

MENTAL HEALTH IN NEW ZEALAND FROM A PUBLIC HEALTH PERSPECTIVE

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MANATU HAUORA

SECTION III:

RISK FACTORS FOR POPULATION GROUPS

CHAPTER 3: MĀORI

LORNA DYALL

Kia mau ki te kura whero, kei mau koe ki te kura tawhiwhi;

Kei waiho koe hei whakamōmona mo te whenua tangata.

Hold onto the precious treasures, to the ancestral treasures;

Leave alone what is harmful to the people enriching the land today.

Hold fast to the genuine and true, do not be beguiled by that which is spurious and deceptive.

The promotion of mental health and wellness is not a new concept for Māori, but it is new for health and mental health services, which have largely focused on illness in the past. Māori have many cultural practices such as tapu* and noa, manakitanga (a philosophy and practice of caring for kin when sick and unwell) and tangihanga, which play an important role in expressing respect for people and their relationship to their tīpuna (ancestors), and coping with grief.

The appropriateness of Māori cultural practices have been questioned in the past, and previous government policies have weakened many Māori cultural values and social structures such as the whānau. Māori have seen this as the effects of colonisation and lack of recognition of the Treaty of Waitangi. The Treaty was signed in 1840 by a number of tribes in New Zealand and Queen Victoria's representatives, to provide protection and to promote the wellbeing of tangata whenua (natives) of New Zealand. It accorded rights and responsibilities to Māori, both individually and collectively, and to the Crown. Recognition of the Treaty is at an interesting stage of development in New Zealand. The Crown, through successive governments, has now acknowledged it as the foundation of New Zealand as a nation. The Government is currently attempting to negotiate with different Māori groups and iwi to settle past grievances. However the disempowered position of Māori as a Treaty partner has affected the psyche of Māori. This has contributed to the risk factors affecting the mental state of individuals, hapū and iwi.

Māori now consider that they have a right to be healthy and for the Treaty of Waitangi to not only be part of New Zealand's history, but the basis of the path forward for the development of New Zealand as a nation (Te Puni Kōkiri 1994b). A clear view is emerging of how Māori would like to see themselves in the medium term and what wellness and mental wellbeing mean in that context. Māori consider that substantial improvement in the health of Māori, and thus their mental health, is not likely to occur until socioeconomic, educational and justice issues are addressed, the Crown accepts the aspirations of tino rangatiratanga (self-determination) by Māori, there is an equitable distribution of health and related resources to Māori health needs and Māori are able to manage this funding.

* A glossary of Māori terms is provided on pages 100–101.

Mental health services in New Zealand are currently being reconfigured. Community services are being developed and psychiatric hospitals closed or substantially reduced in size. Alongside these developments, whānau, hapū, and iwi are rebuilding their cultural values and tikanga (customary practices) which have in the past provided protection for good health and contributed to reducing the risk of both Māori- and Western-defined mental disorders. A process of rebuilding Māori social structures, such as whānau, marae and te reo Māori, is now taking place. Durie has described this process as reinstitutionalisation, in contrast to what is happening in mental health service delivery (Durie 1994b). Mental health promotion and mental health services should support these developments as, in the long term, they are likely to help reduce the risk factors that contribute to mental disorders for Māori. The most effective initiatives are likely to be those that support the empowerment and development of Māori to achieve their own aspirations and address their own perceived mental health problems.

WHO IS A MĀORI?

In the 1991 Census of Population and Dwellings, three questions gave New Zealanders the opportunity to identify whether they considered themselves 'sole Māori'; whether Māori was one of the ethnic groups they identified with; and whether they had Māori ancestry. Each of these questions identified different populations, with each group having unique features. The 'sole Māori' group comprises those who name Māori as their only ethnic affiliation. The Māori ethnic population identify their culture as Māori or part-Māori, while the ancestry group has constitutional rights, and as individuals may exercise their right to take a claim to the Treaty of Waitangi Tribunal and to enrol on the Māori electoral roll. Pomare and colleagues (1995) concluded that 'who is Māori?' is not a simple matter. They recommended that information gained from the census be used carefully and that the most appropriate definition of Māori is chosen by Māori for the situation. They recommended that the 'sole Māori' population group be used as the definition of Māori for longitudinal health studies as it mirrors more closely the previous definition of Māori (half or more Māori ancestry). However, for policy purposes, the 'sole Māori' population, and the 'Māori as one of the ethnic groups a person identifies with' is generally taken to represent the Māori population. From the 1991 census, these combined together accounted for 434 847 people, or approximately 13 percent of the total population.

The census identified that Māori are predominately urban based and have a significantly lower socioeconomic and health profile than the non-Māori population. In 1991, for example, the annual median income of Māori males was \$12,955, less than two-thirds of the median income of non-Māori males (\$20,023). In the past, unemployment rates have been higher for both Māori males and females than non-Māori. For example, in 1991 Māori youth aged 15–24 years had an unemployment rate of 37 percent compared to 12 percent for non-Māori. The causes of these socioeconomic differences are complex, but from a Māori perspective are seen as the effects of the ongoing process of colonisation, the limited success of past government policies, and the lack of recognition of the Treaty of Waitangi and the rights and responsibilities it accorded to Māori, individually and collectively, as a Treaty partner.

Durie (1995) suggests at least three different distinct Māori groups are emerging. Members of the first group participate in many Māori activities, such as sending their children to Kōhanga Reo and participating in Māori sport and cultural activities, and are involved on their marae. The children of this group are likely to feel fairly comfortable on the marae, will be able to speak Māori and will

participate in a range of Māori activities, such as attending tangihanga. Members of this group identify strongly as Māori and probably defined themselves as ‘sole Māori’ in the 1991 census. The next group is likely to be much more a part of mainstream New Zealand society and the lifestyles of its members will closely resemble that of their Pākehā neighbours. Although from outside appearances they may seem no different from Pākehā, members of this group identify strongly as Māori. The third group are those Māori who do not participate strongly in either Māori or mainstream activities. They are seen as being relatively isolated, and from a health perspective, are likely to have greater needs. For example, they are likely not to have their own general practitioner and may have limited knowledge about when and how to access health services. Although members of this group may be cut off from their cultural roots, they also identify strongly as Māori.

