

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Ellison-Loschmann, L; Pearce, N (2006) Improving access to health care among New Zealand's Maori population. *American journal of public health*, 96 (4). pp. 612-7. ISSN 0090-0036 DOI: 10.2105/AJPH.2005.070680

Downloaded from: <http://researchonline.lshtm.ac.uk/1503/>

DOI: [10.2105/AJPH.2005.070680](https://doi.org/10.2105/AJPH.2005.070680)

Usage Guidelines

Please refer to usage guidelines at <http://researchonline.lshtm.ac.uk/policies.html> or alternatively contact researchonline@lshtm.ac.uk.

Available under license: <http://creativecommons.org/licenses/by-nc-nd/2.5/>



Improving Access to Health Care Among New Zealand's Maori Population

Lis Ellison-Loschmann, PhD, and Neil Pearce, PhD, DSc

The health status of indigenous peoples worldwide varies according to their unique historical, political, and social circumstances. Disparities in health between Maoris and non-Maoris have been evident for all of the colonial history of New Zealand. Explanations for these differences involve a complex mix of components associated with socioeconomic and lifestyle factors, availability of health care, and discrimination.

Improving access to care is critical to addressing health disparities, and increasing evidence suggests that Maoris and non-Maoris differ in terms of access to primary and secondary health care services. We use 2 approaches to health service development to demonstrate how Maori-led initiatives are seeking to improve access to and quality of health care for Maoris. (*Am J Public Health*. 2006;96:612–617. doi:10.2105/AJPH.2005.070680)

THE HEALTH CIRCUMSTANCES

of indigenous peoples vary according to the unique historical, political, and social characteristics of their particular environments, as well as their interactions with the nonindigenous populations of the countries in which they reside. An example is the Maoris, the indigenous people of New Zealand. We focused on the health realities of this

group, in particular the effects on Maori health of health care services designed according to the values and social processes of non-Maoris.¹

Significant differences in life expectancy exist between Maoris and non-Maoris in New Zealand, but the role of health care in creating or maintaining these differences has been recognized and researched only recently. An analysis of Maori health in the context of New Zealand's colonial history may suggest possible explanations for inequalities in health between Maoris and non-Maoris, highlighting the role of access to health care. Two potential approaches to improving access to and quality of health care for Maoris are (1) development of a system of Maori health care provider services and (2) initiation of cultural safety education.

NEW ZEALAND SETTLEMENT AND THE TREATY OF WAITANGI

The Maoris journeyed to New Zealand via the Pacific approximately 1000 years ago.² Pool suggested that perhaps only a few hundred Maoris arrived initially, with information on subsequent settlement patterns and population dynamics available through various sources such as

oral traditions and archaeological records. The first recorded contact between Maori and Europeans occurred in 1769, at the time of James Cook's expedition to New Zealand from Britain.³

In 1840 the Treaty of Waitangi, a formal agreement for British settlement and a guarantee of protection of Maori interests, was signed by representatives of the British crown and some of the Maori chiefs. It is estimated that Maoris numbered approximately 80 000 at that time, along with a population of about 2000 settlers. The signing of the Waitangi treaty facilitated a large-scale influx of British migrants, and by 1858 a decline in the Maori population and an increase in the number of settlers saw the 2 groups both numbering approximately 59 000. By 1901, the country's demographics had drastically altered, with the population of 770 313 settlers outnumbering the Maoris by 16.5:1.³

The settlers' introduction of firearms and new infectious diseases had a major impact on death rates among the Maoris.⁴ However, the historical and socioeconomic context in relation to Maori mortality after the colonization of New Zealand, specifically Maoris' loss of land, was also important.^{5,6} Kunitz⁵ noted that death from disease did not occur to the same extent among

those indigenous peoples who kept their land (such as in Samoa and Tonga) as among those who did not, because disruption of their economic base, food supplies, and social networks was far less widespread. For Maoris, this disruption not only occurred via land confiscation made possible through acts of law but also extended to legislation in many other areas, including regulation of Maori rights and discrimination against the use of Maori language in schools, all of which have affected the health of Maori people.⁴

