

Racism, Colonialism and Māori Health

A review of the evidence

July 2023



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Part one: Introduction

In 2021 the Waitangi Tribunal released its HAUORA Report on Stage One of its Health Services and Outcomes Kaupapa Inquiry. It found that over the 20 years since the introduction of The Health Services Act 2000 that health services had failed to meet Māori needs. The divergence between Māori and New Zealand European health outcomes, as captured by a gap in life expectancy of seven years had not ‘meaningfully’ changed over the 20 years. This it was claimed, was due to the continued impacts of ‘colonialism’ and ‘racism’. The Ministry of Health, the New Zealand Medical Council, the Health Quality and Safety Commission New Zealand and many public health academics have supported this narrative.

The purpose of this paper is to examine the evidence behind these claims. The main focus is on the empirical evidence that is used to support claims that the health system is structurally racist, or that personal racism affects health outcomes.

Our main conclusion is that there is very little robust empirical evidence that racism contributes materially to the gap in life expectancy. The main drivers are different smoking and obesity rates. Other behavioural differences such as higher risk taking may also contribute. The response by the institutions and individuals pushing the racism narrative would be that this is a superficial understanding and that the differences are driven by more fundamental causes such as differential access to resources, which are in turn are the result of colonialism. But this claim is never substantiated, and on the limited data on the issue it appears that resources are not really the issue. The gaps primarily come back to behaviour.

The paper is organised as follow:

Part two presents our key findings.

Part three examines the Waitangi Tribunal’s review of Māori health outcomes over 2000-2020.

Part four presents the very different perspective of the Waitangi Tribunal in the 2000 Napier hospital report. It rejected the argument that different health outcomes were in themselves a breach of the Treaty and emphasised the relevance of individual agency.

Part five looks at the main drivers of the difference in life expectancy between Māori and NZ Europeans, which are different smoking and obesity rates compounded by other behavioural differences. It examines the counter argument that these behavioural differences are really driven by more ‘fundamental’ socio-economic factors and various forms of ‘racism’.

Part six is the first part of our review of the evidence supporting the Ministry of Health’s claims that there is a substantial body of evidence supporting their racist system claims. It examines the evidence presented in a recent survey of quantitative papers.

Part seven examines the Health Quality and Safety Commission New Zealand report ‘Window on the quality of Aotearoa New Zealand’s health care 2019 – a view on Māori health equity’.

Part eight reviews the Medical Council of New Zealand report on Māori health ‘Cultural Safety Baseline Data Report Release and Recommendations’

Part nine concludes. We summarise the evidence on structural and personal racism. We reflect on why (selected) differences in health outcomes are almost always described as inequitable (unfair and unjust) and almost equivalently are due to racism and in particular to ‘structural’ racism.

Part two: Key findings

Waitangi Tribunal did not seriously review Māori health developments over 2000-2020

The Tribunal largely focused on life expectancy outcomes before 2000 and up to around 2011. Its claim that there had been no discernible improvements was simply false. Between 2000 and 2017 Māori life expectancy increased by about three years and the gap to NZ European fell by around one and a half years. As population life expectancies change only slowly, this was material progress. The Tribunal did not make any serious attempt to review the ‘by Māori, for Māori’ primary health care model that had been in place since 2000.

The Crown accepted without argument that colonialism had a negative impact on Māori health

Crown counsel, after acknowledging the negative influence of the cumulative effects of colonisation, further acknowledged that it was not necessary for the Tribunal to establish a causative link between colonisation and the disparities that exist today.

The reality is that the Crown and the Tribunal did not have evidence of a causative link, so did not want to talk about the issue.

2000 Waitangi Tribunal Napier hospital report did not find Māori were entitled to equal health outcomes regardless of behaviour

In its 2000 Napier hospital report the Tribunal rejected the claim that different health outcomes were in themselves a breach of the Treaty emphasising the relevance of individual responsibility. It said:

The Treaty did create an enduring right to transitional protection against particular adverse effects, it did not establish a permanent Māori entitlement to additional health service resources as distinct from that of New Zealanders as a whole.

Poor health outcomes may be associated with particular lifestyles or cultural associations. The much higher incidence of smoking amongst Māori is an example. Here too, the principles of active protection and equity rule out inaction. However, reducing the causal factor may be a very long-term aim and may depend, short of coercion, on a varying balance of State intervention and individual responsibility.

Smoking, Obesity and risk taking behaviour account for much of the amenable difference in life expectancy.

A review of the relationship between ethnic group life expectancy outcomes and key risk drivers shows a strong relationship with obesity and smoking. Asian life expectancy is four years higher than NZ Europeans' and they have the lowest smoking, obesity and risky drinking rates. Māori have higher smoking, obesity and risky behaviour rates, which likely accounts for much of the seven year difference in life expectancy compared to NZ Europeans.

Disparate access to resources unlikely to have a material impact on Māori health outcomes

Māori wages are, on average, around 10-15 percent lower than NZ European's. Some of the difference will be due to the younger Māori age structure. Asian wage incomes are lower than NZ European but this has not been an impediment to superior health outcomes. Māori disproportionately benefit from welfare transfers which enhances their spending power. Māori household incomes are lower than NZ European, but Māori are not disproportionately represented in the lowest income quintile. Their share is slightly below the Māori population share.

Evidence on the relationship between 'unmet health needs due to cost' and the Deprivation index found that Māori with the lowest deprivation scores reported the highest unmet needs. For other ethnicities there is the expected relationship. Higher deprivation scores are associated with higher unmet needs due to cost.

Review of quantitative racism and health system studies shows limited impacts

Our review of a comprehensive set of quantitative studies focusing largely on the relationship between personal experiences of racism and health outcomes, found few material associations. Only one study captured an association that might be material. The presence and materiality in the statistical results were frequently misrepresented in the discussions of the results in these papers.

Survey data shows Asians experienced the highest levels of self-reported racism but this seldom has an association with health outcomes. Experiences of racism by Māori was not high (around 8 percent ever??)

and have been declining over time. About 4 percent claim to have experienced racism in the health system.

Health Quality and Safety Commission New Zealand report found limited differences in health indicators

Health Quality and Safety Commission New Zealand's 2019 report:

Window on the quality of Aotearoa New Zealand's health care 2019 – a view on Māori health equity' provided data on 31 health indicators. Only six showed a material difference.

New Zealand Medical Council misrepresented results of study on surgery mortality rates

The New Zealand Council claimed that Māori mortality rates in acute surgeries was two thirds higher than that of NZ Europeans. The Council drew on the results of a study that showed NZ Europeans had significantly higher raw mortality rates than Māori. However, the Council cited results that adjusted just for age differences leaving out the other covariates. The full model showed that the Māori mortality rate was 14 percent higher than the NZ European rate. This difference could just be an artifact of modelling choices and statistical variation and may not reflect a real difference in outcomes.

No evidence that historical land sales and losses affects current health outcomes

The limited quantitative evidence that is available suggests that higher land retention is associated with poorer health indicators.

All health outcome differences are not inequitable

In practice the 'racism drives health' narrative describes all statistical differences in health outcomes between Māori and non-Māori as inequitable. Inequitable is defined as unfair and unjust but there is no discussion of what is what is unfair and unjust and what is not. Most people would say that it is not unfair and unjust if a smoker, for example, has a worse health outcome than a non-smoker. But it appears the same judgement is not applied to Māori.

Former Director General's claims that there is substantial evidence that racism has a significant impact on Māori health outcomes are unfounded

There is no such compelling body of evidence. There is no evidence that the Ministry has critically reviewed the evidence that has been put forward to support the impacts of racism claims.

Part three: The Waitangi Tribunal's findings

The Waitangi Tribunal sets out in their chapter two: 'Why this enquiry is needed', the arguments for reform of Māori health provision, and in particular the formation of a separate Māori Health authority. There was no pushback from the Crown.

The Crown witnesses 'acknowledged' that the reforms in the 2000 Health and Disability Act had failed to ensure 'equitable outcomes' for Māori health.

And Crown Counsel stated in opening submissions that:

'there is no need for this Tribunal panel to inquire into the question of whether Māori health status is significantly worse than for non-Māori at a population level; this is well established and not disputed'.

The Tribunal, nonetheless, provided a 'broad overview' of the existing 'inequities' in health outcomes. It first set out a list of Māori health outcomes at and round 2000 which it says 'paint a grim picture' On life expectancy, which is often treated as a key summary health statistic, there was:

Crown witness Dr Frances McGrath, a chief adviser in the Office of the Chief Medical Officer, told us that, as at 2001, the life expectancy of Māori males at birth was eight years fewer than that of non-Māori males. For Māori females, life expectancy was nine years fewer than for non-Māori females.

And:

From 1950 to 1997, the life expectancy of all non-Māori females had increased from 71.3 years to 79.6 years, and from 67.2 years to 74.3 years for non-Māori males. But Māori had not shared in this increased life expectancy)'

The Tribunal claimed Māori life expectancy had remaining virtually static from the late 1970s.

But this data was outdated and misleading. The point of the exercise, should have been to review how Māori health had changed over 2000 - 2020. Just a glance at the life expectancy data in the Māori Health Book presented in figure one bekiw would have shown that there had been a material increase in Māori life expectancy from the late 1970s.

The Tribunal went on:

The Crown has invested some \$220 billion dollars into the health system alone since 2000, with what appears to be little measurable improvement to Māori health outcomes

Stats NZ reports the following for 2005-2017.

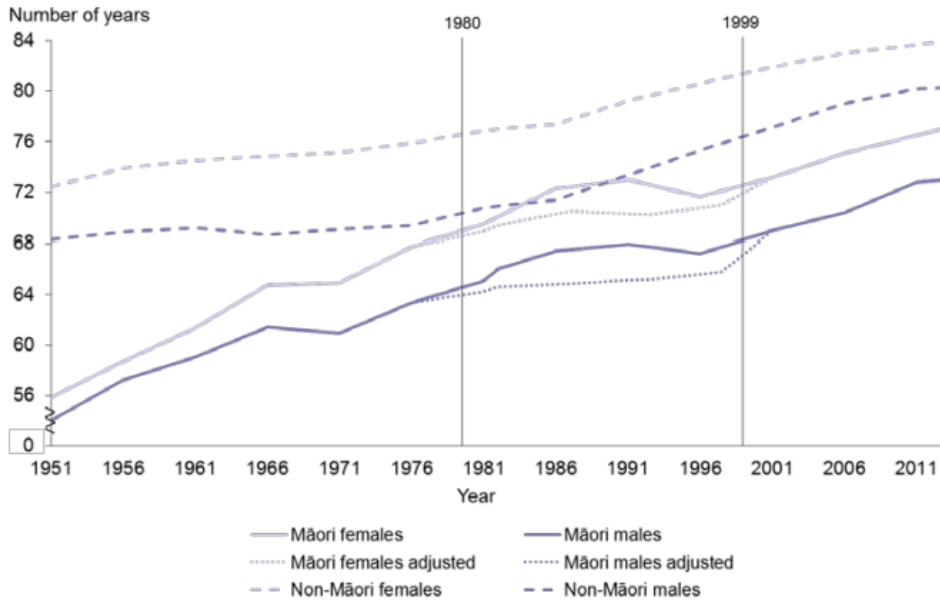
- 81.0 years for 'European or other' males (up 1.7 years), and 84.5 years for 'European or other' females (up 1.3 years)
- 73.4 years for Māori males (up 3.0 years), and 77.1 years for Māori females (up 2.0 years)

Accounting for the improvement over 2000-5 there had been a substantial improvement in Māori life expectancy since 2000. Contrary to the Tribunal's claim this improvement was measurable.

The Tribunal's focus was just on the aggregate Māori life expectancy data, ignoring regional differences. Stats NZ reported:

Māori life expectancy at birth was highest for males and females in the Marlborough region in 2017–2019 (79.9 and 83.4 years respectively). It was lowest for males and females in Gisborne (71.2 and 75.2 years respectively).

Figure one: Life expectancy for Māori and non-Māori over time



The regional gaps between Māori and non-Māori life expectancy were between 1 year and 9.1 years.

This obviously poses an question for those arguing that life expectancy differences are due to structural or personal ‘racism’. Why are the health system, and health workers, racist in the Gisborne region but not in Marlborough?

Table one provides more information on the causes of death. It shows material improvements for Māori over 2000-2 to 2015.

Table one: Māori/non-Māori Death rates per 100,000 age adjusted

Cause	Māori	Non-Māori	Māori	Non-Māori	Change %	
	2000- 2002	2000-2002	2015	2015	Māori	Non-Māori
Cardiovascular	570	270	287	132	-52.6	-54.0
Cancer	310	143	216	120	-32.5	-16.0
COP	181	56	109	37	-39.8	-34.0

The Tribunal on the causes of life expectancy differences

Under the heading ‘Why are Māori Health Outcomes So Bad Compared with those of Non-Māori?’ the Tribunal said:

The parties before us all accepted that Māori health inequities are not only caused by health issues but influenced by a wide range of factors, including income and poverty, employment, education, and housing – termed the social determinants of health.

And

The parties also accepted that Māori health inequities are influenced by the cumulative effects of colonisation.

Importantly the Crown signed up to the 'colonisation' narrative.

Crown counsel, after acknowledging the negative influence of the cumulative effects of colonisation, further acknowledged that it was not necessary for the Tribunal to establish a causative link between colonisation and the disparities that exist today.

Or in other words evidence does not matter. The negative impacts of colonisation are a self-evident truth.

The Tribunal then went on to make a link to racism. This is the narrative which pervades the Māori health literature so we present it in some detail:

The legacy and ongoing impacts of colonisation now partly manifest as a form of discrimination often termed institutional racism. Dr Heather Came-Friar, an interested party witness in our inquiry, said institutional racism is 'broadly defined as a pattern of differential access to material resources, cultural capital, social legitimation and political power that disadvantages one group, while advantaging another'

Institutional racism partly manifests as: the outcomes of mono-cultural institutions which simply ignore and freeze out the cultures of those who do not belong to the majority.

National structures are evolved which are rooted in the values, systems and viewpoints of one culture only.

Participation by minorities is conditional on their subjugating their own values and systems to those of 'the system' of the power culture.

The failure to address negative social determinants, then, can be considered a form of institutional racism.

The Director General of Health's contribution

On the same lines the then Director-General of Health Dr Bloomfield stated:

So socio-economic deprivation for Māori impacts on their ability to access good health but it is compounded by other factors including racism. The impact of personal and institutional racism is significant on both the determinants of health and on access to and outcome from health care itself. Racism is associated with poorer health, including poorer mental health.

