) and it is these falls that are thought to be the most likely precipitant to psychosis in predisposed women. Oestrogens modulate the function of the monoamine systems in the brain, especially the dopaminergic system (Wieck 1989). The significance of this is unclear at present. While increased dopamine receptor sensitivity has been reported to predict relapse from postnatal psychosis in vulnerable women in one study (Wieck et al 1991), this was not confirmed in another (Meakin et al 1995). Further study is needed.

A Christchurch study assessed the prevalence of postnatal depression as 20 percent of mothers, with 13 percent being significantly depressed and 7 percent having a borderline level of symptoms (McGill et al 1995). Importantly, only 6 percent of the women in the study recognised their symptoms as characteristic of depression. An Auckland study of depressive symptoms in mothers at four weeks post-partum found 7.8 percent showed major depression and a further 13.6 percent minor depression (Webster et al 1994). Risk factors for depression included being single, under 20 years at the birth of their first child, having a poor relationship with their partner and being Māori. The authors found the screening questionnaire they used, the Edinburgh Postnatal Depression Scale, to be both highly specific and sensitive for women with adequate English. They also recommended routine screening of post-partum women for depression, noting that the depression of many of the women had not been identified by health workers.

Hapgood and colleagues showed that lability of mood in the puerperium was related to psychiatric symptoms up to 14 months later and was the strongest predictor of later psychopathology (Hapgood et al 1988). This suggests another way of identifying risk groups that may be targeted for prevention.

The evidence for post-partum depression being higher in women who are less supported, single and under 20 can be assumed to place many young Māori women in a high-risk group for post-partum depression. There is also a higher rate of low birthweight infants and pre-term births in young Māori women, which is a further risk factor. The development and continuation of programmes such as Tipu Ora, a support and education programme for Māori mothers and children from pregnancy to five years, are important developments that address some of these risks and will need careful evaluation.

Giving up a baby for adoption has been variously seen as either the only solution to a woman's moral turpitude, or as a cruel demand by a non-understanding society, complicating the plight of the unmarried, often young, mother. One recent New Zealand study compared two groups of women who had relinquished a child for adoption: the first who had become reunited with their lost children, the second who were still awaiting such contact (Field 1992). The reunited mothers felt better about the adoption events and felt they had more social support.

SEX DIFFERENCES IN PARTICULAR PSYCHIATRIC ILLNESSES

ADMISSION STATISTICS

The New Zealand admission statistics are seriously limited in their usefulness because of their known inaccuracies. The quality of information submitted by hospitals is dubious, in part because the data are coded using *ICD-9*, and most psychiatrists and other mental health staff think in either *ICD-10* or *DSM-IV* terms. This problem is particularly severe for affective disorders, a significant category of mental illness for women but one where the outdated division between affective psychoses and neurotic depression in *ICD-9* is virtually meaningless in 1997. Obviously, admission profiles are more influenced by admission practices than the true morbidity rates in the community. It is of interest that the total age-specific rates of all psychiatric admissions (first and readmissions) tend to be higher for women than men in all but the 10–39 and over-80 year age groups. Men display higher rates than women in the 15–39, 45–54, 60–69 and 75–79 years age groups, when first admissions were considered alone. In 1993, only in the 40–44 years and the 55–59 years age brackets were the female admission rates higher than the male. Total male admission rates are boosted by those with substance abuse diagnoses.

AFFECTIVE DISORDERS

One of the best replicated epidemiological findings in the psychiatric literature is the emergence of a 2:1 female excess in depressive disorders during adolescence (Weissman and Klerman 1977). This female predominance is well established by 15 years of age, but begins to emerge around the time of the hormonal and physiological changes of puberty, raising the possibility of causal biological factors. Negative affect increases during the period of rapid oestrogen rise in early puberty at 10–14 years of age (Brooks-Gunn and Warren 1989). A National Institute of Mental Health (NIMH) study of puberty and psychopathology reported early maturation (as measured by oestradiol, and testosterone:oestradiol ratio) was associated with less negative emotional tone in boys, but more in girls (Susman et al 1987; Susman et al 1989).

More recent studies using genetic models suggest that the increased prevalence of mood disorders in women cannot be attributed to genetic factors (Merikangas et al 1985; Gershon 1990).

A 'biological susceptibility' model suggests that the high rates of mood disorder in females during their reproductive years may result from an interaction between the HPA axis and female sex hormones. This hypothesis suggests that the complex, delicately integrated neuroendocrine rhythmic system related to female reproduction is vulnerable to change, whether physiological, psychosocial or environmental in nature (Steiner 1992). Prospective studies report that the severity of premenstrual depressive features predicts a subsequent major depressive disorder. In one such study, premenstrual depressive features showed a predictive value greater than family history and prior personal history of depression (Endicott 1993). Cyclic worsening of premenstrual depressive features is also commonly seen prior to the development of a prolonged episode of depression. Late-luteal exacerbations of affective psychoses have been linked to menstrual cycle-related fluctuations in plasma levels of lithium (Conrad and Hamilton 1986).

Depressed patients show a significant decrease in functional activity over the left frontal region of the brain compared to the right as confirmed by EEG, SPECT and functional MRI studies (Haag et al 1994). Sex differences in the behavioural expression of dysfunctions of 5-HT systems appear to occur, with depressed women tending to ruminate while men prefer distracting activities such as sport (Nolen-Hoeksema 1987; Nolen-Hoeksema et al 1992). Recent findings have shown that physical activity enhances self-esteem in depressed women (Ossip-Klein et al 1989) and exercise produces a shift in cerebral activation such that the left frontal region becomes more active relative to the right (Petruzzello and Landers 1994). Thus, it is possible that the sex differences seen in depression are affected by preferred sex coping strategies influencing the neurophysiological mechanisms underlying mood (Heller 1993).

SCHIZOPHRENIA

Sex differences exist in the age of onset and severity of outcome for women and men with schizophrenia, with women having a later age of onset and a better prognosis (Seeman and Lang 1990). It has been postulated that oestradiol may play a protective role for women with schizophrenia through its effects on the dopaminergic system. Chronic oestrogen administration is known to cause down-regulation of dopaminergic receptors, similar to antipsychotic drug treatment. A protective role by oestrogen would fit with reports of increased rates of relapse in schizophrenic women premenstrually, post-partum and post-menopausally when oestrogen levels are low or fall precipitously. Decreased relapse rates during pregnancy are seen when oestrogen levels are elevated. See also Chapter 18.

ABUSE RESEARCH

There is an increasing interest in New Zealand, as well as overseas, in the link between the abuse of women (physical, sexual and emotional) and the higher female rates of mental health problems.

Adult Abuse

Two New Zealand papers by Gavey have documented the frequency of sexual assault in an undergraduate sample of female university students. Half revealed some form of sexual victimisation and one-quarter had either been raped or had experienced attempted rape. These figures are similar to these in a comparable US study (Gavey 1991a, 1991b).

