







A systematic search and narrative review of Aboriginal and Torres Strait Islander women and men pelvic health care: demonstrated need for improvement

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Received: 7 September 2023
Accepted: 30 November 2023
Published: 8 January 2024

Cite this:

Wise EM et al. (2024)
Australian Journal of Primary Health 30,
PY23167.
doi:[10.1071/PY23167](https://doi.org/10.1071/PY23167)

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ABSTRACT

Warning. This article contains terms, descriptions and opinions that may be culturally sensitive for Aboriginal and Torres Strait Islander peoples.

Background. Pelvic health conditions among Aboriginal and Torres Strait Islander women and men are under-recognised and under-reported despite indication of the significant burden of these conditions. Access to effective management provided in a culturally safe manner appears lacking. The study aims were to: (1) summarise the burden of pelvic health conditions among Aboriginal and Torres Strait Islander peoples; (2) explore barriers and enablers to Aboriginal and Torres Strait Islander peoples accessing pelvic healthcare services; and (3) provide considerations on how to implement culturally safe pelvic healthcare services for Aboriginal and Torres Strait Islander peoples. **Methods.** This study involved a systematic literature search informing a narrative review. **Results.** Fourteen specific articles were identified. Burden related to pelvic health conditions was identified for both women and men, noting high likelihood of under-reporting. Barriers to effective culturally safe treatment included racism, shame and stigma associated with women's and men's business, lack of culturally safe services and geographical distance. Enablers included building trust with local communities, using yarning principles and codesign of pelvic health services with Aboriginal health workers and services. Strategies to improve pelvic health care for Aboriginal and Torres Strait Islander peoples were described at the systems, health service and clinician levels. **Conclusion.** Efforts are needed to improve the diagnosis and management of pelvic health conditions for Aboriginal and Torres Strait Islander peoples. Actions are required to engage with local Aboriginal Community Controlled Aboriginal Community Controlled Health Organisations, professionals overseeing service provision and healthcare providers to address the burden of these conditions among Aboriginal and Torres Strait Islander peoples.

Keywords: Aboriginal, barriers, burden, enablers, models of care, pelvic floor, pelvic health, women's health.

Introduction

Aboriginal and Torres Strait Islander peoples have the right to lead healthy lives ([National Congress of Australia's First Peoples 2009](#)). However, poor health outcomes and challenges in accessing health care compared to their non-Aboriginal counterparts have been widely reported ([Australian Institute of Health and Welfare 2015](#)). Social and cultural determinants of health including the ongoing effects of colonisation, institutionalised racism and marginalisation contribute to these inequities ([Department of Health 2018](#)). It is probable that these issues exist for pelvic health conditions ([Table 1](#)). There are indications that pelvic health conditions among Aboriginal and Torres Strait Islander peoples are currently under-reported and under-recognised ([Clarke et al. 2021](#)).

Table 1. Pelvic health conditions.

| Condition | Description | Specific conditions and symptoms |
|---------------------------------|---|---|
| Bladder disorders | A group of conditions that affect the bladder and its ability to store and release urine. | Stress urinary incontinence, urge urinary incontinence, urinary urgency, urinary frequency, overactive bladder, interstitial cystitis, urinary retention, nocturia, and bladder overdistension. |
| Bowel dysfunction | A group of conditions characterised by difficulty with bowel movements. | Constipation, faecal incontinence, faecal urgency, pelvic floor dyssynergia, and pelvic floor muscle dysfunction. |
| Endometriosis | A condition where growth of uterine-like tissue is present outside the uterus. | Symptoms include pelvic pain, dysmenorrhea, pelvic floor muscle dysfunction, dyspareunia, heavy or irregular menstrual bleeding, infertility, gastrointestinal symptoms, bladder symptoms, and fatigue. |
| Pelvic cancer | Cancer within the pelvic region. | Bladder, prostate, uterine, cervical, ovarian, colorectal, vulval, and testicular cancer. Symptoms such as pain, pelvic floor muscle dysfunction, bladder, bowel, and sexual dysfunction are common. |
| Perinatal injury | Injury sustained during pregnancy, childbirth, or gynaecological procedures in the perinatal period. | Injuries to the bladder, pelvic floor, perineal tears, or cuts (episiotomy), obstetric anal sphincter injuries, and nerve damage. |
| Pelvic pain | Pain in the lower abdominal or pelvic region. | Endometriosis, ovarian cysts, prostatitis, bladder or bowel issues, musculoskeletal conditions, pelvic floor muscle dysfunction and trauma can cause or contribute to pelvic pain. |
| Pelvic floor muscle dysfunction | A condition where the pelvic floor muscles are not functioning optimally. | Pelvic floor muscle hypo- or hypertonicity, strength, timing, and coordination issues. It can occur as a result of factors such as pregnancy, childbirth, surgery, trauma, menopause, and aging. Symptoms can include urinary or faecal incontinence, urinary urgency, frequency or retention, and pelvic pain. |
| Pelvic inflammatory disease | Inflammation and infection in a woman's reproductive organs caused by bacteria usually from untreated sexually transmissible infections (STIs). | Symptoms may include pelvic pain, dyspareunia, unusual vaginal discharge, fertility issues, and pain with urination. |
| Pelvic organ prolapse | A condition where one or more of the pelvic organs move from their normal position into the vagina, rectum, or anus. | Uterine prolapse, cystocele, rectocele, enterocele, and vaginal vault prolapse. Symptoms can include pressure or heaviness in the vagina, pain or discomfort with sex or physical activity and bladder and bowel dysfunction. |
| Polycystic ovarian syndrome | Hormonal disorder of the ovaries characterised by irregular or absent periods, increased androgens, and sometimes cystic ovaries. | Symptoms may include infertility, irregular or absent menstrual cycles, acne, hirsutism, and metabolic features such as obesity and diabetes. |
| Sexual dysfunction | A group of conditions characterised by difficulty with sexual function. | Difficulty with arousal or orgasm, erectile dysfunction, pain during intercourse/dyspareunia, vaginismus, and vulvodynia. |