In support of his assertions the Director-General presented a selected set of statistics from the years 2010 to 2014 including:

- *In 2013, 23.5 percent of Māori lived in decile 10 (most deprived) areas (compared with 6.8 percent of non-Māori).*

But living in a 'deprived' area is not in itself a measure of a health outcome nor is it likely that living in a decile 10 area in itself will have a direct impact on health. As we note below Māori living in higher decile areas do not necessarily have better health outcomes.

In 2013/14, Māori adults were almost twice as likely as non-Māori adults to have experienced racial discrimination in their lifetime.

But these numbers are quite low and are falling. The Director -General did not mention the most relevant statistic. Only 4.2 percent of Māori reported an experience of unfair treatment by a health professional on the basis of ethnicity in their lifetime. A reasonable conclusion, based on the data, is that there is little personal racism in the health system.

The Director General was also explicitly questioned on racism in the health system.

Q. Would you agree that racism is also a determinant of health ?

A. Yes, I would and this is one that we have learnt a lot more about over recent years and continuing to learn. I think we have now some quite good evidence that racism at a range of levels does determine access to experience of and outcomes in the health care system.

We address the evidence base in parts six to eight below. Quite simply there is no substantive evidence base to support the assertion that racism has a major impact on Māori health.

‘Inequitable’ outcomes.

An interested party witness, Professor Papaarangi Reid tried to explain the difference between inequality or disparity – terms that capture differences in health outcomes – and health equity. She emphasised that, while differences in health outcomes will always exist, inequities are differences in health outcomes that are ‘unfair and unjust’

Inequity, she says, is a structural imbalance whereby the depth of need of all people who need to use health services is inadequately recognised.

However, there is no searching discussion, by Reid, this Tribunal, by other health institutions, and in the relevant New Zealand literature, of what unfair and unjust means in the health context. The Ministry produced a lengthy paper on the history of the equity concept and has formulated a definition but it never engages with the hard issues. There are many disparities in health outcomes by different groups. Females have better health outcomes than males, Asians have better health outcomes than NZ Europeans. NZ Europeans males in lower socioeconomic groups have much worse outcome than average. Why these disparities are not described as inequitable is never addressed.

Essentially the inequity claims often reduce to little more than an assertion that any disparity in Māori health outcomes is ‘unfair and unjust’.

Finally, what was obviously lacking in the Tribunal/Ministry narrative was any serious effort to assess the ‘by Māori for Māori’ health management programme over the last 20 years . On this point we repeat Dr. Laurie Knight’s (2022) assessment.

Since 2000, most Māori health services for Māori enrolled on the Māori electoral roll in both rural and urban regions have been provided by seventy-seven Māori Health providers. They have been funded by the state but completely managed by iwi throughout New Zealand during this time. They were created twenty years ago to provide a “by Māori, for Māori” health service as a solution for the Māori health problems

While some of the hauora have provided an excellent range of public health measures and personal health services, others have not been so successful.

However, this network of hauora have not had the breakthrough in improving Māori health statistics that had been hoped would occur with a “by Māori, for Māori” service provider. The reasons for this are debated with Māori claiming inadequate funding was the cause and the funding agency stating failure to reach agreed health targets, poor management, and incorrect spending priorities were to blame. The Waitangi Tribunal, when starting the investigation into the report on Māori health, refused to publish their findings into the reasons that this health service delivery system failed, stating it was “sensitive”

Part four: The Waitangi Tribunal 2000 Napier Hospital report

Māori health disparities has been examined by the Waitangi Tribunal previously. The Napier Hospital report (2000) was a response to a claim that the decision to centralise hospital health services in Hastings rather than Napier was a Treaty breach. The report also dealt with the claim that disparate health outcomes were a treaty breach. We present the Tribunal’s discussion at length because it is so different in tone and content to the 2021 report.

The extent to which the Crown can be held responsible for the health status of Māori being worse than that of non-Māori, even by a long margin, is necessarily limited.

Several considerations affecting our use of health disparity as a measure of prejudicial effect must, however, be clarified.

The first is the issue of agency, or individual responsibility. In general, individual health outcomes cannot be laid at the door of the State. Individuals from either side of a disparity divide may experience equally poor or beneficial outcomes.

The second is the issue of particularity. Poor health outcomes may be associated with particular lifestyles or cultural associations. The much higher incidence of smoking amongst Māori is an example. Here too, the principles of active protection and equity rule out inaction. However, reducing the causal factor may be a very long-term aim and may depend, short of coercion, on a varying balance of State intervention and individual responsibility.

The third is the issue of causal time lag. Were an antismoking campaign to equalise Māori and non-Māori smoking rates overnight, the heavier health burden of past smoking would not finally dissipate for the adult Māori population for half a century or more, and the effects of passive smoking on their children would remain even longer.

A third principle, the principle of equity, emerges in particular from the granting to all Māori of the status of British subjects. This principle is relevant to the provision of State social services and to standards of healthcare for Māori.

We conclude therefore that, while the Treaty did create an enduring right to transitional protection against particular adverse effects, it did not establish a permanent Māori entitlement to additional health service resources as distinct from that of New Zealanders as a whole.

Put another way, once transition was complete, the principle of active protection did not privilege Māori as a group.

But discrimination for or against the Māori population, however well intentioned, inevitably cuts across fundamental values of equality before the law and between peoples.

A balance must also be struck in any period between the Crown's obligation of active protection of Māori health and the responsibility of individual Māori to maintain their personal health.

However powerful the medical technology and however lavish the means to afford it, individuals cannot be entirely cocooned from the health effects of their lifestyle choices and their exposure to their environment.

The chief difficulty with the claimants' position is not the goal of equal health outcomes but the one-track focus on healthcare services as the means to achieve it. More ambulances under the cliff cannot remove the factors causing people to fall off.

This perspective did not find its way into the 2021 report.

Part five Reasons for lower Māori life expectancy

In our view the main drivers of the difference in life expectancy between Māori and NZ European are obvious. Māori smoke more and are more obese. These and other behavioural factors, include a willingness by Māori males, in particular, to take more risks, and do more risky drinking. These factors have been completely ignored by the Waitangi Tribunal, the then Director General of Health, the New Zealand Medical Council, and in many academic papers. Some of the relevant data are set out in table one.

Table two: Ethnicity and life expectancy drivers

Ethnic group	Life expectancy	Obesity %	Smoking %	Hazardous drinking %
Asian	85.1m/ 87.9 f	18.5	3.2	6
NZ European	81m/ 84.5 f	31.9	7.2	20.1
Pacific	75.4m/79f	71.3	18.9	21.5
Māori	73.4m/ 77.1f	50.8	19.2	33.1

Sources NZ Health Survey 2021-22., Stats NZ

The above data does not show the full story. In particular, the Māori smoking rate has fallen drastically from around 40 percent in 2005 to just under 20 percent in the last health survey. This fall has not yet worked though into better Māori health indicators but future improvements can be expected. But as the 2000 Waitangi Tribunal warned, this can take some time.

There are estimates of the impacts of some of these risk factors on life expectancy. For example Walsh and Wright (2020) estimated that higher smoking rates amongst Māori were responsible for 2.1 years of the life expectancy gap for Māori men and 2.3 years for Māori women.

Higher obesity will be a significant driver. A 2015 Ministry of Health report on obesity stated that a body mass index (BMI) of over 40 reduces life expectancy by over 8 years. The Māori over 40 BMI rate was 10 percent, compared to 3 percent for New Zealand European. BMIs of over 30 pose a lesser but a still significant risk.

A decomposition analysis (Walsh and Grey 2019) of the life expectancy difference between Māori and non-Māori identified avoidable and non-avoidable causes. It found that unavoidable causes accounted for 2.4 years of life expectancy. So if we account for smoking, obesity and accidents (accounting for nearly a year's reduction in life expectancy for Māori men) then only a relatively small difference remains that could potentially be ascribed to the functioning of the health system.

However Walsh and Grey and the other proponents of the 'inequitable' mortality difference narrative would argue that smoking and other behavioural drivers are just indicators of more 'fundamental' causes.

Many of the drivers are related to the unequal distribution of the determinants of health. For example, the unequal distribution and access to resources such as income, education and employment, factors which often compound one another. These factors also pattern exposures to other risk factors such as tobacco use, poor nutrition, overcrowded

and poor-quality housing, and drug and alcohol use. This inequitable distribution, particularly for Māori, is rooted in structural hierarchies that are associated with colonisation.

Claims that health disparities are driven by disparate access to resources are frequently asserted but there has been little empirical analysis of these pathways in New Zealand.

On the face of it access to resources would not appear to be a very significant issue. To state the obvious it does not cost money to stop smoking or eat less (though this may be hard to do). The fall in Māori smoking rates was not driven by changes in the underlying 'fundamental causes'. It was mainly driven by a policy to impoverish smokers to force them to quit.

Most of the direct cost of health is borne by the state and it is not directly claimed that Māori are receiving a disproportionately low share of these resources (though there will continue to be arguments about fair capitation rates and so on).

Typically the only evidence to support the economic/social determinants story are based just on correlations between socioeconomic indicators and life expectancy. But this is not necessarily convincing. The causation could also work the other way. The personal characteristics which drive persistent smoking can also drive poor economic and social outcomes.

Many of the 'fundamental' drivers will also have a relatively weak causal link to mortality rates. Housing 'quality' or 'overcrowding' might have an impact on infectious diseases but these are now just a small proportion of the disease burden. Living in a lower cost house does not in itself cause cancer or heart disease.

Incomes not hugely different

The main socioeconomic argument is based around access to resources.

But if we look at the data by ethnic group we do not see the yawning gaps that might drive large health disparities between Māori and New Zealand Europeans. The following are the Stats NZ average hourly earnings rates estimates for June 2019, and household incomes from the 2022 Income and Housing report. Importantly the composition of the lowest household income quintile does not show a disproportionate Māori share in that income class. The 16.7 percent share is actually below the Māori population share.

Those who are familiar with Deprivation index data, which shows a disproportionately large share of Maori in the lowest part of the distribution may be surprised by the equalised household income data. The different results bears investigation but our take is that the Deprivation index is heavily weighted to welfare status and housing. Neither necessarily predicts low equalised incomes for the lowest quintile well. The household income data is the more relevant if the purpose is to see if Maori have lower disposable incomes to devote to health.

Table three: Income indicators by ethnic group

	Average hrly. rate \$	Median household income equalised \$	Share of lowest house hold income quintile %
NZ European	26.85	48904	60.4
Māori	23	41822	16.7
Pacific	22.38	40707	9.5
Asian	24	50001	10.9

Source: Stats NZ

Again to state the obvious, higher Asian longevity cannot be seriously explained by higher incomes. Low rates of smoking and drinking and low obesity rates must be the key. Māori hourly rates and household

incomes might be somewhat lower than NZ European but Māori are not over-represented in the lowest and presumably most vulnerable household income quintile.

Socioeconomic disparities

Socioeconomic differences, often measured by 'deprivation index' indicators are generally found to be associated with poorer health outcomes. The extent to which this demonstrates causation rather than mere correlation is open to debate. But importantly the association does not seem to hold for Māori.

One indicator used to show the impact of resources on health is unmet needs due to cost. Unmet need for GP services is defined as:

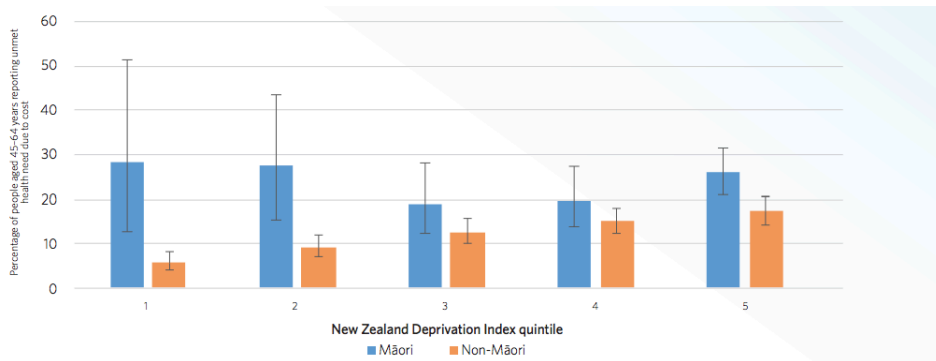
having had a medical problem but not visiting or talking to a GP because of cost, in the past 12 months.

The data is: New Zealand Average: 10.7 percent

By ethnic group: Māori 14.4; Pacific 11.4; Asian 10.6 ; European New Zealander 10.6.

Figure two shows the percentage of unmet need due to cost for Māori and non-Māori by deprivation index quintile for the 45 - 64 age group. Unmet need for Māori is actually higher for the least deprived quintiles. Why this is the case is, no doubt, complicated, with many possible explanations, but one may be that Māori place a different value on spending on health.

Figure two. Unmet need by Deprivation quintile (45-64 yrs)



Source: NZHQ

Colonialism, land loss and health

There is another strand in the literature that claims a link between colonialism, land loss and Māori health. There has been one attempt at developing empirical evidence on this point. Grimes and Thom (2021) examined empirical links between higher historical land loss and higher modern smoking rates. They found that land retention was **positively** related to smoking.

But that was not how the findings were publicly presented. There were two sets of analyses. The first, based on iwi population weightings, that generated the above result was relegated to the appendix. The second, based on unweighted data that found a positive relationship between confiscations and smoking, was the highlighted result. But obviously the weighted average approach should have been preferred if

the intention was to inform an understanding of impacts on Māori as a whole. The unweighted analysis will be biased by the outcomes for very small iwi.

And as we noted above, East Coast Māori, who have one of the highest rates of land retention, have the worst life expectancy.

On the more general argument on the negative effects of colonisation, the implicit argument is that Māori would have independently developed the behaviours and values that generate European levels of life expectancy if there had been no colonisation, or alternatively Māori had been provided with a non-racist health system. But there is no attempt at an 'alternative history' that would demonstrate this.

Part six: A review of the quantitative racism and health literature

The argument that there is a strong and material empirical relationship between racism and health is seemingly supported by a recent review of the New Zealand quantitative literature on race and health

outcomes by Talamaivao et al. (2020). Their table of results presented in figure X appears convincing. The 24 papers reviewed presented 65 results showing a negative association between some measure of ‘racism’ and health and only one showing a positive result. Eleven showed no relationship.

