

The Health Status of Māori Male Prisoners: Key results from the Prisoner Health Survey 2005

Summary

- Almost 50% of sentenced male prisoners are Māori.
- Forty-seven percent of Māori male prisoners have a chronic disease of some kind that has been diagnosed by a doctor.
- The most common chronic disease in Māori male prisoners is asthma, with a prevalence of 21%.
- Māori males were significantly more likely than non-Māori males to have a history of head injury. Approximately three-quarters of Māori male prisoners have a history of a head injury where they became unconscious or 'blacked out'.
- Sixty-eight percent of Māori male prisoners are current smokers.
- There was an overall trend for Māori to have a higher prevalence than non-Māori across all the risk factors (high blood pressure, high blood cholesterol, overweight or obese BMI, current tobacco smoker, needle use in prison and ever use of drugs).
- Seventy-two percent of Māori male prisoners eat the recommended number of servings of fruit each day and 64% eat the recommended number of servings of vegetables each day.
- Māori males are significantly less likely than non-Māori males to have decreased their physical activity since coming to prison.
- Māori male prisoners tend to rate their dental health as being better than two years previously (37%) and are twice as likely as non-Māori to do so.
- Forty-four percent of Māori male prisoners had seen a GP in the 12 months prior to entering prison.
- As well as seeing the prison nurse and/or doctor, 18% of Māori male prisoners have seen a medical specialist and over half (55%) another health care worker in the last 12 months in prison.

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MINISTRY OF HEALTH

Introduction

While people are in prison there is an obligation and opportunity to maintain and improve their health. Prisoners are entitled to the same access and standard of health care as the general public in the community. There are more than 6000 prisoners serving prison sentences at any one time in New Zealand, and this number continues to grow. The prison population is predominantly composed of males under the age of 30 years, with Māori and those of low socioeconomic status over-represented. Almost 50% of prisoners are Māori.

Improving Māori health outcomes and reducing Māori health inequalities are government priorities. Given the high and disproportionate rate of imprisonment of Māori, this makes the health of prisoners an important issue for Māori health, and for contributing to reducing Māori and non-Māori health inequalities – both overall inequalities and any that might exist within the prisoner population.

Previous research about Māori prisoners

There is a limited amount of information about the health status of Māori prisoners. Previous research has shown that Māori prisoners have high levels of mental illness, in particular depression, post-traumatic stress disorder, alcohol and drug abuse or dependence, and phobias (Simpson et al 2003). However, no differences in the levels of mental illness by ethnicity in prisoners have been found, except for depression, which was more commonly found in European/Other prisoners.

Suicide in prison has made a major contribution to the overall Māori male suicide rate, more so than for non-Māori (Skegg and Cox 1993). Historically, there has been little difference between the suicide rates of Māori and non-Māori prisoners (Skegg and Cox 1993), but during the 1990s Māori male prisoners appeared to have a higher rate of suicide than non-Māori (Suicide Prevention Review Group 1995, Māori Suicide Review Group 1996). Lastly, there is evidence to suggest that Māori prisoners have a higher prevalence of traumatic brain injury (Barnfield and Leatham 1998) and hearing loss (Bowers 1986, cited in Murray et al 2004) than non-Māori.

About this booklet

The information presented in this booklet comes from the Prisoner Health Survey 2005 of sentenced prisoners. This survey was conducted by the Ministry of Health to improve understanding of the extent of the health needs among New Zealand prisoners and to inform future prisoner health service planning, policy, processes and programmes. More information on the Prisoner Health Survey 2005 can be found in the PHI Occasional Bulletin *Results from the Prisoner Health Survey 2005*, available from <http://www.moh.govt.nz/phi>.

The focus of this booklet is on Māori male prisoners, because males comprise over 90% of the sentenced prisoner population. A more limited number of results are available for female prisoners, by Māori and non-Māori ethnicity. These can also be found in *Results from the Prisoner Health Survey 2005*.

It is not the aim of this booklet to provide an in-depth interpretation and discussion of results. However, readers should consider the health status of prisoners, and of Māori, in the context of the broader determinants of health and imprisonment. For further discussion on the context of the imprisonment of Māori and the health of Māori prisoners, see *Hauora: Māori Standards of Health IV*, chapter 15 (Te Rōpū Rangahau Hauora a Eru Pōmare 2007).