Please note that this table provides a general overview and is not an exhaustive list of all pelvic health conditions. These conditions can often overlap, and patients might experience multiple conditions simultaneously.

Challenges with access to culturally safe, cost-effective, first-line management options such as physiotherapy and pelvic floor muscle training are likely to contribute to an amplified burden of pelvic health conditions for Aboriginal and Torres Strait Islander peoples (Clarke *et al.* 2021; Milroy *et al.* 2022). The burden might be addressed through the implementation of culturally safe models of pelvic health care. Cultural safety ensures that voices of Aboriginal and Torres Strait Islander people are heard, concerns are addressed, outcomes are achieved, and misdiagnosis is prevented (Milligan *et al.* 2021; McGough *et al.* 2022). Currently, there is limited guidance on what culturally safe pelvic health care for Aboriginal and Torres Strait Islander peoples should look like (Bonner and Boyle 2017). Real

opportunity exists to improve pelvic health care by working in partnership with Aboriginal Community Controlled Health Organisations (ACCHOs) to identify and implement culturally safe approaches and treatment regimes.

Aims

The aims of this narrative review were to: (1) investigate the need for conservative pelvic health care among Aboriginal and Torres Strait Islander peoples by summarising the burden of pelvic health conditions and access to pelvic health services; (2) explore barriers and enablers to Aboriginal and Torres Strait Islander peoples accessing pelvic health

services in primary care, outpatient and community settings; and (3) discuss considerations on how to implement culturally safe pelvic healthcare services for Aboriginal and Torres Strait Islander peoples.

Research cultural considerations and approach

The project was conducted in accordance with the core ethical values outlined by the National Health and Medical Research Council, encouraging respect for the shared values and relevance to the needs and aspirations of the Aboriginal and Torres Strait Islander peoples (National Health Medical Research Council 2018). Our team included both Aboriginal and non-Aboriginal members with combined expertise in culturally safe ways of working, Aboriginal and Torres Strait Islander health and research methodologies, model of care and policy development, and management of pelvic health. As part of the research process, the team engaged in an ongoing process of cultural development, which included discussion particularly focused on understanding the underlying social and cultural determinants of the health gap and in the actualisation of Women's and Men's Business (Maher 1999). We had both women and men in the team. Through an iterative process, we agreed it was reasonable to discuss broad concepts of pelvic health as a group. We were careful not to discuss specific elements or use terminology that might be considered intimate or specific to either Women's Business or Men's Business. Senior cultural mentorship was provided by author, MM.

Study design and methods

A systematic search with a narrative review was deemed appropriate to address the research aims, and performed with consideration of the Scale for the Assessment of Narrative Review Articles (Baethge *et al.* 2019). A librarian was consulted to refine a search strategy. Using the broad keyword search terms and concepts, 'Aboriginal', 'Australia', 'Health Service', 'Pelvic Health' and 'Cultural' (Supplementary Appendix 1), a systematic search was performed of CINAHL, Medline, Proquest, Scopus and Lowitja tool (using the PubMed database) in August 2022. Australian Indigenous HealthInfoNet database publications were searched manually utilising the keyword search terms, inclusive of grey literature. Articles were included if they were published between 2010 and August 2022, were focused on Aboriginal and Torres Strait Islander peoples and included pelvic health information around burden, outcomes, models of care, barriers and enablers, cultural safety and/or conservative management. Title and abstract screening was completed by two authors independently. Disagreements were arbitrated by a third

author. Articles retained for full-text screening were managed by the same process. Articles that met inclusion criteria had data extracted into table form (Table 2). Additional articles detailing barriers, enablers, cultural safety and models of care in other areas of Aboriginal and Torres Strait Islander health informed our discussion.