The Treaty of Waitangi is the primary mechanism through which Maoris have sought to have their unique rights as the indigenous people of New Zealand addressed.⁷ The treaty's intention was to protect and maintain the well-being of all citizens, and its health implications relating to processes of good government and notions of participation and equity are important.⁸ Since the 1970s, public awareness of the Treaty of Waitangi has continued to increase, primarily as a result of growing Maori aspirations for self-determination. In particular, it has been argued that the continuing disparities in health between Maoris and non-Maoris represent evidence that Maori health rights are not being protected as guaranteed under the



treaty and that social, cultural, economic, and political factors cannot be overlooked in terms of their contribution to the health status of this group.⁹

In recent government health documents, the indigenous status of Maoris has been recognized, and the Treaty of Waitangi has been acknowledged as a fundamental component of the relationship between Maoris and the government.^{10–12} However, the treaty has never been included in social policy legislation, and there is a clear gap between acceptance of the treaty and translation of its aims into actual health gains for Maoris.¹³

MAORI HEALTH STATUS

After reaching a low point of approximately 42 000 in 1896, the Maori population began to increase in subsequent years.¹³ Government-initiated public health services and Maori-controlled health promotion programs, including the appointment of Maori health inspectors to work within Maori communities, contributed to this gradual recovery.^{3,13,14} Also, decreases in mortality were probably influenced by the introduction of a national health care scheme and social welfare system in 1938, along with improvements in treatment methods. Until the 1930s, the Maori had lived primarily in rural communities, but loss of land—and, hence, employment opportunities—in these areas subsequently led to large-scale urban migration. This situation paralleled changes in New Zealand's economy, which

shifted from an agricultural focus to the production of manufactured goods.³

Maori fertility rates remained elevated both through the period of severe mortality decline and as mortality rates improved, resulting in a population with an age structure that is relatively young. In 2001, 37% of Maoris were younger than 15 years, compared with 23% of New Zealand's overall population, and 3% were 65 years or older, as opposed to 12% of the country's overall population.¹⁵

Life expectancy has increased among the indigenous populations of New Zealand, Australia, Canada, and the United States over time but has never matched that of the nonindigenous populations of these countries.⁵ There has been a consistent increase in life expectancy among Maoris since the 1950s, but recent data indicate a widening gap between Maoris and non-Maoris.¹⁶ For example, male non-Maoris' life expectancy at birth was 70.9 years during the period 1980 to 1984, increasing to 75.7 years during 1996 to 1999; life expectancy among women increased from 77.2 to 80.8 years. In contrast, Maori life expectancy at birth increased from only 64.6 to 65.8 years among men and from 69.4 to 71.0 years among women. Thus, during this period, the gap in life expectancy between Maoris and non-Maoris increased among both men (from 6.3 to 9.9 years) and women (from 7.8 to 9.8 years).¹⁶

Pomare used data from 1954 through 1975 to provide a comprehensive overview of Maori

health status.¹⁷ During the period examined, rates of cause-specific mortality, including deaths from respiratory diseases, infectious diseases, cardiovascular diseases, diabetes, cancer, and unintentional injuries, were higher among Maoris than non-Maoris. Mortality rates have since declined for some diseases, but disparities between Maoris and non-Maoris remain.¹⁶ For example, during 1996 to 1999, age-standardized cardiovascular disease mortality rates were 264.9 and 78.5 per 100 000 among Maoris and non-Maoris, respectively, and the corresponding respiratory disease mortality rates were 54.5 and 16.7 per 100 000. Also, there is recent evidence of increasing cancer mortality rates among Maoris; age-standardized rates (per 100 000) were 189.7 in 1980 to 1984 and 215.2 in 1996 to 1999, as compared with rates of 119.4 and 104.4, respectively, among non-Maoris.¹⁶

Similarly, although overall hospital discharge rates among both Maoris and non-Maoris increased in all age groups between 1970 and 1992, Maori rates continue to be 1.4 to 2.5 times higher than non-Maori rates.^{8,18} In 1997, compared with non-Maori rates, Maori hospitalization rates were 40% higher for both infectious diseases and respiratory disorders and more than 100% higher for endocrine disorders.¹⁸

EXPLANATIONS FOR HEALTH DISPARITIES

A number of different explanations have been suggested for the

inequalities in health between Maoris and non-Maoris. One common suggestion is that these differences are due to genetic factors.¹⁹ However, about 85% of genetic variation occurs randomly and is not related to race or ethnicity. The striking time trends in Maori mortality and morbidity during the 20th century demonstrate that environmental factors played the major role.²⁰ Thus, although genetic factors may contribute to differences in health status between Maoris and non-Maoris in the case of certain specific conditions, they do not play a major role in population and public health terms.