Background

According to Department of Correction figures from March 2007, there are 2954 Māori male sentenced prisoners (Table 1). Almost 50% of the sentenced male prisoner population identifies as being Māori.

Table 1: Ethnicity of sentenced male prisoners

Ethnicity	n	%
Māori	2954	49.1
Pacific	663	11.0
European	2191	36.4
Asian	141	2.3
Other	60	1.0
Unknown	2	< 0.5
Total	6011	100.0

Source: Department of Corrections unpublished data, March 2007

Note: The data excludes prisoners of unknown or indeterminate gender (n = 5).

The Māori male prisoner population has a younger age profile than the non-Māori male prisoner population (Department of Corrections 2004).

The average sentence length for male prisoners is approximately four years, excluding those prisoners sentenced for life. However, 16% of males are in prison for less than a year (Department of Corrections 2004). In addition, some prisoners may have only just started their sentences and so many prisoners in the survey will not have been in prison for many years.

Presentation and interpretation of results

This booklet is focused on Māori, so crude results are presented for Māori only, to show the actual percentage estimate in the male Māori prisoner population. However, to show any differences between Māori and non-Māori not accounted for by age differences, age-standardised results are presented. Age standardisation allows for comparison to be made between ethnic groups with different age distributions.

The 95% confidence interval (95% CI) gives an indication of the margin of error. Conventionally, when the confidence intervals of the results for the two ethnic groups do not overlap, the difference is considered statistically significant at the 5% significance level. If the confidence intervals do overlap, the difference could be due to chance.

Chronic disease and head injury

A chronic disease is defined as a physical or mental illness that has lasted or is expected to last for more than six months, with symptoms that may come and go.

Table 2: Chronic disease* and head injury, Māori male prisoners (crude percentage)

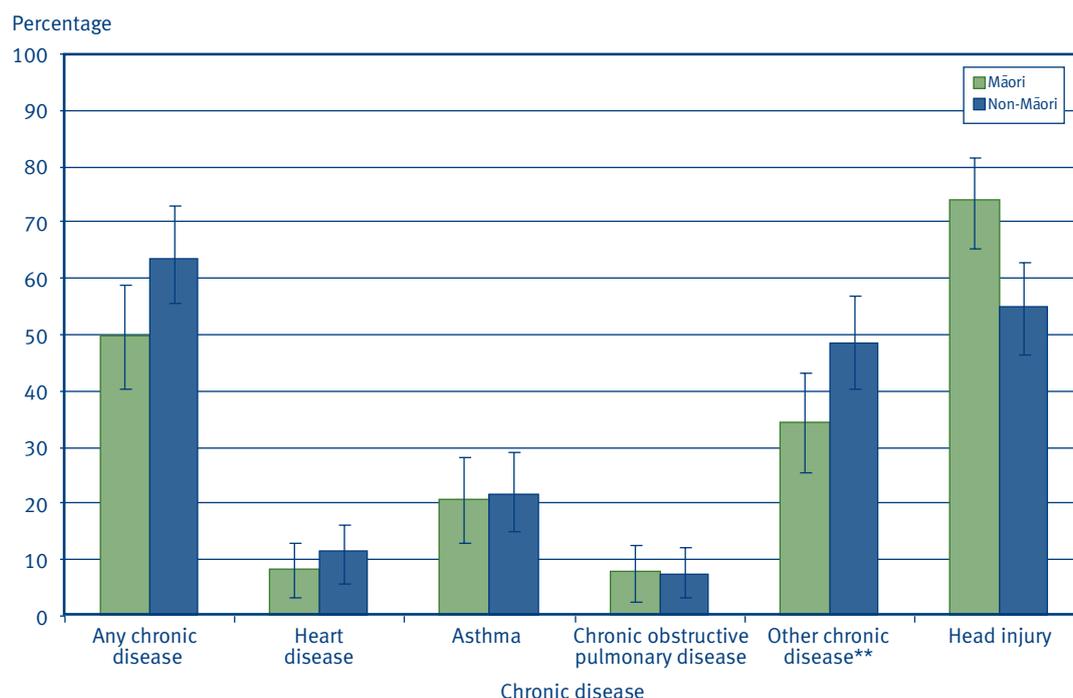
Any chronic disease	Heart disease	Asthma	Chronic obstructive pulmonary disease	Other chronic disease**	Head injury
46.6 (38.1–55.2)	6.4 (2.4–10.3)	21.1 (13.9–28.3)	6.8 (2.6–11.0)	30.9 (23.2–38.6)	73.8 (66.2–81.3)

* There were not adequate numbers in the Prisoner Health Survey for reliable estimates for Māori males for diabetes and cancer.

