Is there systemic bias for Māori with eating disorders? A need for greater awareness in the healthcare system

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ABSTRACT
The New Zealand Mental Health Survey, Te Rau Hinengaro, indicated that eating disorders are at least as common in Māori as non-Māori, which is consistent with international findings that eating disorders exist in other indigenous and ethnic minority groups. Specific factors may be relevant to the development and treatment of eating disorders in the Māori population. We suggest this may include differential exposure to risk factors, the impact of acculturation, changing body image ideals and systemic bias reducing access to treatment and research participation. However, an absence of high-quality research regarding eating disorders in Māori makes it difficult to be certain about this. We suspect that Māori do not receive treatment in specialist eating disorders services at a level commensurate with comparable prevalence data in New Zealand and that a significant contributory factor to the apparent unmet need for Māori with eating disorders is likely to be systemic bias. Urgent attention to this area of research is required.

Anorexia nervosa (AN), bulimia nervosa (BN) and binge-eating disorder (BED) are serious conditions with significant adverse medical, psychological, social and economic effects on individuals, impairing quality of life. Eating disorders (EDs) are at least as common in Māori as in non-Māori, according to the New Zealand Mental Health Survey Te Rau Hinengaro (NZMHS). However, to date there is very limited research focused on EDs and Māori. This paper considers the existing evidence and identifies gaps in the literature, and briefly discusses other aspects that may have an impact on the experience of eating disorders in Māori.

Prevalence
The NZMHS used standardised diagnostic measures and conducted face-to-face interviews during 2003 and 2004 with 12,992 New Zealand adults over the age of 16 years. Of that number, 2,595 participants identified as being of Māori descent. The rates of EDs for Māori were similar to the general population and in some instances higher, with a prevalence of 0.7% for AN, 2.4% for BN and 3.1% for any eating disorder, compared to 0.6%, 1.3% and 1.3% respectively for the whole population. While the NZMHS findings are now limited by the age of the data, these results suggest that AN rates for Māori may be similar to the general New Zealand population, and in the case of BN and any eating disorder greater than the non-Māori prevalence.

Similar findings have been established in other countries. In Australia, the prevalence of EDs features in indigenous Aboriginal and Torres Strait Islander peoples is equal to that of non-indigenous Australians. Similarly, a study in New Mexico found eating disturbances among Hispanic and Native
American youth were comparable to their European American counterparts. Further epidemiological data of EDs throughout Asia and the Pacific also suggests the prevalence of EDs within these regions has increased. These findings support the findings of the NZMHS that EDs exist in indigenous and non-westernised nations at a rate that is at least equal across population groups.

**Pathways to eating disorders**

If BN and potentially other EDs are as common among Māori than non-Māori, we must ask why, and examine the potential differential impacts on the pathways to the development of EDs for Māori. Māori are known to experience disproportionate exposure to risk factors for a number of health conditions, including mental illness. Much of the research in this area has centred on the influence of the social determinants of health and how as a consequence of colonisation, Māori experience higher levels of deprivation, reduced access to quality healthcare, and increased exposure to adversities such as racism. The applicability of this to Māori who experience EDs is unknown. The pathways to EDs are multifaceted and while some of the risk factors are shared with other mental disorders, some are more specific to EDs. The key determinants include: biological (including familial genetic predisposition), sociological (cultural/environmental influences) and psychological influences (including disturbance in a perceived body/weight image). The majority of this research has been conducted on dominant ethnic groups within populations and therefore its relevance to indigenous and ethnic minority groups is undetermined.

In terms of genetic predisposition, there is a growing agreement within the scientific community that sub-analysis within genetic studies by ethnic groups is problematic due to confounding variables. This includes race and ethnicity being a social construct and not an adequate marker of genetic diversity, as well as, the prevalence of admixture across populations. Instead, the trend has moved to focusing on the impact of racism and the determinants of health in the interpretation of ethnic differences. In the context of EDs, this is explored in the sociological and psychological pathways to EDs for ethnic minority groups.

Research on sociological pathways to EDs for other indigenous populations and ethnic minority groups has focused primarily on acculturation. Acculturation is the process of one culture adopting the values, norms and beliefs of another dominant culture. In the context of EDs this involves the adoption of Western-constructed beliefs regarding beauty, which includes body image ideals of ‘thinness’ for women, and a slim and muscular ideal for men. The research suggests that there is an association between EDs psychopathology and cultural change in some population groups, particularly in the context of Western culture adoption. However, research in this area is complicated by cross-cultural variation in both the conceptualisation and measurement of acculturation in that there is a lack of a uniformed definition of what acculturation actually is and therefore how it is measured. Consequently, studies have shown mixed results dependent on the groups studied and methods used. To date, there has been no research that has specifically investigated the association between acculturation and EDs in Māori. Therefore, the relevance of cultural change in the development of EDs among Māori remains unclear.

