

## FEATURES ARTICLE

# In the shadow of exclusion: the state of New Zealand Asian health

Rex Liao

## Introduction

New Zealand (NZ) Asians have a long history in Aotearoa dating back to the 19th century, with especially pronounced increases in migration over the past few decades.<sup>1</sup> This ethnic category is an exceptionally broad term, which incorporates individuals with ancestry covering an immense geographical and cultural range, with completely different languages, migration narratives, and experiences of discrimination.

There can be a naive assumption that a diverse workforce composition is all that is necessary for ensuring the needs of ethnic and cultural groups are accounted for. Without making a concerted effort to examine the statistics and the communities they aim to represent, we cannot assume our healthcare policies are actually effective for those populations. Asians are often excluded from further analysis, and there is a complete lack of Asian health teaching within the medical curriculums. Too often, policies barely reference Asians apart from tokenistic references to their demographic presence and above-average headline statistics.

Owing to the broadness of this topic, the focus will be on Aotearoa-specific research. For the purposes of this article, all references to ethnicity are within the NZ context. With all the benefits conferred by a multicultural country, equally the responsibilities inherent in diversity must be addressed openly.

## Demographics

From the 2013 Census, 11.8% of the population identified as having Asian ancestry, the second largest ethnic minority group.<sup>2</sup> It also had the second highest rate of growth from 2006–2013, especially pronounced in Auckland, Wellington, and Waikato.<sup>2</sup> The Auckland region has 23% of its population identifying as having Asian ancestry, which totals 65% of the Asian population in Aotearoa.<sup>2</sup> The fastest growing Asian subgroups were those identifying with Indian, Chinese, Korean, or Filipino ancestry; these were also the most populous subgroups.<sup>2</sup>

## Beyond the headlines

Headline statistics categorise Asians as generally healthy.<sup>3</sup> This allows complacency to assert itself through an absence of Asian health in mainstream discourse. However, there are several factors to consider when interpreting these statistics.

Firstly, broadly presenting Asian populations as healthy can mask drastic disparities in health outcomes within and between subgroups. There is some attempt to stratify Asians into three groups: Chinese, Indian (or South Asian), and Other Asian.<sup>3,4</sup> However, most of the time, disaggregation is not performed. This is significant because different subgroups can have divergent health outcomes that are hidden when they are averaged out into one single classification. Even with the subgroups, the Other Asian category is especially problematic. It comprises people of ancestry from countries with completely different cultures, languages, and challenges into one amorphous group.

Just as before, disparities within communities of this category can be hidden by the averaging effect of being included with other groups.

Secondly, Asians have the lowest rates of enrolment with primary healthcare providers and the utilisation of those services.<sup>3,5</sup> This is explored later on, but those who do interact with primary healthcare services may be healthier than the general Asian population. Hence, primary healthcare providers may see less of the health issues that significantly affect Asian communities, reducing the impetus for advocacy.

Thirdly, immigrants admitted more recently may have different profiles from those who migrated earlier on. This stems both from Aotearoa's shifting desire of immigrant skills reflected in its immigration policies, and the dramatic changes in Asia across this time.<sup>6,7</sup> Time spent in Aotearoa also lends varying levels of acculturation and socialisation depending on their time and place in society.<sup>8</sup> Hence, it is important to keep these demographic shifts in mind when interpreting research. Studies that applied to a particular Asian subgroup 20 years ago may be less relevant to the subgroup today, as they could have very different backgrounds despite having the same aggregated ethnicity.

Furthermore, owing to the rapid migration of the past decades, most Asians are first-generation immigrants, although there is an increasingly large block of NZ-born Asians.<sup>2</sup> As immigrants must pass various immigration protocols for both work skills and health, they will naturally contribute to higher rates of labour-force participation, employment, educational attainment, and better health statistics. This is often referred to as the "healthy immigrant effect". Continuously adding their relatively healthy statistics into the group helps conceal issues that may otherwise be developing.<sup>8</sup>

## Healthy immigrant effect

In Aotearoa, there is evidence to suggest the "healthy immigrant effect" begins to dissipate the longer people remain in a country.<sup>8</sup> Comparing between Asian subgroups, NZ-born Indians had the highest all-cause and cardiovascular (CVS) mortality rates.<sup>8</sup> The groups examined included overseas-born and NZ-born Indians, Chinese, and Other Asians.<sup>8</sup> Conversely, Chinese and Other Asians were more likely to have higher cancer mortality rates.<sup>8</sup> From separate census data, Chinese and Other Asians of both genders had higher rates of smoking than South Asians, which may contribute to this relationship.<sup>3</sup>