** 'Other chronic disease' means any chronic disease apart from heart disease, diabetes, asthma, chronic obstructive pulmonary disease and cancer. It includes migraine, depression, stomach ulcers, back problems, hepatitis B or C, limb/joint pain, bipolar disorder, irritable bowel, and any other chronic disease prisoners specified.

Forty-seven percent of Māori male prisoners have a chronic disease of some kind that has been diagnosed by a doctor (Table 2). The most common chronic disease is asthma, with a prevalence of 21%. In addition, three-quarters (74%) of Māori males report a history of a head injury where they became unconscious or 'blacked out'.

Figure 1: Chronic disease* and head injury, male prisoners, Māori and non-Māori, (age-standardised percentage)



* There were not adequate numbers in the Prisoner Health Survey for reliable estimates for Māori males for diabetes and cancer.

** 'Other chronic disease' means any chronic disease apart from heart disease, diabetes, asthma, chronic obstructive pulmonary disease and cancer. It includes migraine, depression, stomach ulcers, back problems, hepatitis B or C, limb/joint pain, bipolar disorder, irritable bowel, and any other chronic disease prisoners specified.

There were no statistically significant differences in the prevalence of heart disease, asthma and chronic obstructive pulmonary disease (Figure 1). However, Māori males were significantly more likely than non-Māori males to report a history of head injury (Figure 1).

Risk factors

A risk factor is something that increases a person's chances of developing a disease. High blood pressure and high blood cholesterol are risk factors for heart disease and stroke, while being overweight or obese or a smoker are risk factors for many common chronic diseases and cancer. The use of needles for injecting drugs, piercing and tattooing can be a risk for the transmission of viral illnesses such as hepatitis.

Table 3: Risk factors, Māori male prisoners (crude percentage)

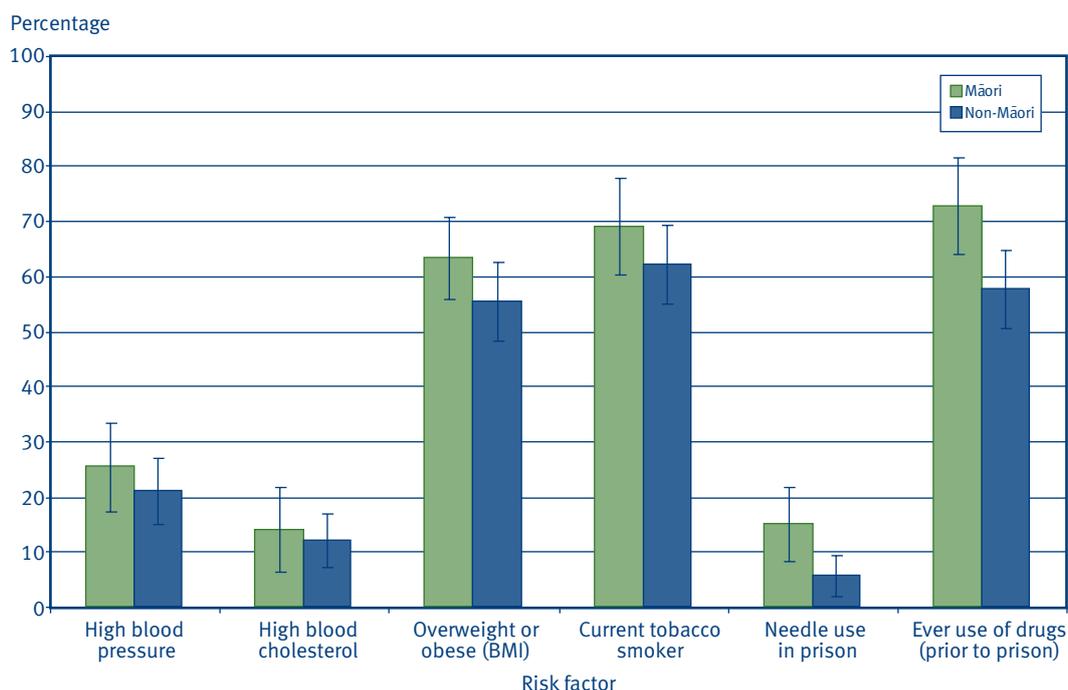
High blood pressure	High blood cholesterol	Overweight or obese (BMI)*	Current tobacco smoker	Needle use in prison	Ever use of drugs (prior to prison)**
19.8 (13.2–26.5)	10.2 (4.6–15.8)	58.5 (50.9–66.1)	68.4 (60.2–76.7)	14.8 (8.6–21.0)	78.1 (71.1–85.1)