Nongenetic explanations for differences in health between Maoris and non-Maoris can be grouped into 4 major areas focusing on socioeconomic factors, lifestyle factors, access to health care, and discrimination. These explanations are not mutually exclusive, but it is useful to consider them separately while bearing in mind that they are inextricably linked.

Socioeconomic Factors

The first studies to assess the role of socioeconomic factors and health status differences between Maoris and non-Maoris investigated mortality in men aged 15 to 64 years.^{21–23} The most recent of these analyses showed that Maori men were more than twice as likely as non-Maori men to die prematurely; also, mortality rates among Maori men were significantly higher in each socioeconomic class grouping, and mortality differences among these men were greater within their



own ethnic social class groups as well.²³

In addition, a number of studies have demonstrated increasing mortality and morbidity with increasing deprivation.^{24–26} As an example, the New Zealand Deprivation Index enables area-level assessments of socioeconomic deprivation through the use of census data. Area meshblocks (which contain an average of 90 people) are ranked by means of a decile score of 1 to 10; the higher the score, the more deprived the neighborhood.²⁷ Analyses using this index have shown that, for deciles 1 to 7, differences in life expectancy at birth between Maoris and non-Maoris are 5.8 years for men and 5.3 years for women; for the most deprived deciles (8–10), the differences are 8.2 years and 10.1 years, respectively. More than half of the Maori population (56%) lives in areas ranked in deciles 8 to 10.²⁷

However, lower Maori health status is only partially explained by relative socioeconomic disadvantage; Maori mortality rates have been shown to be persistently high even after control for social class.²³ For example, using data from 1974 to 1978, Smith and Pearce²⁸ found that approximately 20% of the difference between Maori and non-Maori male mortality rates was attributable to differences in socioeconomic status, whereas 15% was linked to cigarette smoking; 10%, to alcohol consumption; 5%, to obesity; and 17%, to accidents. In addition, about 35% of excess Maori deaths were due to

diseases for which effective health care was available.

Lifestyle Factors

It can be argued that lifestyle factors, such as smoking, represent one of the mechanisms by which socioeconomic factors affect health status.²⁹ However they are interpreted, it is important to consider the extent to which differing lifestyles may account for differences in health status between Maoris and non-Maoris. Recent national surveys have shown that Maoris smoke tobacco at a higher rate than non-Maoris (53% vs 20%),³⁰ that 47% of Maori men and 39% of Maori women (vs 17% and 21% in non-Maori men and non-Maori women, respectively) are obese, and that 46% of Maori men and 50% of Maori women have hypertension, as compared with 43% and 38% of non-Maori men and women, respectively.³¹

Access to Health Care

As noted earlier, a significant proportion of the excess mortality among Maoris stems from diseases for which effective health care is available, suggesting differences in access to health care.^{8,23,28} In this context, access has been described in terms of both “access to” and “access through” health care, the latter concept taking into account the quality of the service being provided.³² Health care need and health care quality have been developed into a framework for measuring disparities in access to care in the United States, a framework that includes broader environmental and

societal factors (e.g., racism) that may affect access.³²

There is increasing evidence that Maoris and non-Maoris differ in terms of access to both primary and secondary health care services,^{33,34} that Maoris are less likely to be referred for surgical care and specialist services, and that, given the disparities in mortality, they receive lower than expected levels of quality hospital care than non-Maoris.^{35,36} One survey showed that 38% of Maori adults reported problems in obtaining necessary care in their local area, as compared with 16% of non-Maoris. Maoris were almost twice as likely as non-Maoris (34% vs 18%) to have gone without health care in the past year because of the cost of such care.³⁷ This adds to previous evidence that cost is a significant barrier to Maoris’ access to health services.^{18,33,38}

Discrimination

The role of discrimination and racism in harming health is not new but has received increasing attention over the past 20 years.^{39–41} The Maori Asthma Review³⁸ reported that conscious or unconscious attitudes of health workers contribute to a reluctance by Maoris to seek medical care for their asthma until it is absolutely necessary. Another study reported barriers to accessing diabetes care among Maoris, including unsatisfactory previous encounters with professionals and experiences of disempowerment.⁴² Doctors have been shown to be less likely to advocate for preventive measures for Maori

patients than for non-Maori patients,⁴³ and Maoris may be less likely than non-Maoris to be referred for surgical care.³⁴