The two injury research programmes in Auckland and Dunedin have developed an interest in domestic and sexual abuse against women and have identified five priority areas for research. These are primary prevention, responsiveness of health care professionals, economic cost of violence, incidence and prevalence, and secondary prevention (Fanslow and Norton 1994). Two studies using New Zealand community samples have been published. Data from the Christchurch Child Development Study showed that assault by their partner was reported at a rate of 2–3 percent per annum by the mothers of two- to seven-year-old children in a cohort study over six years (Fergusson et al 1984). Such assault was more likely in de facto cohabiting relationships, those of shorter duration, where the pregnancy of the study child was unplanned, and where the parents were young, less educated, non-White, and did not attend church. In a community study of adult Otago women, 16.2 percent said they had been physically abused by their male partner (Mullen et al 1988). These women had not suffered physical abuse from anyone else. They were more likely to have married in their teens and showed poorer mental health indices than the non-abused women.

One recently published study that combined quantitative and qualitative approaches to the question of male attitudes to female abuse/assault found a worryingly high level of acceptance of, and involvement in, physical and psychological abuse of women (Leibrich et al 1995). One-quarter of men interviewed considered that physical abuse of women is acceptable and nearly six out of 10 (58 percent) that the psychological abuse of women is acceptable; one-fifth (21 percent) had been physically violent in the last year and one-half (53 percent) psychologically abusive in the last year. This report provided some important insights into the demographic profile of the abusive New Zealand male. See also Chapter 9. Prevention policy must be influenced by this information.

Unpublished data from the random community OWHS-Child Sexual Abuse bank shows that 22.4 percent of adult women have been physically abused since the age of 16 years. Premarital pregnancy and early cohabitation were significant risk factors for a woman to report physical abuse, as was experiencing parental disharmony and physical punishment in her teenage years and identifying herself as a follower in childhood.

Child Sexual Abuse (CSA)

As in all other countries studied, CSA in New Zealand is common and associated with a wide range of adverse subsequent psychosocial adult outcomes, including self-harming behaviours (Anderson et al 1993; Mullen et al 1993; Mullen et al 1994; Romans et al 1995a, 1995b). It is also clear however, that CSA is not found in isolation but occurs in a family matrix of other psychosocial disadvantages, which also lead to adverse adult outcomes. Factors that can soften the impact of CSA on its victim, include some within the family, and others outside, such as the school's response (Romans et al 1995b). These factors have implications for primary and the secondary prevention, as they can be drawn on in the design of potential interventions.

PARTICULAR ISSUES FOR MĀORI WOMEN

Māori women are a diverse group of indigenous women who define themselves and their cultural identity as Māori. They come from a variety of iwi, family backgrounds, socioeconomic and health status. Strategies dealing with the mental health needs of Māori women from a public health perspective must take these real differences into account.

The failure of traditional health services to understand the importance of social relationships for women can be seen also in the non-comprehension of the importance for Māori of connectedness with wider whānau and iwi, with land and with language. The health of Māori women has been adversely affected by colonisation and alienation from land, language and wider whānau links. There is a struggle to develop and maintain a positive sense of identity and self-esteem, while many messages received about being Māori are negative. The Treaty of Waitangi, as the key document that guarantees all Māori, both women and men, a right to adequate health status and care, is essential in the development of appropriate health services.

Further risks to mental health come from the greater likelihood of unemployment, low socioeconomic status and poor physical health experienced by many Māori women and their whānau (Pomare and de Boer 1988). As with other women, the experiences of emotional, physical and sexual abuse have a serious impact on mental wellbeing. There are no reliable Māori prevalence figures for these problems; they are urgently needed.

As for all women, issues of powerlessness within society are highly pertinent for Māori women. Māori women are subject to barriers put up against them not only as women but also as Māori. While it is becoming more common for women to have access to female doctors, it is very rare that Māori women have the choice of Māori women health professionals. Although Māori women have for many years developed strategies and programmes to improve the health of Māori, there are few Māori women in decision-making and policy-making positions at a national level. Despite this, Māori women have continued to assert their leadership in health initiatives and organisations such as the Māori Women's Welfare League and many iwi and community health initiatives. Māori health initiatives have accepted Māori concepts of health as encompassing aspects of not only the health of an individual but also the integration with the health of the whānau and the contact with important cultural aspects of health.

The role of Māori women as guardians and nurturers is acknowledged at gatherings of Māori health workers. Hekia Parata stated: 'Māori women are at the centre of what still exists of whānau. They disproportionately bear the burden of all responsibilities. If Māori women are not healthy, then their whānau cannot be. Conversely, if their whānau is not healthy nor are they' (Te Puni Kōkiri 1994). Māori women have a special role in nurturing and protecting themselves, their whānau and future generations. The fostering of mental wellbeing and the prevention of mental disorder in Māori women will benefit all Māori.

Many factors place Māori women at risk of mental disorder. New Zealand epidemiological studies of the mental health of women have not focused on ethnicity as a variable and have insufficient Māori in their samples to give adequate population-based information on psychiatric disorder in Māori. Without this information, assumptions can be based only on the high level of risk factors, admission and discharge statistics and extrapolation from other indigenous populations. We do not even know whether research tools such as the GHQ are valid for populations such as Māori women. When research is undertaken it will be crucial that Māori women are allowed to determine their own concerns.

The established link between chronic physical illness and psychiatric morbidity is highly relevant when considering the mental health of Māori women. Māori women have higher morbidity and mortality rates than non-Māori women for many physical conditions including lung, stomach and cervical cancer, respiratory diseases, diabetes, renal disease and heart disease (Pomare et al 1995). This leads to an increased mental health risk and indicates pathogenic lifestyle factors. There are no data on Māori women and their use of primary health care services regarding mental health concerns. The high rates of morbidity due to preventable or controllable diseases would suggest a low use of primary care services.

Rapuora reported that many young urban Māori women identified themselves as being depressed (Murchie 1984). The study's definition of depression was, however, imprecise. High levels of alcohol abuse by young women may be problematic. High rates of cigarette smoking and obesity are also reported.

The official information indicates a rising rate of psychiatric admissions for Māori women over the past 30 years, with an increase in readmissions for Māori women compared with non-Māori for diagnoses of schizophrenia, affective psychosis and drug psychosis. If preventive strategies for mental disorder are to be developed, then a more accurate picture of utilisation patterns and diagnosis needs to be provided.

In *Hauora: Māori Standards of Health, III: A study of the years 1970 – 1991*, alcohol dependence and abuse is recorded as the second most common cause of admissions for Māori women with a ratio of 2.6:1 for Māori:non-Māori women (Pomare et al 1995). Access difficulties, the higher use of law enforcement agencies on admission and the high rate of readmissions for both male and female Māori concerned these authors. They state:

While the need for monitoring and evaluation continues, there is a need to commit adequate resources to the early identification of, and intervention into, Māori mental illness. Indeed, it is timely for a comprehensive review of Māori mental health.

(Pomare et al 1995: 123)

MENTAL HEALTH PROMOTION AND MENTAL ILLNESS PREVENTION IN MĀORI WOMEN

The *Ottawa Charter* (WHO et al 1986) has been suggested as an appropriate base for health promotion for Māori women (Ropiha 1994). The charter provides for the development of a public health policy and creates a base from which to address issues such as poverty, unemployment, and their mental health effects. Community action must be strengthened if mental health promotion messages are to be delivered and negative beliefs challenged. The Waiora Project was a project based on health promotion that aimed to improve self-esteem and identity (Reid 1985). It used three methods for reinforcing a positive sense of identity and high self-esteem: community development, broadcasting of positive messages about being Māori, and school programmes.