Between NZ-born and overseas-born Asians, the latter had lower all-cause mortality across all three ethnic subgroups.<sup>8</sup> There was also a dose-response relationship between all-cause mortality and duration of residence.<sup>8</sup> Another study by similar authors examined the effects of socioeconomic and neighbourhood deprivation, with educational attainment.<sup>9</sup> Asians without post-school qualifications or who lived in deprived neighbourhoods had higher mortality rates than those who did not experience those circumstances.<sup>9</sup>

Factors that contribute to the dissipation of the "healthy immigrant

effect” may include acculturation, levels of physical activity, lack of health service usage, discrimination, and loss of support systems.<sup>3,10</sup>

### Uptake of services

As mentioned, Asians have the lowest usage of primary healthcare providers.<sup>3,5</sup> Underreporting of healthcare needs, under-usage of disability, residential care, chronic pain services, oral health care, mental healthcare, screening, and public services have also been observed in Asian populations.<sup>3,4,11–14</sup> It cannot be assumed that a lack of usage reflects a lack of need. For example, in comparison to European patients, Asian patients attending chronic pain services reported significantly more pain, social impairment, and reduced quality of life.<sup>14</sup> However, as a result of cultural and systemic barriers they were less willing to reveal their distress to others, let alone seek professional help.<sup>14</sup>

A shorter length of residence was also strongly associated with less frequent access to healthcare practitioners.<sup>3</sup> From the 2013 Census, 12% of the Asian population stated they did not have conversational skills in English.<sup>2</sup> Unable to comfortably navigate casual conversation, it is likely that even more are uncomfortable articulating already difficult to explain health issues to health professionals.

Asians also report the highest rates of discrimination out of all ethnicities.<sup>15,16</sup> Adolescent Asians reported high levels of discrimination and bullying, compounded with the fact that they were also less likely to seek assistance.<sup>17,18</sup> Another factor that serves to suppress these issues from public purview is the pervasive “model minority” stereotype.<sup>17</sup> Typecast and assumed to be successful in narrowly defined roles, stepping out of the shadow of societal stereotyping can be both confronting and wearisome. Interviews with Asian youth elaborated issues with cultural identities and unmet needs, the latter of which was particularly focused on mental health, sexual health, and disabilities.<sup>17</sup>

Evidence supports the existence of explicit racial prejudice from other New Zealanders. From a survey of 750 people regarding their views towards immigrants, 48.3% of participants indicated that the arrival of Asian migrants was altering Aotearoa’s culture in “undesirable ways” and 45.9% believed Asians threatened to “overwhelm New Zealand culture”.<sup>19</sup> Furthermore, 67.6% believed immigrants put “too much strain on our limited resources”, 52.2% believed immigrants were a “burden on the New Zealand social welfare system”, and almost half thought that Chinese and Other Asians (excluding Indians) brought crime to the country.<sup>19</sup>

Within the context of the health system, Asian participants were more likely to experience discrimination from health professionals than Europeans.<sup>18,20</sup> Experiences of discrimination were associated with worse self-rated health, increased prevalence of depressive symptoms, and usage of cigarettes.<sup>18</sup> This record of discrimination is particularly pertinent to future health professionals. We must consider both our individual roles and the entirety of the health system in perpetuating this discrimination, and how these factors feed into the low rates of Asian engagement with health services.

### Women’s health

Asian women had significantly lower rates of cervical screening uptake than all other ethnicities, which was also associated with increased age and lower length of residence.<sup>21</sup> This is especially important as approximately 80% of cervical cancer patients were either never or infrequently screened.<sup>21</sup>

Asian birth weights remain lower than average, particularly for Indians.<sup>22</sup> In 2015, Asian infant death rates had increased by 17% over the previous 5 years.<sup>23</sup> This was not disaggregated, so it was impossible to examine Asian subgroups. Another report showed that Indian women were more likely than European women to have babies born extremely prematurely, yet Indian babies were less likely to receive resuscitation attempts than other ethnicities.<sup>24</sup> Indian babies also had high perinatal mortality rates, especially among those born at 20–24 weeks gestation; this relationship persisted even after accounting for multiple factors.<sup>24</sup> Again, there were inequities in access, with Indian mothers being less likely than European women to register with a

