

# Why are those most in need of Sudden Unexplained Infant Death (SUDI) prevention information the least likely to receive it? A comment on unconscious bias and Māori health

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**O**ur goal in this commentary is to expand discussions of unconscious bias into the New Zealand health care arena. We begin with a review of international research which links health provider bias to inequitable health outcomes for ethnic minorities. Local studies indicating Māori may be vulnerable to bias will then be reviewed. We then discuss data taken from the 2014 *Well Child/Tamariki Ora (WCTO) Programme Delivery Report* which shows Māori are less likely to receive SUDI prevention information from their Well-child health provider than other ethnic groups in New Zealand.<sup>1</sup> We then discuss the impact of stereotyping on Māori before offering suggestions for addressing unconscious bias.

The theoretical framework for the role of unconscious (sometimes referred to as implicit) bias in health care is well-established and based on empirical findings in social psychology and research on health-care processes.<sup>2-3</sup> Unconscious bias has been recognised in cognitive science and social psychology for decades where it is understood as an automatic tendency for humans to perceive people, situations and events in stereotypical ways. Banaji and Greenwald<sup>4</sup> have shown how unconscious biases reflect deeply held stereotypes associated with different social categories (including ethnicity, age, gender, socio-economic status and religion).

These perceptions trigger responses which occur outside of the perceiver's conscious awareness.<sup>5</sup> Humans are inclined to display in-group favouritism (a preference and affinity for their own in-group) as well as out-group derogation (discrimination toward out-groups).<sup>6</sup> These two cognitive phenomena combined create a natural predisposition to negatively stereotype out-group members and respond positively to similar others.<sup>4</sup>

Consequently, leading researchers have defined unconscious bias in health care as occurring when a provider 1) automatically/unconsciously classifies a patient as a member of a group, 2) applies stereotypes to the patient based on their group membership and 3) makes decisions based on those stereotypes.<sup>3</sup> The circumstances under which health care services are delivered are often characterised by time pressure and complexity. According to Smedley, Stith and Nelson<sup>7</sup> these factors increase the likelihood that unconscious biases will influence a providers' behaviour as they are more likely to be relying on instinctive responses rather than rational thought processes.

Direct or explicit bias differs from unconscious bias in two ways. While explicit bias tends to be obvious and intentional, unconscious biases are generally unintentional and manifest covertly.<sup>8</sup> Health research has demonstrated unconscious bias from a

provider towards their client may manifest in the form of subtle social cues which signal avoidance, anxiety, discomfort or dislike.<sup>9</sup> Examples include body language (moving away, avoiding direct eye contact, leaning back from clients, crossing arms across the chest and other forms of closed body language). Facial expression (flattened affect) and voice tone/speed can also suggest disdain (eg speaking slowly may be construed as patronising while speaking too quickly may signal a desire to end a conversation quickly). Thus unconscious bias can manifest surreptitiously in a range social slights and exclusions that make the patient feel uncomfortable and at the worst offended.

Although unconscious bias has received scant research attention in the New Zealand context, the issue has received considerable research attention in the United States (US) and the United Kingdom (UK) in recent years. For example, the detrimental impact of unconscious bias was evinced by a 2002 American Institute of Medicine (IOM) report titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* which reviewed over 100 healthcare studies on US populations to reveal Black-Americans and other ethnic minorities receive poorer quality health care and less medical interventions than White-Americans—partly due to bias and stereotyping on the part of health providers.<sup>7</sup>

Several US based studies have demonstrated that higher health provider biases are associated with poorer patient outcomes. When the provider and the patient come from different cultural or racial groups, health providers tend to be less proactive, less ‘patient centred’ and generally fail to establish optimal levels of rapport.<sup>10–13</sup> Cooper et al., have shown that clinicians with higher negative race biases are more likely to dominate conversations with their patients, show less interpersonal warmth and spend less time explaining various treatment options. Accordingly, patients who have clinicians with higher unconscious bias are more likely to leave appointments feeling dissatisfied, untrusting and are more likely to rate their clinicians poorly on interpersonal skills.<sup>2</sup> These perceptions may have serious consequences. For example, if

patients do not trust their health providers they may less likely to adhere to treatment regimens or book follow-up appointments.

