

REVIEW

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Culturally responsive recommendations for eating disorder prevention and management for First Nations peoples in Australia: a policy scoping review

Zyana Gall^{1*}, Hilary Smith², Gabrielle Grant¹, Kanita Kunaratnam³, Carissa Lee⁴, Felicity Kerslake⁵ and Alana Gall¹

Abstract

Background Evidence suggests First Nations people in Australia may experience a higher burden of eating disorders (EDs) than the broader Australian population. EDs are among the most debilitating and lethal mental health conditions; however, little is known about the unique considerations for First Nations people experiencing EDs, especially around best practices. This policy scoping review aims to map the current recommendations for managing EDs specific to First Nations peoples and to identify further research opportunities.

Methods We conducted targeted searches of electronic databases and health websites ($n = 53$) for policies, reports, toolkits/guidelines, and fact sheets that contained any information regarding First Nations peoples and ED to identify and select papers as per the inclusion and exclusion criteria. Target groups included ED-specific bodies, various National and State Government departments, Aboriginal Community Controlled Organisations (ACCOs), and other relevant services. Included documents were analysed using Both-Ways Collaborative Yarning and Reflexive Thematic Analysis.

Results We identified 398 eligible documents; after double screening by two researchers, 19 documents were included in our review. Our analysis revealed a distinct need for recommendations for the prevention and management of EDs specific to First Nations peoples. The included documents focus on (a) the potential drivers for EDs, (b) the significant research deficit, and (c) recommendations for future research to inform practice.

Conclusions Our analysis found no clear policy recommendations for the prevention or management of EDs specific to First Nations peoples. Further, research and policies specific to First Nations peoples and communities around EDs are sorely needed. Additionally, this work must be led, informed by and involve the meaningful inclusion of First Nations peoples.

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Plain English summary

We know that First Nations Australians are more likely to experience an eating disorder than the general Australian population. Despite this, there is little research on what the experience of an eating disorder may be like for a First Nations person, nor how best to help a First Nations person heal from an eating disorder. We looked at all the policy documents we could find that discussed both First Nations peoples' health and eating disorders. It was difficult to find policies that were specifically about eating disorders for First Nations people. Instead, we found a lot of policies that said that not enough is known about how to address eating disorders among First Nations communities. Lack of research seems to have stopped anyone from making policy and practice recommendations that could help stop First Nations people from having an eating disorder or help them heal and recover. In this paper, we summarise the information that we found in the policies we read. More research and action is needed to determine how best to help prevent eating disorders in First Nations people, how to help First Nations people with eating disorders heal, and how to put this knowledge into practice.

Keywords Eating disorders, Mental health, Indigenous health, SEWB, Cultural safety, Public health, Wellbeing, Policy

Introduction

Eating disorders (ED) represent a significant public health concern globally, with up to an estimated 17.9% of young people having experienced an ED by early adulthood, with other specified feeding or eating disorder (OSFED), anorexia nervosa, bulimia nervosa and binge eating disorder having the highest prevalence recorded globally [1–3]. The Butterfly Foundation (2024), an Australian national eating disorder support organisation, recently reported an estimated 1.1 million Australians are living with an ED; this is a staggering 21% increase since 2012 [4]. Further, they reported a higher prevalence in women and those aged under 19 (27%). Alarming, people experiencing an ED have a higher mortality risk, with an estimated 1,273 premature deaths in Australia being attributed to EDs in 2023 alone [4].

Despite increasing advancements in ED diagnosis, management, and treatment protocols [5], and the development of guidelines for general clinical practice [6] and mental health professionals [7], there remains a distinct lack of policy initiatives underpinning healthcare across the ED journey. This is especially true for First Nations peoples experiencing EDs. Indeed, there is a dearth of research specific to First Nations peoples, especially with consideration of what constitutes culturally inclusive prevention, management and treatment for this priority population [8]. This is concerning, as evidence suggests EDs are more common amongst First Nations peoples than among the broader Australian population [5, 9]. In 2020, it was estimated that the prevalence of EDs experienced by First Nations people was 27% [9], with subjective binge eating, objective binge eating, and weight and shape concern being the most common ED symptoms [10]. Food insecurity affects First Nations people disproportionately [11]; food insecurity is known to increase the risk of EDs in the wider population [12]. Therefore, food insecurity is likely to be a significant factor to be addressed in preventing and responding to ED among

First Nations peoples. Similarly, First Nations people are disproportionately affected by other known ED risk factors such as trauma [13–16] and intergenerational trauma [17, 18], and by co-occurring conditions such as non-communicable diseases [19–23], so it is likely that these may also be factors to address in ED prevention and management among First Nations peoples. Despite this evidence, the limited existing literature suggests that eating disorders are underdiagnosed and poorly understood within the First Nations population, contributing to the significant gaps in access to appropriate care and support that we see for First Nations people experiencing an ED [8]. These ED-specific gaps are likely compounded by wider health system barriers for First Nations people, including inadequate service coordination, service communication deficits, lack of trust and cultural safety, lack of reliability, affordability and sustainability of services, and transport issues [24].

This policy scoping review aims to critically examine the current state of knowledge regarding the prevention and management of eating disorders in First Nations peoples by reviewing national, state and territory-level health policies to identify critical gaps, challenges, and opportunities for improving prevention, early intervention, and treatment of EDs in First Nations communities.

Methods

When conducting research, it is important to reflexively consider and describe our backgrounds, perspectives and values that we each bring [25, 26]. The current scoping review was led by a First Nations young-adult researcher (ZG), with guidance from a First Nations senior researcher (AG) and a non-Indigenous policy professional with a focus on EDs (HS), all with lived experience of EDs. The authorship includes four First Nations authors (ZG, CL, FK, AG) and three non-Indigenous allies (HS, GG, KK), with expertise in EDs (HS, KK, CL), policy (HS, KK, CL, AG), nutrition (KK, FK, AG), mental

health (ZG, GG, FK), and First Nations health and well-being research (ZG, KK, CL, FK, AG).

Eligibility criteria

Upon conceptualisation of the current review, we identified the importance of privileging the voices of First Nations peoples' when recommending best practices in First Nations health. For this reason, we first sought guidance from the First Nations community-controlled health sector, through targeted searches of their respective websites and general searches through Google. However, we could not identify policies addressing EDs

specific to First Nations peoples. Therefore, we expanded our search to include peak ED bodies, National and State Governments, and other culturally appropriate services (see Table 1 for details). Upon conducting this expanded search, we were still not able to identify a single policy that outlined clear recommendations for EDs specific to First Nations peoples, so we expanded our search further to include fact sheets, annual reports, and toolkits. To be included in our review, the document needed to include any information where both EDs and First Nations peoples were mentioned together within the sentence or paragraph (see Fig. 1 for process flow diagram).

Table 1 List of targeted searches grouped by organisation type

Group	Company/Org. Name
Eating Disorder Bodies	<ul style="list-style-type: none"> - Australian Eating Disorders Research and Translation Centre (AEDRTC) - Australian and New Zealand Academy of Eating Disorders (ANZAED) - Butterfly Foundation - Centre of Excellence in Eating Disorders (CEED) - Child and Youth Mental Health Eating Disorder Program (CYMHS EDP) - Eating Disorders Neurodiversity Australia (EDNA) - Eating Disorders Queensland (EDQ) - Eating Disorders Victoria (EDV) - InsideOut Institute for Eating Disorders (InsideOut) - WA Eating Disorders Outreach and Consultation Service (WAEDOCS) - National Eating Disorders Collaboration (NEDC) - Queensland Eating Disorder Service (QuEDS)
National / Government Health	<ul style="list-style-type: none"> - 13YARN - Australian state and territory governments departments of health (QLD; ACT; WA; NSW; NT; SA; TAS, and; VIC) - Australian Health Practitioner Regulation Agency (Ahpra) - Australian Institute of Health and Welfare (AIHW) - WA Gov Mental Health Commission - Lowitja Institute - Parliament of Australia - The Healing Foundation - National Aboriginal Community Controlled Health Organisation (NACCHO)
Grey Literature Databases	<ul style="list-style-type: none"> - Analysis & Policy Observatory (APO) - Guidelines International Network (GIN) - Google Scholar - CareSearch - International Network of Agencies for Health Technology Assessment (INAHTA) - MedNar - Trove - WorldCat - OpenMD - Scopus - Informit - HealthInfoNet
Workforce Peak Bodies	<ul style="list-style-type: none"> - Australian Indigenous Doctors' Association (AIDA) - Australian Indigenous Psychologists Association (AIPA) - Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) - Indigenous Allied Health Australia (IAHA) - National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners (NAATSIHWP) - The Royal Australian and New Zealand College of Psychiatrists (RANZCP)
First Nations State/Territory Health	<ul style="list-style-type: none"> - Aboriginal Health and Medical Research Council (AH&MRC) - Aboriginal Health Council of South Australia (AHCSA) - Aboriginal Medical Services Alliance Northern Territory (AMSANT) - Central Australian Aboriginal Congress (CAAC) - Queensland Aboriginal and Islander Health Council (QAIHC) - Tasmanian Aboriginal Centre (TAC) - Victorian Aboriginal Community Controlled Health Organisation (VACCHO)