Despite the different realities of Māori merging from one continuum to the other, all groups aspire to a strong cultural base which nurtures their identity. They wish to have social structures in place that allow them to participate and be valued in all sectors of Māori and non-Māori life. Current government health policy supports the recognition of this diversity and the Transitional Health Authority (THA) is now required to fund services that take account of the needs and aspirations of all three (or more) of these emerging groups.

In developing mental health promotion, there is a need for research that identifies the mental health priorities for each group, their common aspirations and how these should be met. There is also a growing view that the concept of ‘diverse realities’ for Māori should not be used as a weapon against Māori. It should not be argued that as homogeneity does not exist, there is no specific Māori identity. Instead these differing realities should be used as a framework to unite Māori to build a strong and dynamic cultural base.

SELF-IDENTIFICATION: MARKER OF MENTAL WELLNESS

In health services, it needs to be recognised that the question of who identifies as Māori, and when, is not a simple matter. The answer depends on who is asking, and why, and how a person feels about him- or herself at the time.

The number of individuals who positively state they are Māori, and changes in patterns of self-identification, are important indicators of mental wellbeing at a population-based level. They signal changing attitudes as people come to terms with who they are and their aspirations for the future. With Māori positively and assertively requesting tino rangatiratanga and the beginning of the settlement of past Treaty grievances, it will be interesting to see what changes have taken place in the size and profile of the Māori and iwi populations since the 1991 census when the results of the new census carried out in March 1996 are published.

The 1991 census was the first time that people with Māori ancestry were given the opportunity to define their tribal affiliations. Detailed iwi profiles were made available only to the respective iwi. This information has been valuable in determining the profile of a population for planning and as part of their discussions to resolve Treaty grievances. It has also allowed the number and needs of beneficiaries to be established and will help assist in determining the likely need for health and mental health services.

SELF-IDENTIFICATION AND COLLECTION OF INFORMATION

Self-identification is the most appropriate way of enabling people to define who they are. Although such information is not yet routinely collected at mental health out-patient and community-based services as part of national statistics, it was introduced in 1993 for in-patient data. However, this has not been without difficulties. In a clinical setting, it needs to be recognised that individuals and their whānau may change their ethnic identification during the course of their illness. At the beginning, they may state that they are not Māori as they consider their sickness is related to mate Māori and may not feel comfortable communicating this insight to health professionals. However, in a supportive environment and with the option of care from a Māori perspective, they may change their identification as part of their own path to wellness. For this and other reasons, it is likely that current mental health statistics under-report how many Māori need access to mental health services. The degree of under-reporting is unknown, but in other areas in the health sector it may be up to 30 percent (Kilgour and Keefe 1992).

There is a need for research on how ethnic information should be collected, by whom, and when and how this information should be used. This information would help develop and monitor mental health promotion strategies, assessment procedures, treatment and rehabilitation programmes and the allocation of funding to both Māori and mainstream services.

The lack of a detailed picture of the current mental health status of New Zealanders and Māori is an area of concern and warrants further research. The data from the 1985 Christchurch Epidemiology Psychiatric Study are reported elsewhere in this report (Wells et al 1989) (see Chapter 1 especially). Although this study drew from a population that does not reflect the cultural diversity of other parts of New Zealand, it provides key data in estimating that 3 percent of the general New Zealand adult population, including Māori, are likely to need mental health services for severe mental disorders in any one year. This figure was used to guide the development of the document that outlines strategic directions for mental health services for 1994 to 2004 (Ministry of Health 1994). However, it probably underestimates the full extent of the resources required for effective mental health promotion, early intervention, treatment and rehabilitation.

There are no national data on the extent of Māori mental health needs. The stocktake of the adequacy of community mental health services (1993) and the review of community services in the Waikato (1994) found that Māori have high needs but there are few services to meet these from a Māori kaupapa (foundation) (Bridgman 1994). This reinforces the need to establish the prevalence and incidence of mental disorder and health needs in Māori communities. This should also raise awareness of mental health issues and begin to challenge attitudes and behaviours that have been accepted and normalised, such as violence, passivity, abuse, hearing of voices, delusions and excessive alcohol and cannabis use. Increasingly, Māori are recognising mental health as a priority and are requesting more services delivered by Māori for Māori clients.

The new services that are being purchased by the Transitional Health Authority provide an opportunity to integrate mental health promotion into service delivery. The move to community-based mental health services and the establishment of benchmarks for specific services, such as youth and alcohol and drug services, provide the opportunity to gain ethnic information, to carry out appropriate assessments, to track changes in identification and to identify successful intervention strategies.

RISK FACTORS THAT INFLUENCE THE DEVELOPMENT OF MENTAL DISORDERS

Mental disorders are influenced by both genetic and social factors. In the report *Nga Ia o te Oranga Hinengaro Māori* (Te Puni Kōkiri 1993a), it is suggested that the pattern and diagnosis of mental disorders such as schizophrenia, psychosis and depression are affected more by social, cultural, and environmental factors than by genetic factors. Unfortunately, many Māori experience those sociocultural and environmental factors that are considered to increase the risk of developing these disorders.

A study of youth at risk has found the following factors affect the likelihood of mental disorder and alcohol and drug abuse: the degree of poverty, unemployment, adequacy of housing, prevalence of crime, the use of illegal drugs and whether a group occupies a minority status in a community (Community Substance Abuse Programme 1990). The family environment a person grows up in also has an important bearing on this. Particular factors include the degree of parental abuse or neglect, family instability, parental alcohol and drug dependency, the quality of parenting, and the stability of relationships between the parents and within the family. Other factors of importance include the lack of self-esteem and cultural esteem, the ability to cope with stress, the ability to communicate, the ability to establish and maintain relationships, success at school, educational achievement, and personal alcohol and drug use.

Mental health promotion programmes will need to address these issues. The *Ottawa Charter* (WHO et al 1986) provides a useful framework for Māori to work at all levels in creating change. In this model, Māori must be involved in all aspects of mental health decision-making to facilitate the development of supportive environments, to strengthen community networks and local leadership, to develop appropriate information and resources and to reorient mental and health services. For too long, Māori have been excluded from key decisions, or a generic approach has been taken so that differences in perspective have been glossed over. Māori are now beginning to take more control. A hui focusing on whakawhanaungatanga (kinship) (March 1996) encouraged Māori to develop their own promotion, prevention, treatment, and healing programmes. Māori are also beginning to see the need for Māori to understand their situation and the effects of colonisation. Further hui would assist the development of population-based strategies to address the risk factors for mental health problems for Māori.