Local research shows Māori experiences within the health care system parallel international studies. Stereotypes may contribute to the problem. Analyses of newspaper, television and radio reports of Māori health demonstrate Māori are consistently presented as poorer and sicker as a group—largely due to lifestyle choices (rather than structural issues or processes within the health system).<sup>14,15</sup> Data suggests these stereotypes are mirrored in health care settings. McCreanor and Nairn interviewed 25 GPs from urban Auckland on the topic of Māori health and found that practitioners perceived Māori as sickly and non-compliant. They also attributed Māori health problems to cultural and lifestyle choices.<sup>16</sup> The presence of these attitudes among health care professionals suggests that biases may play a role in differential outcomes for Māori.

A number of data sources demonstrate a bias in the way medical services, procedures and treatments are prescribed for Māori as opposed to other ethnic groups.<sup>17</sup> For example, Westbrooke, Baxter and Hogan<sup>18</sup> found Māori men are less likely to receive medical intervention for cardiac disease compared with Pākehā men. Ministry of Health data indicates Māori women are less likely to receive epidural pain relief during child birth compared to non-Māori women.<sup>19</sup> Hill et al.<sup>20</sup> demonstrate that Māori have a significantly poorer cancer survival rate than non-Māori; partly due to differences in the standard of medical treatment Māori receive. Jansen and Jansen<sup>21</sup> report that Pākehā doctors spent 17 percent less time (2 minutes out of a 12-minute consultation) interviewing Māori than patients from other ethnic groups. In an older, but relevant study in the context of this paper, Mitchell<sup>22</sup> found New Zealand general practitioners (GPs) are less likely to prescribe prophylactic therapy to Māori and Polynesian children. He concluded “the higher asthma mortality and admission rates in Māori and Pacific Island children compared with European children is not due to ethnic differences in prevalence, genetic or socio-economic factors. The most important

factor appears to be differences in medical management.” (p835). According to Mitchell anecdotal evidence suggests some GPs do not prescribe prophylactic drugs because of the difficulty in communicating appropriate instructions to Māori and Polynesian parents. This, he notes, amounts to stereotyping according to ethnicity—because medical practitioners make “assumptions about the appropriateness of prescribing asthma prophylactic therapy for these ethnic minority groups” (p.835). This sentiment is substantiated by an analysis of the 2002/03 New Zealand Health Survey, where Māori reported the highest prevalence of ever experiencing racial discrimination in their interactions with health care providers compared with non-Māori.<sup>23</sup>

Research with Māori and Pākehā GPs shows some Pākehā GPs find it harder to communicate with Māori patients and Māori are less comfortable, trusting and forthcoming in their interactions with Pākehā GPs.<sup>13</sup> Jansen, Bacal and Crengle<sup>24</sup> found similar data in a large nationwide survey of 651 Māori consumers of health and disability services. Māori reported their health care workers did not communicate with them effectively, failed to take time to carefully explain their treatment options and inform them of additional health services they could utilise. Arlidge et al.<sup>25</sup> examined the hospital experiences of Māori and Pacific and Pākehā families. Interviews revealed many Māori and Pacific whānau/families felt alienated within the hospital setting. Māori reported receiving less focussed attention, less discussion and less information from their health care providers. Māori and Pacific respondents felt medical staff were unapproachable (either because they were too busy or seemed unavailable to help) this made them feel that they could not ask for information or support. Pākehā families did not report having these same experiences.