Lead Maternity Carer within the first trimester.<sup>24</sup>

Indian women were found to be 1.35 times as likely to develop pre-eclampsia compared to European women.<sup>25</sup> However, if women had risk factors for pre-eclampsia, Indian women were 2.66 times as likely to develop the condition; this was the second-highest of all reported ethnicities behind African women.<sup>25</sup>

### Mental health

Self-reported depression was less common among Asians than other ethnic groups, but healthcare bias and cultural factors may have a significant role in underestimating this statistic.<sup>3</sup> Asians were likely to be under-diagnosed compared with Europeans.<sup>13</sup> They had low rates of access to psychiatric services, which is also associated with knowledge, language and cultural barriers.<sup>13</sup> Particularly significant was stigma regarding mental health in various Asian cultures.<sup>13</sup>

There are challenges with assessing mental health issues through a Western model as well. For example, in Cambodian Khmer there is no direct translation of the word “depression”.<sup>26</sup> Difficulties in articulating their thoughts combined with a lack of cultural knowledge from the health professional may lead to missed or inaccurate diagnoses. Some patients may also have a greater tendency to report physical symptoms as a substitute for mental distress; this makes building rapport and taking a detailed social history targeting specific risk factors even more vital.<sup>27</sup> When it comes to interpreting services, interpreters are neither obligated nor specifically trained to provide cultural advice, but they can be inappropriately used as a proxy.<sup>28</sup> This improperly shifts the burden of responsibility away from the health practitioner.

Apart from bullying and discrimination, Asian youth also reported high levels of depressive symptoms and anxiety.<sup>17,29</sup> In older Asians, a significant problem was loneliness, which was associated with detrimental health outcomes and wellbeing.<sup>30</sup> Asians were the most likely to report loneliness, but were the third most likely to live alone compared to other ethnicities.<sup>31</sup> Social isolation is a known risk factor for suicide, but from coronial records the vast majority of elderly Asian suicides occurred while they still resided with their families.<sup>32</sup> It should be noted that this was from a sample size of 15 people.<sup>32</sup> In this study, themes of declining physical health and the stresses of acculturation were highlighted.<sup>32</sup> Stigma, barriers with accessing health services, and culture-specific manifestations of mental distress also make identification of warning signs very challenging.<sup>27,32</sup>

The symptoms of mental distress differ across cultures and generations. Coupled with barriers to access, it is important to keep these factors in mind when interpreting headline statistics. They likely mask a much darker truth. Considering the heterogeneous makeup of the Asian population, it is important that health professionals, particularly if they have personal expertise, are encouraged through recruitment and funding to effectively contend with these issues.

### Diet, exercise and related comorbidities

Indians have the highest rates of diabetes compared to other ethnicities and were more likely than Europeans to suffer from the associated adverse outcomes as well.<sup>11,33</sup> South Asians overall have very high rates of diabetes, CVS diseases, cholesterol, and hypertension.<sup>3,11</sup> However, they were also less likely to receive a “Green Prescription” through primary healthcare.<sup>3</sup>

Asians were also the least likely group to be consuming the recommended amount of fruits and vegetables, which did not change between 2002 and 2013.<sup>3</sup> The 2017 Health and Independence Report reiterated this trend among both Asian children and adults.<sup>34</sup> This effect was exacerbated for those living in socioeconomically deprived regions.<sup>34</sup> This indicates a strong need for health promotion, and is an issue primary health providers should keep in mind when screening for relevant conditions.

Physical activity levels were also very low.<sup>3</sup> This corresponds with another report showing Asians had significantly lower levels of participation in sporting events, clubs, competitions, and gym memberships.<sup>35</sup> Among children, Asian girls were the least likely among all

ethnicities and genders to use an active mode of transportation to school.<sup>36</sup> Considering the link between exercise and recreation with both physical and mental health, this indicates a significant need to develop strategies to increase community participation in active recreation. Two potential barriers included insufficient time and the associated cost of the activities.<sup>35</sup> Only limited measures have been taken to directly address this issue. Individual organisations, such as Harbour Sport, have made attempts to construct strategies targeted towards Asian communities, which may be useful frameworks to model from.<sup>37</sup>