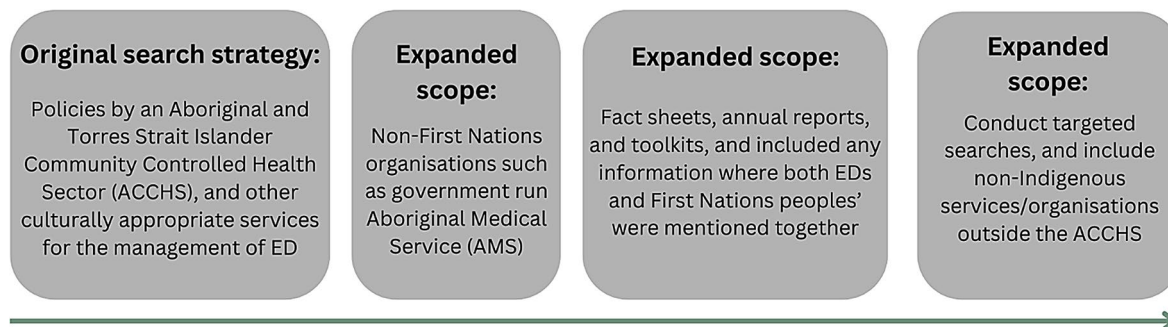


Fig. 1 Flow diagram of eligibility for inclusion process

Table 2 Search terms

First Nations Peoples Terms	Eating Disorder Terms
Indigenous OR Aboriginal* OR "Torres Strait Islander" OR "First Nation**" OR "First People**"	"Eating Disorder**" OR Anorexia OR Bulimia OR "Binge eating" OR "body image" OR "body dysmorphia" OR "muscle dysmorphia" OR "weight overvaluation" OR "shape overvaluation"

Search strategy

A search strategy was conducted using the PRISMA extension for a scoping review (PRISMA-ScR) [27]. The following electronic databases were searched: Analysis & Policy Observatory (APO), Guidelines International Network (GIN), Google Scholar, CareSearch, The International Network of Agencies for Health Technology Assessment (INAHTA), MedNar, Trove, WorldCat, OpenMD, Scopus, and Informit. As minimal data was found via academic databases, a targeted approach of relevant sources such as government and peak ED bodies was conducted to widen the search. Search terms specific to First Nations peoples were derived from Burt et al. (2020), including 'body image', 'body dysmorphia' and 'weight/shape overvaluation', and included in our search, alongside ED diagnostic terms such as 'eating disorder', 'binge eating', 'bulimia' and 'anorexia'. First Nations search terms were derived from Gall et al. (2021), including 'Indigenous', 'Aboriginal', 'Torres Strait Islander' and 'First Nations', with the addition of 'First People' [8, 28] (Table 2).

Review process

Our review was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses, Extension for Scoping Reviews (PRISMA-ScR) guidelines [27] (see Fig. 2) and adhered to Arksey and O'Malley (2005) framework for scoping reviews, consulting with First Nations academics and policy experts from peak ED bodies, as per the final stage of this framework [29]. Based on the search strategy, 398 eligible documents were found and

hand-copied to EndNote, ready to upload to Covidence for screening. Of the 398 documents, 25 duplicates were removed in Covidence. Two reviewers independently double screened 373 documents and then met to resolve minimal discrepancies.

Targeted searches were conducted ($n=396$), additional records were identified through other sources ($n=2$), and duplicates removed. Throughout the screening process, title and abstract screened ($n=373$) and ($n=57$) were excluded due to irrelevancy, leaving ($n=316$) documents to be assessed for eligibility. Total articles excluded ($n=297$) due to the following exclusion criteria; 0. Other ($n=5$); (1) Not a policy ($n=121$); (2) Not an Australian policy ($n=0$); (3) Not a health policy ($n=4$); (4) Not a national, state or territory level policy ($n=0$); (5) Nil information on ED ($n=112$); (6) Nil information on ED and First Nations peoples ($n=19$), and (7) No recommendations for the management of ED for First Nations peoples ($n=36$), thus leaving ($n=19$) included documents.

Characteristics were extracted for each included document: year of publication, document title, authoring organisation and department (where applicable), author names (where applicable), document type, intended audience, and mentioned eating disorders (Table 3).

We employed Braun and Clarke's (2019) Reflexive Thematic Analysis (RTA) [30], along with Both-Ways Collaborative Yarning [31], to analyse the data. RTA is a form of thematic analysis that recognises the biases and lens we all bring to our analysis of data, as integral to the process [30]. Both-Ways Collaborative Yarning is a combination of the Both-Ways approach and Collaborative Yarning,