Ethics approval

Not required.

Results

After removing duplicates, 2277 articles underwent title and abstract screening, with 50 of these then undergoing full-text screening. Fourteen studies (Table 2) were finally included, dealing with pelvic health concerns and conservative management. Twelve pertained to women (eight mentioning burden, four barriers, four enablers). Three pertained to men (three mentioning burden, one barriers, nil enablers). Five pertained to clinicians (four barriers, two enablers).

Burden of pelvic health conditions in Aboriginal and Torres Strait Islander women

The burden of pelvic health conditions for women included one article reporting on pelvic inflammatory disease (Silver *et al.* 2012), one on pelvic organ prolapse (Clarke *et al.* 2021), five on incontinence (LoGiudice *et al.* 2012; Bonner and Boyle 2017; Smith *et al.* 2019; Clarke *et al.* 2021; Milroy *et al.* 2022), one on pelvic floor dysfunction (Milroy *et al.* 2022) and one on polycystic ovarian syndrome (Boyle *et al.* 2012). It should be noted that Clarke *et al.* (2021) is a narrative review focused on prolapse, incontinence and infertility in women only, and shares many of the same studies as ours. That review had a focus specifically on epidemiology, diagnosis and management, not extraction of barriers and enablers.

Investigations to diagnose pelvic inflammatory disease were undertaken infrequently and of those diagnosed, none had the recommended treatment documented (Silver *et al.* 2012). Aboriginal and Torres Strait Islander women frequently report incontinence (LoGiudice *et al.* 2012; Bonner and Boyle 2017; Smith *et al.* 2019; Clarke *et al.* 2021), with a prevalence of 32% in a larger sample from remote Western Australia (Smith *et al.* 2019). Prevalence rates were found to be likely under-reported due to reliance on self-reporting, under-reporting to primary healthcare providers and under-referral to specialist providers (Clarke *et al.* 2021). A high burden of pelvic floor dysfunction among Aboriginal and Torres Strait Islander women has been reported (Milroy *et al.* 2022). Clarke *et al.* (2021) reported that diagnosis of pelvic organ prolapse occurred in a specialist outreach program in the Northern Territory and that the most common management included

Table 2. Details of included literature.

| Reference | Study type | Participants | Study aims | Outcomes | Main theme |
|-------------------------------|---|--|---|--|----------------------|
| 1. Adams <i>et al.</i> (2013) | Mixed-methods. | Aboriginal and Torres Strait Islander men from urban, rural and remote communities in the Northern Territory and Queensland ($n = 293$ in the quantitative arm, age = 18–74 years; $n = 38$ in the qualitative arm). | Report on the prevalence and factors associated with erectile dysfunction. Document care-seeking behaviours and barriers to seeking care. | Quantitative findings: 16% of men had mild or mild-to-moderate erectile dysfunction, and 14% had moderate-to-severe erectile dysfunction, increasing prevalence with increasing age. There was an association of moderate-to-severe erectile dysfunction with residence in a remote area compared to living in an urban environment (odds ratio [OR] = 2.9; $P = 0.02$) and having a chronic condition (OR = 3.7, $P = 0.0005$). Qualitative findings: Barriers reported included silence of men around sexuality, shame, difficulties in communication, concerns with confidentiality, low self-esteem and lack of culturally appropriate services. | Burden Barriers |
| 2. Beaumont (2019) | Consumer engagement in an educational session format and contents (for pregnancy-related back/pelvic pain). | Aboriginal women in: (1) focus group ($n = 4$); and (2) support group attendees ($n = 9$) and a support person ($n = 1$) (ages not provided) from an urban hospital setting in South Australia. | Focus group feedback to reconfigure the format and contents of antenatal class material, with an additional participant providing feedback after undergoing the new sessions. | Focus group: Barriers identified included too many words on consumer documentation, need for assistance to read the admission letter, class not specific for Aboriginal women so were less likely to attend, did not know what physiotherapy was, session length was too long, women were not interested in exercising. Enablers identified were that potential participants more likely to attend if suggested by Aboriginal health workers, preferred daytime classes rather than evening, creche availability, group introduction including acknowledging which mob each attendee is from, and they were more likely to see the physio 1:1 after the group because they know the physio now. Post attendance feedback: Indicated women found the sessions useful, learning practical skills in a comfortable environment. | Barriers Enablers |
| 3. Bonner and Boyle (2017) | Retrospective clinical audit. | Aboriginal and non-Aboriginal women referred to a specialist outreach program in rural and remote Northern Territory ($n = 1426$, median age reported as 49 years, but unclear if this was the whole sample or those with urinary incontinence (range = 33–85 years)). | To review if care for urinary incontinence was consistent with guideline-based practice. | Of the 1426 referrals, 43 (3%) were for urinary incontinence, with 31/43 (72%) being Aboriginal women. The authors suggest there is potentially under-reporting of urinary incontinence in this setting. Under-referral into the multi-disciplinary team care was indicated as a potential issue. They indicate that to improve guideline concordant management of urinary incontinence for Aboriginal women, there needed to be increased community and healthcare practitioner awareness of services, improved access to and coordination of available services, and development of culturally appropriate resources. | Burden |