The issue of Māori engagement with public health services is crucial in relation to SUDI in New Zealand where Māori babies die of SUDI at almost five times the rate of non-Māori babies. SUDI prevention (“safe sleep”) information is delivered to New Zealand parents through the Ministry of Health’s Well Child/Tamariki Ora (WCTO) programme which is free to all New Zealand

children from birth to five years. WCTO services are delivered by a range primary health providers; midwives, doctors, nurses and hospital specialists. The programme is comprised of 13 “wellness checks” or “core visits” with health providers. These checks include 12 core visits plus a GP health check at six weeks (linked to the six-week immunisations). According to the WCTO National Schedule 2013 SUDI prevention information should be provided during core contacts 1–5 by WCTO providers.<sup>26</sup>

WCTO National Programme Delivery Reports for 2014 (which reported ethnicity data for Māori and *Pasifika* only) revealed only 43.4% of Māori babies received all core contacts 1–5, compared to the national average for all babies which was 57.7%. For those who received core 1 visits 48% of Māori received SUDI information compared to 59.5% of all births.<sup>3</sup> One might not think that this is not such a significant gap and may reflect some other trend, however, we noted that 64% of *Pasifika* parents did receive information compared to 48% Māori.<sup>1</sup>

The fact that Māori are less likely to receive their Core 1 visits is in itself a concern—however we find it particularly concerning that even when Māori *do* receive visits—they are less likely to be provided with SUDI safe sleep information. What is different about the way in which Māori are engaged by WCTO providers? Typically, when there is some kind of health inequity experienced by Māori this is attributed to lower socio-economic status, poor access to health care services or poorer service uptake on the part of Māori. However, we believe the possibility of unconscious bias towards Māori on the part of health care providers should be considered.

To substantiate that view, a 2013 study conducted by Pacific Perspectives,<sup>27</sup> which analysed the maternity and health care experiences of Māori and Pacific mothers, underlines the extent of stereotyping young women experience in their interactions with health professionals. The report revealed significant shortcomings in the quality of services younger women receive throughout the maternity care system and shows this population are subject to significant stigma: stating “vulnerable young mothers felt interactions with staff stereotyped, judged and stigmatised them” (p.8).

This report is substantiated by other qualitative studies which demonstrate young Māori mothers have significant challenges dealing with health professionals and believe they are judged, frowned on and spoken down to by doctors and nurses alike.<sup>28</sup> For young Māori mothers the expectation of discrimination may also contribute to poor outcomes. It may be that expectations of having a negative experience can lead to distrust/anxiety about health care professionals—which discourages them from accessing health services. Jansen, Bacal and Crengle<sup>24</sup> noted that some Māori prefer Māori health providers. However, it is important to note that Māori are a minority in the health care workforce meaning the vast majority of interactions Māori have will be with health providers who are non-Māori. This is also the case for Māori mothers who are mainly dealing with non-Māori GPs, Plunket nurses and midwives.

We acknowledge that a complex array of factors underpin Māori health inequities. We believe interpersonal dynamics within the health care system also are a major influencing factor. Where traditional approaches to dealing with inequities in health have focussed on overt exclusionary practices (ie racism) and cultural competency training, we believe little change will be made unless these deeper (hidden, rationalised and largely unchecked) unconscious biases are addressed. To precipitate change we need to find a way to talk about inequities constructively. We believe the language of biases provides a framework for this discussion to occur in an inclusive and non-blaming way. Unconscious biases may be at odds with the practitioner's conscious beliefs—and reflect attitudes they would not consciously endorse. Māori must also be aware of their own biases. If Māori perceive they have had negative experiences with health providers in the past they will be apprehensive about future interactions. If Māori are primed to have negative experiences, they may misinterpret health provider behaviour incorrectly (ie see bias when it isn't there). These perceptions can unconsciously undermine health provider's efforts to care for them.

For our original question: *Why are those most in need of information about sudden infant death the least likely to receive it?*

There are many answers—however, we believe some health providers may hold stereotypes that inhibit their ability to connect effectively with young Māori mothers. This manifests in the amount of time they spend with each client, their tone of voice, the extent to which they express sensitivity and ultimately the amount of information they provide. Māori may read non-verbal behaviour negatively and withdraw from their engagement with service providers (ask less questions, feel sceptical about the advice they are given, feel reluctant to make follow up appointments). This explains not only Māori dissatisfaction with health provider services—but also why Māori are less likely to receive the safe sleep information they should be given.