* BMI = body mass index. This booklet is based on a published analysis in which ethnic-specific BMI cut-offs were used. It was acknowledged at the time that their use is controversial.

** 'Ever use of drugs' refers to the ever use of drugs that were not prescribed by a doctor, or use of drugs for a purpose other than for what they were prescribed.

Among the risk factors asked about in the survey, the most common current risk factor for Māori males is being a smoker, with 68% reporting they smoke one or more cigarettes per day (Table 3). Over half (58%) of Māori male prisoners are overweight or obese (Table 3).

Figure 2: Risk factors, male prisoners, Māori and non-Māori (age-standardised percentage)



* BMI = body mass index. This booklet is based on a published analysis in which ethnic-specific BMI cut-offs were used. It was acknowledged at the time that their use is controversial.

** 'Ever use of drugs' refers to the ever use of drugs that were not prescribed by a doctor, or use of drugs for a purpose other than for what they were prescribed.

There was an overall trend for Māori males to have a higher prevalence than non-Māori across all the risk factors (Figure 2). These differences show borderline statistical significance for needle use in prison and the 'ever use' of drugs prior to prison (Figure 2).

Protective factors

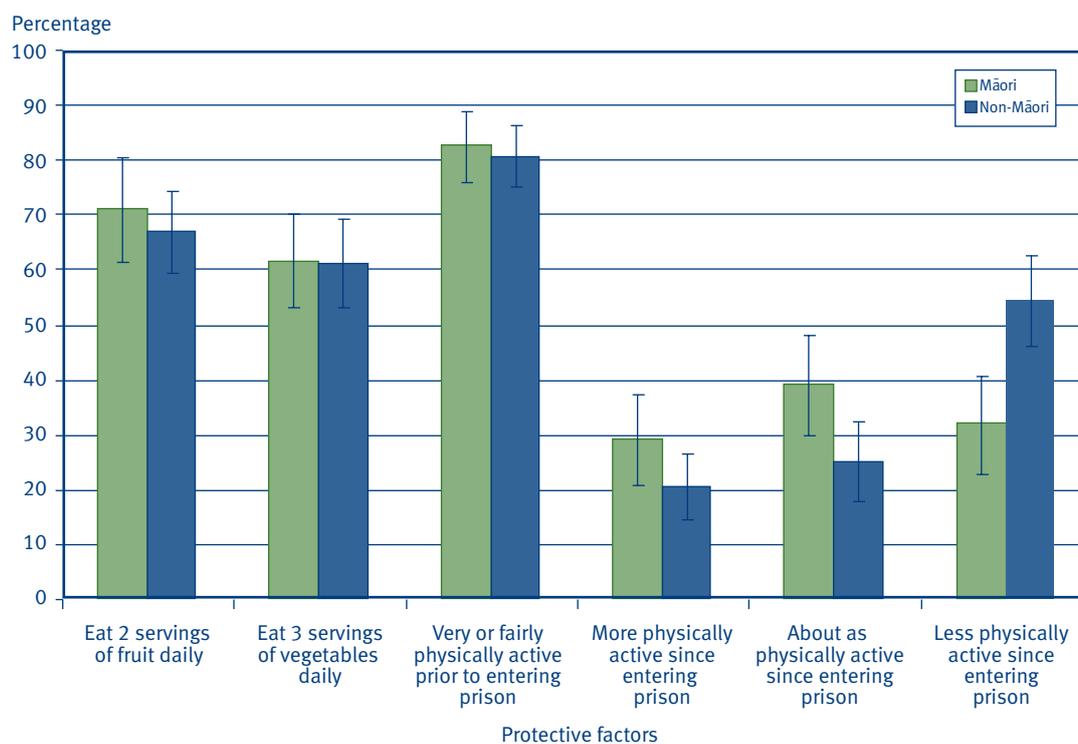
A protective factor is something that decreases your chances of developing a disease. Physical activity and fruit and vegetable consumption are associated with a decreased chance of developing heart disease, stroke and cancer.