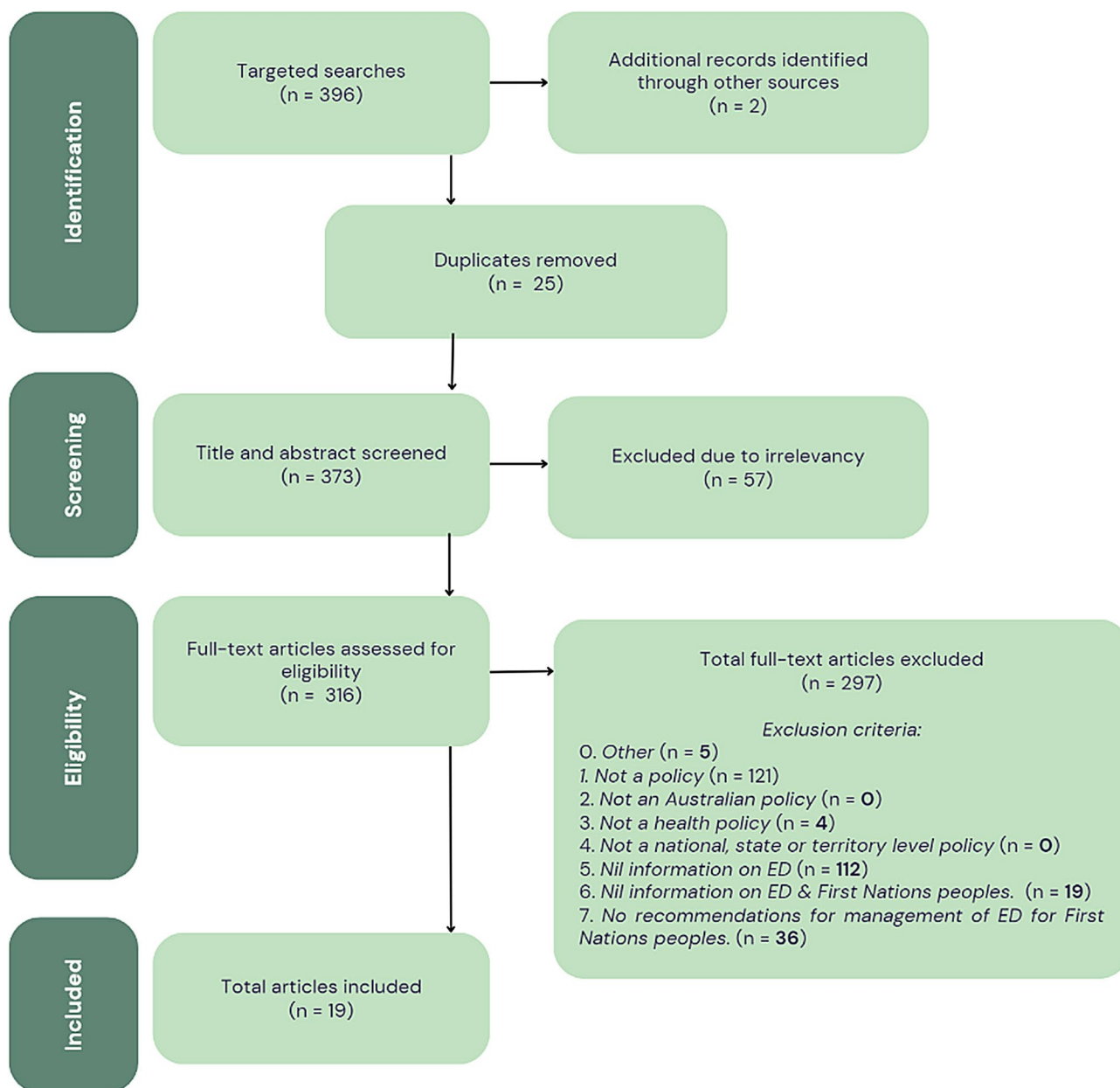


Fig. 2 Document selection and PRISMA-ScR (Preferred Reporting items for Systematic Reviews and Meta-Analyses – Scoping Reviews) flow diagram

that the senior First Nations author has used separately in previous research [31–33]. Collaborative Yarning is one part of the four-part Yarning method, used purposefully as outlined by Shae [34, 35]. This part of the Yarning method uses a flexible and inclusive approach to allow multiple researchers to be more engaged with the research process and co-analysis of the data in a culturally appropriate way [34, 35]. A Both-Ways Approach derives from a recognition of the value that both First Nations and Western epistemologies bring to create new knowledge, while still being grounded in First Nations knowledges [34, 36]. The research team comprising non-Indigenous and First Nations researchers met and

analysed the data together using the Both-Ways Collaborative Yarning in a session facilitated by the First Nations senior researcher. Analysis was performed following a meta-aggregation framework [37], modified for the group session.

Results

A thematic analysis was conducted on the relevant content from the 19 included documents, that is, the content that specifically addressed eating disorders and First Nations people. The following themes were identified: (1) Determinants of health and potential drivers of EDs, (2) Research deficit, and (3) Recommendations for future

Table 3 Characteristics of included documents (*n* = 19)

Author/s (year)	Access date	Type of document	Intended audience	Eating disorders mentioned
The Royal Australian & New Zealand College of Psychiatrists (RANZCP) (2014) <i>Hay, P. et al.</i>	January 2024	RANZCP Guidelines	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder.
Butterfly Foundation (2017)	January 2024	National Agenda	All stakeholders – government, researchers, organisations, patients, & healthcare practitioners	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder
Women's Health Victoria (WHV) (2017)	February 2024	Paper	Health professionals & ED stakeholders	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder
National Aboriginal Community Controlled Health Organisation (NACCHO) & Royal Australian College of General Practitioners (RACGP) (2018)	January 2024	National Guide	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder
NSW Government, Department of Health (2018)	January 2024	Practice-based guide	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, Avoidant/Restrictive food intake disorder (ARFID), OSFED, & USFED
Butterfly Foundation (2019)	January 2024	Toolkit	Health professionals	Mention ED generally (no specifics)
Butterfly Foundation (2020)	January 2024	Reconciliation action plan	Patients, stakeholders, researchers, and government	Mention ED generally (no specifics)
National Eating Disorders Collaboration (NEDC) (2020)	January 2024	Decision-Making tool	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, ARFID, OSFED, & UFED
Eating Disorders QLD (EDQ) (2021)	January 2024	Information Booklet	Patients, carers and health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, and all other eating disorders listed in the DSM-5 and other EDs not yet classified in the DSM-5
NSW Government, Department of Health (2021)	January 2024	Service Plan	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, and all EDs mentioned in the DSM-5
State of Victoria, Royal Commission into Victoria's Mental Health System (2021)	January 2024	Final Report	Government	Mention EDs generally (no specifics)
InsideOut Institute (2021)	January 2024	Research Strategy	Governments, research bodies, philanthropists, research funders, health services, health service planners and providers, universities and training institutes, researchers, clinicians, & patients	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, ARFID, OSFED, UFED, Pica, & Rumination Disorder
ACT Government (2022)	January 2024	Model of Care	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, OSFED, & UFED
NEDC (2022)	January 2024	Clinical practice guidelines	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, ARFID, OSFED, & UFED
Butterfly Foundation (2023)	January 2024	Annual report	Clients and stakeholders	Anorexia
Gayaa Dhuwi (2023)	January 2024	National Consultancy Report	Government	Mention EDs generally (no specifics)
Eating Disorders Neurodiversity Australia (EDNA) (2023)	January 2024	Report	Stakeholders, healthcare professionals, researchers, academics, educators (e.g., teachers, sports coaches), service managers, and lived experience experts.	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, and all eating disorders listed in the DSM-5, plus eating disorders which are yet to be classified.
NEDC (2023)	January 2024	Strategy	Health professionals	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, and all eating disorders listed in the DSM-5, plus eating disorders which are yet to be classified.
Butterfly Foundation (n.d)	January 2024	Fact Sheet	Patients	Anorexia nervosa, Bulimia nervosa, & Binge eating disorder, & OSFED

research to inform practice. The following results section is in a narrative format comprising only the findings from the 19 included documents (Fig. 3).

Characteristics of the included documents

Many of the included documents provided brief descriptions of the effects of colonising practices without including contextual factors. This may have had the unintentional effect of removing autonomy from First Nations peoples in-text, where they may appear to be reflected as passive recipients of the impacts of colonisation. It is not the intention of the authors of this paper to repeat this pattern. The contents of the documents included in the review are set out in the results section with the greatest amount of contextual detail possible based on the contents of each document. Further context for some of these findings is provided in the Discussion section, including more explicit consideration of the forces involved in the dispossession and displacement of First Nations peoples.

Determinants of health and potential drivers of EDs

In lieu of any actual recommendations for the management of First Nations people experiencing EDs, the majority of the included documents focussed on the potential drivers of EDs in this population, namely the different social and cultural determinants of health. Two main subthemes were identified: (a) Socioeconomic and healthcare system factors; and (b) historical factors. Secondary subthemes were food access, healthcare access & models of care, traditional food system interruption, intergenerational trauma, and ongoing psychological impact of disadvantage.

Socioeconomic and healthcare system factors

Food access

Women's Health Victoria (2017) found that 97% of First Nations peoples did not consume the recommended daily amount of fruit and vegetables, thus those living within Australia's rural and remote areas consumption being lower due to the "lack of availability and accessibility of fresh food to those areas" (p. 09) [39]. Food security

is based on four pillars, access, availability, food quality/ utilisation, and stability [39]. Women's Health Victoria (2017) shared a study conducted by Alhazmi (2014) that in 2012–2013 over one in five (22%) First Nations peoples experienced household food shortages within the past year this issue was more pronounced in remote areas where 31% of First Nations people faced lack of food security. This impacts psychosocial wellbeing associated with higher levels of stress, depression and anxiety symptoms which these associations present higher in females than males [39].

Healthcare access and models of care

Several included documents noted that First Nations peoples experience higher rates of disadvantages such as lower literacy levels, insufficient income levels, and lack of access to funded treatment without significant gap fees [41, 46, 51]. Particularly within rural and remote communities, many face multiple barriers, such as limited health and mental healthcare services and reduced access to transport to these services in comparison to metropolitan areas [41, 46].

The Royal Commission into Victoria's Mental Health System (2021) reports that the local rural mental health workforce is suffering from workforce shortages, and there is a lack of interest in positions offered in these locations due to unattractive salaries and a lack of further career opportunities. Adding to the workforce challenges, there is a further lack of culturally trained health professionals to support the First Nations communities in such locations [47]. Some organisations have suggested that "... working with those who identify as Aboriginal or Torres Strait Islander is too challenging." (p. 15) [44].