Effective promotion and prevention programmes identify overall wellbeing as essential in obtaining good health. They link whānau connectedness with improved physical health, decreasing high-risk behaviours such as smoking, and improved self-esteem. Mental wellbeing is a central part of overall wellbeing and will need support from thoughtful and informed policies.

MENTAL HEALTH RESEARCH ISSUES FOR WOMEN

There are several major issues relating to research with women that deserve careful consideration. A landmark report in the US published in 1985 identified the lack of scientific data on women's health as lying behind the poor understanding of women's health care needs (Public Health Services 1985). This resulted in a new policy at the National Institutes of Health to encourage the inclusion of women in clinical scientific trials. Work has focused particularly on the menstrual cycle. A gendered analysis of health is now beginning to appear in the scientific literature. This acknowledges that there are particular health concerns unique to women (menstrual cycle-related problems, hysterectomy, caesarian sections, ovarian cancer) or that disproportionately affect women (osteoporosis, eating disorders, abuse) (Auerbach and Figert 1995). Four basic systemic problems requiring attention were identified: the exclusion of women from major clinical studies; inadequate attention to gender analysis in medical research; inadequate attention to diseases and conditions specific to or more prevalent in women; and the lack of senior women researchers in health and science (Auerbach and Figert 1995). These concerns underpin the importance of research as the key vehicle for advancing knowledge about the most effective prevention and treatment processes.

In addition to the need for women to participate in and benefit from research efforts, there has been sustained criticism from feminists of research methodologies and their relevance to women. Pertinent questions have been asked about the power of the research team alone to define the questions investigated; such questions may not be those of most relevance to the research subjects. The limitations of quantitative research methodologies are outlined. Although they are often more powerful statistically, they may arbitrarily force a category response from the subject, which cannot accurately reflect the complex subtleties of meaning and variation. Commentators are concerned about the potential for the female research subject to be exploited. Some negative factors uncovered by research may be used by the researchers or by the media, out of the context of women's lives, and may add further blame to women for their inferior socioeconomic status. Narrow biomedical analyses can lead to an underweighing or ignoring of the social causes of disease (Auerbach and Figert 1995).

SERVICE PROVISION FOR WOMEN

SEX DIFFERENCES IN INTERACTIONS WITH THE HEALTH PROFESSION

The question about whether health professionals treat men and women differently is complex, but there are some interesting published speculations. The term 'the Yentl syndrome', referring to a young woman who had to disguise herself as a man in order to be educated, has been applied to the tendency for women to be under-investigated for myocardial ischaemia, after control for other relevant variables (Healy 1991). However, once these women had been investigated, and cardiac catheterisation had been performed, there were no sex differences in treatment rates. It appeared that once a woman had shown that she was like a man, she was treated as a man would be.

Several reports have suggested that women's complaints may be conceptualised differently to those of men, by both physicians and non-clinicians (Broverman et al 1970; Carmen et al 1981; Verbrugge 1984; Sprock et al 1990; Redman et al 1991). The sex of the health professional may influence the outcome of the consultation: women are more likely to undergo cervical smears and mammograms if they see female rather than male physicians (Lurie et al 1993).

New Zealand Studies

There seem to be few published New Zealand data on sex differences in interactions with health professionals. The Christchurch Psychiatric Epidemiology Study reported that only 29 percent of those with a psychiatric disorder had sought help for their mental health. However, three-quarters had seen their general practitioner in the preceding six months (Hornblow et al 1990). Only one-third (35 percent) of those with a psychiatric illness in the Otago Women's Health Survey were receiving any help for their disorder, most (86 percent) from their general practitioner (Romans-Clarkson, Walton, Dons et al 1990).

The high mortality rate of Māori women from cervical cancer led to awareness of the need to develop more acceptable methods of taking cervical smears. Specific campaigns to increase awareness of cervical smears and the training of female Māori health workers to take smears have increased the acceptability and understanding of the process, suggesting that culturally sensitive approaches could also bear fruit in the mental health field.

From another study, Cheung and colleagues reported Cambodian subjects living in Dunedin simultaneously held indigenous and Western illness aetiology constructs. The majority (63.7 percent) had experienced problems with local health services, particularly with communication, interpretation services, fear and lack of trust (Cheung and Spears 1995). Although the data were not analysed by sex, among the improvements suggested by the subjects was greater access to female doctors. Other improvements were more Cambodian-speaking doctors, cheaper consultation fees and shorter waiting lists. These findings again indicate real barriers to access for non-Pākehā patients. There is clearly a gap in our understanding of the determinants of women seeking appropriate professional services for their mental health problems. More data are required.

TRAINING NEEDS OF DOCTORS

All doctors should have a working knowledge of available techniques for the diagnosis and management of psychiatric illnesses.

For both severe and common mental illness in women, the primary care team serves a critical role in recognising and managing the problem. Thus general practitioners and their practice nurses need to be able to recognise depression, anxiety, and psychosomatic disorders in women quickly and efficiently. They also need to know when to refer to a specialist for further help.

We know that 25–40 percent of both hospital in-patients and people consulting their general practitioners have significant psychiatric morbidity and that such morbidity is frequently unrecognised by hospital specialists such as surgeons and physicians, as well as by general practitioners. It is possible to train general practitioners to a high level of psychiatric expertise (Goldberg et al 1988).

Only when we have an adequately sized, well-trained local psychiatric workforce will quality care for the severely mentally ill be readily available.

PUBLIC EDUCATION NEEDS

Among the general public, attitudes are often negative and knowledge scanty about mental illness. Despite this, a recent Otago study reported that most people who had been in contact with the mentally ill held informed and enlightened views about the causation and effects of psychiatric disorder (Ng et al 1995). Much of the subjects' information had come through the media. The community needs accurate and compassionate information on the subject of mental illness.

Public education campaigns can reduce the stigma associated with mental health. These could include school health education programmes, media campaigns, work site programmes, small group self-help approaches, train-the-trainer programmes and targeting of groups that either request more accurate knowledge or are thought to be poorly informed.