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Table 2. (Continued).

| Reference | Study type | Participants | Study aims | Outcomes | Main theme |
|----------------------------|---|---|--|--|----------------------|
| 4. Boyle et al. (2012) | Cross-sectional. | Aboriginal and Torres Strait Islander women living in the Darwin area of the Northern Territory ($n = 248$, median age = 31 years (interquartile range 22–38 years)). | To report the prevalence of polycystic ovarian syndrome and profile these women on associated characteristics. | Proportion of participants with polycystic ovarian syndrome (PCOS) was 15% (95% confidence interval = 11–20%). The prevalence was not associated with age. Prevalence was associated with obesity, with 30% of women with a body mass index greater than 30 kg/m ² meeting the diagnostic criteria for polycystic ovarian syndrome. | Burden |
| 5. Boyle et al. (2012) | Mixed-method study comprising a medical record audit, semi-structured interviews and focus group discussions. | Clinical audit of records for 36 women (mean age = 30 years, 75% identifying as Torres Strait Islander). Interviews performed with women attending the service ($n = 8$) (and with clinicians working at the clinic ($n = 8$)). | To review 12 months of development and operation of a clinic for polycystic ovarian syndrome in remote Northern Territory (in the Torres Strait). | 97% of women attending the clinic were overweight or obese. Care provided was broadly considered concordant with guideline-based recommendations, with 75% undergoing cardiometabolic screening, 100% undergoing emotional screening and 89% being provided lifestyle management advice. 60% attended review appointments with moderate success in goal achievement and weight loss. Barriers to entry into the program occurred with the initial presentation to the primary care provider, with the referral process itself, and with attending the appointment. Suggestions for improvement included the need for clinic resources to be appropriate in language and culture, longer consultation times and use of individual rather than group lifestyle treatment with the dietitian. Specific cultural and resource (system and individual) barriers to lifestyle change recommendations were reported. | Barriers Enablers |
| 6. Clarke et al. (2021) | Systematic search and narrative review. | 11 included studies. (Note: Five of these included studies also meet the inclusion criteria for this review, with the majority of those not included being about infertility). | Provision of a review of the literature relating to the epidemiology, diagnosis, and management of prolapse, incontinence, and infertility in Aboriginal and Torres Strait Islander women. | Prolapse: one study identified. Incontinence: five studies identified. Urinary incontinence prevalence was reported at up to 56%, although it was considered there was significant potential for under-reporting. The findings of each individual study were described in detail. The authors call for the vital need to understand the epidemiology of the included conditions in more detail, plus the need for the development of culturally appropriate assessment and management resources that are accessible. | Burden |
| 7. LoGiudice et al. (2012) | Cross-sectional. | Aboriginal men and women living in communities in remote Western Australia ($n = 363$, age >45 years). | To establish the prevalence of falls, urinary incontinence and pain. | Urinary incontinence was reported by 31 people (9%). The odds of urinary incontinence were higher among people with epilepsy, stroke and poor mobility. | Burden |

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Table 2. (Continued).