Table 4: Measures of protective factors, Māori male prisoners (crude percentage)

Eat at least 2 servings of fruit daily	Eat at least 3 servings of vegetables daily	Fairly or very physically active prior to entering prison	Change in physical activity level since entering prison: more active	Change in physical activity level since entering prison: less active
72.3 (64.4–80.3)	63.8 (55.9–71.6)	82.5 (76.1–88.9)	31.5 (23.2–39.9)	31.6 (23.1–40.1)

Seventy-two percent of Māori male prisoners eat the recommended number of servings of fruit each day and 64% eat the recommended number of servings of vegetables (Table 4). The majority of Māori males were fairly or very physically active prior to prison (83%), with similar percentages becoming less and more physically active upon entering prison (Table 4).

Figure 3: Protective factors, male prisoners, Māori and non-Māori (age-standardised percentage)



There were no differences in daily fruit and vegetable consumption and physical activity levels prior to prison (Figure 3). However, Māori males are significantly less likely than non-Māori males to have decreased their physical activity since entering prison (Figure 3).

Oral health

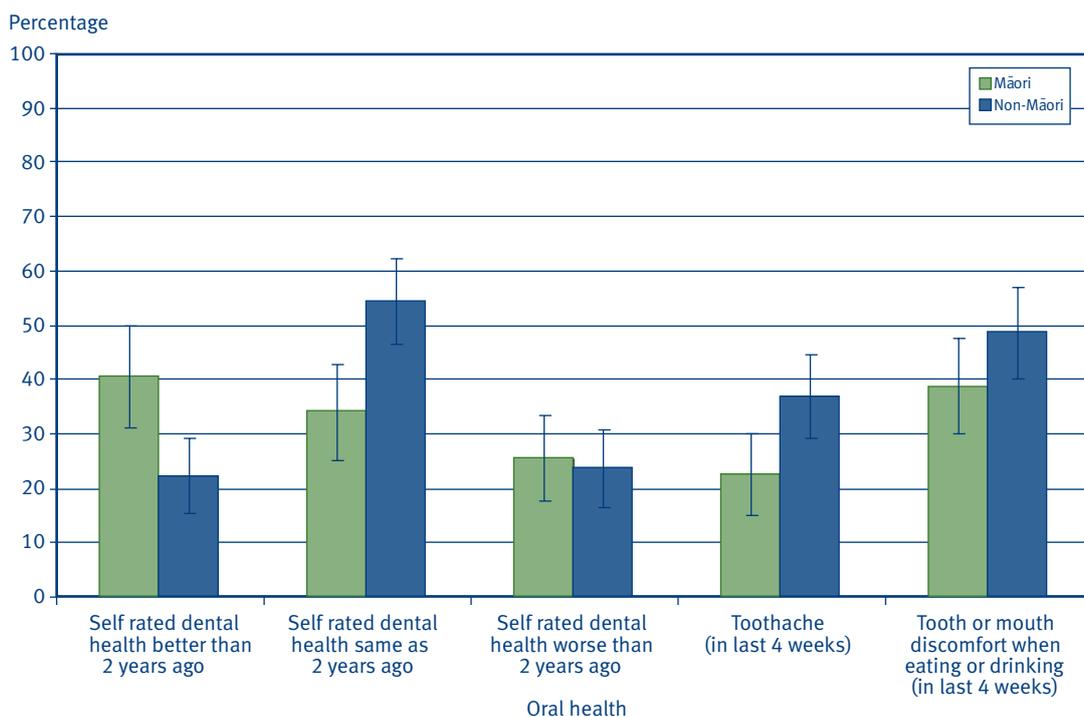
Good oral health is about more than just teeth: it is important for everyday activities such as eating, drinking, smiling and talking, as well as general health and wellbeing (World Health Organization 2003). Part of the health services provided to prisoners includes some dental care.