Lastly, mental health and well-being may be conceptualised differently within different cultures. For some First Nations peoples, it is a holistic concept of social and emotional wellbeing (SEWB). The SEWB phrase is unique to some First Nations peoples' contexts which differs from Western medical contexts of mental health and treatment [41, 51]. An example of this difference is the prioritising of relationship-establishment, or "relationality" in First Nations peoples' ways of delivering care, as

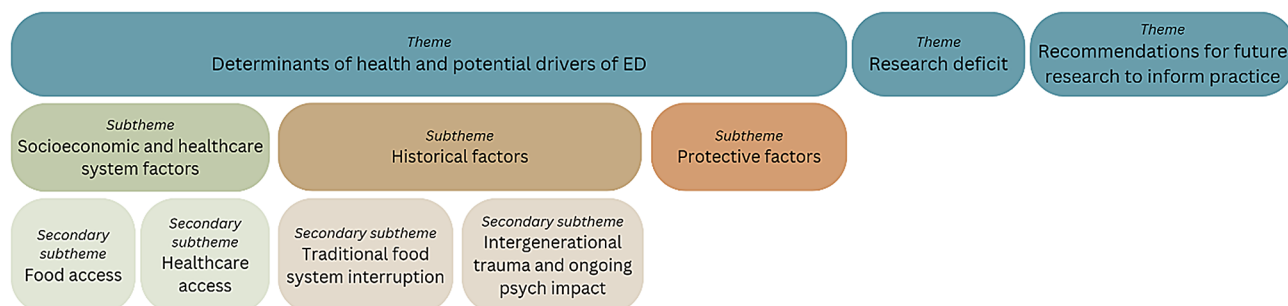


Fig. 3 Themes arising from thematic analysis

opposed to the clinical Western doctor-patient approach [54]. This evidence suggests that greater levels of cultural competency training would equip healthcare providers with better understanding and higher levels of comfort-ability when working with First Nations communities [54]. Additionally, this training would potentially lead to more rural and remote healthcare job interest [41, 47].

Historical factors

Traditional food system interruption

Women's Health Victoria noted that the act of colonisation of Australia enforced the European diet, that were often high in fat, sugar, and salt, on First Nations peoples, when traditional diets comprised predominantly of high protein, complex carbohydrates, and other nutrients [39]. This resulted in the loss of autonomy in the cultivation and consumption of traditional foods [39]. Further, the loss of access to traditional foods and food-practices led to increased consumption of discretionary food, and decreased consumption of nutrient-dense food, thus leading to poor nutrition and increased diet-related disease links - such as Type II diabetes [38].

Intergenerational trauma and ongoing psychological impact of disadvantage

As noted by the Butterfly Foundation, the colonisation of Australia left First Nations peoples with psychological trauma, grief and loss experiences [51]. This, along with the current social and economic environment of extreme cost of living pressures, has resulted in high levels of psychological distress within First Nations communities. Considering the other disadvantages and barriers they face such as food insecurity, lack of accessible transportation, health, and mental health services, etc. emerging research suggests higher rates of EDs within First Nations peoples [51]. Furthermore, several included documents highlighted how cultural dispossession combined with social disadvantage, psychological trauma, and negative relationships with food could lead to an increased risk of EDs within First Nations peoples [41, 48, 51].

Research deficit

The majority of the documents included ($n=10$) in the review state there is limited research and evidence showing how to best support First Nations communities with EDs [38, 39, 41–43, 45, 46, 48, 49, 51]. First Nations peoples are underrepresented within the current research. Thus, future research needs to focus on specific ED treatment and management approaches that are built taking into account First Nations perspectives [38]. EDs are highly complex, and the lack of awareness, screening tools, and treatment models specific to First Nations communities could be due to the processes by which evidence-based constructs further the exclusion and

marginalisation of minority populations [42, 45]. However, several included documents noted that research is needed in order to test or adapt existing screening and diagnostic tools, early intervention approaches and treatment models to make them safe, culturally relevant and effective for First Nations peoples [41, 45, 48]. The lack of research within the field was also reported to continue the lack of awareness and/or understanding of eating disorders within First Nations communities in several documents [38, 46, 48, 49, 51].

Although there is a dearth of research on First Nations peoples and EDs, there are a select few studies that were referenced throughout the 19 included documents which highlight ED indicators such as body image issues ($n=6$) [38, 43, 46, 51, 52, 55] and disordered eating ($n=2$) [39, 45]. Body image issues have also been highlighted as the top three concerns within First Nations peoples, with evidence suggesting “*Aboriginal and Torres Strait Islander adolescents are more likely to engage in activities to lose weight, increase weight and increase muscles than their non-Aboriginal and Torres Strait Islander peers.*” (p. 18) [55]. A 2019 study examining the prevalence of EDs in a general population and cited in an included document found that 25% of identified First Nations peoples had an ED, higher than non-Indigenous survey respondents [46].

Recommendations for future research to inform practice

Eight documents made specific calls for further research. Of these, five documents noted the need for research to develop interventions and treatments [41, 43, 45, 46, 49], and three specified the need for research to be conducted in partnerships or led by a First Nations person with guidance from Elders [38, 48, 51]. There is also a dire need for advocacy and for recognition and awareness of the high prevalence of EDs within the First Nations communities [44, 46].

Three of the documents made only brief calls for further research [41, 45, 49]; however, Butterfly Foundation (2020) specifically highlighted the unique contributions that First Nations peoples with firsthand experience of EDs and negative body image can offer to prevention and service delivery [51].

The same three documents noted that EDs are highly complex and are experienced differently in each culture; considering the variety of experiences, people with lived experience, their families, and carers should be included when conducting system evaluation and development of informed, validated screening tools for different population groups in this instance First Nations people and communities [41, 45, 49].

Protective factors

Several documents noted that it is imperative that clinicians demonstrate cultural competence: appropriate

knowledge, skills, and attitudes when working with First Nations peoples with EDs [38, 41, 44, 46]. With a First Nations patient, the approach to care should be informed by “...an understanding of their history and culture even though there is little written about specific approaches to treatment for those who suffer from an eating disorder.” (p. 08) [38]. NEDC (2023) makes specific recommendations for bolstering protective factors across multiple contexts, including community development, family support, education, workplaces, sport and social media [45]. The document goes on to describe specific protective factors for First Nations peoples;

“Protective factors for Aboriginal and Torres Strait Islander social and emotional wellbeing includes factors such as connection to body (e.g., through access to culturally safe, culturally competent and effective health services and professionals); connection to mind and emotions (e.g., strong identity); connection to family and kinship (e.g., culturally appropriate family-focused programs and services); connection to community (e.g., support networks); connection to culture (e.g., cultural involvement and participation); connection to country (e.g., time spent on country); and connection to spirituality and ancestors (e.g., contemporary expressions of spirituality).” (p.94) [45].

NEDC (2023) highlights the need to consider that different cultures and individuals within have different levels of exposure to protective and risk factors, some risk factors include “interruptions to traditional food systems; racism; trauma; absence

of family members; disconnection from community; services that are not culturally safe; restrictions on access to country; and lack of connection to the spiritual dimension of life.” (p.93) [45].

Discussion

This discussion includes consideration of the research gap, interruptions to SEWB and other key issues emerging from our analysis of the policies in this review, incorporating evidence from the wider literature particularly as it relates to these themes.

The research and evidence gap

With the continuation of the health and life expectancy Gap between First Nations peoples and other Australians, it is of concern that the research on EDs in the First Nations population is lacking and has been lacking for years, particularly considering the impact EDs can have on other areas of health, and their high suicidality and mortality rates. Furthermore, almost a decade of Australian health policy documents refers to this significant gap in the research, yet little appears to have progressed to date. Figure 4 shows a timeline of calls for further research in key guidelines and policy documents, spanning 2014 to 2023.