A CHANGING HEALTH ENVIRONMENT

New Zealand’s national health care system was established in the 1930s with the intention of providing free medical care delivered by salaried medical practitioners. However, the system was subsequently modified to a government-paid fee-for-service subsidy with secondary care under state control and funding and primary care largely state funded but controlled by individual doctors.⁴⁴ This configuration remained unchanged until the 1980s, when radical public sector restructuring resulted in extensive changes to the social services system based on a competitive market model.⁴⁵

In 1991, a series of major health service reforms were initiated, including 2 particularly important changes concerning the way in which public hospital and population health services were organized and delivered and a new funding scheme for the provision of primary health care that enabled health practitioners to work together to provide contracted primary care services.⁴⁶ It was within this context that a pair of Maori-led initiatives concerned primarily with improving access to services among Maoris were undertaken: (1) the establishment of Maori health care provider services and (2) the development of cultural safety education.



Maori Health Care Providers

At the beginning of the 20th century, Maori leadership played a key role in advancing health promotion and disease control activities within Maori communities.^{13,14} This approach was to be important throughout the century, and there are many examples of both national and local Maori-led initiatives committed to advancing Maori health.³² These initiatives occurred outside of the mainstream services being provided at the time, which made them vulnerable to changes in government and funding availability. An opportunity for the focused development of Maori provider services emerged with the introduction of the 1991 health reforms. However, this restructuring of health and social services also led to a widening gap in inequality, as evident in such key determinants of health as income, education, employment, and housing. Moreover, the reforms had direct effects on the health of Maoris, particularly that of children.⁴⁷

What are the differences between health services provided by Maoris and those provided by non-Maoris? Crengle⁴⁸ identified use of Maori models of health and promotion of positive Maori development as 2 key philosophies underpinning Maori primary health care services. Maori cultural processes used as a basis for developing and delivering contemporary health services that support self-sufficiency and Maori control are crucial to the success of these provider organizations. Maori provider services have specifically identified access

issues as a key factor and have used a range of strategies to address these issues, including extensive mobile services and outreach clinics (alongside a health center service base), free or low-cost health care, employment of primarily Maori staff who are more likely to have access to Maori consumers in their communities,⁴⁸ and active inclusion of the community in the planning and delivery of services.

The number of Maori health providers increased from 13 in 1993 to 240 in 2004. However, these providers continue to face a number of difficulties. For example, a lack of good primary health data, such as ethnicity data, has limited the potential of many Maori health providers, and a small Maori health workforce has been quickly absorbed into the growing number of Maori provider organizations. Also, the short contract time frames in place require extensive renegotiations each year. In addition, because Maori providers work primarily with families at high levels of need in terms of health services, increased costs are inevitable if health gains are to be achieved, and funders must take this situation into account.⁴⁹ Similar policy initiatives have recently been adopted in Canada and Australia to improve the health of indigenous peoples; however, the contractual environments in these countries lean toward single multiyear funding contracts for comprehensive primary health care, and there is early evidence that such systems are more efficient for providers

and promote better outcomes among consumers.⁵⁰

It is too soon to assess the effects that the Maori provider organizations are having on the health status of Maoris, and these organizations should be viewed as representing one of a package of necessary long-term measures. Although the evidence that such strategies are effective is not yet available, there is certainly evidence that the reverse is true; that is, health service provision with little Maori participation results in poor Maori outcomes.^{8,49}

Cultural Safety Education

In parallel with the development of a system of Maori service providers, there have been initiatives to improve Maoris' access to "mainstream" services. One such initiative, cultural safety, is an educational framework designed to assess power relationships between health professionals and those they serve.⁵¹ The initiative has been taught in New Zealand nursing and midwifery programs since 1992, and it is a requirement for nursing and midwifery registration examinations. In 1995, the International Council of Nurses adopted a resolution to develop guidelines for the implementation of cultural safety in nursing education and practice in all 118 of the council's member countries.⁵¹