| Reference | Study type | Participants | Study aims | Outcomes | Main theme |
|---|--|--|--|---|--------------------------------|
| 8. Marcusson-Rababi et al. (2019) | Qualitative. | Aboriginal and Torres Strait Islander women ($n = 8$, mean age = 52 years (range 33–68 years)) and cancer care-providers ($n = 18$) from a tertiary hospital in Queensland. | Explore the experiences of gynaecological cancer care. | Participants' experiences of gynaecological cancer were grouped into four themes. (1) Navigating the system: - delayed diagnosis leads to poorer outcomes, - access to services required support from staff and infrastructure to counteract for distance to access services, - patients wanted support, flexibility, contact and follow up, - Aboriginal liaison officer was helpful. (2) Coping with treatment demands: - a lack of financial support, social work services and accommodation led to stress and anxiety, and moving from community/country adds to stress. (3) Feeling welcome and safe in the hospital: - issues of trust, rapport, cultural sensitivity and respect were key determinants of patients' satisfaction with health professionals. (4) Communication and decision-making: - better delivery of bad news, use of non-medical terminology, adequate time in appointments, strategies to manage language barriers, and poor cultural competency, - patients felt a loss of autonomy, especially with a late-stage diagnosis. | Barriers |
| 9. Miller (2021) | Conference report (full conference recording available at www.youtube.com/watch?v=_76xx5a-2HhY). | Team members from an Aboriginal and Torres Strait Islander health service in urban Queensland. Clinical data reported on Aboriginal and Torres Strait Islander women people attending the clinic ($n = 166$, age >18 years). | To have an open conversation about incontinence in Aboriginal and Torres Strait Islander women, describing efforts to provide culturally safe care. | Preliminary clinical data indicated 30% of 166 people in their sample experienced incontinence episodes, with 9% experiencing several episodes per day. 70% reported an adverse effect of urinary leakage on daily activity (ranging from minor to great). The Yarning circle project of creating a Yarning cloth is a respectful and culturally appropriate way of bringing women together to discuss difficult or typically shameful topics in a way that is both enjoyable and empowering. Three forms of yarning were discussed: 'social yarn'; 'diagnostic yarn'; and 'management yarn'. | Enablers |
| 10. Milroy et al. (2022) | Mixed-methods. | Aboriginal/Torres Strait Islander women were interviewed ($n = 27$, mean age = 53 years (range 18–77 years)) attending urban Aboriginal medical service in urban New South Wales. | To explore the burden of pelvic floor dysfunction for Aboriginal and Torres Strait Islander women, the frequency of co-morbid risk factors and barriers to care. | Chronic cough and obesity were associated with higher scores on the pelvic floor impact questions. Themes identified from interviews were help-seeking behaviours, embarrassment, and normalisation of the symptoms. Also, strategies to address the issue were reported, including reports of difficulty with educational efforts, usefulness of specific pelvic floor clinics and/or pelvic floor physiotherapists; some indicating a need for financial aid, preference for a female doctor and improved continuity of care. | Burden Barriers Enablers |

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Table 2. (Continued).

| Reference | Study type | Participants | Study aims | Outcomes | Main theme |
|--------------------------------------|---|--|---|--|------------|
| 11. Silver <i>et al.</i> (2012) | Cross-sectional review of medical records. | Aboriginal women attending five primary health care centres in remote, central Australia (119 women presenting on a total of 224 occasions, median age = 25 years (interquartile range, 21–30 years). | To assess the extent and management of pelvic inflammatory disease. | Pelvic inflammatory disease was documented as the diagnosis for 35 (16%) of the 224 presentations. However, in reviewing the file notes, 95 (42%) or the presentations meet the guideline criteria for this diagnosis. Guideline-based management was not administered for any of these 95 presentations (comprising of 54 individual women). The authors' recommendations included the need for increased awareness of symptom recognition and revision of the current guidelines to reflect the reality of providing pelvic health care in remote locations. | Burden |
| 12. Smith <i>et al.</i> (2019) | Longitudinal study (Baseline collected 2004–2006; Follow-up collected 2011–2013). | Aboriginal men and women living in communities in remote Western Australia. (Baseline: $n = 363$, mean age = 61 years (standard deviation 11 years); Follow-up: $n = 184$, mean age = 65 years (standard deviation 10 years)). | To describe urinary incontinence assessment, prevalence, incidence and associated conditions in older Aboriginal Australians. | At baseline, 35% of the sample met at least one of the criteria for the presence of incontinence. At follow-up, this had reduced to 16%. And 24% of the cohort who did not have incontinence at baseline reported incontinence at follow-up. At baseline, female sex, poor vision, poor hearing, history of stroke, diabetes, kidney problems, poor mobility, head injury, greater depressive symptoms and poorer cognition were univariably associated with incontinence. Cross-sectional analysis of the follow-up data indicated older age, female sex and chewing tobacco were univariably associated with the self-reported presence of incontinence. Only female sex remained in a multivariable analysis. | Burden |
| 13. Sutherland and Billimoria (2011) | Conference report. | Health workers in rural and remote communities across mainland Australia. Scoping project: n reported as approximately 100. Training: $n = 273$. | Review of projects for continence training targeting health professionals who provide services for Aboriginal and Torres Strait Islander Australians in rural and remote regions. | Scoping project: 52% did not provide a service for incontinence. Awareness of available resources and funding for care was relatively poor. Training evaluations: 93% of students felt increased confidence talking to Aboriginal people about continence, 98% reported continence knowledge had increased, 70% felt they would use information in the future. The project highlighted the use of a range of teaching methods and that training needs to be continued in rural and remote locations. It was suggested continence education should receive attention in core vocational training. | Barriers |
| 14. Willis <i>et al.</i> (2011) | Qualitative. | Aboriginal and Torres Strait Islander women ($n = 24$) and health care providers from gynaecological cancer care centres located in New South Wales, Victoria, South Australia and the Northern Territory ($n = 37$). | Report on differences in Indigenous women's expectations of clinical care during treatment for gynaecological cancer in rural and remote regions. | Identified themes were timely access; access to culturally appropriate screening; family and familiar Indigenous staff; sex of health professionals; provision of appropriate education materials and explanations. Aboriginal and Torres Strait Islander women in regional and rural settings have specific views about quality medical care, and should not be considered a homogenous group. | Barriers |

the use of pessaries and referrals for surgery. Urinary incontinence has been reported to be managed with medication (Bonner and Boyle 2017). It is worth noting here that in a scoping review of 100 Australian Aboriginal health services, 52% did not provide a service for incontinence (Sutherland and Billimoria 2011).