Table 5: Measures of oral health, Māori male prisoners (crude percentage)

Self-rated dental health better than 2 years ago	Self-rated dental health the same as 2 years ago	Self-rated dental health worse than 2 years ago	Some toothache (in last 4 weeks)	Some tooth or mouth discomfort when eating or drinking (in last 4 weeks)
37.1 (29.1–45.0)	35.7 (27.4–44.1)	27.2 (20.2–34.2)	24.0 (16.6–31.4)	41.8 (33.3–50.4)

Māori male prisoners most commonly reported that they thought their dental health was better than two years ago (37%), and approximately three-quarters thought their dental health was better than or the same as two years ago (Table 5). However, 42% of Māori male prisoners reported having experienced some degree of tooth or mouth discomfort when eating or drinking in the previous four weeks.

Figure 4: Measures of oral health, male prisoners, Māori and non-Māori, (age-standardised percentage)



Māori males are significantly more likely to rate their dental health as better than two years ago than non-Māori males, and are almost twice as likely to do so (Figure 4). There is also a suggestion that Māori males are less likely than non-Māori males to report experiencing toothache in the previous four weeks (Figure 4).

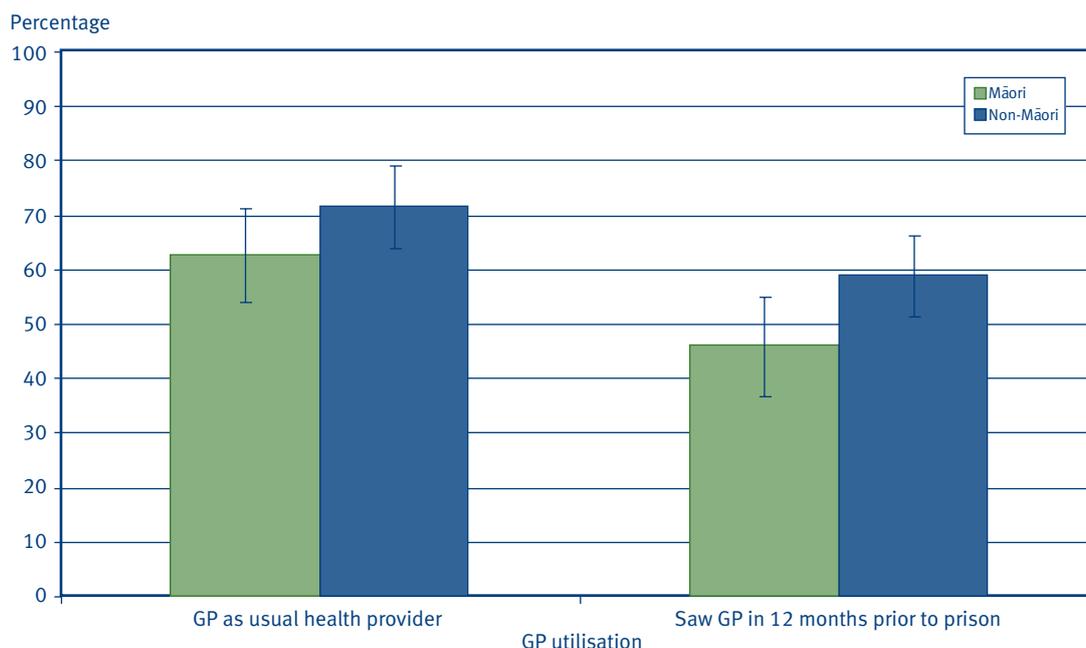
Health service utilisation

Patterns of health service utilisation reflect a combination of need for care, demand for care and access to care.

Prior to prison

Prior to entering prison, 61% (95% CI 53–70) of Māori males used a general practitioner (GP) as their usual health provider and 44% (95% CI 35–52) had seen a GP in the 12 months prior to entering prison.

Figure 5: Health service utilisation prior to entering prison, male prisoners, Māori and non-Māori (age-standardised percentage)



There were no statistically significant differences in GP utilisation prior to prison (Figure 5).