TAPU AND NOA

Tapu and noa are fundamental parts of being Māori and underlie many of the tīkanga and behaviour that Māori carry out in everyday activities. Tapu as a concept is defined by Marsden (1975) as ‘the sacred state or condition in which a person, place or thing is set aside by dedication to the gods and therefore removed from profane use’. Tapu is about sacredness and according respect or mana to certain people, objects, events, places and parts of the body and recognising that all objects have their mauri (life force). Depending upon the situation, an object, person or event may be tapu or sacred. To recognise the importance of tapu, Māori protocol is often centred around according respect to or reducing the sacredness of an object or situation so that people are able to function in their daily activities without fear. Noa is about removing restrictions or protective mechanisms to this end.

Tapu and noa can be used to promote health and to provide protection to people. Traditionally, Māori have used the concepts of tapu and noa as a philosophical basis for protection and promotion of public health (Durie 1994b). Tapu and noa have been, and still are, associated with births, deaths, marriages, preparation for battle and conservation of food. The protocols used to respect tapu and noa vary according to the situation, but in general karakia (prayer), whaikōrero (speech), waiata (song), karanga (call), wai (water) and kai (food) may be used.

When Māori present to the health system, they come with their own world view and cultural concepts and values. In presenting, Māori may feel that they are unwell because they may have breached certain cultural protocols, perhaps by not according respect to an event or a place or by not requesting sufficient spiritual or ancestral protection. They may describe their sickness as *mate Māori*, or *mākutu*, and their *whānau* may describe their behaviour as disturbing or *pōrangī*. Williams (1985) describes *pōrangī* in terms of being ‘headstrong, the mind fully occupied, out of one’s mind, wandering and seeking’. Alongside the concept of *pōrangī*, Māori have other terms to define mental states, such as *wairangi*, to describe someone who is overly excited, infatuated or foolish. A similar concept is *haurangi*, which is generally used to describe someone who is drunk or intoxicated, but can also be used to convey madness. *Ārangī* conveys being unsettled or anxious, and *ārangirangi* describes someone who is listless or idle.

The perceived cause of unwellness may not be expressed openly when Māori present to the health system – for many different reasons, such as the inability to communicate what is considered to be the cause of the problem because they have little cultural knowledge themselves but just know that something is wrong, or because they are *whakamā* (ashamed). These matters may be ignored and behavioural symptoms interpreted in terms of a Western medical and or psychiatric framework, leading to inappropriate diagnosis and treatment. For example, use of cannabis may be seen as the primary cause of dysfunction rather than a secondary feature of a more severe illness.

While *Guidelines for Cultural Assessment in Mental Health Services* (Ministry of Health 1995) have been developed for use in mental health services, their benefits may be limited. Māori enter the mental health services in many different ways (eg, via accident and emergency services, presentation during an acute illness, or through the justice system), and so the proposed guidelines should be in place across the health and disability sector and should be formally evaluated.

The principles of cultural assessment aim to recognise the Treaty of Waitangi, enhance the cultural perspective of the client and *whānau* through appropriate assessment, care and treatment, and involve Māori in all aspects of care. These guidelines reinforce the Code of Health and Disability Consumer Rights in the health and disability sector and should be used as part of the development of principles for mental health promotion for Māori.

In order to integrate Western medicine and Māori concepts of health, sickness and behaviours into operational frameworks, rather than one taking precedence over the other, there is a need to study how Māori consumers and *whānau* present to the health system, their views on the causes of their ill health or mental distress and how the concepts of *tapu* and *noa* or *mate Māori* relate to this. Such research would support new government policy on Māori health services. From 1996/97 regional health authorities (and subsequently the Transitional Health Authority and its successor) had discretion to purchase *rongoā Māori* services if appropriate standards can be met. Within this policy, the place of *tohunga*, *kaumātua* and *kuia* may be made more explicit, with Māori having the right to request this support if needed.

Tapu and *noa* are now being used in new ways, such as through the philosophy of Health through the Marae (Te Puni Kōkiri 1995a). This model of health promotion has been pioneered at Tahuna Marae, at Waiuku in South Auckland, to promote Māori being ‘smokefree’. Using the concept of *tapu* and Māori *tikanga*, Māori receive a new message that smoking is bad for your health and therefore undermines the cultural base of being Māori as your body is *tapu*. In other situations, the concept of *tapu* is imposed by *rāhui*. Through this, protection may be accorded to particular food sources for a period of time, such as when a beach is closed off as it is unsafe. This concept has been adapted to other settings, such as a ban on the use of alcohol and drugs, or the use of speaking English when learning Māori.

The concepts of tapu and noa could be further extended in the development of Māori mental health promotion programmes and strategies. The use of Māori terms to describe different mental states should also be investigated as they may be more acceptable, and have less stigma attached, than current Western terms.

MĀORI MODELS OF WELLNESS

Māori view health broadly and support the general thrust of the World Health Organization's definition that health is a state of complete physical, mental and social wellbeing, rather than merely the absence of disease or infirmity. Māori have challenged the World Health Organization to broaden its view of health and to recognise also the importance of wairua and the whānau (Dyall 1988). At the historic Hui Whakaoranga (Department of Health 1984) and the Hui Taumata (Department of Māori Affairs 1984), Māori also advocated that health is about people, their development and their vision for the future.

In describing a Māori view of health, four different models have emerged through hui and different consultation processes over the last decade. These models will be outlined briefly. The first model is often described as the four cornerstones of wellbeing and is called the 'Te Whare Tapa Whā' model. This was developed by Durie in consultation with Māori at a number of hui in the early 1980s and was endorsed as a broad view of health for Māori at the Hui Whakaoranga. Good health is described in relation to the four walls of a strong house: te taha wairua (spiritual wellbeing), te taha hinengaro (mental wellbeing), te taha tinana (physical wellbeing) and te taha whānau (family wellbeing). A person is considered unwell if any one of these foundations is weak. For a person to be healthy, all four walls need to be strong.

The second model of health is called 'Te Wheke', or the octopus. It has been developed by Pere (1984) and was first presented at the Hui Whakaoranga. This model supports the above but describes all of the components that need to be in place for waiora, or total wellbeing, to exist. For a person or a group of people to have wellbeing, they need wairuatanga (spirituality), hinengaro (mental wellbeing), taha tinana (physical wellbeing), whanaungatanga (extended family), whatumanawa (emotions), mauri (life force), mana ake (unique identity), and ha a koro ma a kui ma (inherited strengths). Each of these features represents one of the eight tentacles of the octopus.