Burden of pelvic health conditions in Aboriginal and Torres Strait Islander men

Three articles pertained to the burden of pelvic health conditions among Aboriginal and Torres Strait Islander men (Table 2). Incontinence was reported as 15% in a male-only sample (Smith *et al.* 2019) and 9% in a mixed-gender sample (LoGiudice *et al.* 2012). One article reporting on reproductive health found 30% of Aboriginal and Torres Strait Islander men suffer from erectile dysfunction (Adams *et al.* 2013), with increasing prevalence with age, residence in a remote area and having other chronic health conditions (Adams *et al.* 2013).

Barriers to pelvic health service access for Aboriginal and Torres Strait Islander women

Seven articles were identified pertaining to barriers to pelvic health service access for Aboriginal and Torres Strait Islander women (Table 2). Identified barriers included lack of formal referral to physiotherapy from a specialist clinic, embarrassment and shame, sex of the health practitioner, poor communication, poor cultural competency, lack of financial support, issues of trust particularly around confidentiality, ACCHOs lacking pelvic health services, group classes not specific for Aboriginal women and that these classes were too long or that there was a need for longer consultation times

(Sutherland and Billimoria 2011; Willis *et al.* 2011; Beaumont 2019; Marcusson-Rababi *et al.* 2019; Milroy *et al.* 2022).

Enablers to pelvic health service access for Aboriginal and Torres Strait Islander women

Three articles were identified pertaining to enablers to pelvic health service access for Aboriginal and Torres Strait Islander women (Table 2). Themes identified included the use of ‘yarning cloths’ to discuss difficult or shameful topics, encouragement from Aboriginal health workers to attend group classes, daytime classes, childcare availability, continuity of care and ensuring class content is clear, short in duration and includes refreshments (Boyle *et al.* 2017; Beaumont 2019; Miller 2021).

Barriers to pelvic health service access for Aboriginal and Torres Strait Islander men

We identified two articles pertaining to barriers to pelvic health service access for Aboriginal and Torres Strait Islander men (Table 3). Identified barriers to accessing care included shame, concerns with confidentiality, low self-esteem, lack of culturally appropriate services and poor communication (Sutherland and Billimoria 2011; Adams *et al.* 2013).

Enablers to pelvic health service access for Aboriginal and Torres Strait Islander men

No articles were identified in respect to enablers to pelvic health service access for Aboriginal and Torres Strait Islander men.

Table 3 provides a summary of the barriers to pelvic health care for Aboriginal and Torres Strait Islander people, which draws on the specific papers included in the literature

Table 3. Considerations to improving pelvic healthcare for Aboriginal and Torres Strait Islander people.

| Barriers to receiving adequate pelvic health care | | |
|--|---|--|
| <div><ul style="list-style-type: none">• Geographical distance• Lack of transport• Lack of childcare services• Financial difficulties• Lack of culturally appropriate services• Racism and stigma• Lack of understanding of pelvic health conditions, their symptoms, and management options</div> <div><ul style="list-style-type: none">• Inadequate funding• Shame• Need for same-sex clinicians• Lack of continuity of care• Fear of lack of confidentiality</div> <div><ul style="list-style-type: none">• Inconsistent service delivery• Lack of trust, rapport and cultural safety• Lack of respect and/or racism demonstrated by healthcare practitioners/institutions</div> | | |
| Considerations for improving pelvic health care | | |
| System level | Health service level | Clinician level |
| <div><ul style="list-style-type: none">• Policy commitment to improving cultural safety• Specific training of Aboriginal health workers in pelvic floor management• Provide Aboriginal cultural safety for non-Aboriginal workforce• Acknowledgement and understanding of social and cultural determinants of health</div> | <div><ul style="list-style-type: none">• Telehealth services• Employment of Aboriginal health workers• Integration of pelvic health services within already existing Aboriginal Controlled Health Organisations• Development of strong and trusting partnerships with Aboriginal communities• Provide options for same-sex clinicians in respect of Women's Business and Men's Business• Aboriginal-specific artwork, signage and health promotion materials</div> | <div><ul style="list-style-type: none">• Spend time getting to know patients• Commitment to cultural safety• Holistic approach• Use of clinical yarning• Longer consultation times• Trauma-informed care• Understanding of shame as a cultural concept</div> |

search and the broader literature related to barriers to health care.