RECOMMENDATIONS

- Many factors that impinge on women's mental health lie outside the health field and arise out of women's inferior status in society. The need for all women to have access to good education, income maintenance and a safe physical environment is of critical importance. The ongoing failure to recognise the true worth of women's unpaid work, as carers of children, the sick and the elderly, is unjust and traps many women in frank poverty and most in relative deprivation. The discrimination against women is particularly felt by some subgroups of the female population, such as Māori women and other disadvantaged women. These are global concerns and provide the matrix out of which so much female mental disorder arises. Health authorities must liaise with education, social welfare and other government bodies to ensure a healthy community for both women and men.
- There is a need to educate the New Zealand public about mental illness so that the stigma associated with having a mental disorder is removed. For effective secondary prevention to occur, women must feel comfortable taking their mental health problems to primary health care professionals, without embarrassment or secrecy. All women need to be able to recognise when they are experiencing a mental disorder and seek effective treatment for it. With respect to eating disorders, there is a requirement for the promotion of sensible attitudes to body shape and healthy nutrition. Young people, especially young men, need to be encouraged to develop good conflict resolution skills, in order to halt the various forms of violence perpetrated against women.
- A well-trained and accessible health workforce, able to recognise and manage both severe and common mental disorders, is necessary. Primary health care professionals need to be skilled in diagnosing conditions and treating them promptly and effectively. They need to know when to refer to tertiary level services and to be aware of ancillary agencies providing counselling and psychotherapy in their community. At the tertiary level, there is a need for an adequate number of trained psychiatrists and psychiatric nurses to diagnose and treat serious mental disorder and provide back-up support and supervision for the primary caregivers. Too often our current services in New Zealand are difficult for women to access and are alienating.
- Good antenatal and perinatal care will reduce damage to the central nervous system for both men and women (Eisenberg 1987). Other desirable community actions include accident prevention programmes, encouragement of self-help groups and support services, good quality long-term institutions and efforts to reduce central nervous system damage from causes such as road accidents.

- Clear secondary and tertiary prevention strategies are now possible for those women with severe, chronic mental illness such as schizophrenia, recurrent affective disorders and brain trauma. By limiting the disabilities associated with these conditions, women will be able to function optimally in their various roles, despite their illness. The elements of good care include:
 - early diagnosis and treatment
 - affordable prophylactic medications that have the best side-effect profile to enhance adherence
 - access to psychotherapies designed to enhance living skills
 - appropriate accommodation, including when necessary, supervised housing and long-term residential care; this includes the accommodation of a woman’s dependent children
 - meaningful recreational and employment activities
 - freedom from prejudice and exploitation.
- Given that a lot is now known about risk factors for women, targeting of high-risk subgroups is feasible and cost-effective. Adolescent girls and post-partum women are two such groups. Here screening is of value. Where a disorder is present, intervention is indicated. Other high-risk groups are Māori women and probably Pacific women, although there are few research data addressing their needs. Women who have experienced physical, sexual or emotional abuse or previous psychiatric illness, and those with poor physical health or who are socially isolated, also deserve particular attention. There needs to be a clear government commitment to sustaining those community health initiatives that women consider to be working well (eg, Women’s Refuges, Tipu Ora, iwi-based health clinics, Family Planning Clinics).
- Reproduction-related matters need careful policy formation. Free contraception, affordable child care and just paternal financial support for solo mothers all need rationalisation. Given that women are more prone to depression than men, financial barriers to antidepressant treatment need addressing. The newer antidepressants, with their kinder side-effect profile and better adherence rates, should be financially available to those suffering from depression. A depressed woman’s reduced ability to function optimally affects her family and her community; it makes poor economic sense to place barriers in the way of her receiving early and effective treatment. The availability of counselling and psychotherapy is also of concern, as such services are quite unevenly spread throughout the community. These services also need rationalisation.
- More research into the causes and optimum management of women’s mental health problems is needed. Many overseas findings need to be replicated in New Zealand. Our research workforce is of a high calibre and has the ability to contribute generalisable knowledge to the international community. As a first-world country, New Zealand has the responsibility to do so. Such research needs to be woman-friendly with subjects involved in determining the research agenda. There are a number of psychophysiological conditions unique to women which need imaginative New Zealand-based research (menstrual-related problems, infertility, pelvic pain, eating disorders). The primitive stage of development of eating disorder services in New Zealand highlights the lack of resources made available for these extremely debilitating conditions and the need for systematic investigation into provision of cost-effective treatments. Research is needed to guide the development and evaluation of services to ensure that they better meet the mental health needs of New Zealand women. Finally, there are subgroups of women (eg, lesbians, elderly women, women with disabilities) who have additional problems that need further study.

REFERENCES

- Anderson J, Martin J, Mullen P, et al. 1993. The prevalence of childhood sexual experiences in a community sample of women. *J Am Acad Child Adolesc Psychiatry* 32: 911–9.
- Angold A and Worthman CW. 1993. Puberty onset of gender differences in rates of depression: a developmental, epidemiologic and neuroendocrine perspective. *Affective Disorders* 29: 145–58.
- APA. 1994. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. [DSM-IV]. Washington, DC: American Psychiatric Association.
- Auerbach J and Figert AE. 1995. Women's health research: public policy and sociology. *J Health Soc Behav* (extra issue): 115–31.
- Backstrom T. 1992. Neuroendocrinology of premenstrual syndrome. *Clin Obstet Gynaecol* 35: 612–28.
- Belle D. 1990. Poverty and women's mental health. *Am Psychol* 45(3): 385–9.
- Brooks-Gunn J and Warren MP. 1989. Biological and social contributions to negative affect in young adolescent girls. *Child Dev* 60: 40–60.
- Broverman IK, Broverman DM, Clarkson FE, et al. 1970. Sex-role stereotypes and clinical judgements of mental health. *J Clin Consulting Psychol* 34: 1–7.
- Brown G and Harris T. 1978. *Social Origins of Depression: A study of psychiatric disorder in women*. London: Tavistock.
- Buckner JC, Bassuk EL, Zima BT. 1993. Mental health issues affecting homeless women: implications for intervention. *Am J Orthopsychiatry* 63: 385–99.
- Cameron OG, Kuttesch D, McPhee K, et al. 1988. Menstrual fluctuation in the symptoms of panic anxiety. *J Affect Disord* 15: 169–74.
- Carmen EH, Russo NF, Miller JB. 1981. Inequality and women's mental health: an overview. *Am J Psychiatry* 138(10): 1319–30.
- Cheung P and Spears G. 1992. Psychiatric morbidity among Dunedin Chinese women. *Aust NZ J Psychiatry* 26(2): 183–90.
- Cheung P and Spears G. 1995. Illness aetiology constructs, health status and use of health services among Cambodians in New Zealand. *Aust NZ J Psychiatry* 29: 257–65.
- Cogill SR, Caplan HL, Alexandra H, et al. 1986. Impact of maternal postnatal depression on cognitive development of young children. *BMJ* 292: 1165–7.
- Conrad CD and Hamilton JA. 1986. Recurrent premenstrual decline in serum lithium concentration: clinical correlates and treatment implications. *J Am Acad Child Adolesc Psychiatry* 26: 852–3.
- Cook BL, Noyes RJ, Garvey MJ, et al. 1990. Anxiety and the menstrual cycle in panic disorder. *J Affect Disord* 19: 221.
- Cooper B. 1990. Epidemiology and prevention in the mental health field. *Soc Psychiatry Psychiatr Epidemiol* 25: 9–15.
- Cox JL, Connor Y, Kendell RE. 1982. Prospective study of psychiatric disorders of childbirth. *Br J Psychiatry* 140: 111–7.