The third model of health was developed as part of the proceedings of the Royal Commission on Social Policy in the late 1980s and has been called the 'Ngā Pou Mana' model. For a group of people to be healthy, they are dependent upon appropriate social and economic policies being in place. Policies must recognise the importance of whanaungatanga (extended family), taonga tuku iho (cultural heritage), te ao turoa (physical environment) and tūrangawaewae (source of identity).

The fourth model of health has been developed recently at the hui Te Ara Ahu Whakamua (Te Puni Kōkiri 1994b). This model builds on the three models that were developed in the 1980s and looks to the future. Māori now consider that they have the right to be healthy and have a clear view of where they would like to be by the year 2000. For Māori to be healthy, people need a sense of identity, self-esteem, control over their own destiny, a voice that is heard, knowledge of te reo Māori and tikanga, and economic and whānau security.

If this vision of wellness were achieved it would reduce many of the identified risk factors that are known to affect mental illness. From a public health perspective, Māori mental health promotion programmes will need to take a broad approach, support intersectoral collaboration and responsibility, and support Māori aspirations of tino rangatiratanga and Māori service delivery. *He Matariki*, a Māori public health strategic plan, seeks to achieve these goals (PHC 1995).

All of the above models of health have been developed within the context of contemporary Māori life, but they have drawn upon traditional Māori values, concepts and practices, and particularly the concepts of tapu and noa.

MĀORI MENTAL HEALTH STATUS

There are no standardised measures that capture health from a Māori perspective. However, Māori are disproportionately overrepresented as clients of health and related services, such as prisons, child health camps, children in supervisory care, women's refuges, alcohol and drug services, Accident Rehabilitation Compensation and Insurance Corporation (ARCIC, but usually referred to as 'ACC') services and general hospital admissions. This overrepresentation is particularly pronounced in those services that require custodial or intensive supervisory care, or intense treatment and rehabilitation services. For example, Māori make up approximately half of the prison population, a third of the clients of ACC (Te Puni Kōkiri 1995c) and over half the clients of women's refuges. The overrepresentation of Māori in all of these services provides an indication that Māori have high unmet mental health needs. Existing agencies have their own specific focus and do not offer the necessary comprehensive approach to health care. Many of these services have minimal Māori input into planning and decision-making. As a result they have no real impact on changing the health status of Māori. There is a need for these agencies to accept responsibility for Māori mental health as part of their service and there should be a general acceptance of what constitutes wellness for Māori. This would be facilitated by a common purchasing and service delivery framework that goes across agencies, such as *Whāia te Ora mō te Iwi* (Department of Health 1992). The Government's expectations for the THA must involve Māori in purchasing and delivering services to Māori and the wider community.

PATTERNS OF MĀORI MENTAL HEALTH ADMISSIONS

Te Puni Kōkiri has reviewed the pattern of Māori first admissions and readmissions to mental health services and has found the results disturbing (Te Puni Kōkiri 1993a). It has been found that over the period 1960 to 1990, Māori first admission rates have increased dramatically, and are slightly higher than Pākehā rates. Since 1990, the rate of first admissions has been relatively stable for all groups.

Psychosis and drug and alcohol abuse account for almost a third of first admissions. The increase in alcohol and drug abuse among Māori is seen as the underlying reason why Māori readmission rates are so high. The increase in alcohol- and drug-related problems for Māori was identified as an issue in 1993 with the release of *Nga Ia o te Oranga Hinengaro Māori* (Te Puni Kōkiri 1993a), and should be considered as a major focus for both mental and general health promotion.

Admission rates for alcohol psychosis (including Korsakoff's psychosis, now termed the amnesic syndrome) and drug psychosis for Māori are approximately five times those for non-Māori. The rate of admissions for alcohol and drug abuse are also increased for Māori, especially for Māori men.

From the pattern of use of alcohol and drug treatment services, it appears that Māori are more likely to be cared for in an institutional setting than in the community. When Māori are first admitted for alcohol and/or drug abuse, this is usually seen as the major problem, rather than symptomatic of a wider mental health problem. Cannabis, for example, can hide symptoms of a major psychotic illness such as schizophrenia which will benefit from early active treatment if recognised.

Alcohol and drug abuse have a wider impact than admissions to mental health services, as they also contribute to injuries. In 1990, accidents, particularly motor vehicle accidents, were the second major cause of admissions to general hospitals for Māori.

During the decade 1980 to 1990, Māori were 40 percent more likely to be readmitted to psychiatric services than Pākehā. The Māori male readmission rate is particularly high. Between 1984 to 1993 it increased by 65 percent, while for Māori women the increase has been 28 percent. Over this period the readmission rate for Pākehā fell by 25 percent (Bridgman and Dyll 1996). When readmitted, Māori are likely to be diagnosed as having a severe psychotic illness, such as schizophrenia, affective disorder or other psychotic disorders. Schizophrenia is the most debilitating psychotic illness, particularly if not diagnosed and managed well. While schizophrenia accounts for only 17 percent of first admissions, nearly half of readmissions (45 percent) are for this illness and this rate is increasing for both Māori males and females (Bridgman and Dyll 1996). Affective psychosis and other psychoses make up approximately 20 percent of first admissions and 30 percent of readmissions.

The high rate of diagnosis of a psychotic illness for Māori suggests that the way in which Māori present, their behaviour, and the way they communicate what is happening for them (such as being in contact with one's ancestors or seeing visions for the future), are perhaps not being interpreted in the context and diverse realities of being Māori.

Non-psychotic illnesses account for 14 percent of Māori first admissions and 9 percent of readmissions. Admissions for these illnesses are declining for both Māori and for Pākehā, as these problems are now being cared for on an out-patient basis or in community-based services.

The low rate of admission of Pacific people for these illnesses suggests that either these illnesses are not recognised in their culture or they have not yet been influenced by Pākehā or Western-related disorders. It could be suggested that as Māori take on Pākehā values and concepts of illness they are more likely to become prone to Pākehā illnesses, such as anorexia nervosa. Such issues must be borne in mind when developing mental health programmes for Māori.