The cultural safety initiative includes teaching of the history of New Zealand within its curricula and provides comprehensive information on the Treaty of Waitangi and the effects of colonization on the present-day health status of Maoris.⁵² Also, it

attempts to identify conscious or unconscious cultural and social attitudes that affect student nurses or midwives in their provision of nursing care and to transform those attitudes, thus enabling students to see their effects through a framework of practice-related reflection and action. Therefore, it is important that cultural safety be taught by nurses and midwives who can relate their teaching directly to practice situations.⁵² In cultural safety education, "culture" is defined in its broadest sense, that is, in reference to any group or person who may differ from the nurse or midwife as a result of gender, sexual orientation, social or economic position, disability, age, religious beliefs, or ethnic group.⁵¹ To illustrate:

An example of culturally safe practice may be seen in the action of a self-aware nurse who recognizes homophobia in [his or her] own personality and chooses not to work in the area of HIV/AIDS where chances of encountering homosexual people are higher than in some other areas of nursing employment. The nurse acknowledges that the effect of his or her homophobia on the recipient of care may be unsafe and detrimental to care and that it would take a great deal longer to establish trust in this context. This example could be applied to a wide range of situations.^{51(pp.128–129)}

The cultural safety initiative does not advocate a cultural immersion approach or the learning of customs of ethno-specific groups, in that this would promote a stereotypical view of culture over time.⁵³ In the New Zealand context, teaching nurses and midwives to be experts in



Maori culture leads to further disempowerment of Maoris, given that there are significant numbers of Maoris who have been deprived of knowledge of their own identity and traditions.

Along with understanding and confronting issues of power and marginalization, a critical component of cultural safety education is recognizing the role of wider societal processes in maintaining health disparities between Maoris and non-Maoris through discrimination and racism.⁵⁴ This information was not seen to be relevant to nursing and midwifery practice, and the introduction of cultural safety education was controversial. In the initiative's early years, inaccurate media reports concerning the content and teaching of the curricula influenced the public's perceptions of and reactions to the program. This resulted in a political response in 1995, with the Nursing Council of New Zealand being required to review cultural safety education and report back to a parliamentary select committee.⁵¹

Cultural safety education is currently included in assessments of registered nurses and midwives within some regions of New Zealand as part of their clinical career development, and there has been support for it to become a core component of the training of all health professionals.^{51,55} The extent to which the initiative is making a difference in terms of the quality of health care provided in New Zealand remains to be fully assessed and will ultimately be judged by those who are the recipients of health services.

CONCLUSIONS

Disparities in health between Maoris and non-Maoris have been evident for all of the colonial history of New Zealand. Although there have been significant improvements in the past 140 years, recent evidence indicates that the overall gap in life expectancy between these groups is widening rather than narrowing. Explanations for these differences involve a complex mix of factors associated with socioeconomic and lifestyle characteristics, discrimination, and access to health care.

Maori-led programs designed to improve health care access are taking a 2-fold approach that supports both the development of Maori provider services and the enhancement of mainstream services through provision of culturally safe care. The driving force behind the new initiatives described here has been the evidence of the poor health status of the indigenous people of New Zealand and their clear demand for improved health services. Maori provider organizations and cultural safety education are examples of initiatives that have emerged not in isolation but, rather, within a context of macro-level government policies that have been shown to either promote or greatly hinder the health status of indigenous peoples. ■

About the Authors

The authors are with the Centre for Public Health Research, Massey University, Wellington Campus, Wellington, New Zealand. Lis Ellison-Loschmann is also with the Respiratory and Environmental Health Research Unit, Municipal Institute of Medical Research, Barcelona, Spain.

Requests for reprints should be sent to Lis Ellison-Loschmann, PhD, Centre for Public Health Research, Massey University, Wellington Campus, Private Box 756, Wellington, New Zealand (e-mail: lellison-loschmann@massey.ac.nz).

This article was accepted July 26, 2005.

Contributors

L. Ellison-Loschmann originated the review and wrote the article. N. Pearce assisted with originating ideas and reviewed drafts of the article.

Acknowledgments

Lis Ellison-Loschmann was funded by a training fellowship in Maori health research, and the Centre for Public Health Research is supported by a Programme Grant, from the Health Research Council of New Zealand.