One reason often used to explain why there is a lack of focus on EDs within the First Nations population is the assumption that other leading causes of mortality are of more pressing concern. Indeed, the leading five causes of mortality in the 5-year period 2015–2019 were; (a) cancer and other neoplasms (23%); (b) circulatory diseases

Timeline of calls for further research

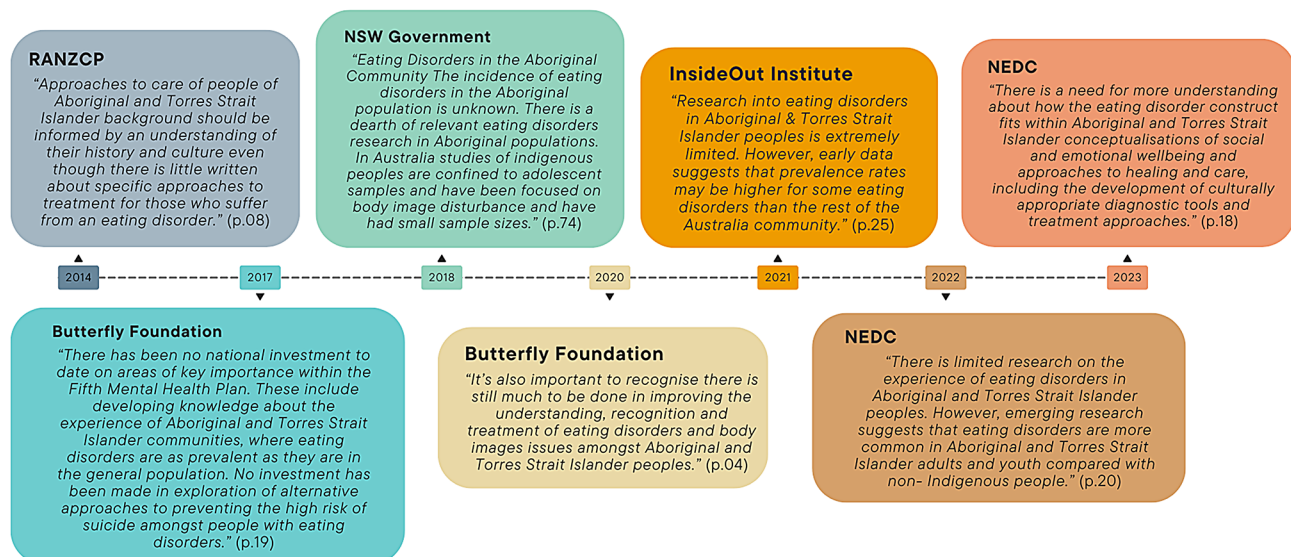


Fig. 4 Timeline of calls for further research

(23%); (c) injury and poisoning (15%); (d) respiratory disease (10%); (e) endocrine, metabolic and nutritional disorders (9%) [56]. Australian Institute of Health and Welfare (2024) reported 36% of the First Nations population reported having a current mental health condition, with anxiety being 16.5%, depression 13.3%, and behavioural or emotional problems at 9.3% [57]. While the prevalence of these mental health conditions is known and concerning, this does not negate the importance of also understanding how EDs affect the First Nations population, particularly as EDs are associated with elevated suicide rates [58, 59].

While important research, including First Nations-led research, has been done in relation to EDs among First Nations people over the past 20+ years, the number of papers and studies is few, and their combined scope remains limited. Existing studies have focused on prevalence of disordered eating and eating disorders among First Nations people, how this compares to the general Australian population, and how ED or disordered eating are expressed among Indigenous populations (including Australian and international examples) [9, 10, 60–64]. This work is important in beginning to understand the scale and nature of the problem – these studies have shown that disordered eating and eating disorders do affect First Nations people and communities at rates equal to or higher than the general Australian population and that they may experience different risk patterns. However, as this review has found, there remains very little clarity or guidance around how to prevent or respond to disordered eating or eating disorders among First Nations people and communities. In the absence of such guidance, both First Nations and non-Indigenous health workers and practitioners may have difficulty in providing safe and effective responses to eating disorders among their First Nations clients [65]. This would likely impact negatively upon First Nations people's access to and experience of eating disorder care [66, 67], contributing to delayed, missed or mis-diagnosis [68, 69], longer course of illness and greater physical and mental health complications [4, 70, 71]. The authors also note a small group of studies looking at media influence on First Nations young people's body image [60, 61, 64], however, these were conducted 20 years ago, and the media landscape has significantly changed since that time. To our knowledge, there have been no recent studies along this line of inquiry.

Interruptions to social and emotional wellbeing

First Nations people's and non-Indigenous Australians' life expectancy gap has been estimated to be 8.8 years for males and 8.1 years for females [72].

Six of the included documents in this review discussed First Nations peoples from rural and remote areas are

impacted by food insecurity [39–41, 46, 47, 51]. Where others report there is a lack of accessibility and affordability of healthcare and transportation [41, 46, 47]. Our analysis identified the social and cultural determinants of health as a key theme. The World Health Organization (n.d) defines social determinants being non-medical factors that influence health outcomes [73]. The Australian Institute of Health and Welfare (2024) states that the gap between First Nations peoples and non-Indigenous Australians is broken down into 2 groups: social determinants of health (35%, 5 factors) and health risk factors (30%, 6 factors), with a 20% overlap between them, leaving 35% to be unexplained.

Colonisation has severely disrupted First Nations communities' SEWB, and factors not limited to society, culture, and economy. The Royal Commission into Victoria's Mental Health System (2022) describes that First Nations peoples were "... subjected to a range of injustices, including mass killings or being displaced from their traditional lands and relocated on missions and reserves in the name of protection. For Aboriginal and Torres Strait Islander people, colonisation meant massacre, violence, disease and loss." (p.1–2) [39, 74]. EDs are one group of negative health effects of ongoing colonisation, which affect First Nations people in unique ways owing to intergenerational trauma and disconnection from Country, culture, and traditional food systems, which are not experienced in the same way by other Australians [39, 41, 47, 51, 74, 75]. An understanding of First Nations peoples' culture and what the community barriers are, such as food insecurity, lower literacy levels, shame, accessibility, and affordability, could be the first step towards helping First Nations peoples with EDs [38, 41, 44–47, 51].

With this knowledge, and with reference to the holistic health framework of SEWB for First Nations peoples [76] (Fig. 5) we hypothesise that the continuing effects of colonisation led to a loss of connection to the SEWB domains, particularly to spirit, country and culture, which could be a key factor in increased ED risk among First Nations peoples.

Food (In)security

The prevalence of food insecurity in Australia was studied by McKay (2019), which placed food insecurity in the range from 20% of First Nations peoples in Victoria to 76% of First Nations peoples in remote communities [77]. A recent study by Sherriff, S. (2022) on *Murradambirra Dhangaang* (make food secure) within First Nations communities identified five core themes underpinning food insecurity: (a) trapped in financial disadvantage; (b) gaps in the local food system; (c) limitations of non-Aboriginal food relief organisations; (d) on-going impacts of colonisation; (e) maintaining family, cultural and community commitments and responsibilities [78]. This study, along