While in prison

Prisoners are entitled to the same access and standard of health care as the general public in the community. Also, on arrival at a prison, the prison nurse sees all prisoners within four hours for a short assessment of essential health needs. This is followed by a more comprehensive assessment within 24 hours. Prisoners are then referred for a medical examination with the prison doctor on a priority basis.

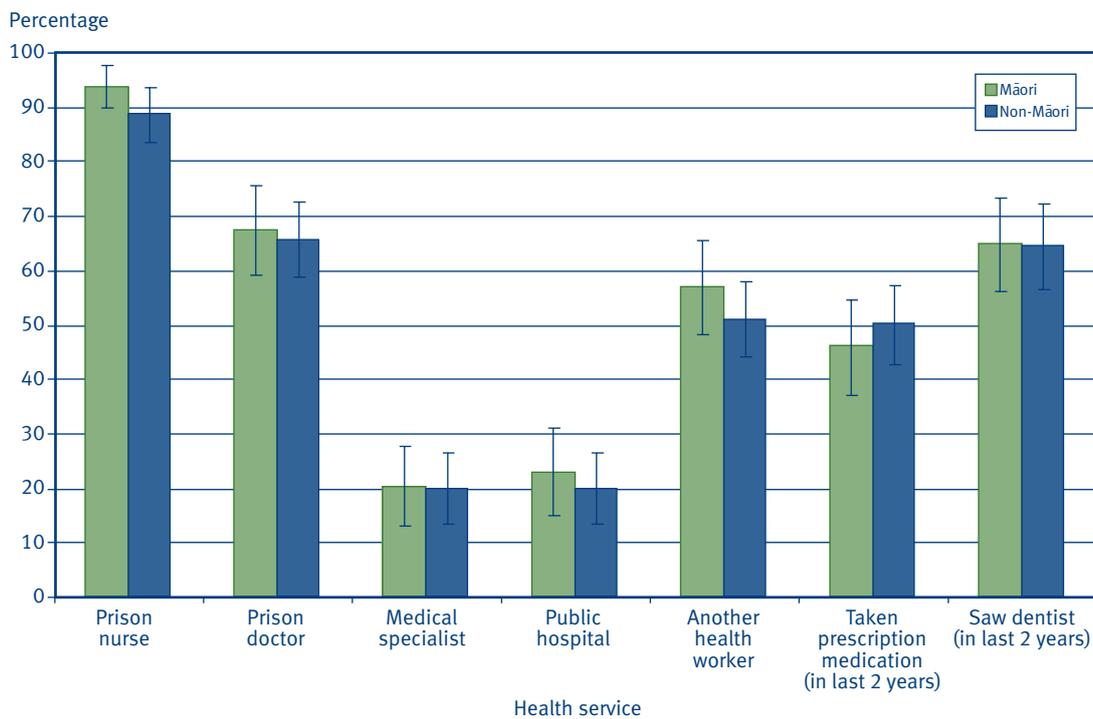
Table 6: Health service utilisation in last 12 months (or part thereof) while in prison, Māori male prisoners (crude percentage)

Prison nurse	Prison doctor	Medical specialist	Another health care worker*	Public hospital	Taken prescribed medication (last 2 weeks)	Saw dentist (in last 2 years)
92.1 (87.5–96.6)	65.1 (57.6–72.6)	18.2 (11.6–24.7)	54.5 (46.3–62.7)	22.0 (14.5–29.6)	40.6 (33.3–48.0)	64.6 (58.5–70.7)

* 'Another health care worker' means dentist or dental therapist, social worker, psychologist or counsellor, alcohol or problem gambling counsellor, physiotherapist, optician or optometrist, dietician, midwife, etc.

Nearly all Māori males (92%) had seen the prison nurse in the last 12 months while in prison (Table 6). Eighteen percent had also been referred to see a medical specialist. In addition, 65% of Māori males had seen a dentist in the last two years.

Figure 6: Health service utilisation in last 12 months (or part thereof) while in prison, male prisoners, Māori and non-Māori (age-standardised percentage)



* 'Another health care worker' means dentist or dental therapist, social worker, psychologist or counsellor, alcohol or problem gambling counsellor, physiotherapist, optician or optometrist, dietician, midwife, etc.

There were no statistically significant differences in health care utilisation in the last 12 months while in prison (Figure 6). There was also no difference in the percentage who had seen a dentist in the last two years.

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