While obesity rates were lowest among Asians, headline statistics can again be deeply misleading. Evidence suggests that Asians have similar levels of negative health outcomes at lower body mass indexes (BMI) compared with other ethnicities.<sup>38,39</sup> Ministry of Health guidelines provide a non-specific recommendation that health professionals should lower management thresholds, particularly if there are additional risk factors such as the presence of abdominal obesity.<sup>40</sup> It also suggests a lower threshold for abdominal obesity as measured by waist circumference.<sup>40</sup> The World Health Organisation provides a few suggestions, with BMIs of  $> 23 \text{ kg/m}^2$  and  $> 27.5 \text{ kg/m}^2$  to represent low risk and high risk warning points for Asian populations.<sup>38</sup>

### Obstacles ahead

In 2007, Dr Ruth D'Souza noted that Asian health research was lacking, despite their population growth and long history in Aotearoa.<sup>46</sup> Agnes Wong in 2015 presents a similar story, despite the population growing 33% from 2006–2013.<sup>2,42</sup> In 2017, the New Zealand Health Research Strategy (NZHRS) 2017–2027, in its only mention of the Asian population, echoed this problem, but even this was referred from Wong's report.<sup>47</sup> It made no suggestions. In 2018, a background paper used to advise the NZHRS notes several of the problems discussed earlier in this article about solely looking at headline statistics.<sup>48</sup> Yet again, no suggestions were made beyond a paltry statement about achieving equity.

There will be difficulty in overcoming the inertia that naturally resists the pace of change. Despite the size of the population, Asians are grossly under-represented in leadership positions in politics and public service. In 2018, only 4.1% of those at the managerial level of State Services identified with an Asian ancestry.<sup>44</sup> Members of Parliament of Asian descent were at a meagre 4% in 2014, the most underrepresented ethnic group, which was a reduction compared to 2008.<sup>45</sup> These trends of scarce Asian leadership are a common pattern that exists across many fields. With few positions of influence, normalising and vindicating the needs of those communities will be uniquely challenging.

### Limitations

The superficial examination of the issues discussed in this article does not give them their due importance. Little reference has been made to Asian subgroups with smaller populations as well. Also, many dimensions of Asian health have not been examined at all in this article. These include refugees, gender experiences, problem gambling, domestic violence, religion, LGBTQIA+ experiences, people with disabilities, and many more.

### A path forwards

Overall, students and health professionals of Asian heritage are well-represented compared to the general population.<sup>49,50</sup> However, a diverse workforce does not mean inclusive practices are a given, nor properly represented in leadership. Policy plans consisting solely of generic bywords such as “diversity”, “inclusion”, and “equity” with the assumption that non-specific guidelines are enough to serve an incredibly heterogeneous Asian population are not only insufficient, but negligent. Regional strategies such as the ones produced by Auckland, Manukau, Waitemata, and Canterbury District Health Boards enable interventions tailored to the diverse populations they serve.<sup>51–54</sup>

At a higher level, an overlying national Asian health framework should be developed to guide the creation of regional programmes and their specific initiatives. This involves ensuring Asian representation at

the highest levels of policy design, along with additional funding of Asian health providers. Topic-specific strategies, such as for specific medical conditions, should account for Asian populations to a meaningful extent. It also means the development of Asian health strategies, along with specific teaching of Asian health and cultures within the medical curriculums. Currently, its absence remains an egregious oversight.

At a ground level, health students should not be tentative about asking for resources and funding specific to Asian health promotion. Giving the issues of the second-largest minority group in Aotearoa their due is hardly an audacious request. Health professionals and students have powerful platforms to lead on these matters. This is especially pertinent for health issues affecting Asian subgroups with smaller populations, which may otherwise remain overlooked. Considering how long these issues have been neglected, coupled with the continued growth of these populations, there is a growing urgency to act more boldly.

It is important to properly represent the interests of the communities we serve, particularly as many of them are disenfranchised and will be left by the wayside unless we actively engage with them. Open communication, co-design of solutions, and empowering community leadership will enable us to best use our knowledge and skills to meet the unique needs of each community.<sup>10,12,41</sup> Health promotion is better discussed in Agnes Wong's 2015 publication.<sup>42</sup> Some understanding of the fundamental differences between Asian cultures and Western society, such as a tendency towards more collectivist perspectives, is also helpful.<sup>43</sup>

At a minimum, disaggregation of the Asian ethnic category should be the default expectation. If relevant, further stratification of Asians may be needed. For example, health outcomes may vary between overseas-born Asians and NZ-born Asians, or even by length of residence. This may not be feasible in the short-term or in every circumstance, but would go a long way in ensuring our policies are animated by the right statistics.