In this part we present a partial review of this literature. We have focussed on the Māori results, and to reduce the task somewhat have left out the mental health and maternal health categories. However where mental and maternal health outcomes appear in papers cited in the other categories these are reviewed. Our coverage covers more than three quarters of the literature and gives a good sense of the quality of the analysis.

Note that text in italics in what follows are the authors’.

Figure three: Talamaivao summary of results of discrimination and health

Health indicators	Association with negative health	Association with positive health	No association	Studies
Mental health				
Pre-natal/post-natal depression	1			25
Depressive symptoms	2			37,38
Pre-natal perceived stress	1			25
Psychological distress	3			12,35,42
Diagnosed mental health condition	1			12
Suicide attempts	1			38
SF 12/36 mental health	4			1,12,33,39
Feelings of control over life	1			35
Wellbeing/overall health				
Self-rated health	7			1,12,23,33,35,37,39
Life satisfaction	5			1,24,33,25,42
Overall wellbeing	2			38,42
Quality of life	2			30,31
Happiness	1			44
Self esteem	2			35,42
Subjective evaluation of health	1			42
Body satisfaction	1			35
Physical health				
Childhood asthma (medicated)			1	30
Cardiovascular disease	2			12,39
SF36 physical health	2			12,39
Infectious disease hospitalisations (first year of life)	1			28

Health related behaviours				
Cigarette smoking	4		1	12,32,36,37,39
Marijuana use	1			32
Alcohol use (hazardous or binge)	4			12,32,37,41
Watching TV			1	35
Exercise			1	35
Body size (BMI, waist circumference)			1	12
Healthcare				
Patient experience	1			13
Unmet need	2			29,43
Satisfaction with health care service	2			29,43
Access to healthcare service	2		1	29,34,35
Cancer screening (breast and cervical)	1*		1	13
Maternal health				
Morning maternal cortisol levels	1		1	23
Evening maternal cortisol levels				23
Maternal diurnal cortisol decline	1		1	23
Infants higher cortisol reactivity at six weeks				23
Birth weight	1*	1#	1^	27
Gestation length	1*			27
Other health indicators				
Feeling safe in neighbourhood	1			37
Sleep disturbance/poorer sleep	2			25,40
Fatigue	1			35
Relationship dissatisfaction/conflict			1	35

Wellbeing /overall health

*Experience of racism was associated with negative life satisfaction in five studies, **1,24,33,35,42** with one study using longitudinal data.*

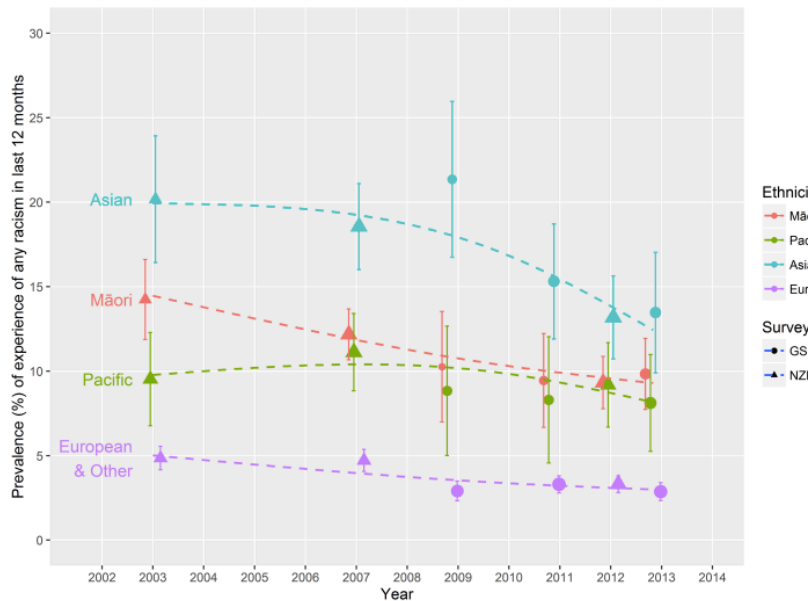
1. Harris RB, Stanley J, Cormack DM. Racism and health in New Zealand: Prevalence over time and associations between recent experience of racism and health and wellbeing measures using national survey data.

This paper reported on reported experiences of racism by ethnicity in the New Zealand Health Surveys and the General Social Survey. Asian participants reported the highest experience of racism (around 13–15% over the three most recent surveys), followed by Māori and Pacific (8–10%), NZ Europeans/other 4%. Reporting of racial discrimination has declined over time with the largest decline experienced by Māori.

NZ Europeans have the lowest racism experience rates. But this does not mean that they are disproportionately protected against 'unfair and unjust' treatment. As the largest ethnic group a larger proportion of their interactions will be with their own ethnic group, and adverse interactions in these cases will not be counted as racially motivated.

The relationships between experiences of racism and four measures of health and wellbeing are shown in figure five. The first two measures are odds ratios with no experience of racism as the default at 1. The last two are absolute differences in an index, with no obvious interpretation of its significance. The reported figures compare outcomes for those who reported experiencing racism and those who did not. For example, the top line in the figure shows that NZ Europeans experiencing racism were 1.98 times more likely to report being in poor or fair health.

Figure four: Experiences of racism over time



In general NZ Europeans and Asians appeared to be the most vulnerable to negative impacts from racism, scoring the highest on two of the four measures. And in aggregate NZ Europeans account for the largest part of the negative impact of racism in New Zealand. For Māori there was no statistically significant association between racism and self-reported life satisfaction or physical health. The strongest association was with reported mental health.

There was a discussion of causation in the paper. The results just present correlations so it cannot just be assumed that experiences of racism caused the negative health outcomes. The causation might well run the other way. For example there is a relationship between poorer mental health and racism for Māori, but it is possible that people in poor mental health are more likely to perceive a racial slight, when others in better health would not.

Figure five: Relationship between experience of racism and health and wellbeing indicators

Health and wellbeing variables	Ethnicity	Impact of racism on health outcome
		Adjusted Odds Ratio (95% CI)
Poor/fair self-rated health ^a	European/Other	1.98 (1.55, 2.51)
	Māori	1.89 (1.53, 2.32)
	Pacific	1.73 (1.16, 2.57)
	Asian	1.39 (0.96, 2.01)
Dissatisfied/very dissatisfied life satisfaction ^b	European/Other	2.33 (1.73, 3.14)
	Māori	1.39 (0.87, 2.20)
	Pacific	1.84 (0.70, 4.82)
	Asian	2.41 (1.31, 4.44)
SF-12 mental health ^c		Mean difference (95% CI)
	European/Other	-2.94 (-4.35, -1.54)
	Māori	-4.10 (-5.19, -3.01)
	Pacific	-3.56 (-5.19, -1.93)
SF-12 physical health ^c	European/Other	-2.40 (-3.40, -1.39)
	European/Other	-2.41 (-3.11, -1.72)
	Māori	-0.93 (-2.06, 0.20)
	Pacific	-2.23 (-3.73, -0.72)
Asian	0.18 (-0.53, 0.89)	

On causation it is argued:

Our study is cross-sectional and therefore limited in terms of attributing causality. However, experience of racism has been linked to negative health and well-being outcomes in prospective studies, in New Zealand.

This is a weak argument. Establishing causation in one study does not establish causation in an unrelated study. In any event the two New Zealand studies cited did not make a case for causation between racism against Māori and health outcomes

The first of the cited references (Hobbs et al) found that factors associated with hospitalisation of Māori infants were high household deprivation (2.16, 1.06-5.02) and maternal smoking (1.48, 1.02-2.14).

Experience of racism was **not** statistically significant.

Only the abstract of the second paper (Stronge et.al 2016) could be accessed but it did not appear to establish causality.

The key result was:

Study 1 showed that perceived discrimination was directly linked with decreased life satisfaction, but indirectly linked with increased life satisfaction through higher levels of ethnic identification.

This result appears to be similar to the analysis reported in Houkamau et al, which is discussed below. It did not establish causality.

33. Cormack D, Stanley J, Harris R. Multiple forms of discrimination and relationships with health and wellbeing: findings from national cross-sectional Surveys in Aotearoa/New Zealand. *Int J Equity Health*. 2018 Feb 17;

This study did not breakdown experiences of racism by ethnic group so no conclusions can be drawn relating to Māori.

35. Houkamau CA, Stronge S, Sibley CG. The prevalence and impact of racism toward indigenous Māori in New Zealand. *Int Perspect Psychol Res Pract Consult*. 2017; 6(2):61–80.

This study used data from the New Zealand Attitudes and Values surveys. It presents the results of a model that assessed the prevalence of ethnic discrimination experiences amongst Māori, and investigated the link to 15 social, economic, and psychological indicators of well-being. The impacts are tiny (a 1 or 2 percent in most cases). Nevertheless the authors concluded:

These results evidence the NZHRC (New Zealand Clinical Research) claim that racism toward Māori is a genuine social problem that perpetuates Māori disadvantage in New Zealand.

It also appears that the results might be an artifact of the methodology. It used data based on questions on subjective feelings about discrimination rather than questions on whether the respondent had actually experienced discrimination. Schmitt, Branscombe, Postmes, & Garcia, (2014) reporting on a meta-analysis of racial discrimination impacts that found that:

the effect of discrimination on well-being was significantly negative for studies that manipulated general perceptions of discrimination but effects did not differ from 0 when attributions to discrimination for a specific negative event were used.

In the Houkamau et al. paper the effect of the manipulation of the data from the Attitudes and Values survey was to increase the percentage of Māori experiencing racism to 43 percent compared to the less than 15 percent reported in paper 1. This manipulation probably explains the impacts on wellbeing.

42. Kapeli SA, Manuela S, Sibley CG. Perceived discrimination is associated with poorer health and well-being outcomes among Pacific peoples in New Zealand

This paper was not relevant to the Māori discrimination issue.

Other indicators of wellbeing

*Papers showed an association between experience of racism and negative outcomes with respect to overall wellbeing, quality of life measures, happiness, self-esteem, subjective evaluation of health and body satisfaction.***30,31,35,38,42,44**

30. Paine S-J, Cormack D, Stanley J, Harris R. Caregiver experiences of racism are associated with adverse health outcomes for their children: a cross-sectional analysis of data from the New Zealand Health Survey. Crit Public Health. 2019 Jun 17; 0(0):1–12.

This paper examined the relationship between care givers experience of racism and child health outcomes With respect to medicated asthma treatment there was no relationship with racism.

On the mental health measure there was a statistically robust association with experienced racism for Māori, but there was a positive impact on Asians and no impact on Pacific. There was evidence of a positive impact on Māori self-esteem.

Figure six: Racism impacts Paine et. al.

Level of variable	CHQ mental health	CHQ behaviour	CHQ self-esteem
	Mean difference (95% CI)	Mean difference (95% CI)	Mean difference (95% CI)
None	Ref	Ref	Ref
1 report	-1.14 (-3.23, 0.95)	-3.33 (-6.34, -0.33)	-3.16 (-5.87, -0.46)
2+ reports	-4.15 (-7.13, -1.17)	-4.71 (-7.87, -1.57)	-4.37 (-7.06, -1.67)
Māori	-2.89 (-4.58, -1.20)	-5.04 (-7.22, -2.85)	0.63 (-1.18, 2.44)
Pacific	-0.18 (-2.46, 2.10)	-1.99 (-4.58, 0.61)	3.32 (1.36, 5.29)
Asian	3.38 (1.08, 5.69)	6.40 (4.15, 8.66)	5.78 (3.02, 8.54)
European/Other	Ref	Ref	Ref

This mixed picture is not how the authors reported the results.

The present study makes an important contribution by showing that increased reporting of experience of racism among caregivers is strongly associated with worsening CHQ-PF scores.

31. Dyall L, Kepa M, Teh R, et al. Cultural and social factors and quality of life of Māori in advanced age. Te puawaitanga o nga tapuwae kia ora tonu - Life and living in advanced age: a cohort study in New Zealand (LiLACS NZ). N Z Med J. 2014 May 2; 127(1393):62–7.

This paper reports on a survey of 280 Māori aged 80-90. The abstract reported that one in five had answered positively to 'colonisation affecting their life today'. It is difficult to assign any meaning to these answers as they do not describe whether the impact of colonisation was positive or negative and colonisation was not defined. It could have meant different things to different respondents.

The responses to the discrimination questions were:

A low number of participants reported discrimination. 4 and 3 participants reported being the victim of verbal and physical ethnic abuse respectively, and 5 reported being treated unfairly by a health professional in the last 12 months.

And over the longer term (up to 80 years given their age) the numbers were:

- Victim of ethnic abuse verbal more than 12 months ago? 8%
- Victim of ethnic abuse physical abuse more than 12months ago? 4%
- Treated unfairly by health professional more than 12 months ago? 4%
- Discriminated against ever? 22%

'Ever' experiencing discrimination was associated with lower mental health related quality of life. The mean mental health index score was 52.8 compared with 49.6 for the control, which does not appear to be very material. There was no relationship with physical health and wellbeing. Colonisation affecting a participant's life had no significant association with current health indicators.

However the discussion had a different tone which was not supported by the actual findings.

It is very likely this age group experienced significant discrimination during the 20th and 21st century when discriminatory policies were and are in place. Institutionalised racism is acknowledged and exists within our health

and disability system and is a factor that contributes to health inequalities and poorer health outcomes. This matter needs to be addressed by those in senior decision-making positions and the education and ongoing training and development of all health and related occupations revisited.

35. See above

38. Williams AD, Clark TC, Lewycka S. The Associations Between Cultural Identity and Mental Health Outcomes for Indigenous Māori Youth in New Zealand. Front Public Health. 2018; 6(319).

This study of New Zealand Māori youth used data from the New Zealand Youth survey. It primarily focussed on the relationship between cultural identity and mental health. It also reported that experiencing discrimination was associated with poorer wellbeing scores, greater depressive symptoms, and a previous suicide attempt. 25 percent of students reported some form of discrimination. This was higher (33 percent) for students with a strong Māori identity, than for students with a low Māori identity (19 percent).

42. See above

44. Lambert M, Fleming T, Ameratunga S, Robinson E, Crengle S, Sheridan J, et al. Looking on the bright side: An assessment of factors associated with adolescents' happiness. *Adv Ment Health*. 2014 Mar 15;12.