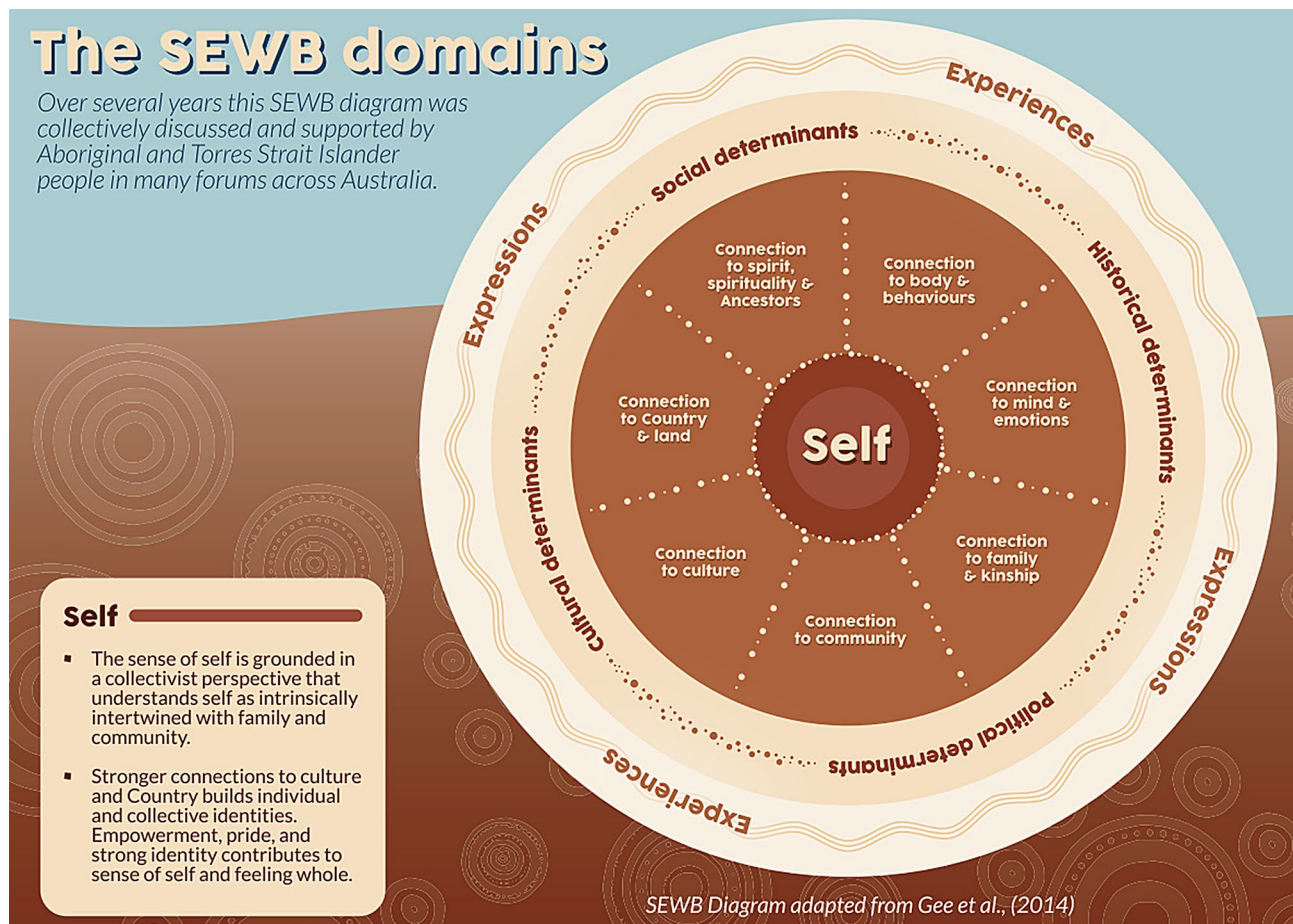


Fig. 5 SEWB Diagram from Transforming Indigenous Mental Health and Wellbeing (n.d) [76].

with data from the Australian Institute of Health and Welfare (2024) suggests that 40% of First Nations adults “...were living in households that had experienced days without money for basic living expenses, such as for food, clothing and bills...” (para. 6) and shows how acute issues in relation to food access and security can be among the First Nations population.

Food insecurity increases the risk of EDs [12], and this more than doubles the risk of binge-type EDs in cases of severe food insecurity [12]. Due to the significant health disparities between First Nations peoples and non-Indigenous Australians, and ongoing issues of food insecurity being linked to the lack of affordability and a range of structural factors, future research in this area ought to look at the specific experiences of First Nations peoples in Australia in relation to food insecurity and ED risk. Additionally, this research should focus on some of the unique aspects of First Nations culture, which may act as protective factors, as well as post-colonial effects that contribute to risk factors or their root causes.

Possible drivers of EDs

The possible drivers of EDs identified in the review include (1) socioeconomic and healthcare system factors, (2) historical factors, and (3) protective factors. Research deficit seems to play a major role in the content found in the included documents, particularly the scant practical guidance for First Nations people experiencing ED, their carers (where applicable), community, or the workers who support them (whether First Nations or non-Indigenous). While some documents included recommendations for future research and some guidance for health professionals, most did not comment on the subject. That is, documents may have noted the importance of cultural competency or of engaging with Aboriginal Health Workers but not provided guidance on how to do this in the context of ED prevention and management.

At present, the area is severely under-researched, though the important works that have been undertaken to date, as well as further research that is expected to emerge as part of The Australian Eating Disorders Research and Translation Centre project to establish an Aboriginal and Torres Strait Islander Eating Disorder Research Strategy. Whilst further research to close

Table 4 Summary of data from included documents**Summary of practice recommendations**

- Understand potential barriers First Nations peoples may face to help choose the correct ED management pathway, such as food insecurity, financial barriers, geographic barriers, etc. [38–41]. Work with the person and their chosen family or community members to devise a pathway that will be feasible for them [40–42].
- Use a holistic approach [41, 44]. Models of First Nations health, such as the Social and Emotional Wellbeing framework, show how interconnected all dimensions of health and wellbeing are for First Nations peoples [45]. Make time to understand the whole picture of the person rather than ‘siloining’ your area of practice [38].
- Avoid language that can potentially induce shame within the person’s community – it can be better to talk about feelings and behaviours rather than labels [41].
- Ensure all approaches to care are trauma-sensitive and informed [41, 46]. Consider the possible traumatic experiences that a First Nations person may have been more likely to have endured than the general population (e.g. forced removal, placement in Out of Home Care, incarceration, family violence) and ensure you work in ways that are sensitive to triggers that may exist for the person [41, 46, 47].
- Customise models and treatments to ensure they are relevant and culturally appropriate to First Nations peoples [38, 45–47]. This might include integrating a SEWB framework into your practice, working alongside a SEWB worker, engaging with Elders or other community members, and using Clinical Yarning methods [41, 45].
- Customise/tailor current treatment and communications approaches to accommodate their culturally diverse needs, resources, and expectations [41, 45, 46, 48]. This might include engaging with Elders and other community members, working with translators and interpreters, producing bespoke resources, and finding ways to support the person to engage with cultural practice [39, 44, 48].
- Practice cultural reflexivity [38, 41]. This involves understanding that First Nations people’s ways of knowing, being and doing may differ from your own and that neither is inherently superior. Seek out learning and professional development opportunities to deepen your skills and understanding in this area [41].
- Broaden your perspective of what constitutes a First Nations person’s support system, which may often involve input from Elders, community members, extended family, and friends [41, 43]. It is also important to explore the role of Traditional Healers and bush medicine [41].
- Refrain from clinical language and overreliance on health literature [41]. Be aware that some Indigenous people have lower literacy levels or speak English as a second, third, fourth or fifth language [41].
- Upskill in how to use a Clinical Yarning approach [41].
- Understand that shame experienced by some people with disordered eating behaviours varies across cultures, and a tailored understanding of shame in the context of First Nations peoples is necessary [41, 44].
- Recognise that standard nutrition guidance may not be suitable for First Nations peoples who are accustomed to living off the country or are experiencing high rates of food insecurity [39–41]. In these cases, work with the person and their community to understand what would be helpful and feasible [41].
- Approaches to care of people of First Nations background should be informed by an understanding of their history and culture [38, 39, 41, 45].
- Include people with lived experience, their families, and carers in system and service evaluation and development [41, 49].

Policy & Structural Recommendations

Work on structural change and workforce development needs to be informed by a framework that factors in key areas, including health outcomes in the First Nations population; inter-relation, historical, social, cultural, economic, environmental, and mental and health risk factors that impact the social and emotional wellbeing [46].