Compulsory admissions account for a third of all admissions for Māori men. These include those being committed to hospital under the Mental Health (Compulsory Assessment and Treatment) Act 1992 and those sent on remand under the Criminal Justice Act 1985. The rate of involuntary admission is 154 percent higher for Māori men than Pākehā men and 55 percent higher for Māori women than Pākehā women. Māori are also more likely to be referred for forensic care. At the Mason Clinic and Lake Alice (both forensic psychiatric units), Māori account for 40 percent of all admissions.

As national mental health information is available only up to 1993, it is not possible to review what impact, if any, the restructuring resulting from the health reforms and the Government's *Looking Forward: Strategic directions for mental health services* (Ministry of Health 1994) have had on Māori mental health. Similarly, it is not possible to determine the effects of deinstitutionalisation of mental health services on Māori, as current national, regional and local ethnic community-based information is not available.

There is an urgent need to review what is happening for Māori in mental health, as first admission and readmission rates increase, and the severity of illnesses at admission become more severe; and it seems that Māori are being treated differently. On average, Māori spend 40 percent less time in hospital despite the high likelihood of being diagnosed as having a psychotic illness. The difference in length of stay suggests that Māori are not receiving the amount of care expected on the basis of their diagnoses. The disproportionate representation in forensic psychiatric services is also of major concern.

National information on the function and effectiveness of mental health services provided from a Māori perspective is not yet available but is clearly needed. Durie (1994a), when reviewing Māori psychiatric admissions and policies over the last three to four decades, suggested that Māori may be subject to overt discrimination in the mental health system with health professionals being uneasy with less restrictive forms of treatment.

NORMALISATION OF MENTAL ILLNESS

Māori communities have limited information about early signs and symptoms of both Māori and psychiatric illnesses and whom to see about these, whether Māori healers or mental health specialists. If there is a mental health problem, it is often unclear how to access health care at an early stage so that compulsory admissions are avoided and the level and type of care are appropriate.

Due to the massive changes that have occurred in Māori communities over the last decade or so, such as the restructuring of the economy, many Māori have been displaced from employment to unemployment, and forced to accept welfare dependency and early retirement which are in themselves risk factors for mental disorders. As a result, unemployment and welfare dependency have become normalised. This process of normalisation is supported by Māori cultural values and spirituality. However, some accepted behaviours, such as domestic violence and abuse and excessive alcohol and drug use, need to be challenged if Māori mental health is to be improved.

If mental health promotion programmes are to begin to change cultural norms, they must be developed with Māori whānau, hapū and iwi. There is a need to consider a range of other health issues as well, such as smoking, cervical cancer screening, heart disease, and sudden infant death syndrome prevention, in an integrated model. The Māori and iwi health services being developed at present by Māori provide an ideal foundation to create a new infrastructure to deliver a range of health services, including an integrated mental health component.

Durie (1995) has suggested that establishing mental health services as part of primary health care services will not be easy and will need to be tackled carefully. A small study to identify obstacles to primary health care involving members of Te Runanga o Raukawa found that 80 percent would not wish to consult a medical practitioner about emotional or behavioural problems, irrespective of who the doctor was. This study suggests that Māori do not see the doctor as the first point of contact and so more appropriate people will need to be trained to deliver information and carry out primary intervention work.

The choice and training of such workers will need to recognise the needs of young Māori males in particular. This group has high mental health needs and their behaviour puts them at risk of being compulsorily admitted, being diagnosed as psychotic or even imprisoned. The need to be sensitive to the emotional needs of Māori men has also been highlighted in a small study looking at the health priorities of young Māori men living within the area of Te Runanga o Te Rarawa (around Kaitaia) (Te Puni Kōkiri 1994c). This found that the young men interviewed wanted information about general

emotional and social development, life skills, and how to handle relationships, as they knew that if they were to have a job, they would have to leave the area and go to the city. They also stated that they would feel more comfortable talking to someone who was either not too close in age or not part of their whānau or close community. They also had clear views regarding marijuana and alcohol use and saw that alcohol in particular was widely abused and a problem for their parents and peers.

DIFFERENT TRENDS FOR MĀORI MEN AND WOMEN

Māori men have higher rates of admission than Pākehā men for every diagnostic category except affective and other psychosis readmissions. In particular, Māori males have much higher admission rates for psychotic illnesses and for drug and alcohol abuse. Two factors may affect this pattern of admission. The first is that some Māori men may have difficulty talking about or communicating what is happening for them and instead behave aggressively and thus are considered dangerous. Bizarre behaviour may also appear dangerous. The greater physical strength of men compared to women means that they are more likely to be seen as out of control and in need of admission to protect themselves or others.

In contrast, the admission rate for Māori women for all disorders is lower than for non-Māori, although increasing. Māori women are more likely to be first admitted aged 20–29 years, with readmissions generally occurring over the age of 39 years. The cause of readmissions is not clear but may be related to their changing situation, as children become more independent, leave home, and start work and these women face the pressures of heading a household on their own and trying to survive on a low income with little support.

INJURIES LINKED TO MENTAL HEALTH NEEDS

The high rate of unintentional and intentional injuries among Māori suggests high levels of mental distress and unmet mental health needs. Eleven percent of all Māori male deaths in 1991 were caused by unintentional injuries, twice that for non-Māori males. Hospitalisation rates for unintentional injuries are also high for Māori, particularly males aged between 15 and 24 years, although the increasing rate for Māori females is also of concern. The most common causes of admission for both groups are for accidental falls (28 percent), complications from surgical or medical treatment (18 percent) and motor vehicle crashes (13 percent). Māori also suffer more accidents in the home, violence and child injuries. In 1992, Māori had over three times the general population rate of admissions of children aged 1–4 years for injuries caused by hot objects and caustic or corrosive materials (PHC 1994).

It is suggested that injuries which are regarded as accidents (whether unintentional or intentional) for Māori should not necessarily be seen as an accident but related to the social environment in which Māori live and the daily stress they face. Stress is a major mental health issue for Māori which requires further research.

The increasing rate of intentional injuries, particularly suicides, among Māori is alarming. Between 1980 and 1991, non-Māori had a higher rate than Māori, and the incidence increased by 47 percent for this group over this period. However, the rate for Māori increased by 162 percent in the same time. Suicides in police custody account for about one-quarter of all suicides in Māori men aged 15–49 years, compared to 1.7 percent in non-Māori males.

Research initiated by the Minister of Justice (February 1996) to assess the mental state of prisoners and to consult with Māori regarding suicides in prison has important implications for mental health promotion and service delivery. It is hoped that these projects will involve Māori throughout to ensure that information collected is used sensitively and Māori are involved in the formulation of the recommendations proposed.