References

- Ramsden I. Cultural safety: Implementing the concept. The social force of nursing and midwifery. In: Te Whaiti P, McCarthy M, Durie A, eds. *Mai i Rangiatea: Maori Wellbeing and Development*. Auckland, New Zealand: Auckland University Press; 1997:113–125.
- King M. *The Penguin History of New Zealand*. Auckland, New Zealand: Penguin Books; 2003.
- Pool DI. *Te iwi Maori: A New Zealand Population, Past, Present and Projected*. Auckland, New Zealand: Auckland University Press; 1991.
- Durie M. *Te Mana, te Kawanatanga: The Politics of Maori Self-Determination*. Auckland, New Zealand: Oxford University Press Inc; 1998.
- Kunitz SJ. *Disease and Social Diversity: The European Impact on the Health of Non-Europeans*. New York, NY: Oxford University Press Inc; 1994.
- Sorrenson MPK. Land purchase methods and their effects on Maori population 1865–1901. *J Polynesian Soc*. 1956;65:183–199.
- Ratima MM. *Kia Ururu mai a Hauora: Being Healthy, Being Maori. Conceptualising Maori Health Promotion* [dissertation]. Otago, New Zealand: University of Otago; 2001.
- Pomare E, Keefe-Ormsby V, Ormsby C, et al. *Hauora: Maori Standards of Health III. A Study of the Years 1970–1991*. Wellington, New Zealand: Eru Pomare Maori Health Research Centre; 1995.
- Te Ropu Rangahau Hauora a Eru Pomare. Counting for nothing: understanding the issues in monitoring disparities in health. *Soc Policy J N Z*. 2000; 14:1–16.
- The New Zealand Health Strategy. *Wellington, New Zealand: Ministry of Health; 2000*.
- The Primary Health Care Strategy*. Wellington, New Zealand: Ministry of Health; 2001.
- He Korowai Oranga: Maori Health Strategy*. Wellington, New Zealand: Ministry of Health; 2002.
- Durie M. *Whaiora: Maori Health Development*. Auckland, New Zealand: Oxford University Press Inc; 1994.
- Dow DA. *Maori Health and Government Policy 1840–1940*. Wellington, New Zealand: Victoria University Press; 1999.
- Reference Reports, 2001 Census: Maori 2001 Highlights*. Wellington, New Zealand: Statistics New Zealand; 2004.
- Ajwani S, Blakely T, Robson B, Tobias M, Bonne M. *Decades of Disparity: Ethnic Mortality Trends in New Zealand 1980–1999*. Wellington, New Zealand: Ministry of Health; 2003.
- Pomare EW. *Maori Standards of Health: A Study of the 20-Year Period 1955–75*. Wellington, New Zealand: Medical Research Council of New Zealand; 1980.
- Our Health, Our Future: Hauora Pakari, Koiara Roa. The Health of New Zealanders 1999*. Wellington, New Zealand: Ministry of Health; 1999.
- Hall A, Stewart R. Obesity: time for sanity and humanity. *N Z Med J*. 1989;102:134–136.
- Pearce N, Foliaki S, Cunningham C, Sporle A. Genetics, race, ethnicity and health. *BMJ*. 2004;328:1070–1072.
- Pearce NE, Davis PB, Smith AH, Foster FH. Social class, ethnic group and male mortality in New Zealand 1974–78. *J Epidemiol Community Health*. 1985;39:9–14.
- Pearce NE, Pomare E, Marshall S, Borman B. Mortality and social class in Maori and non-Maori New Zealand men: changes between 1975–1977 and



1985–1987. *N Z Med J.* 1992;106: 193–196.

23. Sporle A, Pearce N, Davis P. Social class mortality differences in Maori and non-Maori men aged 15–64 during the last two decades. *N Z Med J.* 2002;115: 127–131.

24. McLoone P, Boddy F. Deprivation and mortality in Scotland, 1981 and 1991. *BMJ.* 1994;309:1465–1470.

25. Eachus J, Williams M, Chan P, et al. Deprivation and cause specific morbidity: evidence from the Somerset and Avon survey of health. *BMJ.* 1996;312: 287–292.

26. Salmond C, Crampton P, Lewis S, Pearce N. Asthma prevalence and deprivation: a small area analysis. *J Epidemiol Community Health.* 1999;53:476–480.

27. Salmond C, Crampton P. Deprivation and health. In: Howden-Chapman P, Tobias M, eds. *Social Inequalities in Health: New Zealand 1999.* Wellington, New Zealand: Ministry of Health; 2000:9–63.

28. Smith AH, Pearce NE. Determinants of differences in mortality between New Zealand Maoris and non-Maoris aged 15–64. *N Z Med J.* 1984; 97:101–108.