This study used data from the New Zealand Youth 07 survey. The abstract reported:

Happiness was negatively associated with witnessing yelling and hitting of children and adults at home, discrimination, frequent marijuana use, sexual abuse, frequent alcohol use and having a long term health condition.

This study did not separately identify Māori. Discrimination had a minor impact, which was not statistically significant.

Physical health

*A few studies explored the association between racism and physical health measures. Harris **12,39** found a negative health association for CVD and SF36 physical health scale scoring. Hobbs,**28** using longitudinal data linked to national hospitalisations, found that maternal experience of healthcare-based racism was associated with increased infectious disease hospitalisations for Māori infants.*

12. is reviewed under smoking below.

39. See below

28. Hobbs MR, Morton SM, Atatoa-Carr P, et al. Ethnic disparities in infectious disease hospitalisations in the first year of life in New Zealand. *J Paediatr Child Health*. 2017; 53(3):223–31.

This paper investigated a cohort of 6846 NZ children, born in 2009-2010, using multivariable logistic regression to obtain odds ratios (OR) for factors associated with ID hospitalisation in the first year of life, for all children, and then separately for Māori or Pacific children.

While the Odds Ratio for Māori was 1.5, experience of racism was not a contributing factor. These were a high household deprivation index score and maternal smoking.

Health related behaviours

Associations between experience of racism and factors linked to increased health risk were found in four studies examining cigarette smoking,12,32,37,39 and four studies that analysed hazardous or binge drinking.12,32,37,41

12. Harris R, Cormack D, Tobias M, et al. The pervasive effects of racism: experiences of racial discrimination in New Zealand over time and associations with multiple health domains. *Soc Sci Med* 1982. 2012 Feb; 74(3):408–15

The study used data from the 2002/03 and 2006/07 New Zealand Health Surveys.

Experience of racially motivated physical attack was significantly associated with smoking and hazardous drinking for both Māori and NZ Europeans although the strength of association was stronger for hazardous drinking among Māori, and smoking amongst NZ Europeans.

Only a limited number of people were exposed to a smoking/physical assault trigger. In 2006 -07 the 5.4 percent of Māori who had previously experienced a physical assault were 1.8 times more likely to smoke. So even if the causation went from racial assault to smoking the impact on the overall Māori smoking rate would have been about 2 percentage points. However, the causation path more likely goes from smoking and drinking to experience of physical attacks. People who smoke and drink are probably more likely to get into conflicts.

32. Di Cosmo C, Milfont TL, Robinson E, et al. Immigrant status and acculturation influence substance use among New Zealand youth. *Aust N Z J Public Health*. 2011 Oct; 35(5):434–41.

This was a study of first and second generation immigrant youth. This was not related to racism and smoking, and Māori smoking in particular.

36. Muriwai E, Houkamau CA, Sibley CG. Looking like a smoker, a smokescreen to racism? Māori perceived appearance linked to smoking status. *Ethn Health*. 2018; 23(4):353–66.

We were not able to access the full paper. The abstract reported:

The results suggested that core aspects of Māori identity and cultural engagement were not significantly linked with smoking. However, the extent to which participants felt they were perceived as prototypically Māori (measured as Perceived Appearance) was reliably associated with smoking.

This does not establish any obvious relationship between racism and smoking. It points to a subculture where smoking is one of the identifiers.

37. Crengle S, Robinson E, Ameratunga S, et al. Ethnic discrimination prevalence and associations with health outcomes: data from a nationally representative cross-sectional survey of secondary school students in New Zealand. *BMC Public Health*. 2012 Jan 18; 12(1):45.

This study used 'Youth 07: the Second National Health and Wellbeing Survey of New Zealand Secondary School Students' data. It was a study of the ethnicity stratified associations between ethnic discrimination and depression, cigarette smoking, and self-rated school achievement.

All ethnic groups reported an association between smoking and the experiencing racism. The results were highest for NZ Europeans and lowest for Asians.

NZ Europeans subject to racism were more likely to exhibit depressive symptoms.

39. Harris R, Tobias M, Jeffreys M, et al. Racism and health: the relationship between experience of racial discrimination and health in New Zealand. *Soc Sci Med* 1982. 2006 Sep; 63(6):1428–41.

This paper used data from the 2002/2003 New Zealand Health Survey, to explore the relationship between self-reported racial discrimination and health. The full paper was not recovered. The abstract reported:

Reported experience of racial discrimination was associated with each of the measures of health examined. Experience of any one of the five types of discrimination was significantly associated with poor or fair self-rated health; lower physical functioning; lower mental health; smoking; and cardiovascular disease.

This paper is based on an old health survey and has been superceded by later analysis.

41 Winter T, Riordan BC, Surace A, Scarf D. Association between experience of racial discrimination and hazardous alcohol use among Māori in Aotearoa New Zealand. *Addict Abingdon Engl.* 2019 Dec; 114(12):2241–6.

The full paper was not recovered. The following is based on the abstract. The analysis used data from the 2016/7 New Zealand Health Survey and examined the relationship between hazardous drinking and experience of past discrimination. They found that Māori identification was associated with elevated levels of hazardous alcohol use, but that this was partially mediated by past discrimination. No theoretical argument was advanced for the role of discrimination in reducing drinking.

Healthcare

Five studies examined healthcare measures and relationships to experience of racial/ethnic discrimination. 1,13,29,34,35

1. See above

13. Harris R, Cormack D, Tobias M, et al. 2012 Self-Reported Experience of Racial Discrimination and Health Care Use in New Zealand: Results From the 2006/07 New Zealand Health Survey. *Am J Public Health.* 102(5):1012–9.

This study used data from the 2006/07 New Zealand Health Survey to test whether experiences of racism were associated with lower cancer screening and other negative health impacts. A significant association was found between racial discrimination and screening rates for Maori women, but not for other ethnic groups. As about 6 percent of Maori reported racial discrimination the impact on timely cancer checks, if there is a casual relationship, would have been about 2-3 percentage points. Note that this study is now dated.

29. Paine S-J, Harris R, Stanley J, Cormack D. Caregiver experiences of racism and child healthcare utilisation: cross-sectional analysis from New Zealand. *Arch Dis Child*. 2018; 103(9):873–9.

This paper looked at the relationship between caregivers' experience of racism and subsequent child health care utilisation. The hypotheses appears to be that a racial incident will make the caregiver less likely to obtain an appointment and less likely to be happy with the healthcare centre.

Three outcome measures were investigated. Having access to a usual healthcare provider was determined by asking if the child had a general practitioner ('GP') or medical centre they would usually go to if unwell.

Unmet need was measured by asking if there had been any time in the last 12 months when their child needed to see their GP but could not see one. A need is unmet if an appointment cannot be obtained within 24 hours, but this will not be consequential in all cases. Treatment could be received later or through an A&E visit.

The results were:

- Māori were more dissatisfied with their healthcare provider. In many cases this would be a Māori provider.
- 6.9 percent of Māori reported an unmet need in 2011/2012 vs. 4.7. for NZ Europeans and 4.1 percent for Asians
- An association was found for racism and unmet need but this relationship largely fell over once the model was adjusted for the care giver's psychological state.

In any event the tested relationship is misconceived. Unmet need is a function of the provider's capacity, which has nothing to do with whether the person seeking the appointment had experienced racial discrimination or not.

However, the conclusion was:

Vicarious racism is a serious health problem in New Zealand disproportionately affecting Māori and Asian children and significantly impacting children's healthcare utilisation. Tackling racism may be an important means of improving inequities in child healthcare utilisation.

34. Teevale T, Denny S, Percival T, Fleming T. Pacific secondary school students' access to primary health care in New Zealand. 2013; 126(1375):11.

This paper did not cover Māori.

35. See above

31. See above.

Summary of the analyses

Table four summarises our review of the analyses. Our conclusion is that there is limited evidence that personal or institution racism has had a material impact on health outcomes. The studies have only tested associations generally without any serious discussion on whether they reflect causation. It is just asserted or implied that they do. There were numerous cases where authors may have been influenced by conscious and unconscious bias in their summary discussions that do not match the data.

The past Director General of Health's claim that there is substantial evidence of racism in the health system does not stand up to a critical assessment.

Table four: Review summary

Paper	Subject	Results	Impact of discrimination	
1. Harris et al.	Incidence of discrimination over time Association between discrimination and health	Discrimination against Māori lower than Asian and falling over time Māori not disproportionately affected	No material evidence of adverse impacts	
35. Houkamau et al	Impact on 15 wellbeing indicators	Results trivial and exaggerated by methodology	No evidence	
30. Paine et. al	Caregiver experience impact on children	Mixed results. Negative for mental health, positive for self-esteem	Limited evidence	
31. Dyll et al.	Impact on 80-90 yr.	Limited experience of racism over lifetime. Minimal association with mental health Colonialism had no impact	No material evidence	
38. William set al.	Māori youth	Association with mental health and stronger Māori identity	A possible issue	

28. Hobbs	Infectious disease hospitalisations	Racism experience not a contributing factor	No evidence	
12. Harris	Relationship between racial assaults and smoking and drinking	Impacts both Māori and NZ Europeans	Causation probably goes from smoking and drinking to assaults	
36. Muriwai	Māori identity and smoking	Association with racism not tested	No association	
37. Crengle	Association between youth smoking and racism experience	Highest for New Zealand Europeans	No disproportionate impact on Māori	
39. Harris	Association between racism and health outcomes for 2002-3	Positive associations reported	Paper is old and has been superseded	
41. Winter	Racism and hazardous drinking	Racism experience reduces hazardous drinking	No negative impact	
13. Harris	Association between racism and cancer screening outcomes for 2006-7	An association for Māori women but not for other ethnicities	Impact on screening rates 2-2 percent if casual	
29. Paine et al	Racism experience and unmet health need	Limited association	Association tested was misconceived	

Part seven: Health Quality and Safety Commission New Zealand. Window on the quality of Aotearoa New Zealand's health care 2019 – a view on Māori health equity

In its 2019 report the Health Quality and Safety Commission focused on 'equity' in the New Zealand's health system. Its vision and starting point sets an impossible standard.

We have a vision of an Aotearoa New Zealand where no avoidable, unfair or unjust health inequities exist that are based on differences in ethnicity, socioeconomic circumstances, geography, gender, sexuality, age, specific health conditions or disabilities, or combinations of these. The World Health Organization defines equity as the absence of avoidable or remediable differences among groups of people.

However all of the possible group 'inequities', except for Māori, are promptly forgotten.

The Commission's explanation of basic causes of health inequities between Māori and non-Māori are a recitation of what has become the standard mantra.

In the Aotearoa New Zealand context, 'basic causes' include the historical acts of taking land, resources and culture, compounded by the monocultural nature of today's health system and service delivery. Colonisation, failure to meet the requirements of te Tiriti o Waitangi and institutional racism have established and maintained advantage for most non-Māori and disadvantage for Māori within the wider determinants of health, and within the health system itself. Institutional racism includes inappropriate action and/or inaction in response to need. It also includes monocultural perspectives and worldviews embedded in health, education, legal and other systems.

Its focus in this report is just on the health system:

the effect of the health system itself on inequitable health outcomes, considering how access to care, and the quality of care once accessed, increases or reduces the inequities caused by wider social injustices. It also considers whether attempts to improve the quality of health services have reduced inequities, worsened them, or had no effect one way or the other.

The following is a review of the Commission's analysis and evidence, which followed what it calls a 'life course' approach, from the youngest to the oldest. The examination of the available evidence looks at 31 indicators. We do not know whether or not there are more health indicators and if the 31 were selected because they show Māori disadvantage, or if this was a complete review.

We present their assessments below commenting on the materiality on any differences. Note that text in italics is the Commission's.

Our assessments are summarised in table seven below. Our materiality assessment is based on the size of the differentials, if any, and the consequences for Māori health. Six assessments pointed to a consequential differential health impact. 24 did not. This is obviously very different from the picture of systematic disadvantage that the Commission trying to paint.

Table seven: Summary of HQSC analyses

:

Number	Assessment	Difference	Material	Notes
1	Lead maternity caregiver	60% M 77%	Yes	
2	% small babies	A small % difference	No	
3	Chlamydia in infants	Only 17 cases	No	
4.	Childhood	No statistically significant differences	No	
5.	Child Asthma treatment	Slightly more intensive treatment	No	
6.	Child asthma hospital admission	20% higher i.e about 200 per year	Yes	
7.	Infant vaccination rate	Was close in 2014-2016 (2%) to NZ vaccination rate. Gap has opened up to 9 percent since	Yes	
8.	Chlamydia 15-24 yr old testing rates	Higher for Māori	No	

9.	Unmet health need due to cost	Numbers reporting unmet health need due to cost not. Differences may primarily reflect different preferences for health expenditure	No	
10.	Youth Hospital admissions for self harm	Over 30 percent higher	Yes	
11.	Youth suicide	More than double	Yes	
12.	HPB vaccine uptake	Identical	No	
13.	Unmet health need due to cost	No evidence that unmet 'need' driven by financial capacity	No	
14.	Wait time for specialist	Wait time differences are minor and probably explained by failure to attend appointment	No	
15.	Acute hospital bed days	More than twice as high for Māori. This not a issue for Māori health but imposes a fiscal cost taking resources away from other groups	No	
16.	Communication quality	No material differences	No	
17.	Diabetes annual review	Minor difference	No	
18.	Inaccessible appointments	No evidence of inaccessibility provided	No	
19.	Diabetes annual review	A few percent lower for Māori but still high	No	
20.	Diabetics admitted to hospital	Around 20 percent higher	Yes	
21.	Diabetics lower limb amputation	Māori rate 30 percent higher but numbers very small	No	
22.	Cancer	No data provided	NA	
23.	Cost barriers to care 65 plus	No difference	No	
24.	Wait for specialist appointment 65 plus	No difference	No	
25.	Unmet disability needs over 65s	Difference not sufficiently objectively measured	No	
26.	Communication for over 65s	No substantial differences	No	
27.	Hospital readmission rates over 65s	Higher Māori over 65 admission rates may reflect more resources directed to Māori	No	
28.	Polypharmacy	Multiple prescription rate 20 percent higher for Māori affecting 1 percent of the population	No	
29.	Treatment after falls	No difference	No	

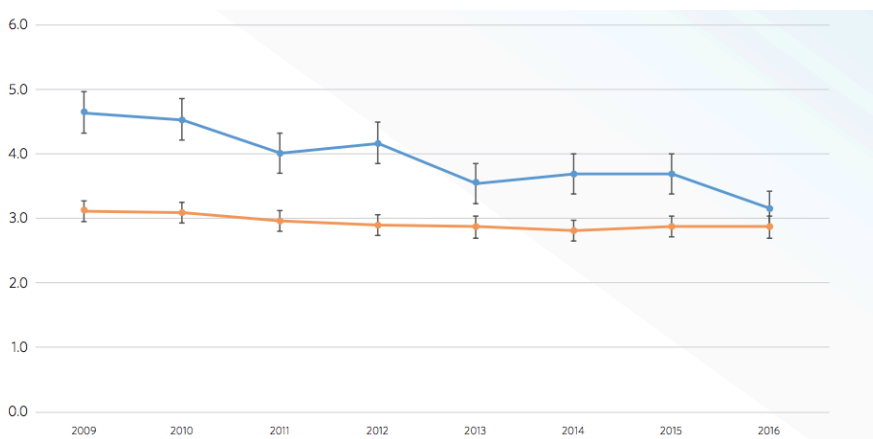
30.	Orthopedoc surgery compliance	No difference	No	
31	Surgery infection	No difference	No	
32.	Hip and knee surgery	No evidence Māori disadvantaged	No	

Maternity and birth

The indicator for access to care is the percentage of women with a lead maternity caregiver. In 2016 this was 77 percent for non-Māori and 60 percent for Māori (up from 42 percent in 2009).