Discussion

In terms of the burden of pelvic health conditions in Aboriginal and Torres Strait Islander peoples, our findings concur with those of [Clarke *et al.* \(2021\)](#) in that limited research does indicate a significant burden for some people, but there are significant gaps in our understanding of this problem. Lower presentation rates are well documented ([Clarke *et al.* 2021](#)) and often reflect a lack of cultural safety. Specific comparisons to the prevalence in non-Aboriginal Australians are lacking, but would seem to be higher in Aboriginal and Torres Strait Islander peoples for incontinence ([Chiarelli *et al.* 2005](#)) and erectile dysfunction ([Chew *et al.* 2008](#)), and similar or slightly higher for polycystic ovarian syndrome ([Table 2](#)) ([Varanasi *et al.* 2018](#)). In addition to greater understanding of the prevalence, understanding how pelvic health conditions impact the lives of Aboriginal and Torres Strait Islander peoples would be a valuable avenue of research. Qualitative research might be particularly useful for this purpose.

From the review of the available literature, it seems access to pelvic health care is limited for many Aboriginal and Torres Strait Islander peoples. Reports of efforts to improve this show promise ([Sutherland and Billimoria 2011](#); [Beaumont 2019](#); [Miller 2021](#)). [Table 3](#) provides considerations for improving pelvic health care, with proposals directed at the systems, health service and clinician levels. At all these levels, collaboration and co-design between healthcare services and Aboriginal and Torres Strait Islander communities would be critical.

System level considerations

System-level consideration should include a commitment in policy to improving cultural safety of the practitioners and their organisations. Policy should be developed, implemented, and evaluated with and by Aboriginal and Torres Strait Islander peoples ([Gooda 2011](#); [Wright *et al.* 2021](#); [McGough *et al.* 2022](#)). Successful implementation of services relies on suitable financial resourcing ([Munns 2021](#); [McCalman *et al.* 2023](#)). Funding commitment and consistency is required to create culturally secure health services for Aboriginal and Torres Strait Islander peoples to attend ([Munns 2021](#)).

Employment of Aboriginal health workers (AHWs), Aboriginal health practitioners (AHPs) and Aboriginal liaison officers (ALOs) can enhance the health outcomes of the Aboriginal and Torres Strait Islander populations by increasing cultural safety, combatting the effects of systemic racism, strengthening communication between healthcare practitioners and patients, improving continuity of care, and addressing local logistical issues to enhance access ([Hartz *et al.* 2019](#); [Munns 2021](#); [De Zilva *et al.* 2022](#); [McCalman *et al.* 2023](#)).

An increase in the number of AHWs, AHPs and ALOs are needed via system-level commitment to training and retention of these individuals ([Lai *et al.* 2018](#); [Derooy and Schütze 2019, 2021](#)).

Cultural brokerage, which is a key aspect of the role of AHWs and ALOs, might have a positive impact on Aboriginal and Torres Strait Islander peoples and their families, and increase engagement with healthcare practitioners ([McKenna *et al.* 2015](#)). Cultural brokerage training, especially in the pelvic healthcare setting, should be implemented to address cultural insensitivity and facilitate more holistic care for Aboriginal and Torres Strait Islander peoples.

Despite the widespread implementation of a tertiary health curriculum designed to enable graduates to work effectively in Aboriginal health care, there is limited evidence that knowledge and perspectives of Aboriginal health and healthcare persists once tertiary health students graduate and enter the workforce ([Bullen and Roberts 2021](#)). This knowledge and perspectives of Aboriginal health is especially important in the area of pelvic health care when dealing with sensitive topics such as sexual health and incontinence. As such, it is essential to improve culturally safe practice in pelvic health care with provision offered at a systems/institutional level. Training and support in culturally safe practice, including training specifically about pelvic health care, recognising gendered Aboriginal perspectives of health and wellbeing, and working within this will begin to address concerns of culturally insensitive practice.

Health service level considerations

Improving access to pelvic health care should include development of services that are equitably and geographically available to all Aboriginal and Torres Strait Islander peoples. Currently, pelvic health services, in particular pelvic health physiotherapy, are less frequently available ([Bonner and Boyle 2017](#)). This can be due to resource limitations, geographical barriers, and/or a lack of skilled workers ([Sutherland and Billimoria 2011](#)). Literature has reported that specialists in outreach programs are not referring to physiotherapy or continence nurses due to lack of awareness and/or low availability of services ([Bonner and Boyle 2017](#)). Telehealth can potentially improve accessibility to services ([Gajjarawala and Pelkowski 2021](#)) for Aboriginal and Torres Strait Islander peoples living in rural/regional and remote areas ([Caffery *et al.* 2017](#)). To create a pathway for in-person service delivery between physiotherapists and Aboriginal and Torres Strait Islander women and men, integration of pelvic health services within ACCHOs might help improve access ([Campbell *et al.* 2018](#); [Harfield *et al.* 2018](#)). These services have strong links with the Aboriginal community, instil a sense of inclusivity and security for patients, and employ Aboriginal and Torres Strait Islander staff and/or staff with a high level of competency in delivering culturally safe services ([Harfield *et al.* 2018](#)). There is a demonstrated need for a concerted effort

to develop strong and trusting partnerships with ACCHO services to integrate pelvic health care within these services and facilitate service delivery (Smith and Burke 2017).