Furthermore, concerted efforts need to be made to address both the low engagement of Asian populations with health services and the significant levels of discrimination they bear. The severity of these issues despite the composition of the healthcare workforce is emblematic of entrenched problems within the health system.

Intertwined with all this is a need to work with, support, and learn from the leadership and health promotion activities of other groups. Collaboration between Māori, Asian, Pacific, and others are essential to rewriting the insidious stereotypes imposed on our communities, and strengthening the bonds between us with new cultural narratives. Enabling inequities to exist for one group implicitly justifies and keeps open the possibility for the discrimination of others.

It is time to step away from the shadow of exclusion. It will not be enough to simply exert our skills in cultural competence at an individual level, nor in working on the edges of an exclusionary healthcare apparatus. There are many challenges to overcome, especially as there is so much to be built without clear guides to follow. Meeting that charge is a weighty responsibility, yet one we must honour for the generations to come.

### References

1. Capie D. Asia and New Zealand [Internet]. Te Ara – the Encyclopedia of New Zealand; 2012 [cited 2019 Aug 12]. Available from: <https://teara.govt.nz/en/asia-and-new-zealand>
2. Statistics New Zealand. 2013 Census quickstats about culture and identity [Internet]. Wellington; 2014 [cited 2019 Aug 12]. Available from: <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity.aspx>
3. Scragg R. Asian health in Aotearoa in 2011–2013: trends since 2002–2003 and 2006–2007. Auckland: Northern Regional Alliance Limited; 2016.
4. Ministry of Health. Asian health chart book. Ministry of Health; 2006. p.1–120.
5. Jatrana S, Crampton P. Affiliation with a primary care provider in New Zealand: who is, who isn't. Health Policy (New York). 2009;91:286–96.