GENERAL MĀORI HEALTH STATUS

The lower life expectancy and greater general morbidity of both Māori men and women again suggest unmet mental health needs. Lung and breast cancer are major causes of death for Māori women. Although tobacco is seen as the major variable affecting the deaths of Māori males and females, stress and addiction are often the underlying reasons for continued tobacco consumption. For ongoing care to be successful, individuals and groups need to adopt healthy lifestyles and comply with treatment. This will be facilitated by a positive sense of self-esteem and cultural esteem. As noted above, *He Matariki* (PHC 1995) provides a good strategy to address not only mental health issues, but all the broad issues that affect Māori health.

SUMMARY OF MĀORI MENTAL HEALTH STATUS

This chapter has provided a broad overview of the information on the pattern of admission of Māori males and females to psychiatric facilities, the diagnoses of mental disorder, and causes of admissions to other health services. This provides some indication of unmet mental health needs. A fuller description will require community-based research to identify the prevalence of mental health needs from both a Māori and Western psychiatric perspective. Comparisons with other areas of the health and social services will require uniformity across agencies in the collection of data on, and determination of, ethnicity.

To move forward, new mental health promotion strategies need to be developed. The emerging Māori health services that embrace a Māori view of health, including 'te taha hinengaro' (mental wellbeing), have the potential to provide either a component of, or a total, mental health service. Evaluation of these initiatives, and of more widespread use of cultural assessments, would be valuable. A number of the different models that are emerging are described below.

COMPREHENSIVE PRIMARY HEALTH CARE

A number of Māori and iwi groups such as Raukura Hauora o Tainui, Te Whānau o Waipareira Trust and Te Oranganui Charitable Trust are involved in the development of primary health care services from a Māori and iwi perspective. All of these new health services have developed their own philosophies, incorporate a Māori view of health in all of their activities and employ a range of people who have both health professional and community development skills. Although these new primary health care services may not yet see themselves as mental health services (with the exception of Te Oranganui Charitable Trust which is involved in developing a model of primary mental health care), they each have the potential to become a comprehensive budget holder, an alternative purchaser and a provider of Māori health services, with mental health being an integral part of the services available.

A recent report released by the World Health Organization (WHO 1990) has suggested that mental health service provision should no longer be a stand-alone specialist service but instead should become part of a comprehensive range of primary and secondary health services and be involved in, and part of, community developments and decision-making. In the proposed infrastructure, health workers in all parts of the health system would be supported to develop skills to deal with psychological and social problems. Furthermore, it is argued these problems are as valid and legitimate as physical problems, and if ignored can incur substantial costs in the health system for inappropriate tests, drugs and treatment programmes. Ignoring mental health problems also imposes costs on consumers as they turn to other agencies and people for help, and their illnesses can become more severe, thus requiring more intensive treatment in the end.

It has been shown that general health personnel with adequate training and support, such as Māori health workers, are capable of managing mental and neurological disorders, such as severe disorders like senile dementia and schizophrenia, and more common psychological and emotional disturbances such as anxiety and depression, drug and alcohol dependence and psychological problems arising from a physical disease or injury. To do so requires increasing their skills in prevention, diagnosis, treatment and rehabilitation of people with these disorders. There is also a need to develop further their interpersonal communication skills, such as interviewing and counselling. However, the increased workload would require an increase in staffing and recognition of this increased responsibility.

The results of a recent study of general practitioners in New Zealand revealed that they do not feel comfortable, nor do they have the time, to provide adequate care for patients with mental health problems or to co-ordinate care for these patients with specialist mental health providers (Falloon et al 1996). This reinforces the need for Māori health providers to meet the needs for Māori.

Success in managing mental health issues at a primary health care level requires support from mental health care specialists. To support this, key Māori and non-Māori mental health workers should be encouraged to move from a hands-on role to providing ongoing training, supervision, the development of effective assessment and treatment protocols and monitoring of the quality of service provided.

An outline of such services is provided in the *Guidelines for Purchasing Personal Mental Health Services for Māori* (Durie et al 1995) and the *1996/1997 Policy Guidelines for Regional Health Authorities* (Minister of Health 1995). However, further development could detail how a comprehensive primary health care delivery structure should be developed with a range of integrated services for Māori rather than stand-alone specialist services, and identify mental health as a priority within this plan. This could also clarify how agencies should work together to achieve defined outcomes for Māori and the respective responsibilities of health and justice, and whānau, hapū and iwi, and the relevant allocation of resources. ARCIC (ACC), which is an important agency for Māori, might adopt a collaborative approach with other services in reducing violence and injuries in the home and community.

TE MĀORI ME TE WAIPIRO: A PUBLIC HEALTH STRATEGY

A report (*Te Māori me te Waipiro*) has recently been released by Te Puni Kōkiri and the Kaunihera Whakatupato Waipiro o Aotearoa (Alcohol Advisory Council of New Zealand) that provides a public health strategy to address the pervasive effects of alcohol use among Māori (Te Puni Kōkiri 1997). The strategy is based on recognition of the Treaty of Waitangi and the requirements of successful health promotion as described in the *Ottawa Charter*. This report notes the painful fact that at least 100 Māori die each year as a result of alcohol consumption. The alcohol strategy proposes that Māori should be recognised and included as key stakeholders in the development and implementation of all

alcohol and related policies, that resources should be directed to Māori communities to develop their own solutions to address alcohol abuse and significant investment should be made in a whole range of health promotion activities, such as workforce development, media messages to Māori and active prevention.

A related small study has examined cannabis use in the area of Te Rarawa. This study has been conducted by members of Te Runanga o Te Rawara (1995) and has brought to their attention the limited information available on its long-term effects. They found that of the 125 people interviewed across this tribal area, 49 were current users and 31 past users of cannabis. They concluded that:

The high level of cannabis use amongst Te Rarawa communities will cause a great deal of harm to the potential growth of those communities. Communities and whānau will become economically reliant on cannabis, people will not be fit to work, families will not function normally and children will not be learning to their full capacity at school. Whole communities may become dysfunctional if some of the trends continue.