The quality indicator was the percentage of babies small for gestational age born at 37–42 weeks gestation, Figure x shows that the gap had substantially closed by 2016.

Figure seven: Percentage of small babies



Chlamydia infections at birth

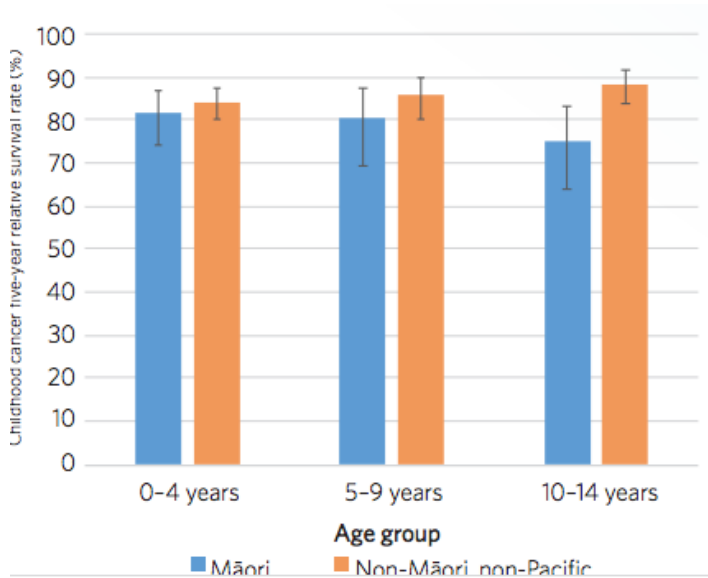
Chlamydia infections for infants under one per 100,000 of live births during childbirth were 220 for Māori versus 100 for non Māori. The number of Māori birth infections would be about 33 and the disparity would account for 17 of those.

As the Māori Chlamydia infection rate is three times the non-Māori rate, the data shows that chlamydia testing has been effective in reducing the disparity in infant infections.

Childhood

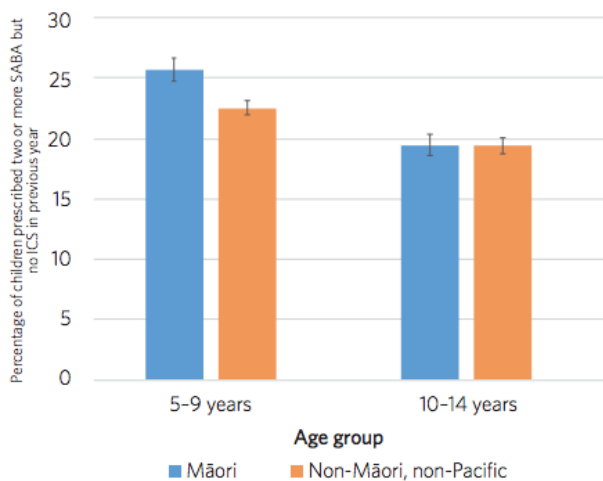
The access indicator is a nearly 20 percentage point difference in the Māori and non-Māori preschool dental care enrolment and the higher rate of caries in 5 year olds. As this treatment is free it is not clear what fault lies with the national health system. This would appear to be mainly an issue for Māori health providers.

The second indicator is Cancer survival rates. None of the differences by age group are statistically robust.

Figure eight: Childhood cancer survival rates**Childhood asthma**

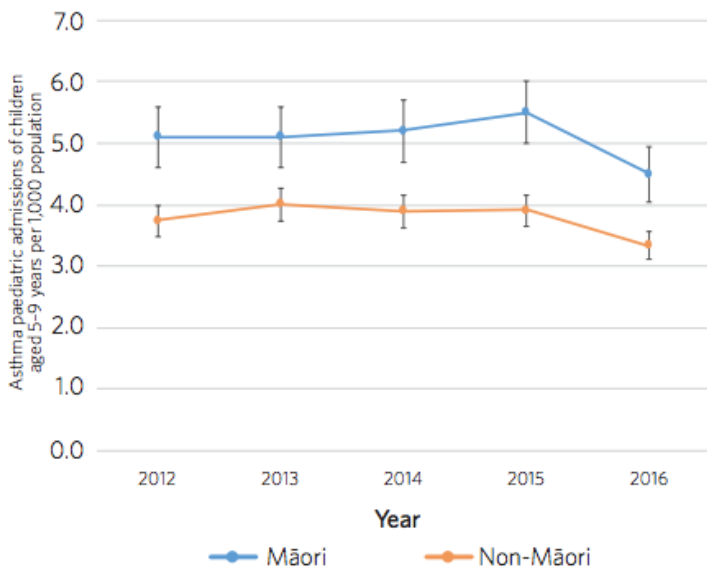
It appears from the data that there is a small but significant inequity in asthma treatment between Māori and non-Māori children aged 5–9 years but not in those aged 10–14 years

It is not clear why a (slightly) more intensive treatment of Māori should be described as inequitable.

Figure nine: Percentage of children prescribed two or more SABA but no ICS in same year, 2012–16

This is mirrored by a consistently, and statistically significant, higher rate of hospital admissions for Māori children in the younger age group

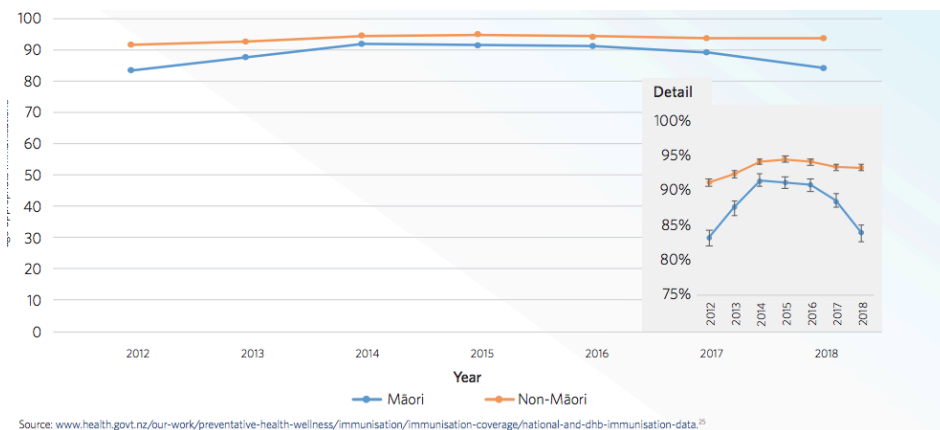
Figure ten: Asthma paediatric admissions of children aged 5–9 years per 1,000 population, 2012–16



Childhood immunisations

No explanation was offered for the recent decline in Māori immunisation rates.

Figure eleven: Percentage of eight-month-old infants with complete age-appropriate immunisations, 2012–18

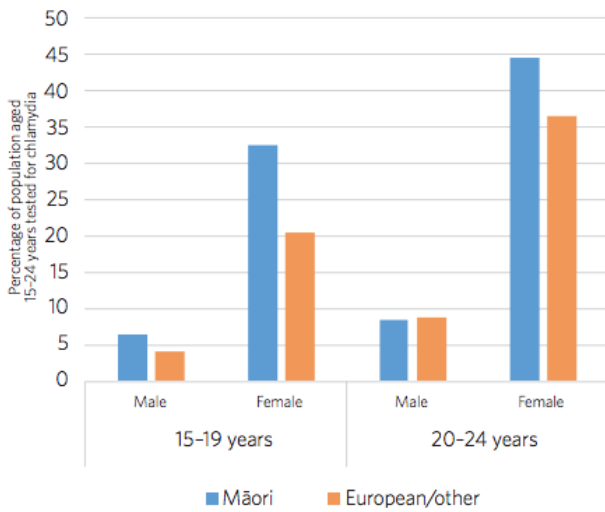


Source: www.health.govt.nz/bur-work/preventative-health-wellness/immunisation/immunisation-coverage/national-and-dhb-immunisation-data.²⁵

Chlamydia rates and coverage of testing (ages 15–24 years)

Testing rates are higher for Māori. The complaint is that they are not high enough.

Figure twelve: Population coverage of chlamydia testing, ages 15–24 years 2015

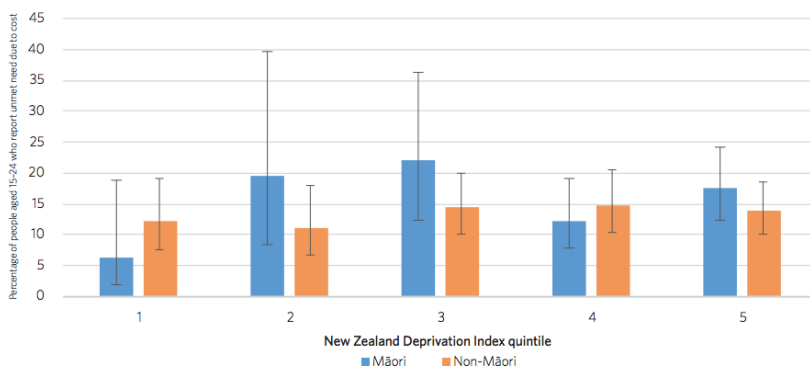


Unmet need for health care

Young Māori report a higher unmet need for health care due to cost than non-Māori (compared with 13 percent of non-Māori, 16 percent of Māori answered yes to the New Zealand Health Survey question).

The differences were not statistically different by deprivation quintile. Whether there was a statistically significant difference in aggregate was not disclosed. The numbers of missed appointments due to cost was not disclosed but would have been small as 15-24 year olds are reasonably healthy.

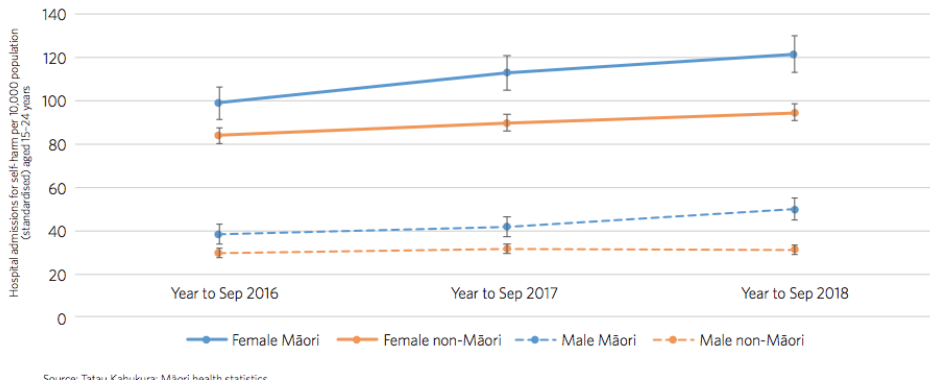
Figure thirteen: Percentage of people aged 15–24 who report unmet need due to cost, by New Zealand Deprivation Index quintile, 2016/17



Hospital admissions for self-harm for youth

There is a clear difference by ethnicity but a stronger difference by sex.

Figure fourteen: Youth self harm hospital admissions

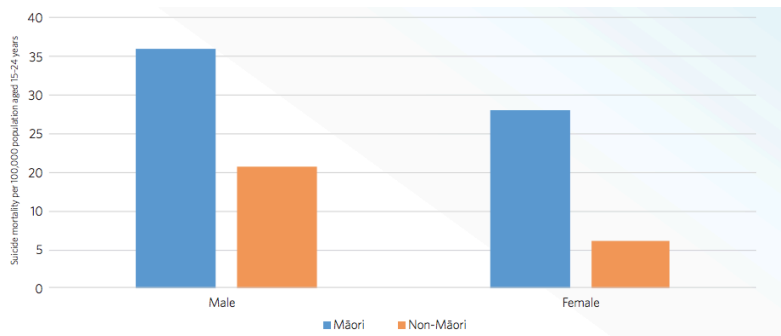


Youth suicide

Suicide mortality among Māori youth is higher than for non-Māori populations. As with self-harm, suicide can reflect a failure of mental health services to recognise, diagnose and treat mental ill health. Suicide rates are much higher for Māori youth compared with non-Māori. The inequity is more than two-fold among both male and female youth.

This disparity is a material issue.

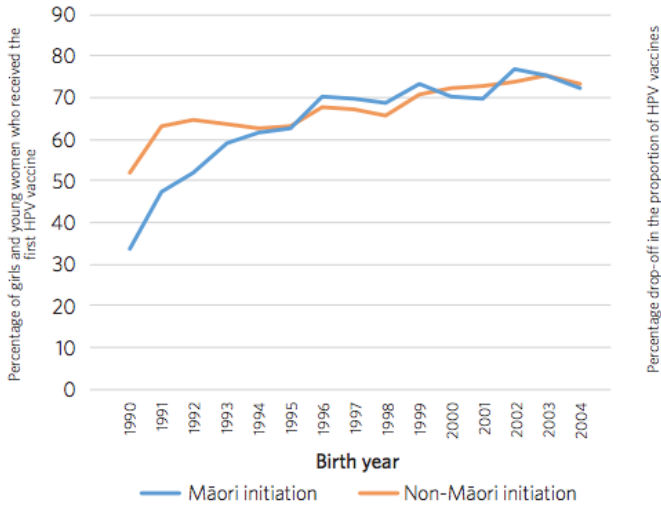
Figure fifteen: Suicide mortality per 100,000 population aged 15–24 years, 2013–15



HPV vaccine uptake

There is no material difference in the most recent data.