6. Capie D. Asia and New Zealand – the rise of Asia [Internet]. Te Ara – the Encyclopedia of New Zealand; 2012 [cited 2019 Aug 11]. Available from: <https://teara.govt.nz/en/asia-and-new-zealand/page-5>
7. Beaglehole A. Immigration regulation – 1986–2003: selection on personal merit [Internet]. Te Ara – the Encyclopedia of New Zealand; 2015 [cited 2019 Aug 11]. Available from: <https://teara.govt.nz/en/immigration-regulation/page-5>
8. Jatrana S, Richardson K, Blakely T, Dayal S. Does mortality vary between Asian subgroups in New Zealand: an application of hierarchical Bayesian modelling. *PLoS One*. 2014;9(8).
9. Jatrana S, Dayal S, Richardson K, Blakely T. Socio-economic inequalities in mortality for Asian people: New Zealand Census-Mortality Study, 1996–2004. *J Popul Res*. 2018;35:417–33.
10. Nayar S, Wright-St Clair VA. Strengthening community: older Asian immigrants' contributions to New Zealand society. *J Cross Cult Gerontol*. 2018;33(4):355–68.
11. Mehta S. Health needs assessment of Asian people living in the Auckland region. Auckland: Northern DHB Support Agency; 2012.
12. Tse S, Laverack G, Nayar S, Foroughian S. Community engagement for health promotion: reducing injuries among Chinese people in New Zealand. *Health Educ J*. 2011;70(1):76–83.
13. Lee CHJ, Duck IM, Sibley CG. Ethnic inequality in diagnosis with depression and anxiety disorders. *N Z Med J*. 2017;130(1454):10–20.
14. Lewis GN, Upsdell A. Ethnic disparities in attendance at New Zealand's chronic pain services. *N Z Med J*. 2018;131(1472):21–8.
15. Human Rights Commission. Race Relations in 2013. Human Rights Commission; 2014.
16. Girling A, Liu JH, Ward C. Confident, equal and proud? A discussion paper on the barriers Asians face to equality in New Zealand. Wellington; 2010.
17. Peiris-John R, Wong A, Sobrun-Maharaj A, Ameratunga S. Stakeholder views on factors influencing the wellbeing and health sector engagement of young Asian New Zealanders. *J Prim Health Care*. 2016;8(1):35–43.
18. Ameratunga S, Tin ST, Rasanathan K, Robinson E, Watson P. Use of health care by young Asian New Zealanders: findings from a national youth health survey. *J Paediatr Child Health*. 2008;44(11):636–41.
19. Gendall P, Spoonley P, Trlin A. The attitudes of New Zealanders to immigrants and immigration: 2003 and 2006 compared [Internet]. 2007;(17):1–57 [cited 2019 Aug 12]. Available from: [http://tur-www1.massey.ac.nz/~newsettl/publications\\_pdfs/Gendall, Spoonley and Trlin OP No. 17.pdf](http://tur-www1.massey.ac.nz/~newsettl/publications_pdfs/Gendall, Spoonley and Trlin OP No. 17.pdf)
20. Human Rights Commission. A fair go for all? addressing structural discrimination in public services. Wellington: Human Rights Commission; 2012.
21. Ministry of Health. National cervical screening programme policies and standards. Wellington: National Screening Unit, Ministry of Health; 2014.
22. Ministry of Health. Report on maternity 2017 [Internet]. Wellington: Ministry of Health; 2019 [cited 2019 Aug 14]. Available from: <https://www.health.govt.nz/publication/report-maternity-2017>
23. Ministry of Health. Fetal and infant deaths 2015 [Internet]. Ministry of Health; 2018 [cited 2019 Aug 14]. Available from: <https://www.health.govt.nz/publication/fetal-and-infant-deaths-2015>
24. Perinatal Maternal Mortality Review Committee. Twelfth annual report of the Perinatal and Maternal Mortality Review Committee [Internet]. Wellington; 2018 [cited 2019 Aug 14]. Available from: <https://www.hqsc.govt.nz/assets/PMMRC/Publications/12th-PMMRC-report-final.pdf>
25. Ministry of Health. Diagnosis and treatment of hypertension and pre-eclampsia in pregnancy in New Zealand: a clinical practice guideline. Wellington: Ministry of Health; 2018.
26. Singh M. Why Cambodians never get "depressed" [Internet]. National Public Radio; 2015 [cited 2019 Aug 14]. Available from: <https://www.npr.org/sections/goatsandsoda/2015/02/02/382905977/why-cambodians-never-get-depressed>
27. Ho ES, Au P, Amerasinghe D. Suicide in Asian communities an exploratory study in NZ – 2015. Auckland DHB; 2015.
28. Asian Health Services. Guidelines for use of interpreters [Internet]. Asian Health Services. [cited 2019 Aug 14] Available from: <http://www.asianhealthservices.co.nz/WATIS-Interpreting-Service/Resources-Guides/Guidelines-for-Use-of-Interpreters>
29. Rasanathan K, Ameratunga S, Chen J, Robinson E, Young W, Wong G, et al. A health profile of young Asian New Zealanders who attend secondary school: findings from Youth2000. The University of Auckland; 2006.
30. Statistics New Zealand. Loneliness in New Zealand: findings from the 2010 NZ General Social Survey. Statistics New Zealand; 2010.
31. Jamieson HA, Gibson HM, Abey-Nesbit R, Ahuriri-Driscoll A, Keeling S, Schluter PJ. Profile of ethnicity, living arrangements and loneliness amongst older adults in Aotearoa New Zealand: a national cross-sectional study. *Australas J Ageing*. 2018;37(1):68–73.
32. Wang J, Ho E, Au P, Cheung G. Late-life suicide in Asian people living in New Zealand: a qualitative study of coronial records. *Psychogeriatrics*. 2018;18(4):259–67.