- Identify and support culturally appropriate eating disorders service points, pathways, and partnerships [41, 45, 46].
- Promotion of epistemic and cultural humility – integrate these concepts into health professional curricula as well as continuous professional development [45].
- Engage in genuine and co-design with Aboriginal leaders, communities, and culturally aligned NGOs, including adequate resourcing [45–46].
- Recognition of the importance of self-determination and ensuring interventions are community-led [44].
- Reduction and recognition of barriers to First Nations peoples accessing ED support, such as food insecurity and economic factors [39, 40]. An example could be combating the lack of workers in rural and remote areas by extending the scope of practice of existing trusted rural health professionals [47].
- Training to be provided to the ED workforce in; (a) Cultural safety [41, 42, 45, 47, 50]; (b) Social and emotional wellbeing [39, 41, 45–48, 51]; (c) Clinical yarning [41]; (d) Cultural competence [38, 41, 42, 44, 47, 51, 52]; (e) Culturally informed practice [38, 41, 45–47, 53].

the ED prevention and management gap is developing, Table 4 includes several practical suggestions that may guide researchers, health practitioners, and policymakers to support First Nations peoples with or at risk of eating disorders.

Conclusion

Many of the documents included in this review discussed possible drivers of EDs within First Nations communities, the lack of research and evidence-based resources to support the identification, treatment, management, and prevention of EDs; a select few also discussed potential

actionable items to help guide future research or to help health professionals when providing assistance to First Nations peoples.

Abbreviations

EDs / ED	Eating disorder/s
SEWB	Social and emotional wellbeing
RTA	Reflexive Thematic Analysis
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses, Extension for Scoping Reviews
VACCHO	Victorian Aboriginal Community Controlled Health Organisation
TAC	Tasmanian Aboriginal Centre
QAIHC	Queensland Aboriginal and Islander Health Council
CAAC	Central Australian Aboriginal Congress

AMSANT	Aboriginal Medical Services Alliance Northern Territory
AHCSA	Aboriginal Health Council of South Australia
AH&MRC	Aboriginal Health and Medical Research Council
RANZCPL	The Royal Australian and New Zealand College of Psychiatrists
NAATSIHWP	National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners
IAHA	Indigenous Allied Health Australia
CATSINaM	Congress of Aboriginal and Torres Strait Islander Nurses and Midwives
AIPA	Australian Indigenous Psychologists Association
AIDA	Australian Indigenous Doctors' Association
INAHTA	International Network of Agencies for Health Technology Assessment
AEDRTC	Australian Eating Disorders Research and Translation Centre
GIN	Guidelines International Network
APO	Analysis & Policy Observatory
NACCHO	National Aboriginal Community Controlled Health Organisation
AiHW	Australian Institute of Health and Welfare
Ahpra	Australian Health Practitioner Regulation Agency
QLD	Queensland
ACT	Australian Capital Territory
WA	Western Australia
NSW	New South Wales
NT	Northern Territory
SA	South Australia
TAS	Tasmania
VIC	Victoria
QuEDS	Queensland Eating Disorder Service
NEDC	National Eating Disorders Collaboration
WAEDOCS	WA Eating Disorders Outreach and Consultation Service
EDV	Eating Disorders Victoria
EDQ	Eating Disorders Queensland
EDNA	Eating Disorders Neurodiversity Australia
CYMHS EDP	Child and Youth Mental Health Eating Disorder Program
CEED	Centre of Excellence in Eating Disorders
ANZAED	Australian and New Zealand Academy of Eating Disorders
OSFED	Other specified feeding or eating disorder

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The authors declare no competing interests.

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References

- Keski-Rahkonen YSaA. Worldwide prevalence of DSM-5 eating disorders among young people. *Curr Opin Psychiatry*. 2022;35(6):362–71.
- Lindvall Dahlgren C, Wisting L, Rø Ø. Feeding and eating disorders in the DSM-5 era: a systematic review of prevalence rates in non-clinical male and female samples. *J Eat Disord*. 2017;5:56.
- Hay P, et al. Epidemiology of eating disorders: population, prevalence, disease burden and quality of life informing public policy in Australia—a rapid review. *J Eat Disord*. 2023;11(1):23.
- Foundation B. *Paying the Price: The economic and social impact of eating disorders in Australia*. 2024.
- Hay P. Current approach to eating disorders: a clinical update. *Intern Med J*. 2020;50(1):24–9.
- Heruc G, et al. ANZAED eating disorder treatment principles and general clinical practice and training standards. *J Eat Disorders*. 2020;8(1):63.
- Hay PJ, Carriage C. Eating disorder features in Indigenous mental health professionals providing eating disorder treatment. *J Eat Disorders*. 2020;8(1):58.
- Adam Burt DM, Kerrie Doyle & Phillipa Hay, *Eating disorders amongst aboriginal and Torres Strait Islander Australians: a scoping review*. *J Eat Disorders*. 2020;8(1):1–73.
- Adam Burt HM, Touyz S, Phillipa Hay, *Prevalence of DSM-5 diagnostic threshold eating disorders and features amongst aboriginal and Torres Strait Islander peoples (First Australians)*. *BMC Psychiatry*. 2020;20(1):449.
- Hay PJ, Carriage C. Eating disorder features in Indigenous aboriginal and Torres Strait Islander Australian peoples. *BMC Public Health*. 2012;12(1):233.
- Australian Institute of Health and Welfare and National Indigenous Australians Agency. *Measure 2.19 Dietary behaviour, Aboriginal and Torres Strait Islander Health Performance Framework website*. 2020.
- Hazzard VM, et al. Food insecurity and eating disorders: a review of emerging evidence. *Curr Psychiatry Rep*. 2020;22(12):74.
- Backholm K, Isomaa R, Birgegård A. The prevalence and impact of trauma history in eating disorder patients. *Eur J Psychotraumatology*. 2013;4(1):22482.
- Kong S, Bernstein K. Childhood trauma as a predictor of eating psychopathology and its mediating variables in patients with eating disorders. *J Clin Nurs*. 2009;18(13):1897–907.
- Convertino AD, Morland LA, Blashill AJ. Trauma exposure and eating disorders: results from a united States nationally representative sample. *Int J Eat Disord*. 2022;55(8):1079–89.
- Krieg A. The experience of collective trauma in Australian Indigenous communities. *Australasian Psychiatry*. 2009;17(sup1):S28–32.
- Coker Ross C. An integrative approach to Understanding and treating disordered eating in African American women. *Treating black women with eating disorders: A clinician's guide*. New York, NY, US: Routledge/Taylor & Francis Group; 2021. pp. 88–102.
- Menzies K. Understanding the Australian aboriginal experience of collective, historical and intergenerational trauma. *Int Social Work*. 2019;62(6):1522–34.
- McCuen-Wurst C, Ruggieri M, Allison KC. Disordered eating and obesity: associations between binge-eating disorder, night-eating syndrome, and weight-related comorbidities. Volume 1411. *Annals of the New York Academy of Sciences*; 2018. pp. 96–105. 1.
- Winston AP. Eating disorders and diabetes. *Curr Diab Rep*. 2020;20(8):32.
- Ranka Konatar et al. *Chronic Non-Communicable Diseases Caused by Adolescent Eating Disorders*. Sanamed, 2024.
- Samantha Burrow, Ride K. *Review of diabetes among Aboriginal and Torres Strait Islander people*, in *Australian Indigenous HealthInfoNet*. 2016.
- Sarnyai Z, Berger M, Jawan I. Allostatic load mediates the impact of stress and trauma on physical and mental health in Indigenous Australians. *Australasian Psychiatry*. 2015;24(1):72–5.