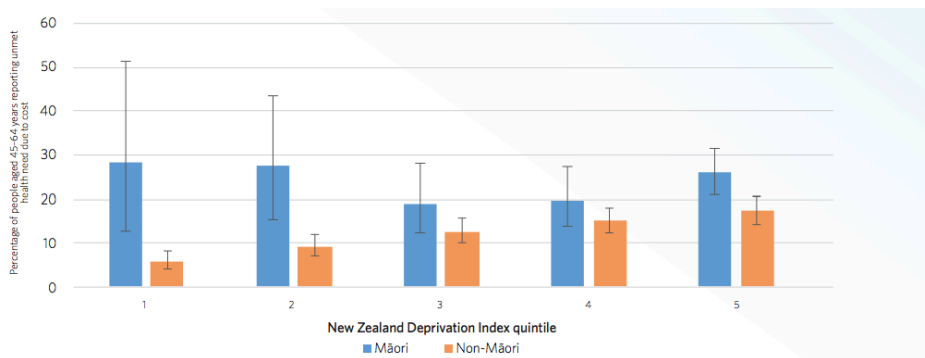
Figure sixteen: HPV vaccine uptake



Unmet need due to cost 45-64 years.

The data shows that unmet need for Māori is not a function of the Deprivation index profile. This might suggest that ability to pay is not the main driver. Māori may be less inclined to spend their own money on health compared to non-Māori.

Figure seventeen: Percentage of people aged 45–64 years reporting unmet need due to cost, by New Zealand Deprivation Index quintile,

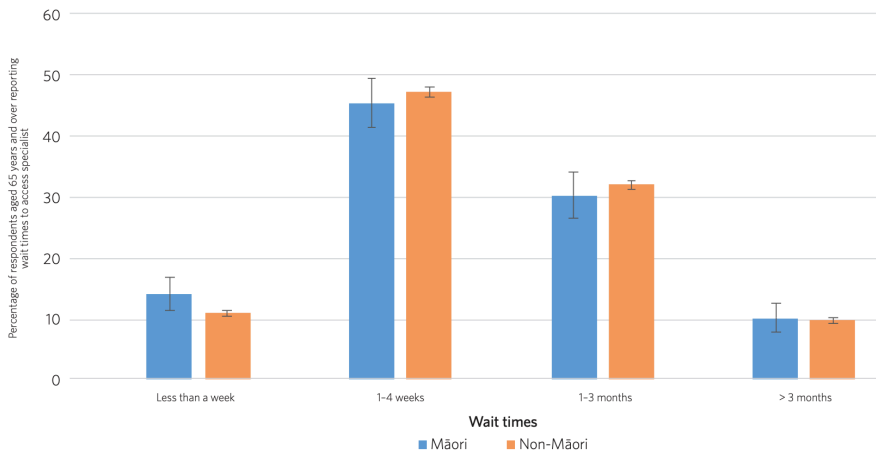


Access: Wait for specialist appointment

More adult Māori report waiting longer than three months for their specialist appointments, while fewer are seen between one and four weeks, compared with non-Māori (Figure 25). This inequity will have far-reaching negative consequences on diagnosis and treatment for Māori,

This description of the effects is overblown. The only statistically robust difference is in the over 3 month wait time, which suggests that about 5 percent of Māori will have a longer wait time. The most likely cause (see below) is that more Māori miss their specialist appointments, which naturally results in delays.

Figure eighteen: Reported wait times to access specialist, as a percentage of adults (25–64 years), New Zealand, 2011–16

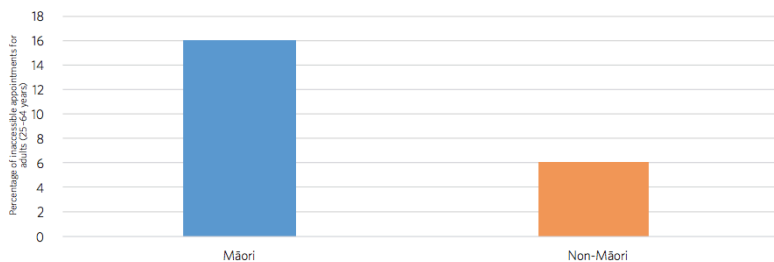


Inaccessible appointments

Inaccessible appointments are commonly reported as 'did not attend' rates. Sixteen percent of adult Māori did not attend a specialist appointment between 2011 and 2014, compared with just 6 percent of non-Māori (Figure 26),³³ suggesting that the current system is failing Māori in the provision of accessible, available and acceptable appointments.

What the data most likely demonstrates is that Māori are more likely to miss their appointments. There is no evidence that the 'system' somehow gives Māori appointment times that are 'less accessible, available and acceptable' compared to non-Māori.

Figure nineteen : Percentage of missed appointments for adults (25–64 years), 2011–14



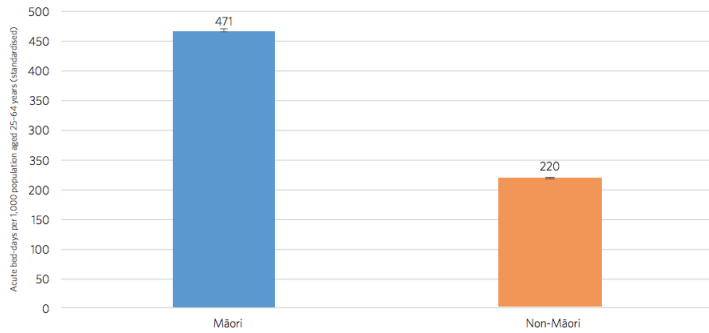
Acute bed-days for adults

Māori have more than twice the rate of hospital bed-days following an acute admission than non-Māori (Figure 27). This result indicates that one or more aspects of the health system is working better for non-Māori than for Māori.

Possible reasons include their access to and management in primary care, transition between primary and secondary care, or difficulties leaving hospital, such as differences in discharge planning or community support services.

Or none of the above. No evidence is advanced to support these hypotheses. A most likely reason is that Māori home care is less robust than non-Māori. If the health system is 'at fault' at all then the main responsibility may sit with Māori health providers.

Figure twenty: Acute bed-days per 1,000 population aged 25–64 years (standardised) New Zealand, 2018



Communication

The Commission’s 20-question adult inpatient survey began in August 2014 and is conducted four times a year. Over 18 waves of the survey since it started, adult Māori have been consistently likely to respond less positively than non-Māori to three of the six questions about their experience of communication with doctors and other hospital staff, and consistently more likely to respond positively to one of the other questions about communication

The questions and the Māori/non-Māori answers are set out below: There are no material differences:

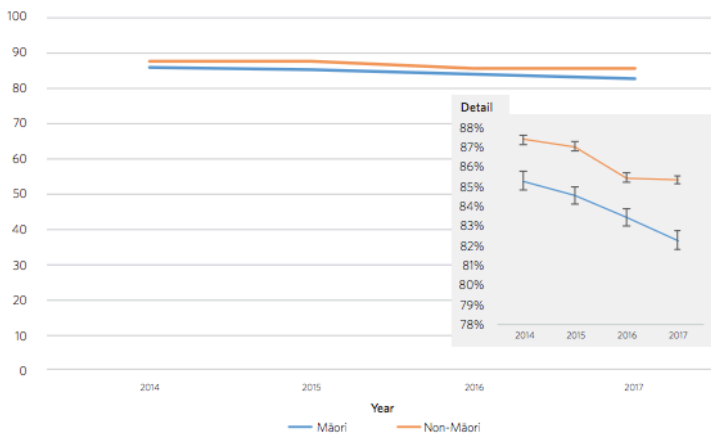
- Always got answers they could understand when they had important questions to ask a doctor
Māori 73% non-Māori 76%
- Felt their condition was explained in a way that they could completely understand: 71% 73%
- Felt doctors always listened to what they had to say: 74% 77%
- Felt nurses always listened to what they had to say: 74% 77%
- Felt other staff always listened to what they had to say: 75% 76%
- Agreed completely that a member of staff told them about medication side-effects to watch for when they went home: 55% 47%

Diabetes annual review

The annual review rates were a few percentage lower for Māori but have been declining for both groups

Figure twenty one: Diabetes cases monitored percent

Figure 28: Percentage of people with diabetes who have regular HbA1c monitoring, Aotearoa New Zealand, 2014-17

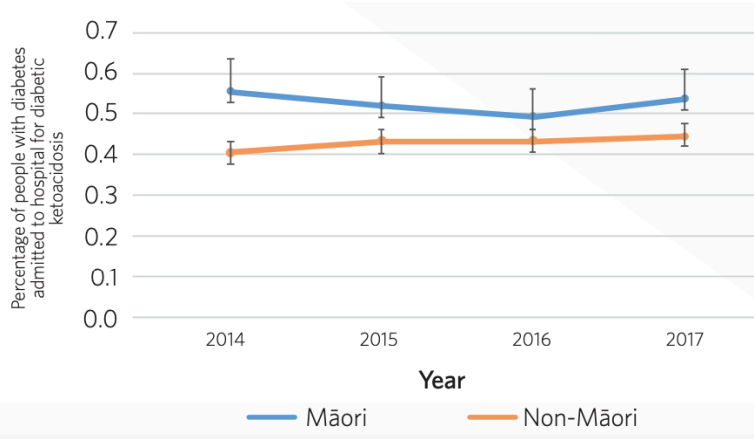


Source: Health Quality & Safety Commission, Atlas of Healthcare Variation, diabetes domain.

Diabetes hospital admission

There was a difference that had been closing but then opened slightly. The aggregate number of admissions were not provided so it is not possible to judge whether the gap is material.

Figure twenty-two: Percentage diabetics admitted to hospital

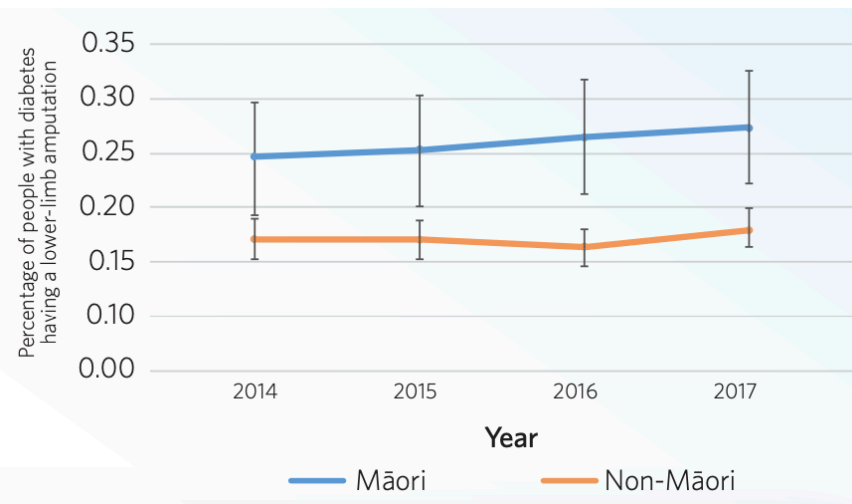


Lower limb amputation

Although rare, lower-limb amputations among those with diabetes were a third higher in Māori than non-Māori each year.

There was no explanation of what might be driving the disparity.

Figure twenty-three: Lower limb amputations



Cancer

No data was presented on cancer but there was a box on the subject and references were given. The box was written by Dr Virginia Signal, Dr Jason Gurney, Ngāpuhi, Ngāti Hine, and Professor Diana Sarfati

Māori are demonstrably less likely than non-Māori to survive nearly every cancer, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 (the numbers are refer to the reference section) and nearly twice as likely to die from their cancer overall. 4

Ethnic differences in cancer survival such as these can be seen as an indirect marker of the quality of a country's cancer services and the equity of service delivery.

The cited references were dated. The latest is from 2012 and most draw on historical data that can now be up to forty years old. The latest data is that age adjusted Māori cancer death rates are 60 percent higher than non-Māori. Not the 100 percent higher claimed in the discussion. The Māori cancer registration rate is now about 30 percent higher than NZ European.

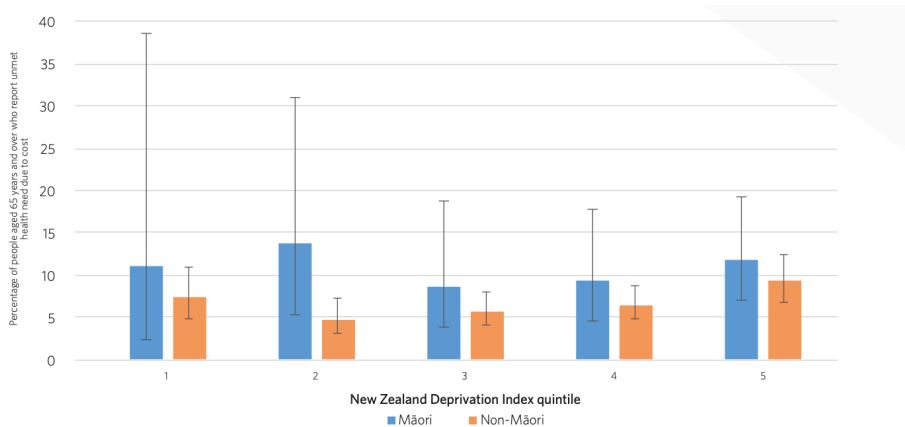
The higher rates of Māori cancer in the box were ascribed to higher comorbidities amongst Māori. There was no mention of cigarette smoking and obesity as drivers of comorbidities

Older people

Cost barrier to care

There is no statistically robust difference between Māori and non-Māori by quintile.