33. Ministry of Health. Living well with diabetes: a plan for people at high risk of or living with diabetes 2015–2020. Wellington: Ministry of Health; 2015.
34. Ministry of Health. Health and independence report 2017. The Director-General of Health's annual report on the state of public health [Internet]. Wellington: Ministry of Health; 2018 [cited 2019 Aug 12]. Available from: <https://www.health.govt.nz/system/files/documents/publications/health-and-independence-report-2017-v2.pdf>
35. Sport New Zealand. Sport and active recreation in the lives of New Zealand adults. 2013/14 active New Zealand survey results. Wellington: Sport New Zealand; 2015.
36. Ministry of Health. Children and young people living well and staying well: New Zealand childhood obesity programme baseline report 2016/17. Wellington: Ministry of Health; 2017.
37. Harbour Sport's ActivAsian Team. Asian sport engagement model. Auckland: Harbour Sport; 2010.
38. Barba C, Cavalli-Sforza T, Cutter J, Darnton-Hill I, Deurenberg P, Deurenberg-Yap M, et al. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet*. 2004;363:157–63.
39. Wen J, Rush E, Plank L. Assessment of obesity in New Zealand Chinese: a comparative analysis of adults aged 30–39 years from five ethnic groups. *N Z Med J*. 2010;123(1327):87–98.
40. Ministry of Health. Clinical Guidelines for Weight Management in New Zealand Adults. Wellington: Ministry of Health; 2017.
41. Wong A, Peiris-John R, Sobrun-Maharaj A, Ameratunga S. Priorities and approaches to investigating Asian youth health. *J Prim Health Care* [Internet]. 2015 [cited 2019 Aug 14];7(4):282–90. Available from: <https://rnzcp.org.nz/assets/documents/Publications/JPHC/December-2015/OSPWong-JPHCDecember2015.pdf>
42. Wong A. Challenges for Asian health and Asian health promotion in New Zealand [Internet]. Auckland: Health Promotion Forum of New Zealand; 2015 [cited 2019 Aug 14]. Available from: <http://www.hauora.co.nz/~hpforum/assets/files/Occasional Papers/15128 FINAL Health promotion forum Asian promotion article.pdf>
43. Coburn CL, Weismuller PC. Asian motivators for health promotion. *J Transcult Nurs*. 2012;23(2):205–14.
44. State Services Commission. Diversity and inclusion [Internet]. State Services Commission; 2018 [cited 2019 Aug 14]. Available from: <http://www.ssc.govt.nz/resources/public-service-workforce-datahrc-diversity/>
45. Ministry of Social Development. The social report 2016 [Internet]. Ministry of Social Development; 2016 [cited 2019 Aug 15]. Representation of ethnic groups in government. Available from: <http://socialreport.msd.govt.nz/civil-and-political-rights/representation-of-ethnic-groups-in-government.html>
46. Desouza R. Walking a tightrope: Asian health research in New Zealand. *Divers Heal Soc Care*. 2007;2007(4):9–20.
47. Ministry of Business Innovation and Employment, Ministry of Health. New Zealand Health Research Strategy 2017–2027. Wellington: Ministry of Business Innovation and Employment and Ministry of Health; 2017.
48. New Zealand Health Research Strategy Development Group. Health and health research in New Zealand: background paper for the inaugural meeting of the Development Group [Internet]. Auckland: New Zealand Health Research Strategy Development Group; 2018 [cited 2019 Aug 15]. Available from: <http://www.hrc.govt.nz/sites/default/files/Background paper for Development Group.pdf>
49. Cullen A, Grant B. The New Zealand medical workforce in 2017. Medical Council of New Zealand; 2018.
50. Te Pou o te Whakaaro Nui. DHB mental health and addiction employees: 2018 profile. Auckland: Te Pou; 2018.
51. Zhou L, Bennett S. International benchmarking of Asian health outcomes for Waitemata and Auckland DHBs. Auckland: Waitemata District Health Board; 2017.
52. Waitemata DHB. Waitemata DHB health needs assessment 2017 [Internet]. Auckland: Waitemata District Health Board; 2017 [cited 2019 Aug 15]. Available from: <http://www.waitematadhb.govt.nz/dhb-planning/health-needs-assessments/2017-health-needs-assessment/>
53. Counties Manukau DHB. Asian health plan 2017/18. Auckland: Counties Manukau Health; 2017.
54. Bartholomew N. Culturally and linguistically diverse populations and health in Canterbury. Canterbury District Health Board and Pegasus Health; 2013.

---

**About the author**

➤ Rex has completed his fifth year of medicine at the University of Otago, and is currently undertaking a BMedSc(Hons) with the Public Health department in Wellington. He is concerned about the overlooked health disparities that affect Asian New Zealanders. He hopes to continue advocating for systemic solutions to health inequities while pursuing a future in General Practice.

---

**Conflicts of Interest**

Rex is a student reviewer for the NZMSJ. This article has gone through a double-blinded peer review process applied to all articles submitted to the NZMSJ, and has been accepted after achieving the standards required for publication. The author has no other conflict of interest.

---

**Correspondence**

Rex Liao: rliao017@gmail.com