(Te Runanga o Te Rawara 1995: 24)

Alcohol and cannabis are often used together and are seen as some of the triggers for the increase in Māori admissions to psychiatric facilities for psychosis. The strategy Te Māori me te Waipiro provides a model that can be built on to raise Māori awareness regarding substance abuse and to begin to address this problem. Like smoking, this issue will not be solved overnight but will require concentrated effort, possible changes to legislation, changes in allocation of resources, information for communities, resources for communities to determine their own solutions to the issue, skill development of health workers and reassessment of the effectiveness of current alcohol and drug treatment programmes for Māori. These policy directions are relevant to the Government's emerging policy development on cannabis (Ministry of Health 1996).

ORANGA WHĀNAU

A number of Māori health services are involved in strengthening and rebuilding Māori whānau in a positive way, such as Tipu Ora. This is a holistic well child care programme in the Rotorua and Christchurch areas that focuses on delivering health care programmes for Māori caregivers and their children (Te Puni Kōkiri 1994d). Another service, Whaioranga Trust in Tauranga, aims to reach those whānau that are not linked into usual Māori structures, such as marae. Another body, Ngati Toa Rangatira, has pioneered whānau development and has established contact with iwi members to begin to develop programmes and activities that build their health status (Te Puni Kōkiri 1994a).

Successful interventions have been shown to be those that are comprehensive in meeting all of an individual or group's needs, are intensive (by establishing ongoing relationships with clients rather than referring them to other specialists) and are flexible. Services should respond to the needs of clients and their whānau and not vice versa. It has become clear that considerable resources must be invested in those whānau with the greatest need, as they have the greatest risk. Indeed, one measure of success of any programme is the extent to which those most at risk participate.

Mental health promotion programmes for Māori will need to identify at an early stage which individuals and whānau are at greatest risk, whose needs should take priority and how these will be resourced. Ensuring an equitable distribution of health resources to meet Māori mental health needs for those in real need is an issue for Māori. Considerable resources are invested in in-patient care but, despite being diagnosed with the same illnesses as Pākehā, Māori spend less than half the time in hospital that Pākehā do.

OMANGIA TE OMA ROA: MĀORI PARTICIPATION IN PHYSICAL LEISURE

Despite methodological difficulties, some reviewers of the relationship between physical activity and mental health suggest that aerobic exercise is more effective than no treatment, is useful as part of group therapy and encourages individual relaxation (Weyerer and Kupfer 1994). See also Chapter 2 for contrasting views.

A number of new Māori initiatives are based on physical recreational leisure. These include the establishment of a Whare Oranga (house of livelihood) at Tahuna Marae in Waiuku. This has become part of a holistic concept using the marae as the focal point for developing and delivering health messages based upon tikanga Māori. This gymnasium has provided a positive environment for people from all walks of life and a wide range of disabilities to become fit, to develop a positive sense of self-esteem and to begin to make significant changes in their lives.

This approach can be used as a strategy to promote Māori mental health and wellbeing for all age groups and also to assist with stress, to build self-esteem and cultural esteem and to find other ways to cope with frustration. A recent evaluation of the Māori Women's Welfare League Healthy Lifestyle Programme (Te Puni Kōkiri 1993b) has highlighted that this programme bustles with energy. It involves young and older Māori women in netball and has increased participants' and their supporters' knowledge on a wide range of health issues. This programme's overall slogan is 'Be fit, be proud, and be Māori'.

Health initiatives such as this, alongside iwi sports and inter-marae competitions and Māori cultural events, can provide ideal opportunities to disseminate information and to raise awareness of certain health matters, such as the early signs and symptoms of depression, schizophrenia, anxiety and alcohol and drug abuse, as well as increasing fitness.

A recent report released by Te Puni Kōkiri (1995b), *Omanuia te Oma Roa*, outlines the experience of five different groups that have organised physical leisure activities for those who are at risk of becoming sedentary. Effective programmes must have clear goals, be well planned and be for a defined time period, say six weeks. The barriers to Māori participation in these activities include: cost, transport difficulties, whānau commitments and lack of support (particularly for women), whakama (shyness, shame), poor health, communication difficulties and lack of appropriate programmes.

Māori men generally have poorer health status than Māori women, as is reflected in their mortality and morbidity rates. Therefore specific strategies should be developed and evaluated for Māori men, which may include physical leisure, to encourage them to take greater responsibility for their health. The growing rate of Māori male admissions and readmissions to psychiatric facilities clearly shows there is a need for programmes to focus on alcohol and drug abuse, violence, communication, self-esteem and cultural esteem. Such programmes could be developed at a national, regional and local level, but to be successful will need to be resourced for at least three to five years to enable the principles of the *Ottawa Charter* to be implemented and health gains to be achieved.

The Māori well women's programme Rapua Te Mana Wahine (Te Wheke Ata Whai 1995) which also incorporates t'ai chi, could be encouraged to promote positive messages to Māori women and to give information on mental health promotion and early intervention. Māori women are regarded as the key to Māori health promotion and Māori health development.

CONCLUSIONS

Many of the programmes and services that Māori are now providing contribute to promoting the health of Māori and thus mental wellbeing. A broad overview has been given of the risk factors that are likely to affect the prevalence of mental disorders among Māori, current patterns of Māori admissions to psychiatric facilities and models of service delivery that could be built upon for Māori mental health promotion. Strategies such as those included in *He Matariki* (PHC 1995) are already in place and need to be supported across the health sector and related agencies to facilitate an improvement in Māori health and to support Māori to develop their own structures to rebuild their culture and socioeconomic and political position in New Zealand.

Kaua e rangiruatia te hapai o te hoe; e kore to tatou waka e u ki uta.

Do not paddle some of you with one stroke, some with another; our canoe will not reach the shore.