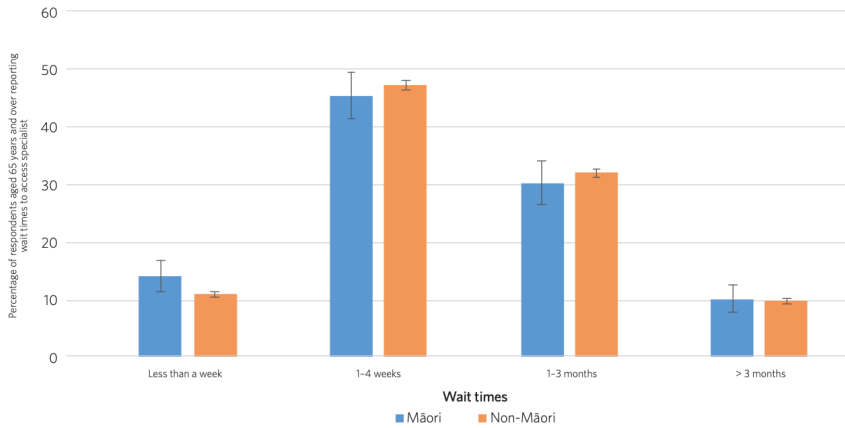
Figure twenty-four: Percentage of people aged 65 years and over who report unmet health need due to cost, by New Zealand Deprivation Index quintile:



Wait for specialist appointment

There are no statistically significant differences between Māori and non-Māori.

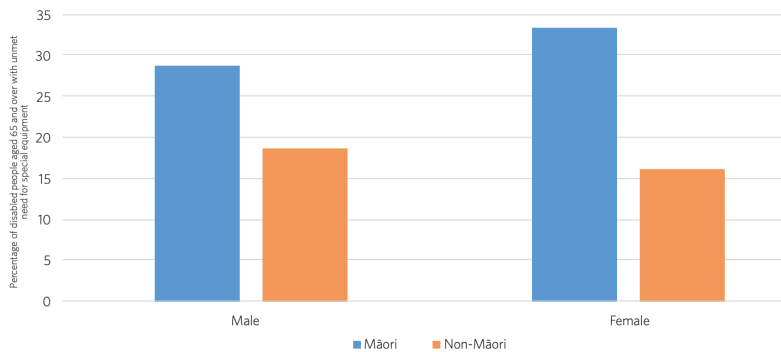
Figure twenty-five: Reported wait times to access specialist, as a percentage of respondents aged 65 years and over



Disability special equipment unmet need for over 65

There does appear to be a difference in unmet needs for special equipment for disabled Māori and non-Māori. However, it is not clear what this means. Disability is measured subjectively and is so broadly defined that over 50 percent of both populations (62 percent Māori, 56 percent non-Māori) report being disabled. The unmet need for special equipment is similarly a subjective response to a question as to unmet need. Unmet need responses may reflect unrealistic expectations of what is possible. These expectations may vary between Māori and non-Māori.

Figure twenty-six: Percentage of disabled over 65 with unmet disability need



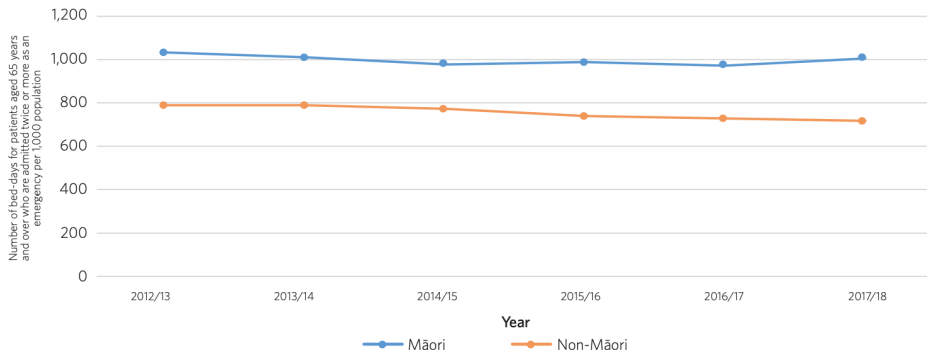
Communication

The results were similar to results for younger cohort above. There were no significant differences.

Readmission to hospital over 65s

Readmission rates are higher for Māori. It is suggested that this implies Māori receive less effective stepdown care than non-Māori. It may also reflect covariates that are not captured by the raw data or different ways Māori manage their own health after an operation. It does not necessarily indicate that fewer resources were applied to Māori stepdown care.

Figure twenty-seven: Number of bed-days for patients aged 65 years and over who are admitted twice or more as an emergency per 1,000 population,

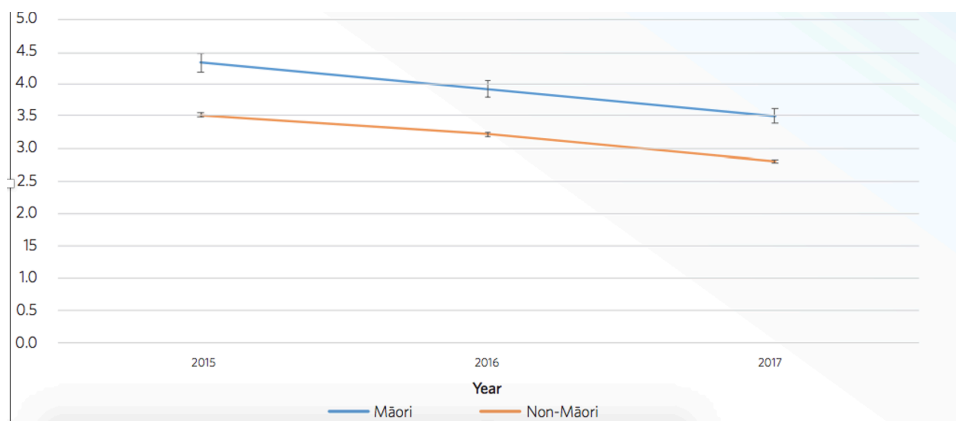


Polypharmacy – use of multiple medicines at the same time

A higher proportion of Māori aged 65 years and older receive this (generally undesirable) drug combination than their non-Māori counterparts

The difference between Māori and non-Māori prescribing means that 1 percent of Māori over 65 are receiving the ‘drug combination’. The analysis does not control for the number of health issues or other covariates, so the indicator does not necessarily reflect inappropriate treatment.

Figure twenty-eight: Percentage over 65 receiving a potentially dangerous drug combination



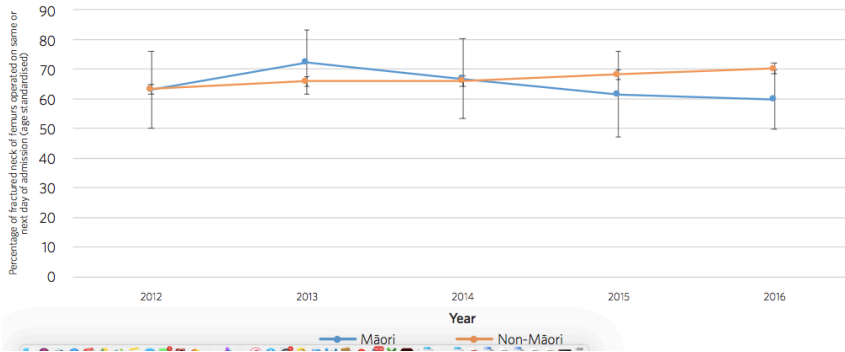
Falls in the community

Falls often result in fractured neck of femur, or hip fracture, which should be operated on as soon as possible (guidelines and a trans-Tasman clinical care standard suggest within 48 hours).

It is not clear why the data went from positive for Māori to negative. Overall, the data suggests that there is not a material issue here and that the year to year variations may be random.

Figure twenty-nine: Rapid treatment of fractures

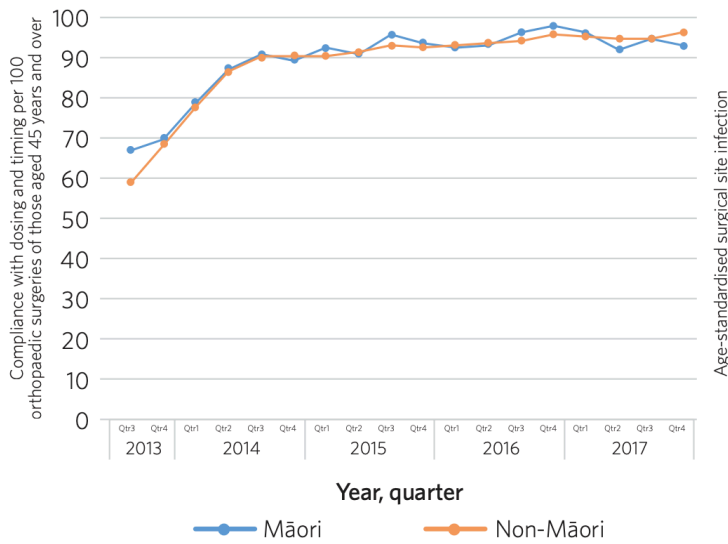
Figure 38: Percentage of fractured neck of femurs operated on same or next day of admission (age standardised), Aotearoa New Zealand, 2012-16



Surgical site infection (orthopaedic)

The data suggests that there is no issue here

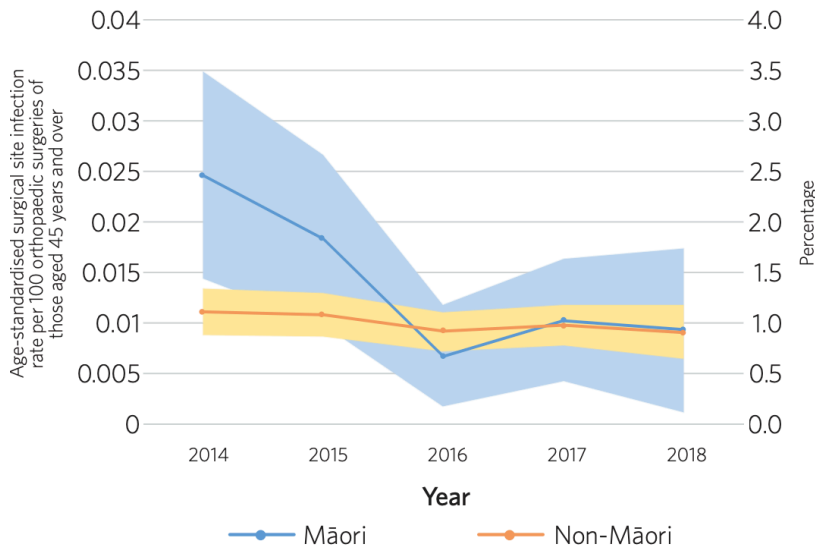
Figure thirty: Compliance with dosing and timing per 100 orthopaedic surgeries of those aged 45 years and over



Surgical infection rates

There is now no difference in surgical infection rates for those over 45.

Figure thirty-one: Surgical site infection rate per 100 orthopaedic surgeries of those aged 45 years and over (age standardised),



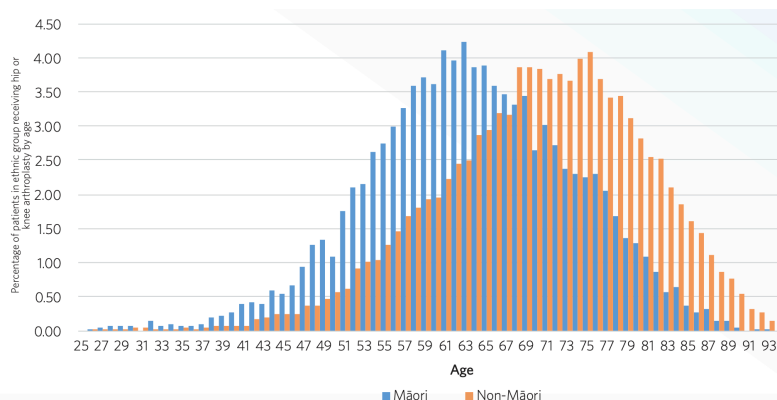
Earlier hip and knee angioplasty

Figure thirty-two shows that Māori have earlier hip and knee angioplasty surgery than non-Māori. This not a surprise because knee and hip replacement needs are associated with obesity. The ‘equity’ argument here is:

Crucially, the diseases and interventions (and improvement programmes) targeting those of retirement age in non-Māori affect working-age Māori

No evidence was presented to show that Māori are being crowded out by retirement age non-Māori surgery.

Figure thirty-two: Age distribution of patients receiving hip or knee arthroplasty, by ethnicity



Part eight: Te Ora report - Medical Council of New Zealand

The Medical Council of New Zealand ran the same narrative as the Waitangi Tribunal in its 2020 Te Ora report on the state of cultural safety and health equity in New Zealand.

The Chair, Dr. Curtis Walker said:

It is essential for medical professionals to acknowledge that systemic racism and privilege exists in the health sector in order to meaningfully address this problem.

And:

to acknowledge the privilege Pākehā receive in their healthcare and consider what they can do to address underprivilege for Māori as vital to achieve health equity.

This gives the impression that ‘Pakeha’ New Zealanders are ‘privileged’ because they receive a disproportionate share of the resources in the health system. We are not aware of any analysis that demonstrates that. What Curtis was really talking about is that NZ Europeans have better health outcomes. It is not clear what he thinks about Asians. As they enjoy better health outcomes than NZ Europeans are they even more privileged?

The following is a review of the evidence presented by the Medical Council to support its claims of disparate and inequitable treatment of Māori.

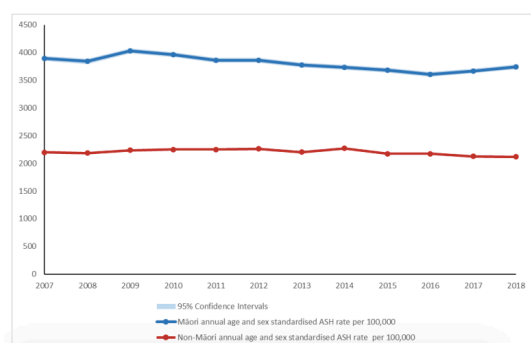
Review of the Medical Council’s evidence

Ambulatory Sensitive Hospitalisations (ASH)

Ambulatory sensitive hospitalisations (ASH) are hospital admissions that are mostly acute and are considered either preventable or reducible if the patient had received interventions in primary care. They might be considered as the hospitalisations that could be avoided if everyone followed the doctor’s orders. In the real world not everyone does.

There is a substantial difference between Māori and non-Māori. ASH rates are likely, as argued in part five, significantly driven by disparate smoking and obesity rates and possibly by other behavioural choices.

Figure Thirty-three: ASH rates per 100,000 age and sex standardised



Perioperative outcomes

Perioperative outcomes refer to the health status of a person after they have undergone surgery.

It was reported that surgery death rates for the non-Māori group ranged between 30-50% lower than Māori rates. The interpretation of this statistic is hampered by the conversion from the conventional measurement in the literature of the Māori rate over the non-Māori rate to the non-Māori rate divided by the Māori rate. This change was to emphasise the 'privilege' non-Māori are receiving. The 30-50 percent converts to 42 to 100 percent higher rates on the standard measure presented in all of the literature.