- Eisenberg L. 1987. Preventing mental, neurological and psychosocial disorders. *World Health Forum* 8: 245–53.
- Endicott J. 1993. The menstrual cycle and mood disorders. *J Affect Disord* 29: 193–200.
- Fanslow J and Norton R. 1994. Violence against women: priorities for public health research in New Zealand. *NZ Med J* 107: 63–4.
- Fergusson D and Horwood L. 1984. Life events and depression in women, a structural equation model. *Psychol Med* 14(4): 881–9.
- Fergusson D, Horwood L, Shannon F. 1984. Relationship of family life events, maternal depression and child-rearing problems. *Pediatrics* 73(6): 773–6.
- Field J. 1992. Psychological adjustment of relinquishing mothers before and after reunion with their children. *Aust NZ J Psychiatry* 26(2): 232–41.
- Fischer P. 1991. *Alcohol, Drug Abuse and Mental Health Problems among Homeless Persons: A review of the literature, 1980–1990*. Rockville, MD: National Institute of Alcohol Abuse and Alcoholism.
- Gavey N. 1991a. Sexual victimisation prevalence among New Zealand university students. *J Consult Clin Psychol* 59(3): 464–6.
- Gavey N. 1991b. Sexual victimization among Auckland University students: how much and who does it? *NZ J Psychol* 20: 63–70.
- Gershon ES. 1990. Genetics. In: FK Goodwin, KR Jamison (eds). *Manic-depressive Illness*. New York: Oxford University Press.
- Gilligan C. 1982a. *In a Different Voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Gilligan C. 1982b. New maps of development: new visions of maturity. *Am J Orthopsychiatry* 52(2): 199–212.
- Gladis MM and Walsh BT. 1987. Premenstrual exacerbation of binge eating in bulimia. *Am J Psychiatry* 144: 1592–5.
- Goldberg D. 1984. The recognition of psychiatric illness by non-psychiatrists. *Aust NZ J Psychiatry* 18: 128–34.
- Goldberg D, Bridges K, Duncan-Jones P, et al. 1988. Detecting anxiety and depression in general medical settings. *BMJ* 297: 897–9.
- Goldberg D and Huxley P. 1980. *Mental Illness in the Community: The pathway to psychiatric care*. London: Tavistock.
- Goodall E, Whittle K, Cookson J, et al. 1991. Buspirone and food intake in women volunteers in relation to the menstrual cycle. In: G Ailhaud, B Guy-Grand, M Lafontan, et al (eds). *Obesity in Europe 91*. Nice, France: John Libbey and Company.
- Goy RW and McEwen BS. 1980. *Sexual Differentiation of the Brain: Based on a work session of the neuroscience research program*. Cambridge, MA: MIT Press.
- Graetz B. 1991. Health consequences of employment and unemployment: longitudinal evidence for young men and women. *Soc Sci Med* 36(6): 715–24.
- Haag C, Kathmann N, Hock C, et al. 1994. Lateralization of the left hemisphere in patients with major depression. *Biol Psychiatry* 36: 453–7.

- Halbreich U and Lumley LA. 1993. The multiple interactional biological processes that might lead to depression and gender differences in its appearance. *J Affect Disord* 29: 159–73.
- Hapgood C, Elkind G, Wright J. 1988. Maternity blues: phenomena and relationship to later post partum depression. *Aust NZ J Psychiatry* 22(3): 299–306.
- Healy B. 1991. The Yentl syndrome. *N Engl J Med* 25: 274–6.
- Heller W. 1993. Gender differences in depression: perspectives from neuropsychology. *J Affect Disord* 29: 129–43.
- Hornblow AR, Bushnell JA, Wells JE, et al. 1990. Christchurch Psychiatric Epidemiology Study: use of mental health services. *NZ Med J* 103: 415–7.
- Ingham JG, Kreitman NB, Miller PM, et al. 1986. Self-esteem, vulnerability and psychiatric disorder in the community. *Br J Psychiatry* 148: 375–85.
- Jorm AF. 1987. Sex and age differences in depression: a quantitative synthesis of published research. *Aust NZ J Psychiatry* 21: 46–53.
- Kessler R, McGonagle IC, Zhao S, et al. 1994. Lifetime and 12-month prevalence of *DSM-III-R* psychiatric disorders in the United States: results from the National Comorbidity Survey. *Arch Gen Psychiatry* 51(1): 8–19.
- Kumar R and Issacs S. 1983. Recurrent post-partum psychosis. *Br J Psychiatry* 142: 618–20.
- Leibenluft E, Fiero P, Rubinow D. 1994. Effects of the menstrual cycle on dependent variables in mood disorder research. *Arch Gen Psych* 51: 761–81.
- Leibrich J, Paulin J, Ransom R. 1995. *Hitting Home: Men speak about abuse of women partners*. Wellington: Department of Justice and AGB McNair.
- Lennon MC. 1995. Work conditions as explanations for the relationship between socioeconomic status, gender and psychological disorders. *Epidemiol Rev* 17(1): 127.
- Lurie N, Slater J, McGovern P, et al. 1993. Preventive care for women: does the sex of the physician matter? *N Engl J Med* 329: 478–82.
- McGee R, Williams SM, Kashani JH, et al. 1983. Prevalence of self-reported depressive symptoms and associated social factors in a sample of mothers in Dunedin. *Br J Psychiatry* 143: 473–9.
- McGill H, Burrows V, Holland L, et al. 1995. Postnatal depression: a Christchurch study. *NZ Med J* 108: 162–5.
- Meakin CJ, Brockington IF, Lynch S, et al. 1995. Dopamine supersensitivity and hormonal status in puerperal psychosis. *Br J Psychiatry* 166: 73–9.
- Mello NY, Mendelson JH, Lex BW. 1990. Alcohol use and premenstrual symptoms in social drinkers. *Psychopharmacology* 101: 448–55.
- Menkes DB, Coates DC, Fawcett JP. 1994. Acute tryptophan depletion aggravates premenstrual syndrome. *J Affect Disord* 32: 37–44.
- Merikangas KR, Weissman MM, Pauls DL. 1985. Genetic factors in the sex-ratio of major depression. *Psychol Med* 15(1): 63–9.
- Mullen PE, Martin JL, Anderson JC, et al. 1993. Child sexual abuse and mental health in adult life. *Br J Psychiatry* 163: 721–32.