What is available is a small body of literature that focuses on body image ideals and dissatisfaction in Māori and other Polynesian peoples—a well-established risk factor for the development of EDs. Durie, a Māori scholar has suggested (1994, cited by Talwar) that Māori believe ‘slender body forms’ are not always valued over ‘well rounded’ body shapes and in Polynesian society obesity is not necessarily viewed negatively given larger body types have been associated with high status, power, authority and wealth. However, more recent empirical research suggests that these beliefs may have changed. Studies investigating body ideals in Pacific people indicate these groups may have a preference for smaller body types. These findings are reflected in New Zealand studies that have established no difference in body dissatisfaction and body ideals between Māori and New Zealand European female participants, including both groups identifying a desire for smaller figures. These studies are however limited by small sample sizes, differences in body mass.
index between measured groups, and in one study, non-standardised means of collecting ethnicity data. Despite these limitations, what they do offer is an alternative view to the expressed belief by Durie (1994, cited by Talwar\(^{15}\)) that Māori are protected from EDs by different body image standards. It is possible that that cultural change has impacted on Māori developing EDs through the adoption of Western constructions of beauty and thin idealisation. However, further research in this area is clearly required to substantiate this.

**Service utilisation**

The level of specialist eating disorder service use for Māori in New Zealand is also uncertain. EDs treatment services have reported concerns about a low referral rate for Māori.\(^{21}\) Potential reasons for this apparent under-representation of Māori in EDs services include over-diagnosis of EDs in NZMHS, under-diagnosis of EDs in health services and barriers to access to quality healthcare for Māori with EDs. While we acknowledge these factors may affect all people with EDs, it is likely that Māori are disproportionally affected. For example, the findings of Metcalf\(^{22}\) demonstrate the widespread under-treatment for Māori across a range of conditions. BN and BED in particular are more likely to go undetected because routine screening is uncommon and the evidence that many do not seek help due to shame or secrecy related to the EDs.\(^{23}\) This may equate to a greater discrepancy in detection rates for BN and BED in primary care samples compared to the NZMHS prevalence data and a lower rate of referral to specialist EDs services. There is also evidence that Māori have reduced rates of contact with primary care comparative to need, further contributing to the potential for disparity. Nonetheless, the paucity of available research that is specific to EDs in Māori makes it difficult to gauge the level of specialist EDs service use and to be certain that Māori experience under-treatment of ED conditions.

Our lack of understanding of how Māori experience EDs is further compounded by a low rate of ethnicity data reporting in New Zealand based studies. This is observed in a number of studies that examine the level of engagement and effectiveness of eating disorder treatments for AN.\(^{24-26}\) Given the sample sizes, sub-analysis data concerning Māori participants may not have been statistically justifiable. Limited data in this area may also be a reflection of the inherent difficulties of researching rare disorders in a sub-population of a country with a small population size; however, research efforts are still required to avoid further marginalising an already vulnerable group. This lack of available evidence limits our understanding of how Māori might experience and respond to current treatments for eating disorders that are available.

**Treatment journeys**

The Meihana model describes a variety of factors that influence the Māori journey to hauora Māori (Māori wellbeing).\(^{29}\) A component of this model is Ngā Roma Moana (ocean currents), which describes four factors from Te Ao Māori (Māori world view) that may influence Māori patients and whānau in clinical settings. These factors include Ahua (personal indicators of the Māori world), whānau, whenua (land) and tikanga (customary practices).

The sharing of food is an essential part of tikanga, which guides both interpersonal and environmental behaviour. Food acts to consecrate both formal and informal occasions, and serves as a marker of noa or ‘ neutrality’ in spaces otherwise considered tapu or ‘sacred’. Simply put, transitioning from tapu to noa happens most commonly through the consumption of food. The act of serving food to guests is also an important part of manaakitanga (hospitality) and contributes to the mana (prestige) of the hosts. The avoidance of food at these occasions has the potential to insult and be perceived as a breach of tikanga. How this affects Māori who have EDs, including how they navigate tikanga and whether current management approaches for Māori with EDs includes this challenge, warrants further exploration.

**Conclusion**

We suspect that Māori do not receive treatment in specialist ED services at a level commensurate with comparable prevalence data in New Zealand and that a significant contributory factor to the apparent unmet need for Māori with EDs is likely to
be systemic bias. More specifically, differential access to health services due to an under-recognition of EDs in Māori by health services, alongside a low rate of referral for treatment. This would be consistent with what is already known regarding the extensive under-treatment of Māori for a range of other conditions. However, service utilisation data is currently lacking to be certain about this, which is further compounded by a lack of ethnicity reporting in published studies. Furthermore, there is a paucity of literature that has considered Māori-specific factors related to the development of EDs. Urgent attention to research in the area of EDs in Māori is required. This is especially important given the typical age of onset for EDs is in adolescence/young adulthood and the younger age of the Māori population. This suggests there may be increasing numbers of Māori youth developing EDs and therefore a corresponding need to ensure primary and secondary services are more accessible and responsive to this cohort. We call for research and quality improvement activities to examine and address the gaps in knowledge. This would involve primary and specialty care audits together with an investigation of national secondary mental health service data. An in-depth examination of Māori experiences of EDs to identify enablers and barriers to health care is also required.

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REFERENCES:


22. McTaff S, G. Arnold, J. Variation in the use of