The source of these numbers was not referenced, but we found the source. The paper was the 2021 New Zealand Medical Journal paper. 'Disparities in post-operative mortality between Māori and non-Indigenous ethnic groups in New Zealand' (Gurney et.al). We review this paper in detail.

The study cohort included all individuals who underwent a procedure in a New Zealand hospital between 1 January 2005 and 31 December 2017. The analyses were stratified as either acute or elective/waiting list based. The acute operations accounted for most of the deaths, 17000 acute versus 7400 elective.

The raw data showed that the Māori death rate was 60 percent of the New Zealand European rate. However adjusting for a range of factors (age, sex, area deprivation, rurality, comorbidities, ASA score, anaesthetic type and procedure risk) the Māori death rate for acute procedures was 14 percent higher than non-Māori.

Māori had statistically significant higher acute death rates for three of the seven procedural specialties, so the differences in outcomes were not systematic. With respect to other ethnic groups there was no difference between Pacific and European rates, whereas Asian rates were similar to Māori for acute surgeries, but not for electives.

For elective surgery the Māori morbidity was 35 percent higher than NZ European. There was no discussion on what was driving the difference between acute and elective surgery rates. There was no statistically robust difference between NZ European and Asian and Pacific outcomes.

The figures reported by the Medical Council were misleading. They adjusted just for age differences, leaving out all the other factors, which were material. The mortality rate for acute procedures for Māori was not over 40 percent higher, it was 14 percent higher. Accounting for both statistical and modelling risk it is not clear that there is any material difference between Māori and non-Māori rates.

A notable omission from the full model analysis was smoking and obesity as risk factors. Perhaps the data was not available, or the authors thought that the procedure risk scores captured all relevant information. However, given the wide differentials between Māori and New Zealand European smoking and obesity rates a direct measure of their impact would give more confidence in the outputs. It would have been possible to account for them by using dummy variables

The partial model result for elective surgery reported by the Medical Council showed that the NZ European mortality rate was 0.1 percent and the Māori rate was 0.2 percent a difference, as they reported

of 100 percent. However the results were rounded to the nearest 0.1 percent so the difference could have been anything from near zero (0.150/0.1499) to around 500 percent.

The results for the full model, expressed in terms of hazard ratios with the New Zealand European ratio set at 1, are set out in figure thirty-five.

Because post-operative mortality rates for both Māori and non-Māori are relatively low the fatality rate differences, even if true, would have had minimal impact on the overall Māori/NZ European relative life expectancy difference.

Figure Thirty-five : Full model results for hospital morbidity

	Māori		Pacific		Asian		MELAA/Other		European	
	Hazard ratio (95% CI)		Hazard ratio (95% CI)		Hazard ratio (95% CI)		Hazard ratio (95% CI)		Hazard ratio (95% CI)	
	Crude	Adj. ¹	Crude	Adj. ¹	Crude	Adj. ¹	Crude	Adj. ¹	Crude	Adj. ¹
Acute										
Total procedures	0.6 (0.57-0.63)	1.14 (1.09-1.2)	0.54 (0.5-0.57)	1.03 (0.95-1.11)	0.57 (0.53-0.62)	1.14 (1.04-1.23)	0.53 (0.46-0.62)	1.04 (0.89-1.22)	Ref	
Procedure specialty										
Cardiovascular	0.8 (0.71-0.91)	1.21 (1.06-1.38)	0.79 (0.67-0.93)	1.19 (0.99-1.42)	1.13 (0.94-1.36)	1.37 (1.13-1.67)	0.71 (0.48-1.07)	0.86 (0.56-1.35)	Ref	
Digestive system	0.73 (0.67-0.79)	1.24 (1.13-1.35)	0.65 (0.57-0.74)	1.13 (0.99-1.3)	0.43 (0.37-0.51)	0.93 (0.78-1.1)	0.55 (0.42-0.71)	1.02 (0.78-1.35)	Ref	
Respiratory system	0.67 (0.57-0.8)	0.92 (0.77-1.11)	0.75 (0.61-0.93)	0.98 (0.77-1.24)	0.81 (0.62-1.05)	1.16 (0.88-1.53)	0.94 (0.59-1.51)	1.4 (0.85-2.3)	Ref	
Neurosurgery	0.99 (0.87-1.12)	1.06 (0.92-1.22)	0.85 (0.7-1.04)	0.9 (0.72-1.11)	1.19 (0.96-1.47)	1.1 (0.88-1.37)	0.65 (0.39-1.08)	0.94 (0.56-1.57)	Ref	
Musculoskeletal	0.41 (0.37-0.45)	1.33 (1.2-1.47)	0.33 (0.28-0.39)	1 (0.84-1.18)	0.64 (0.53-0.76)	1.34 (1.12-1.6)	0.45 (0.33-0.61)	1.06 (0.78-1.44)	Ref	
Urinary system	0.94 (0.73-1.22)	1.04 (0.78-1.38)	0.95 (0.68-1.33)	1.13 (0.78-1.63)	0.49 (0.3-0.8)	0.93 (0.56-1.52)	0.75 (0.35-1.58)	1.45 (0.68-3.09)	Ref	
Other	0.65 (0.56-0.75)	1.09 (0.93-1.27)	0.49 (0.39-0.61)	0.92 (0.73-1.16)	0.36 (0.27-0.49)	1.01 (0.74-1.39)	0.47 (0.28-0.78)	0.93 (0.55-1.58)	Ref	
Elective/waiting list										
Total procedures	1.05 (0.98-1.13)	1.35 (1.25-1.46)	0.86 (0.76-0.96)	1.05 (0.93-1.2)	0.51 (0.44-0.59)	1.01 (0.87-1.17)	0.58 (0.45-0.75)	1.17 (0.91-1.5)	Ref	
Procedure specialty										
Cardiovascular	1.18 (1.01-1.37)	1.26 (1.07-1.5)	1.07 (0.87-1.31)	1.14 (0.9-1.45)	0.88 (0.66-1.17)	1.02 (0.76-1.37)	1.57 (1.04-2.35)	2.06 (1.37-3.09)	Ref	
Digestive system	1.15 (1-1.32)	1.32 (1.14-1.53)	1.2 (0.95-1.51)	1.29 (1.01-1.65)	0.53 (0.4-0.7)	1.05 (0.8-1.38)	0.37 (0.21-0.64)	0.83 (0.47-1.46)	Ref	
Respiratory system	1.12 (0.88-1.43)	1.21 (0.93-1.57)	0.9 (0.6-1.34)	0.86 (0.56-1.33)	0.86 (0.58-1.27)	1.38 (0.93-2.06)	0.93 (0.44-1.95)	1.17 (0.55-2.48)	Ref	
Neurosurgery	1.57 (1.14-2.15)	0.93 (0.66-1.31)	1.7 (1.05-2.75)	0.97 (0.58-1.63)	0.63 (0.3-1.33)	0.66 (0.31-1.41)	1.29 (0.53-3.13)	1.81 (0.74-4.42)	Ref	
Musculoskeletal	1.52 (1.25-1.84)	1.93 (1.56-2.39)	0.62 (0.4-0.97)	1.11 (0.7-1.75)	0.56 (0.32-0.97)	0.98 (0.55-1.74)	0.65 (0.31-1.37)	1.38 (0.65-2.9)	Ref	
Urinary system	1.48 (1.09-2.01)	1.49 (1.05-2.12)	0.41 (0.17-0.98)	0.52 (0.21-1.28)	0.62 (0.32-1.21)	1.09 (0.56-2.15)	0.48 (0.12-1.93)	0.85 (0.21-3.44)	Ref	
Other	0.83 (0.7-0.99)	1.43 (1.18-1.73)	0.68 (0.51-0.9)	1 (0.74-1.34)	0.39 (0.28-0.55)	0.95 (0.68-1.34)	0.19 (0.07-0.51)	0.43 (0.16-1.16)	Ref	

Length of hospital stay

The average length of hospital stay following surgery is longer by 11-17% for Māori. This adds to the cost of Māori operations but does not appear to have a wider health impact. There was no difference in readmission rates. Note that these rates have not been adjusted for covariates that may explain the difference.

Dispensing of selected pharmaceuticals

It was claimed that:

Non-Māori were slightly more likely than Māori to be dispensed urate-lowering therapy for gout, and were statistically more likely to receive it regularly.

It is not clear that this claim is supported by the underlying data. This was not fully disclosed

on the Pharmac site, which for some reason deleted the data for over 65 year olds. What the data for the 45-64 age group showed was that 60 percent of Māori sufferers received a prescription compared to 54 percent for non-Māori and non-Pacific. The difference in regular use was 38 versus 39 percent.

Asthma

There was no difference by ethnic group in the rate of dispensing of inhaled cortico-steroids.

It was also noted:

The HQSC notes that people who have been hospitalised for asthma are recommended to receive an influenza vaccine in the year after admission, as part of their preventive care. Overall rates of uptake are low. In 2018, only 15% of people aged 0-49 received a funded influenza vaccine in the year after admission. There is evidence of

inequity in relation to vaccine uptake; in 2018, 17% of non-Māori, non-Pacific people received an influenza vaccine in the year after admission compared to 13% of Māori.

This scarcely a material and inequitable difference. Most people choose not to take the vaccine and Māori choose not to at a somewhat higher rate.

In addition non-Māori were slightly less likely than Māori to be dispensed only reliever medications for asthma.

All-cause mortality

This part largely repeated the differences in mortality rates reported elsewhere. There was no discussion of the drivers of the mortality rate differences.

Summary

All that the Medical Council has presented to justify their structural racism claim in substance was:

- A higher ASH rate for Māori without any enquiry as to cause.
- ‘Doctored’ evidence on death rates following operations.
- A recitation of the standard life expectancy data without any enquiry as to cause.

Part nine: Discussion and conclusion

Our discussion started with the Waitangi tribunal’s review of post 2000 health system changes on Māori health. Put bluntly the review was a sham. There was no serious attempt to review the relevant data over 2000-2020 or to assess the functioning of the ‘by Māori for Māori’ model. Instead it was simply asserted that the difference in Māori and non-Māori life expectancy is due to structural and personal racism. The Tribunal did not seriously engage with the different findings of the 2000 Napier Hospital Waitangi Tribunal, which said that the state cannot be held responsible for the all of consequences of the life choices individual Māori make.

The former Director General of Health, Ashley Bloomfield pushed a similar line, further claiming that there was a significant body of research that supported claims of racism in the health system. He simply ignored the most obvious drivers of disparate life expectancy, smoking and obesity, which we discussed in part five.

To investigate the Director General's claim of evidence of the impact of racial discrimination in section six we reviewed a recent empirical evidence survey. This showed that:

- Experience of racism directed against Māori is low (8-10 percent over lifetime) and has been declining.
- Only 4 percent of Māori have reported experiences of racism in the health system.
- Only a few studies found a statistical association between racism and health that might be material, but these did not establish causation. There were other cases where racism was positively associated with better health outcomes.
- Asians experience about twice as much racism as Māori but this does not have any systematic impact on health outcomes.

Our examination of the Health Quality and Safety Commission New Zealand. 'Window on the quality of Aotearoa New Zealand's health care 2019 – a view on Māori health equity' found that only six of the 34 comparisons were both materially different and were consequential from a population health outcome perspective.

The Medical Council of New Zealand's substantive additional contribution was a claim that there were significant differences between Māori and NZ European post operative mortality rates. The Council did not disclose where its information came from but we found that it used results that misrepresented the most complete and relevant results. It is probably an open question whether mortality differences are a function of Māori ethnicity at all.

The recurring theme through the 'narrative' is that any difference between average Māori and NZ European health outcomes are 'inequitable'. That is they are unfair and unjust. But when we look for an explanation of why they are unfair and unjust the answers always seem to lead to a circularity. They are unfair and unjust because they are disparate.

The Ministry's definition of health equity is as follows:

In Aotearoa New Zealand, people have differences in health that are not only avoidable but unfair and unjust. Equity recognises different people with different levels of advantage require different approaches and resources to get equitable health outcomes.

This is not really a definition of health equity. The first sentence is the Ministry's description of what the current state of health in New Zealand. We know that much bad health is avoidable but it does not necessarily follow that this is unfair and unjust. To take a high profile example, Sean Plunket, the Platform

host, is for his own reasons, a smoker. He will probably die several years earlier than if he had not smoked and this would have been avoidable. But it is unlikely that many people will regard this as unfair and unjust.

The second sentence gives a partial clue as to implementation. People really means Māori, and to a lesser extent, Pacific. It is just assumed that Māori as a group are 'disadvantaged', but we have not seen in the Ministry's lengthy papers on the 'equity issue' any discussion of how disadvantage is determined. Second, it is assumed that only group average 'disadvantage' matters. The fact that there are large differences within groups is ignored. A large number of Māori are not financially disadvantaged, and a large number of NZ European are too. If the 'disadvantaged' are defined as the bottom two household income quintiles then 48 percent of Māori are disadvantaged, but 52 percent are not. 39 percent of NZ Europeans, or more than 1.3 million people, are disadvantaged. These are some of the people, who in the Chair of the New Zealand Medical Council's mind, are 'privileged'.

In the current 'health equity' model it would be fair and just to transfer health resources from the disadvantaged NZ European group to both the advantaged and disadvantaged Māori groups.

An example of this policy in action is the largest Taranaki Māori health provider, Tui Ora. It spends \$18 million a year on, we understand, 3800 enrolled clients, a per capita average of \$4700. This covers a broader range of services than the typical primary health provider. The expenditure rate, applied across the Māori population, would require a primary healthcare spend of over \$4 billion. The 2022-3 vote for all primary care was \$8 billion or about \$1550 per capita.

It is unlikely that a large increase in Māori health care spending will work, if the objective is to make a significant reduction in the headline life expectancy gap rapidly. There is no effective way of quickly reducing the health impacts of smoking, and probably of reducing obesity at all. To repeat the finding from 2000 Waitangi Tribunal's report:

The chief difficulty with the claimants' position is not the goal of equal health outcomes but the one-track focus on healthcare services as the means to achieve it. More ambulances under the cliff cannot remove the factors causing people to fall off.

These words, no doubt will be ignored, and there will be a call for still more resources to address 'unacceptable' Māori health outcomes, and more a strident call to fight racism in the health system, which simply must be the underlying cause of the failure.

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