24. Nolan-Isles D, et al. Enablers and barriers to accessing healthcare services for aboriginal people in new South Wales, Australia. *Int J Environ Res Public Health*. 2021;18(6):3014.
25. Nilson C. A journey toward cultural competence: the role of researcher reflexivity in Indigenous research. *J Transcult Nurs*. 2017;28(2):119–27.
26. Alvesson M, Skoldberg K. *Reflexive methodology: New vistas for qualitative research*. 2017.
27. Tricco AC, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med*. 2018;169(7):467–73.
28. Alana Gall TLB, Lawler S, Garvey G. Traditional, complementary and integrative medicine use among Indigenous peoples with diabetes in Australia, Canada, new Zealand and the united States. *Aust N Z J Public Health*. 2021;45(6):664–71.
29. O'Malley HAL. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*. 2005;8(1):19–32.
30. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative Res Sport Exerc Health*. 2019;11(4):589–97.
31. Gall A, et al. First Peoples' cultural medicines: A review of Australian health policies using an Indigenous critical discourse analysis approach. *First Nations Health Wellbeing- Lowitja J*. 2025;3:100046. <https://www.sciencedirect.com/science/article/pii/S294984062500004X>
32. Garvey G, et al. The fabric of aboriginal and Torres Strait Islander wellbeing: A conceptual model. *Int J Environ Res Public Health*. 2021;18(15):7745.
33. Gall A, Gall A. Protecting Kanalaritja. *Gems & jewellery*. The Gemmological Association of Great Britain; 2023. pp. 40–3.
34. Michelle Kennedy RM, Booth K, Maidment S. Catherine Chamberlain & Dawn Bessarab, *Decolonising qualitative research with respectful, reciprocal, and responsible research practice: a narrative review of the application of Yarning method in qualitative Aboriginal and Torres Strait Islander health research*. *International Journal for Equity in Health*. 2022. 21(134).
35. Shay M. Extending the yarning yarn: collaborative yarning methodology for ethical indigenist education research. *Australian J Indigenous Educ*. 2019;50(1):62–70.
36. Bat ROM. Both-ways: the philosophy. *Ngoonjook: J Australian Indigenous Issues*. 2007;31:64–86.
37. Lockwood C, Munn Z, Porritt K. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *Int J Evid Based Healthc*. 2015;13(3):179–87.
38. Hay P, Chinn D, Forbes D, Madden S, Newton R, Sugenor L, Touyz S, Ward W. Royal Australian and new Zealand college of psychiatrists clinical practice guidelines for the treatment of eating disorders. *Aust N Z J Psychiatry*. 2014;48(11):1–62.
39. Victoria Women's H. *Serving up inequality: How sex and gender impact women's relationship with food*. 2017.
40. National Eating Disorders Collaboration. *Eating disorders and the dietitian: Decision-making tool for adults experiencing an eating disorder*. 2020.
41. National Eating Disorders Collaboration. *Management of eating disorders of people with higher weight: clinical practice guidelines*. 2022.
42. Cobbaert L, Rose A. *Eating disorders and neurodivergence: A stepped care approach*. 2023.
43. NSW Ministry of Health. *NSW Eating Disorders Toolkit: A practice-based guide to the inpatient management of children and adolescents with eating disorders*. 2018.
44. Butterfly, Foundation. *Social Inclusion Toolkit*. 2019.
45. National Eating Disorders Collaboration. *National Eating Disorders Strategy 2023–2033*. 2023.
46. NSW Ministry of Health. *NSW service plan for people with eating disorders 2021–2025*. 2021.
47. State of Victoria. Final report: promoting inclusion and addressing inequities. R.C.: M.H. System, Editor; 2021. R.C.i.V.s.M.H. System.
48. InsideOut, Institute. *Australian Eating Disorders Research & Translation Strategy 2021–2031*. 2021.
49. Butterfly, Foundation. *National agenda for eating disorder 2017 to 2022: establishing a baseline of evidence-based care for any Australian with or at risk of an eating disorder*. 2017.
50. Butterfly, Foundation. *Annual report 2022–2023*. 2022.
51. Butterfly, Foundation. *Reconciliation action plan: August 2020 – august 2021*. 2020.
52. Butterfly, Foundation. *EveryBODY is deadly: body image and eating disorders factsheet*.
53. Health ACT. *Territory-wide Model of Care for Eating Disorders*. 2022.
54. Kennedy A, et al. Indigenous strengths-based approaches to healthcare and health professions education - Recognising the value of elders' teachings. *Health Educ J*. 2022;81(4):423–38.
55. Eating Disorders QLD. *Understanding eating disorders*. 2021.
56. Australian Institute of Health and Welfare and National Indigenous Australians Agency. Measure 1.23 Leading causes of mortality, Aboriginal and Torres Strait Islander Health Performance Framework website. 2022; Available from: <https://www.indigenoushpf.gov.au/measures/1-23-leading-causes-mortality>
57. Australian Institute of Health and Welfare. *Mental Health*. 2023 23.04.2024; Available from: <https://www.indigenoushmshpc.gov.au/topics/mental-health#aboutthistopic>
58. Amiri S, Khan MAB. Prevalence of non-suicidal self-injury, suicidal ideation, suicide attempts, suicide mortality in eating disorders: a systematic review and meta-analysis. *Eat Disord*. 2023;31(5):487–525.
59. Miskovic-Wheatley J, et al. Eating disorder outcomes: findings from a rapid review of over a decade of research. *J Eat Disorders*. 2023;11(1):85.
60. Cinelli RL, O'Dea JA. Body image and obesity among Australian adolescents from Indigenous and Anglo-European backgrounds: implications for health promotion and obesity prevention among aboriginal youth. *Health Educ Res*. 2009;24(6):1059–68.
61. Mellor D, et al. Body image importance and body dissatisfaction among Indigenous Australian adolescents. *Body Image*. 2004;1(3):289–97.
62. Mitchison D et al. *Eating Disorders in Indigenous Peoples*, in *Eating Disorders: An International Comprehensive View*, P. Robinson, Editors. 2023, Springer International Publishing: Cham. pp. 1–45.
63. Mulders-Jones B, et al. Socioeconomic correlates of eating disorder symptoms in an Australian population-based sample. *PLoS ONE*. 2017;12(1):e0170603–0170603.
64. Ricciardelli LA, et al. Sociocultural influences on body image concerns and body change strategies among Indigenous and Non-Indigenous Australian adolescent girls and boys. *Sex Roles*. 2004;51(11):731–41.
65. Gall A, Smith H, Gall Z. First nations perspectives: strengthening the eating disorder safe principles. *National Eating Disorders Collaboration*; 2024.
66. Sinha S, Warfa N. Treatment of eating disorders among ethnic minorities in Western settings: a systematic review. *Psychiatr Danub*. 2013;25(Suppl 2):S295–9.
67. Gilbert SC. Eating disorders in women of color. *Clin Psychol Sci Pract*. 2003;10(4):444–55.
68. Gordon KH, et al. The impact of client race on clinician detection of eating disorders. *Behav Ther*. 2006;37(4):319–25.
69. Becker AE, et al. A qualitative study of perceived social barriers to care for eating disorders: perspectives from ethnically diverse health care consumers. *Int J Eat Disord*. 2010;43(7):633–47.
70. Austin A, et al. Duration of untreated eating disorder and relationship to outcomes: A systematic review of the literature. *Eur Eat Disorders Rev*. 2021;29(3):329–45.
71. Eielens HP, et al. The 17-year outcome of 62 adult patients with longstanding eating disorders—A prospective study. *Int J Eat Disord*. 2021;54(5):841–50.
72. Australian Institute of Health and Welfare. *Aboriginal and Torres Strait Islander Health Performance Framework: summary report march 2024*. 2024.
73. World Health Organization. *Social determinants of health*. n.d [cited 2024 May]; Available from: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1
74. Victorian Public Sector Commission. *Aboriginal and Torres Strait Islander culture and history: Aboriginal and Torres Strait Islander people have a shared history of colonisation and forced removal of their children*. 2022; Available from: <https://vpvc.vic.gov.au/workforce-programs/aboriginal-cultural-capability-toolkit/aboriginal-culture-and-history/#:~:text=Aboriginal%20and%20Torres%20Strait%20Islander%20people%20were%20subjected%20to%20a,and%20subsequently%20many%20were%20lost>
75. Swan P, Raphael B. *National Aboriginal and Torres Strait Islander mental health policy: National consultancy report*. 2023.
76. Transforming Indigenous Mental Health and Wellbeing. *Fact sheet: social and emotional wellbeing*.
77. McKay FH, Haines BC, Dunn M. Measuring and Understanding food insecurity in Australia: A systematic review. *Int J Environ Res Public Health*. 2019;16(3):476.

78. Simone Sherriff DK, Tong A, Naqvi N, Nixon J, Eades S, Ingram T, Slater K, Dickson M, Lee A, Muthayya S. Murrumbidgee Dhangaang (make food secure): aboriginal community and stakeholder perspectives on food insecurity in urban and regional Australia. *BMC Public Health*, 2022. 22(1066).

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