- Mullen PE, Martin JL, Anderson JC, et al. 1994. The effect of child sexual abuse on social, interpersonal and sexual function in adult life. *Br J Psychiatry* 165: 35–47.
- Mullen PE, Romans-Clarkson SE, Walton VA, et al. 1988. Impact of sexual and physical abuse on women's mental health. *Lancet* 16: 841–5.
- Murchie E. 1984. *Rapuora: Health and Māori Women*. Wellington: The Māori Women's Welfare League.
- Nadelson CC and Raphael B. 1995. Prevention and women's health and mental health. In: B Raphael, CD Burrows (eds). *Handbook of Studies of Preventive Psychiatry*. Amsterdam: Elsevier.
- Ng SL, Martin JL, Romans SE. 1995. A community's attitudes towards the mentally ill. *NZ Med J* 108: 505–6.
- Nolen-Hoeksema S. 1987. Sex differences in unipolar depression: evidence and theory. *Psychol Bull* 101: 259–82.
- Nolen-Hoeksema S, Girgus JS, Seligman ME. 1992. Predictors and consequences of childhood depressive symptoms: a 5-year longitudinal study. *J Abnorm Psychol* 101: 405–22.
- NZHIS. 1994. *New Zealand Birth, Abortion and Pregnancy Data*. Wellington: Health Research and Analytical Services, New Zealand Health Information Service.
- 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. *Aust NZ J Psychiatry* 23: 327–40.
- O'Hara MW, Neunaber DJ, Zekoski EM. 1984. Prospective study of post-partum depression: prevalence, course and predictive factors. *J Abnormal Psychol* 93: 158–71.
- Ossip-Klein DJ, Doyne EJ, Bowman ED, et al. 1989. Effects of running or weight lifting on self-concept in clinically depressed women. *J Consul Clin Psychol* 57: 158–61.
- Park J. 1991. Beyond stereotypes: a study of some New Zealand women alcohol drinkers. *Aust J Public Health* 15(3): 202–6.
- Paykel E and Jenkins R. 1994. *Prevention in Psychiatry*. London: Gaskell.
- Petruzzello S and Landers D. 1994. State anxiety reduction and exercise: does hemispheric activation reflect such changes. *Med Sci Sports Exerc* 26(8): 1028–35.
- Philipps LH and O'Hara MW. 1991. Prospective study of postpartum depression 4.5 year follow-up of women and children. *J Abnorm Psychol* 100(2): 151–5.
- Pomare EW and de Boer G. 1988. *Hauora: Māori Standards of Health: A study of the years 1970–1984*. Wellington: Medical Research Council.
- Pomare EW, Keefe-Ormsby V, Ormsby C, et al. 1995. *Hauora: Māori Standards of Health, III: A study of the years 1970–1991*. Wellington: Huia Publishers.
- Public Health Services. 1985. *Women's Health: Report of the PHS Task Force on Women's Health Issues*. Rockville, MD: US Department of Health and Human Services.
- Redman S, Webb GR, Hennrikus DJ, et al. 1991. The effects of gender on diagnosis of psychological disturbance. *J Behav Med* 14(5): 527–40.
- Regier D, Boyd JH, Burke JD, et al. 1988. One-month prevalence of mental disorders in the United States: based on five epidemiological catchment (ECA) sites. *Arch Gen Psychiatry* 45: 977–86.
- Reid, P. 1985. Waiora: an explanation. *Health* 37: 3–5.

- Romans S, Martin J, Anderson J, et al. 1995a. Child sexual abuse and deliberate self harm. *Am J Psychiatry* 152: 1336–42.
- Romans S, Martin J, Anderson J, et al. 1995b. Factors that mediate between childhood sexual abuse and adult psychological outcome. *Psychol Med* 25: 127–42.
- Romans S, McNoe B, Walton V, et al. 1990. Cigarette smoking and psychiatric morbidity in women. *Aust NZ J Psychiatry* 27: 399–404.
- Romans S, Walton V, McNoe B, et al. 1993a. Otago Women's Health Survey 30-month follow-up, I: onset patterns of non psychotic psychiatric disorder. *Br J Psychiatry* 163: 733–8.
- Romans S, Walton V, McNoe B, et al. 1993b. Otago Women's Health Survey 30-month follow-up, II: remission patterns of non-psychotic psychiatric disorder. *Br J Psychiatry* 163: 739–46.
- Romans-Clarkson SE, Walton VA, Dons DJ, et al. 1990. Which women seek help for their psychiatric problems? *NZ Med J* 103: 445–8.
- Romans-Clarkson SE, Walton VA, Herbison GP, et al. 1988. Marriage, motherhood and psychiatric morbidity. *Psychol Med* 18: 983–90.
- Romans-Clarkson SE, Walton VA, Herbison GP, et al. 1989. The validity of the GHQ-28 and its subscales in New Zealand. *Aust NZ J Psychiatry* 23: 187–96.
- Romans-Clarkson SE, Walton VA, Herbison GP, et al. 1990. Psychiatric morbidity among women in urban and rural New Zealand: psychosocial correlates. *Br J Psychiatry* 156: 84–91.
- Romans-Clarkson SE, Walton VA, Herbison, GP, et al. 1991. Alcohol-related problems in New Zealand women. *Aust NZ J Psychiatry* 26(2): 175–82.
- Romans-Clarkson SE, Walton VA, Herbison GP, et al. 1992. Social networks and psychiatric morbidity. *Aust NZ J Psychiatry* 26: 485–92.
- Ropiha D. 1994. Kia Whai Te Maramatanga: The effectiveness of health messages for Māori. Paper presented at the Public Health Association Conference, Wellington, 18–21 May 1993.
- Scott J and Paykel E. 1994. Affective disorders. In: ES Paykel, R Jenkins (eds). *Prevention in Psychiatry*. London: Gaskell.
- Seeman MV and Lang M. 1990. The role of estrogens in schizophrenia gender differences. *Schizophr Bull* 16(2): 185–94.
- Sprock J, Blashfield RK, Smith B. 1990. Gender weighting of *DSM-III-R* personality disorder criteria. *Am J Psychiatry* 147(5): 586–90.
- Steiner M. 1992. Female-specific mood disorders. *Clin Obstet Gynaecol* 35: 599–611.
- Steiner M, Haskett RF, Carroll BJ, et al. 1984. Circadian hormone secretory profiles in women with severe premenstrual tension syndrome. *Br J Obstet Gynaecol* 91: 466.
- Susman EJ, Inoff-Germain GE, Nottelmann ED, et al. 1989. Hormones, emotional dispositions, and aggressive attributes in young adolescents. *Child Dev* 58: 1114–34.
- Susman EJ, Nottelmann ED, Inoff-Germain G, et al. 1987. Hormonal influences on aspects of psychological development during adolescence. *J Adolesc Health Care* 8: 492–504.
- Tannen D. 1990. *You Just Don't Understand: Women and men in conversation*. London: Virago Press.
- Te Puni Kōkiri. 1994. *Te Ara Ahu Whakamua: Proceedings of the Māori Health Decade Hui, March 1994*. Wellington: Te Puni Kōkiri.

- Verbrugge LM. 1984. How physicians treat mentally distressed men and women. *Soc Sci Med* 18: 1–9.
- Waring M. 1988. *Counting for Nothing: What men value and what women are worth*. Wellington: Allen and Unwin, in association with Port Nicholson Press.
- Webster ML, Thompson JMD, Mitchell EA, et al. 1994. Postnatal depression in a community cohort. *Aust NZ J Psychiatry* 28: 42–9.
- Weissman MM and Klerman GL. 1977. Sex differences and the epidemiology of depression. *Arch Gen Psychiatry* 34: 98–111.
- Wennink JMB, Delemarre-van de Waal HA, Schoemaker R, et al. 1990. Luteinizing hormone and follicle stimulating hormone secretion patterns in girls throughout puberty measured using highly sensitive immunoradiometric assays. *Clin Endocrinol* 33: 333–44.
- WHO, Health and Welfare Canada, Canadian Public Health Association. 1986. *Ottawa Charter for Health Promotion*. Ottawa: World Health Organization, Health and Welfare Canada, Canadian Public Health Association.
- Wieck A. 1989. Endocrine aspects of postnatal mental disorder. *Baillières Clin Obstet Gynaecol* 3(4): 857–77.
- Wieck A, Kumar R, Hirst AD, et al. 1991. Increased sensitivity of dopamine receptors and recurrence of affective psychosis after childbirth. *BMJ* 303: 613–6.
- Wilhelm K and Parker G. 1994. Sex differences in lifetime depression rates: fact or artefact? *Psychol Med* 24: 97–111.
- Wrate RM, Rooney AC, Thomas PF, et al. 1985. Postnatal depression and child development: a three-year follow-up study. *Br J Psychiatry* 146: 622–7.