Burgess et al.,<sup>29</sup> outline a number of important steps towards addressing unconscious bias among health providers. As a first step they recommend helping providers understand the cognitive bases of biases, openly acknowledging stereotypes (so they can be constructively addressed), enhancing health provider's confidence in their ability to interact with patients from a different cultural background and enhancing provider empathy (which is seen as important for improving patient-provider interactions generally).

A range of instruments have been developed for the purpose of assessing personal levels of unconscious bias. The most commonly used is the Implicit Association Test (IAT). The IAT is a computer-based measure that measures the strength of associations between social categories (female, ethnic minorities) and evaluations and stereotypes. IAT has been used in hundreds of studies across a wide array of disciplines to reveal implicit biases. The test is free – and only takes five minutes to complete <https://implicit.harvard.edu/implicit/education.html>

At the present time there is no research that we know of in New Zealand which has directly investigated the extent to which unconscious bias among health professionals impacts on the quality of health care delivered. There is certainly a need for such research to begin. In addition, we believe health providers need to be educated about how subtle and unconscious biases may

affect the way they deal with Māori patients and how these attitudes influence their decisions. Dovidio<sup>30</sup> has demonstrated that making health professionals more conscious of how cognitive biases work (and how biases influence medical encounters) helps

to motivate them to correct their own bias. Although having a greater awareness of bias will not automatically eliminate it, awareness of the issue is certainly needed to open up discussion and promote understanding.

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Dr. Houkamau reports personal fees from Whakawhetu/Mokopuna Ora, outside the submitted work.

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**REFERENCES:**

1. Ministry of Health. 2015. Well Child / Tamariki Ora Programme Delivery Reports for 2014. Wellington: Ministry of Health. Unpublished report.
2. Cooper LA, Roter DL, Carson KA, Beach M, Sabin J, Greenwald A et al. The Associations of Clinicians' Implicit Attitudes about Race with Medical Visit Communication and Patient Ratings of Interpersonal Care. *Am J Public Health*. 2012 May;102(5):979–87.
3. Blair IV, Steiner JF, Havranek EP. Unconscious (Implicit) Bias and Health Disparities: Where Do We Go from Here? *Perm J*. 2011 Spring;15(2):71–8.
4. Mahzarin R, Banaji A, Greenwald G. Blind-spot: hidden biases of good people New York: Delacorte Press; 2013.
5. Hewstone M, Rubin M, Willis H. Intergroup bias. *Annu Rev Psychol*. 2002;53:575–604.
6. Dovidio JF, Kawakami K, Johnson C, Johnson B, Howard A. On the nature of prejudice: Automatic and controlled processes. *J Exp Psychol*. 1997 Sep; 33:510–540.
7. Smedley B, Stith A, Nelson A. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington, D.C; National Academies Press; 2003 p. 6–251
8. Mahzarin R, Banaji A, Greenwald G. Blind-spot: hidden biases of good people New York: Delacorte Press; 2013.
9. Cooper LA, Roter DL, Carson KA, Beach M, Sabin J, Greenwald A et al. The Associations of Clinicians' Implicit Attitudes about Race with Medical Visit Communication and Patient Ratings of Interpersonal Care. *Am J Public Health*. 2012 May;102 (5):979–87.
10. Van Ryn M. Research on the provider contribution to race/ethnicity disparities in medical care. *Med Care*. 2002; 40(1 Suppl): 140–51.
11. Penner LA, Dovidio JF, West TV, Gaertner SL, Albrecht TL, Dailey RK et al. Aversive racism and medical interactions with Black patients: a field study. *J Exp Soc Psychol*. 2010 Mar 1;46(2):436–440.
12. Green AR, Carney DR, Pallin DJ, Ngo LH, Raymond KL, Iezzoni LI et al. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *J Gen Intern Med*. 2007. Sep; 22(9):1231–8.
13. Thomas DR, Arlidge B, Arroll B, Elder H. General practitioners' views about diagnosing and treating depression in Māori and non-Māori patients. *J Prim Health Care*. 2010 Sep 1;2(3):208–16.
14. Nairn R, Moewaka Barnes A, Rankine J, Borell B, Abel S, McCreanor T. Mass media in Aotearoa:

- an obstacle to cultural competence. *NZ Journ Psych* 2011, 40(3), 168–175.
15. Hodgetts D, Masters B, Roberston N. Media Coverage of ‘Decades of Disparity’ in Ethnic Mortality in Aotearoa. *J Community Appl Soc Psychol*. 2004, 14(6), 455–472
  16. McCreanor T, Nairn R. Tauiwi general practitioners’ talk about Māori health: interpretative repertoires. *NZMJ*. 2002, 13;115 (1167):U272.
  17. Alexander H, Irwin C, Purdie G, Hunn M. Incidence and management of high grade glioma in Māori and non-Māori patients. *Journal of Clinical Neuroscience*. *J Clin Neurosci*. 2010 Sep;17(9):1144–7.
  18. Westbrooke I, Baxter J, Hogan J. Are Māori under-served for cardiac interventions? *N Z Med J*. 2001 Nov 9;114(1143):484–7.
  19. Ministry of Health. (2004). Report on maternity. 2002. Wellington: Ministry of Health.
  20. Hill S, Sarfati, D, Blakely T, Robson B, Purdie G, Dennett E et al. Ethnicity and management of colon cancer in New Zealand: Do indigenous patients get a worse deal? *Cancer*. 2010 Jul 1;116(13):3205–14.
  21. Jansen P, Jansen D. Māori and health. In: St George I, editor. *Cole’s medical practice in New Zealand* 12th ed. Wellington: Medical Council of New Zealand. 2013:52–65.
  22. Mitchell EA. Racial inequalities in childhood asthma. *Soc Sci Med*. 1991; 32:831–836
  23. Harris R, Cormack D, Tobias M, Yeh L-C, Talamaivao N, Minster J, Timutimu R. The pervasive effects of racism: experiences of racial discrimination in New Zealand over time and associations with multiple health domains. *Soc Sci Med*. 2012 Feb;74(3):408–15.
  24. Jansen, P, Bacal K, Crengle S. (2008). *He Ritenga Whakaaro: Māori experiences of health services*. Auckland: Mauri Ora Associates.
  25. Arlidge B, Abe S, Asiasiga L, Milne S, Crengle S, Ameratunga S. Experiences of whānau/families when injured children are admitted to hospital: a multi-ethnic qualitative study from Aotearoa/New Zealand. *Ethn Health*. 2009 Apr;14(2):169–83.
  26. Ministry of Health. 2013. *Well Child / Tamariki Ora National Schedule 2013*. Wellington: Ministry of Health. [cited 08 April 2016]. Available from: [https://www.google.co.nz/search?q=WCTO+National+Schedule+2013+SUDI&ie=utf-8&oe=utf-8&gws\\_rd=cr&ei=N5k-GV-nTJ4Hc0gTsy4QI](https://www.google.co.nz/search?q=WCTO+National+Schedule+2013+SUDI&ie=utf-8&oe=utf-8&gws_rd=cr&ei=N5k-GV-nTJ4Hc0gTsy4QI)
  27. Pacific Perspectives Ltd. *Maternity Care Experiences of Teen, Young, Māori Pacific and Vulnerable Mothers at Counties Manukau Health*. Wellington NZ: Pacific Perspectives; 2013 p. 6–69.
  28. Lee R, North N. Barriers to Māori sole mothers’ primary health care access. *J Prim Health Care*. 2013 Dec 1;5(4):315–21.
  29. Burgess D, van Ryn M, Dovidio J, Saha S. Reducing racial bias among health care providers: lessons from social-cognitive psychology. *J Gen Intern Med*. 2007 Jun;22(6):882–7.
  30. Dovidio J, Penner L, Albrecht T, Norton W, Gaertner S, Shelton N. Disparities and distrust: The implications of psychological processes for understanding racial disparities in health and health care *Soc Sci Med*. 2008 Aug;67(3):478–86.

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