29. Pearce N. Traditional epidemiology, modern epidemiology, and public health. *Am J Public Health.* 1996;86: 678–683.

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

31. Russell D, Parnell W, Wilson N, et al. *NZ Food: NZ People. Key Results of the 1997 National Nutrition Survey.* Wellington, New Zealand: Ministry of Health; 1999.

32. Lurie N. Measuring disparities in access to care. Available at: <http://www.nap.edu/openbook/0309085195/html/1.html>. Accessed January 8, 2004.

33. Baxter J. *Barriers to Health Care for Maori With Known Diabetes: A Literature Review and Summary of Issues.* Wellington, New Zealand: New Zealand National Working Group on Diabetes; 2002.

34. Westbrook I, Baxter J, Hogan J. Are Maori under-served for cardiac interventions? *N Z Med J.* 2001;114: 484–487.

35. Malcolm L. Inequities in access to utilisation of primary medical care services for Maori and low income New

Zealanders. *N Z Med J.* 1996;109: 356–358.

36. Davis P, Lay-Yee R, Sinclair O, Gribben B. Maori/non-Maori patterns of contact, expressed morbidity and resource use in general practice: data from the Waikato Medical Care Survey 1991–2. *N Z Med J.* 1997;110: 390–392.

37. Shoen C, Doty MM. Inequities in access to medical care in five countries: findings from the 2001 Commonwealth Fund International Policy Survey. *Health Policy.* 2004;67:309–322.

38. Pomare E, Tutengaehe H, Ramsden I, Hight M, Pearce N, Ormsby V. *He Mate Huango: Maori Asthma Review.* Wellington, New Zealand: Huia Publications; 1991.

39. Krieger N. Does racism harm health? Did child abuse exist before 1962? On explicit questions, critical science, and current controversies: an ecosocial perspective. *Am J Public Health.* 2003;93:194–199.

40. William DR, Neighbors HW, Jackson JS. Racial/ethnic discrimination and health: findings from community studies. *Am J Public Health.* 2003;93: 200–208.

41. Geiger HJ. Racial and ethnic disparities in diagnosis and treatment: a review of the evidence and a consideration of causes. In: Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare.* Washington, DC: National Academy Press; 2003:417–454.

42. Simmons D. Barriers to diabetes care: lessons from a multi-ethnic community in New Zealand. *Diabetic Med.* 1998;15:958–964.

43. Mitchell EA. Racial inequalities in childhood asthma. *Soc Sci Med.* 1991; 32:831–836.

44. Matheson D, ed. *Health Where It Hurts: The Story of the Newtown Union Health Service.* Wellington, New Zealand: Roger Steele; 1992.

45. Scott C. Reform of the New Zealand healthcare system. *Leadership Health Serv.* 1996;5:32–39.

46. Borren P, Maynard A. The market reform of the New Zealand health care system: searching for the Holy Grail in the Antipodes. *Health Policy.* 1994;27: 233–252.

47. Blaiklock AJ, Ciro CA, Belgrave M, Low W, Davenport E, Hassall IB.

When the Invisible Hand Rocks the Cradle: New Zealand Children in a Time of Change. Florence, Italy: Innocenti Research Centre; 2002. Working paper 93.

48. Crengle S. The development of Maori primary care services. *Pacific Health Dialog.* 2000;7:48–53.

49. Kiro CA. *Kimihia mo te Hauora: Maori Health Policy and Practice* [dissertation]. Wellington, New Zealand: Massey University; 2000.

50. Lavoie J. *Indigenous Primary Health Care Services in Australia, Canada and New Zealand: Policy and Financing Issues.* Winnipeg, Manitoba, Canada: Manitoba First Nations Centre for Aboriginal Health Research, University of Manitoba; 2003.

51. Ramsden I. *Cultural Safety and Nursing Education in Aotearoa and Te Waipounamu* [dissertation]. Wellington, New Zealand: Victoria University of Wellington; 2002.

52. Papps E, Ramsden I. Cultural safety in nursing: the New Zealand experience. *Int J Qual Health Care.* 1996; 8:491–497.

53. Ramsden I. Cultural safety/kawa whakaruruhau ten years on: a personal overview. *Nurs Praxis N Z.* 2000;15: 4–12.

54. Ramsden I. The outcomes of colonisation for Maori people and Maori health status. Paper presented at: Maori Development Conference, August 1994, Palmerston North, New Zealand.

55. Kearns RA. A place for cultural safety beyond nursing? *N Z Med J.* 1997;110:23–24.