CHAPTER 8: LESBIAN WOMEN

SUZANNE JOHNSON AND CELIA JAMES

*They have pointed at me with irritated gestures,
Because my eyes searched out your tender look . . .
And seeing us go by, no one wanted to understand
That I had simply chosen you.*

Renée Vivien 1877–1910

A lesbian may be a single woman, a partner, a mother, a member of an ethnic minority. She may identify as lesbian at adolescence, mid-life or later. She may have a physical disability or a mental illness. She may be part of a national sports team, a politician, a political activist. A shared identity differentiates lesbians from other women. Lesbian identity is not limited to sexual activity but encompasses a primary and ontological orientation towards women, a lifestyle preference that is women centred, and a way of being that is women relating (Ponse 1978). Being lesbian is an issue that encompasses social, emotional, political and historical dimensions (Williams 1987).

While opinions and theories of the origins of homosexuality in women have been proffered by psychoanalysts and researchers for decades, and atrocious attempts at ‘cure’ have been inflicted, there is no conclusive understanding of the origins of sexual preference. Some women feel their lesbian sexual preference is innate; some feel they have made a social and emotional choice (Welch 1995). The concept of fixed sexual orientation (innate from birth) compared with the development over time of sexual identity (the way people perceive themselves) is debated by lesbian and gay researchers, and mental health practitioners. Falco (1991) describes lesbian identity as ‘a fluid characteristic’ which can, along with sexual behaviour, fluctuate over a woman’s life-span. One clinician (Golden 1987) describes a distinction between those who felt their lesbianism was essentially beyond their control (‘primary lesbians’), and those who felt it was consciously chosen (‘elective lesbians’). This latter group includes (though is not entirely made up of) those women who define themselves as bisexual or engage in bisexual behaviour. Chapman and Brannock (1987) found that 63 percent of those surveyed stated they had chosen to be lesbian, 28 percent felt they had no choice and 11 percent did not know why they were lesbian.

It is estimated that 10 percent of the population of the United States is lesbian or gay (Buhrke 1989). A recent Australian study of 117 tertiary students found that 20 percent of men and 28 percent of women reported current awareness of some degree of homosexual feeling (McConaghy and Zamir 1995). Gaining accurate statistics on women who identify as lesbian or bisexual is hindered by the reluctance of some women to declare their sexual orientation or preference in order to avoid a negative response.

KEY MENTAL HEALTH PROBLEMS

A survey of 561 New Zealand lesbians by Welch (1995) was prompted by a literature review in which she found very little substantive and sound epidemiological research. She aimed to compare the mental health concerns of respondents with those of the general population of New Zealand women. Calling her research 'a preliminary step', and acknowledging the difficulty of obtaining responses from a fully representative sample of lesbians, Welch found in the respondent group:

- a higher rate of use of mental health services
- similar rates of serious mental illnesses to other New Zealand women
- a high rate of reported past suicide attempts compared to other reported rates of parasuicide
- similar or lower amounts of alcohol use and similar tobacco use compared to the general population of New Zealand women
- a higher proportion had tried marijuana and other recreational drugs
- a high proportion reported sexual abuse either as a child or adult
- those with indications of poor social networks or limited social support were more likely to have higher General Health Questionnaire scores, indicating mental health difficulties.

Welch's findings can be compared with those of the American National Lesbian Health Care Survey of 1917 lesbians (Bradford et al 1994).

- Both studies found that lesbians are frequent users of mental health services.
- The American study showed high rates of alcohol use among lesbians and noted the use of bars as a social resource.
- Rates of physical and sexual abuse in the American study were approximately the same as for all American women (Falco 1991).
- The American study found that depression was a precipitating factor for one out of two lesbians seeking treatment and that relationships are a major treatment focus for lesbians who seek counselling (44 percent sought treatment because of issues with lovers, 34 percent because of family, 10 percent because of friends and 21 percent for loneliness).
- Of Welch's respondents, 52.9 percent had experienced serious suicidal ideation and 20.3 percent had attempted suicide. Of these suicide attempts, 80.7 percent were before the respondents were 25 years of age. In the US survey, 27 percent had (at some time) thoughts about suicide, and 18 percent had tried to kill themselves (Falco 1991).

Welch concludes that the actual risk for mental health problems among lesbians is still unknown, with studies of alcohol and drug use and suicide attempts having found conflicting evidence. Her speculations on the higher rate of sexual abuse include the possibility that feminist awareness may make some lesbians more likely to report these experiences.

RISK FACTORS

Rothblum (1990) states, regarding general risk factors for depression among lesbians, there is some indication that many have fewer categories of social support than do heterosexual women, and are thus more dependent on lesbian friends and partners. Thus, being part of a lesbian community becomes important for lesbians. Women who are less public about their sexual orientation 'in their place of work, family of origin and among acquaintances . . . are more likely to be isolated or have poor social networks and . . . are more likely to have poor mental health' (Welch 1995).

A prevailing societal belief that heterosexuality is superior creates biases influencing the lives of lesbians. Society's disapproving and hostile reaction to a lesbian can lead to internalised 'homophobia', with resultant guilt, fear and self-hatred leading her to hide her sexual identity. Smith (1988) has postulated that depression and dysthymia may result from the conflict that closeted lesbians face living this 'double' lifestyle. A lesbian may encounter negative attitudes and responses to her sexuality in all aspects of her life, such as work (Atmore 1990), family, school, and in public places. These negative attitudes include ongoing verbal and physical violence, often perpetrated by co-workers and neighbours (Lesbian and Gay Anti-Violence Project 1992).

A study of the effects of secondary-school environments on young women concluded that both young lesbians and lesbian teachers are subjected to homophobia, heterosexist oppression and discrimination (Stapp 1991). This study further showed that young lesbians do not 'come out' at school because school is not a supportive environment.

'Outness' is a critical concept for understanding lesbians as it refers to an aspect of daily reality that has no counterpart in the lives of heterosexuals. It is within this dimension of lesbian life that social marginality can best be understood, for although some people see lesbians as another minority group, many more still view lesbians as profoundly different and disgusting. Thus, lesbians risk rejection whenever they disclose their sexual orientation ('come out') to heterosexuals (Bradford et al 1994).

The process of coming out has positive elements in that it increases the chances that lesbians will come in contact with others who share similar concerns and gives lesbians a sense of self-worth and identity in a hostile society (Rothblum 1990).