GLOSSARY

Ārangī	unsettled, anxious
Ārangirangi	listless, idle
Ha a koro ma a kui ma	inherited strengths
Hapū	subtribe
Haurangi	drunk, intoxicated, mad
Hinengaro	mental wellbeing
Hui	meeting, gathering
Iwi	tribe
Kai	food
Karakia	prayer
Karanga	call of welcome, to acknowledge a significant event, to farewell
Kaupapa	foundation, rule
Kōhanga Reo	Language nest, where Māori language is taught via total language immersion
Kaumātua	elders
Kuia	older woman
Mākutu	curse
Marae	a courtyard, community and cultural centre
Mana	status or prestige
Mana ake	unique identity
Manakitanga	a philosophy and practice of caring for kin who are sick

Mate Māori	Māori sickness
Mauri	life force
Noa	free from tapu/ordinary
Pākehā	a person of predominantly European descent
Pōrangī	disturbed behaviour
Rāhui	to place a ban
Rongoā	medicine
Taha tinana	physical wellbeing
Tangata whenua	the indigenous people (Māori) of New Zealand
Tangihanga	Ceremony for mourning the dead
Taonga tuku iho	cultural heritage
Tapu	Sacred
Te ao turoa	physical environment
Te reo Māori	Māori language
Te taha hinengaro	mental wellbeing
Te taha tinana	physical wellbeing
Te taha wairua	spiritual wellbeing
Te taha whānau	family wellbeing
Tikanga	customary practices
Tino rangatiratanga	self-determination
Tipuna	ancestor
Tohunga	expert, especially in spiritual and health matters
Tūrangawaewae	source of identity
Wai	water
Waiata	song
Wairangi	overly excited, infatuated or foolish
Wairua	spirituality
Wairuatanga	spirituality
Whaikōrero	speech
Whakamā	ashamed, shy
Whakawhanaungatanga	kinship
Whānau	family
Whanaungatanga	extended family
Whatumanawa	emotions

REFERENCES

- Bridgman G. 1994. *Two Surveys of the Prevalence of Mental Ill Health in the Community*. Auckland: Mental Health Foundation of Aotearoa.
- Bridgman G and Dyal L. 1996. Update on Nga Ia o te Oranga Hinengaro Māori 1990–1993. Unpublished manuscript.
- Community Substance Abuse Programme. 1990. In: EN Goplerud (ed). *Breaking New Ground for Youth at Risk: Programme summaries*. Report CSAP1. Rockville, MD: US Dept of Health and Human Services.
- Department of Health. 1984. *Hui Whakaoranga: Māori health planning workshop*. Wellington: Department of Health.
- Department of Health. 1992. *Whaia te Ora mō te Iwi: Strive for the Good Health of the People: Government's response to Māori issues in the health sector – Health and Disability Services Bill*. Wellington: Department of Health.
- Department of Māori Affairs. 1984. *Hui Taumata: Māori Economic Development Summit Conference*. Background papers. Wellington: Department of Māori Affairs.
- Durie M. 1994a. Māori psychiatric admissions: patterns and policies. In: J Spicer, A Trlin, J Walton (eds). *Social Dimensions of Health and Disease: New Zealand perspectives*. Palmerston North: Dunmore Press.
- Durie M. 1994b. *Whaiora: Māori Health Development*. Auckland: Oxford University Press.
- Durie MH, Gillies A, Kingi Te K, et al. 1995. *Guidelines for Purchasing Personal Mental Health Services for Māori*. Wellington: Ministry of Health.
- Durie M. 1995. Ngā Matatini Māori: diverse Māori realities. Paper presented at Wānanga Pārongo Kōrerorero, Ngāruawahia, February 1995.
- Dyal L. 1988. Oranga Māori. Paper presented at the World Health Organization Conference, Adelaide, 1988.
- Falloon IRH, Ng B, Bensemam C, et al. 1996. The role of general practitioners in mental health care: a survey of needs and problems. *NZ Med J* 109: 34–6.
- Kilgour R and Keefe V. 1992. *Kia Piki te Ora: The collection of Māori health statistics*. Wellington: Department of Health.
- Marsden DR. 1975. God, man and the universe: a Māori view. In: M King (ed). *Te Ao Hurihuri: The World Moves On*. Wellington: Hicks Smith and Sons.
- Minister of Health. 1995. *1996/97 Policy Guidelines for Regional Health Authorities*, Wellington: Ministry of Health.
- Ministry of Health. 1994. *Looking Forward: Strategic directions for the mental health services*. Wellington: Ministry of Health.
- Ministry of Health. 1995. *Guidelines for Cultural Assessment in Mental Health Services*. Wellington: Ministry of Health.
- Ministry of Health. 1996. *Cannabis: The public health issues 1995–1996*. Wellington: Ministry of Health.

- Pere RR. 1984. The health of the family. *NZ Health Review* 4: 17.
- PHC. 1994. *Our Health, Our Future: Hauora Pakari, Koiora Roa: The state of public health in New Zealand*. Wellington: Public Health Commission.
- PHC. 1995. *He Matariki: A Strategic Plan for Māori Public Health: The Public Health Commission's advice to the Minister of Health 1994–1995*. Wellington: Public Health Commission.
- Pomare E, Keefe-Ormsky V, Ormsky C, et al. 1995. *Hauora: Māori Standards of Health III: A study of the years 1970–1991*. Wellington: Te Ropu Hauora a Eru Pomare.
- Te Puni Kōkiri. 1993a. *Nga Ia o te Oranga Hinengaro Māori: Trends in Māori Mental Health: A discussion document*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1993b. *The Healthy Lifestyle Programme: An evaluation*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1994a. *Oranga Whānau*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1994b. *Te Ara Ahu Whakamua: Proceedings of the Māori Health Decade Hui 1994 March*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1994c. *Te Runanga o Te Rarawa: Māori Male Adolescent Health Project*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1994d. *Tipu Ora Resource Kit*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1995a. *Health through the Marae: Nga Tikanga Hauora o nga Marae*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1995b. *Omangia te Oma Roa: Māori Participation in Physical Leisure*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1995c. *Te Kaporeihana Awhina Hunga Whara: Opportunities for ACC and Māori*. Wellington: Te Puni Kōkiri.
- Te Puni Kōkiri. 1997. *Te Māori me te Waipiro*. Wellington: Te Puni Kōkiri.
- Te Runanga o Te Rarawa. 1995. Cannabis Project. Paper prepared for Te Puni Kōkiri.
- Te Wheke Ata Whai. 1995. *Rapua Te Mana Wahine*. No. 1 (October). Opotiki: Te Wheke Atawhai.
- Wells JE, Bushnell JA, Hornblow AR, et al. 1989. Christchurch Psychiatric Epidemiology Study, Part I: methodology and lifetime prevalence for specific psychiatric disorders. *Aust NZ J Psychiatry* 23: 315–26.
- Weyerer S and Kupfer B. 1994. Physical exercise and psychological health. *Sports Med* 17(2): 108–16.
- WHO. 1990. *The Introduction of a Mental Health Component into Primary Health Care*. Geneva: World Health Organization.
- 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.
- Williams HW. 1985. *A Dictionary of the Māori Language*. 7th ed. Wellington: GP Publications Ltd.