Traditionally, Aboriginal and Torres Strait Islander culture practices separation of gendered roles of women and men. Consideration of the principles of Women's Business and Men's Business is imperative for successful implementation of pelvic healthcare services. The choice to receive care from a health practitioner of the same gender is important, where possible (Coffin 2007; Sutherland and Billimoria 2011; Willis et al. 2011; Smith et al. 2019; Milroy et al. 2022; McCalman et al. 2023). Healthcare services should provide gender diversity and inclusivity training to all staff, to encourage a safe and inclusive space for all Aboriginal and Torres Strait Islander peoples.

Clinician-level considerations

Clinicians need to deliver culturally safe practice and commit to cultural awareness and safety education and participation in ongoing development of cultural capabilities (Department of Health and Aged Care 2014). Clinicians should provide high-level care that moves away from traditional biomedical approaches and encompasses a holistic approach to health care (Oliver et al. 2015; Harfield et al. 2018; Cavanagh et al. 2022; McCalman et al. 2023). Culturally safe practice includes critically reflecting on current practice, values and beliefs (McGough et al. 2022). Recognition of racism, power and privilege within practice is an important first step to providing culturally safe care (McGough et al. 2022). To effectively support Aboriginal and Torres Strait Islander women and men who have experienced trauma, including the impacts of intergenerational trauma, specific consideration needs to be given to culturally safe trauma care, including building trust between clinicians and families and facilitating community partnerships built upon the understanding of the effects of colonisation, racism and social inequity (Cullen et al. 2022), which are attributes important in the provision of pelvic health care. When delivering an Aboriginal and Torres Strait Islander-tailored pelvic healthcare service, practitioners need to be upskilled in trauma-informed care, with specific attention to the Aboriginal and Torres Strait Islander experience (Tujague and Ryan 2021).

Clinicians should explore opportunities to work collaboratively with ACCHOs who do not currently provide pelvic healthcare services. Working in partnership with ACCHOs offers the potential to improve cultural safety and access to pelvic health care (Gooda 2011).

Incorporating a more holistic healthcare approach that takes into account the importance of family, community and traditional approaches to health care should be an important step in engaging Aboriginal and Torres Strait Islander people in pelvic health care (Oliver et al. 2015; Harfield et al. 2018; Cavanagh et al. 2022; McCalman et al. 2023). Tools such as longer consultation times and the implementation of

clinical yarning might help to further develop holistic pelvic health care, though systems-level constraints can make implementation of these types of strategies difficult. Clinical yarning is a culturally appropriate communication tool to facilitate the development of trust and rapport with patients, while also overcoming language concerns; it removes medical jargon, makes allowances for sharing of non-clinical information and improves the ability for shared decision-making in treatment (Coffin 2007; Lin et al. 2020; De Zilva et al. 2022).

Conclusion

Concerted efforts are needed to better recognise and improve the understanding of, and management of, pelvic health conditions for Aboriginal and Torres Strait Islander peoples. In this paper we have presented considerations to inform culturally safe pelvic healthcare services for Aboriginal and Torres Strait Islander peoples. Further steps are required to engage with local communities and ACCHOs, institutions responsible for service provision and healthcare providers to develop a strategy to address the burden of pelvic health conditions in Aboriginal and Torres Strait Islander communities.

Supplementary material

Supplementary material is available [online](#).

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Data availability. Data sharing is not applicable as no new data were generated or analysed during this study.

Conflicts of interest. The authors declare that they have no conflicts of interest.

Declaration of funding. This research did not receive any specific funding.

Acknowledgements. We would like to acknowledge the Traditional Owners of the land on which this research was conducted. We pay our respects to the Elders, past and present and to all Aboriginal and Torres Strait Islander peoples of Australia. We acknowledge the deep spiritual and cultural connections that Aboriginal and Torres Strait Islander peoples have to their lands and waters. We recognise the ongoing intergenerational trauma of colonialism and its impacts on Aboriginal and Torres Strait Islander health outcomes. This research is a small but important step towards addressing health disparities and improving pelvic health outcomes for Aboriginal and Torres Strait Islander peoples, and we remain committed to working in partnership with Aboriginal and Torres Strait Islander communities towards achieving health equity.

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