Lesbians more at risk of mental health problems are those without the protective factors of relationships, community and employment. Those with diminished and interrupted social ties within their personal support network have been portrayed as having a higher suicide risk than those with many, varied and uninterrupted social ties (Saunders and Valente 1987). Older lesbians have been 'invisible' because of the triple minority status of their age, sex and sexual orientation, and may be especially secretive about their sexual orientation because of experiences with homophobic violence, legal and medical discrimination, religious condemnation, or family rejection in their younger years (Deevey 1990). To be old and gay demands adaptation that most people have never had to experience.

PROTECTIVE FACTORS

A positive lesbian identity is a major factor in lesbian mental health. An American study of the psychological adjustment of lesbians and gay men (Miranda and Storms 1989) suggested that development of a positive lesbian or gay identity is an important task in promoting the psychological adjustment of lesbians and gay men. In their study of 194 young people, Hershberger and D'Augelli (1995) found family support influenced mental health, with the single largest predictor of mental health being self-acceptance. In addition, a general sense of personal worth coupled with a positive view of their sexual orientation appeared to be critical for the young people's mental health.

Wolf (1982) conducted in-depth interviews with 100 older lesbians and gay men and documented their many strengths. These included: learning at an early age to fend for themselves; cultivating several non-career interests; preserving friendships outside a lover relationship; increasing their personal autonomy; and more easily adjusting to old age since homosexuality means one has to live with a stigmatised identity throughout life. Leavy and Adams (1986) found a positive correlation between participation in feminist activities and self-acceptance among lesbians. The respondents in Welch's (1995) study reported that being lesbian gave a strong sense of self, community and empowerment.

Studies have identified several consistent requirements for improved mental health for lesbians, including:

- providing a safe and comfortable environment for the client to discuss matters of sexuality; acknowledging and recognising the nature of living as part of a stigmatised minority; the provision of alternative services for lesbians or gay men; the provision of lesbian and gay role models; recognising internalised homophobia and working through that with the client (Welch 1995). A majority of those surveyed by Welch (1995) found alcohol and drug services treated lesbianism as a pathology and outcomes for lesbians in these services were worse compared with those for heterosexual women.
- the inclusion of accurate lesbian information and current research on homosexuality into courses for all health, social and community workers. The proposition that some mental health professionals are homophobic or ignorant about differences in sexual orientation is supported in Welch's findings (Welch 1995). Information about homosexuality and gay/lesbian counselling, when of sufficient length and relatively comprehensive in content, can result in significant and possibly enduring modification of attitudes toward homosexuality and greater therapeutic effectiveness (Rudolph 1989).
- further research into the understanding of sexual orientation and the process of adopting a preferred sexual identity label. The terms 'gay male' and 'lesbian' refer primarily to identities and to the modern culture and communities that have developed among people who share these identities. They should be distinguished from sexual behaviour. Some men and women have sexual relationships with others of their own sex but do not consider themselves to be gay or lesbian (Committee on Lesbian and Gay Concerns 1991). Research on gay and lesbian people provides new and enhanced paradigms and ways of thinking about the whole of human behaviour (Strickland 1995).
- further studies to clarify contradictions in current research, including those women not surveyed in studies of predominantly White, middle-class, urban women who are involved in some form of lesbian network.
- further studies into lesbian identity, partnerships, and how the relationship with community can reaffirm and support identity (Trippet and Bain 1990; Stevens and Hall 1990). The assessment of the psychological resources and adaptability of lesbians to survive in a hostile and stressful environment is an area of future research with applicability to the larger society (Bradford et al 1994).

REFERENCES

- Atmore C. 1990. 'Everything isn't for Everybody': *Some experiences of being lesbian in the workplace*. Dept of Sociology and Social Work, Working Papers No. 5. Wellington: Victoria University of Wellington.
- Bradford J, Ryan C, Rothblum ED. 1994. National Lesbian Health Care Survey: implications for mental health care. *J Consult Clin Psychol* 62(2): 228–42.
- Buhrke RA. 1989. Incorporating lesbian and gay issues into counselor training: a resource guide. *Journal of Counseling and Development* 68: 77–80.
- Chapman BE and Brannock JC. 1987. Proposed model of lesbian identity development: an empirical examination. *J Homosex* 14: 69–80.
- Committee on Lesbian and Gay Concerns. 1991. Avoiding heterosexual bias in language. *Am Psychol* 46: 973–4.
- Deevey S. 1990. Older lesbian women: an invisible minority. *J Gerontol Nurs* 16: 35–7.
- Falco KL. 1991. *Psychotherapy with Lesbian Clients*. New York: Brunner/Mazel.
- Golden C. 1987. Diversity and variability in women's sexual identities. In: Boston Lesbian Psychologies Collective (ed). *Lesbian Psychologies*. Urbana: University of Illinois.
- Hershberger SL and D'Augelli AR. 1995. The impact of victimisation on the mental health and suicidality of lesbian, gay, and bisexual youths. *Dev Psychol* 31: 65–74.
- Leavy RL and Adams EM. 1986. Feminism as a correlate of self-esteem, self-acceptance, and social support among lesbians. *Psychology of Women Quarterly* 10: 321–6.
- Lesbian and Gay Anti-Violence Project. 1992. *The Off Our Backs Report: A study into anti-lesbian violence*. Sydney: Gay and Lesbian Rights Lobby.
- McConaghy N and Zamir R. 1995. Sissiness, tomboyism, sex-role, sex identity and orientation. *Aust NZ J Psychiatry* 29: 278–83.
- Miranda J and Storms M. 1989. Psychological adjustment of lesbians and gay men. *Journal of Counseling and Development* 68: 41–5.
- Ponse B. 1978. *Identities in the Lesbian World: The social construction of self*. Westport, CT: Greenwood Press.
- Rothblum ED. 1990. Depression among lesbians: an invisible and unresearched phenomenon. *Journal of Gay and Lesbian Psychotherapy* 1(3): 67–87.
- Rudolph J. 1989. Effects of a workshop on mental health practitioners' attitudes towards homosexuality and counseling effectiveness. *Journal of Counseling and Development* 68: 81–5.
- Saunders J and Valente S. 1987. Suicide risk among gay men and lesbians: a review. *Suicide Death Studies* 11: 1–23.

- Smith J. 1988. Psychopathology, homosexuality, and homophobia. *J Homosex* 14: 53–65.
- Stapp A. 1991. Coming Out as a Young Lesbian. Unpublished thesis, Victoria University of Wellington.
- Stevens PE and Hall JM. 1990. Abusive health care interactions experienced by lesbians: a case of institutional violence in the treatment of women. *Response* 13(3): 23–6.
- Strickland BR. 1995. Research on sexual orientation and human development: a commentary. *Dev Psychol* 31: 137–40.
- Trippet SE and Bain J. 1990. Preliminary study of lesbian health concerns. *Health Values* 14(6):30–6.
- Vivien R. 1979. *At the Sweet Hour of Hand in Hand*. Weatherby Lake, MO: Naiad Press.
- Welch S. 1995. Lesbian Mental Health. Unpublished thesis, University of Otago, Dunedin.
- Williams J. 1987. *Psychology of Women: Behaviour in a biosocial context*. New York: Norton.
- Wolf DG. 1982. *Growing Older: Lesbians and gay men*. California: University of California Press.