Co-designing an antenatal physiotherapy education session with Aboriginal consumers: a pilot study


Abstract:

Objectives: To identify the barriers to antenatal physiotherapy attendance for Aboriginal women experiencing back and/or pelvic pain, and to determine whether a culturally appropriate, appealing group education session can be developed in partnership with Aboriginal consumers.

Method: A targeted consumer focus group was held to facilitate input from Aboriginal consumers about the existing group education session being offered. A revised session outline was developed based on consumer input and piloted over 3 months. Pilot session attendance data and consumer satisfaction was evaluated and thematically analysed.

Results:

Focus group discussion revealed immediate barriers to group session attendance. Small alterations to class design and delivery were recommended and implemented to enhance cultural competence. The co-designed group sessions were piloted with strong attendance and positive feedback.

Conclusion:

Through co-designing a physiotherapy session with Aboriginal consumers, a more culturally appropriate, appealing session was developed.

Implications:

There may be opportunities to consider the learnings of this project and review the cultural competence of other existing services related to antenatal Aboriginal care.

Please note: Throughout this document, the term ‘Aboriginal’ is used to refer to people who identify as Aboriginal, Torres Strait Islander, or both Aboriginal and Torres Strait Islander. This is done because the people indigenous to South Australia are Aboriginal and I respect that many Aboriginal people prefer the term ‘Aboriginal’. I also acknowledge and respect that many Aboriginal South Australians prefer to be known by their specific language group(s).
Introduction

The question should not be, ‘Why do women not accept the service that we offer?’ but ‘Why do we not offer a service that women will accept?’


There were 18,560 births registered in Australia during 2016 (reflecting approximately 6% of all births) where at least one parent identified themselves as being either Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander Australian on the birth registration form [2]. Perinatal (and neonatal) outcomes continue to be significantly poorer for Aboriginal women and their babies, and one of the major determinants to promoting healthcare access and service engagement during pregnancy for Aboriginal women is the provision of targeted and culturally responsive care [3, 4].

The impacts of physiological, anatomical and biomechanical changes on the musculoskeletal system in pregnancy are well documented [5, 6]. An Australian study demonstrated a period prevalence of 71% for lumbo-pelvic pain in current pregnancy, with the average pain intensity score for their usual pain being 6.5 (on a visual analogue scale of 0 -10) [7]. To effectively manage the significant number of women at the Women's and Children's Hospital (WCH; South Australia, Australia) who experience back and/or pelvic pain in pregnancy requiring physiotherapy, appropriate referrals are triaged to a preliminary group education session. An unpublished report on group session attendance data in 2017 indicated that there were 25 women who identified as Aboriginal referred to physiotherapy triaged to a group session, which represents approximately 12% of all antenatal Aboriginal women birthing at the WCH. Of these women, only 20% (n = 5) attended the group session, with the majority (72%, n = 18) failing to attend without contact. This report suggested significant issues with under-referral to physiotherapy services and likely barriers to attendance.

This project aimed to co-design and pilot a group session with Aboriginal consumers that was both appealing and culturally appropriate. While it is widely acknowledged that health services for Aboriginal consumers should be considered from a cultural appropriateness viewpoint to optimise access, there are limited examples in the literature of where this has occurred (particularly with respect to physiotherapy services) and the learnings that may be shared for other organisations to consider.

Method

Existing processes for managing appropriate antenatal back/pelvic pain physiotherapy referrals at the WCH are centred on attendance at a comprehensive group education session as first line management, unless specific exclusion criteria are met (e.g. non-English speaking women requiring translating assistance, young maternal age, intellectual or significant physical disability). The group session takes a largely biopsychosocial approach to pain management, with a focus on education and self-management. Women are encouraged to share their current situation with respect to site of pain, gravida and parity, gestation and a brief description of their typical day to enable tailored and relevant advice to be provided.

The key objectives of the group education session were for the woman to be able to:

- demonstrate an understanding of the key pregnancy related changes that can significantly impact the musculoskeletal system, signs/symptoms of common antenatal pain complaints affecting the spine and pelvis
- likely course of symptoms and prognosis after pregnancy
- benefit of self management strategies and describe:
  - the key exercises that are prescribed to prevent/improve back/pelvic pain, particularly pelvic floor and abdominal muscle exercises
  - a range of self management strategies for pain control e.g. care with activities of daily living (aiming for pelvic symmetry), posture education, back care (e.g. correct lifting technique), safe use of heat/cold therapy
  - the role of supportive equipment (e.g. lumbo-pelvic support belts, abdominal tubular bandage) as required
- options for ongoing physiotherapeutic care through the public and private sector
- learning opportunities provided for instilling lifelong healthy habits.
Focus group

In order to unpack the existing session and collaboratively reconstruct a potentially more culturally appropriate session design, a consumer focus group was held to discuss the existing session and draft a revised session outline that had broad appeal to antenatal Aboriginal women. A convenience sample of 5 consumers was used for the focus group – interested and motivated women currently enrolled in the Aboriginal Family Birthing Program (AFBP) that were willing to present their thoughts in a group situation. While using a convenience sample may have skewed the information gleaned (and subsequently impacted on the revised session outline) through self-selection bias, it was felt this was a necessary strategy to foster engagement in the project. Similarly, while the aim of the focus group was to co-design a session between therapist and consumers, key Aboriginal Maternal Infant Care (AMIC) workers were also invited to be in attendance to act as patient advocates if required, facilitating information sharing and providing perspective from an Aboriginal healthcare worker viewpoint. These staff welcomed and introduced the participants but, in the end, did not stay and contribute to group discussion.

The focus group session was led by the author, supported by the senior physiotherapist who facilitates the existing group sessions and held in the AFBP clinical space to provide a safe and familiar environment for participants. All participants received an information sheet and completed a consent form. It was noted that participation in the focus group was voluntary, and all discussion points would be reported in a sensitive, de-identified manner – participants were aware that they could withdraw their involvement at any stage without compromising their current or future care at the hospital.

Focus group discussion centred around the following themes over 2 hours:

- Overview of the existing group session
- Is this the right format? Session length, venue, teaching aids
- Is this the right content? What would you like to learn more (or less) about?
- How could we do things better?
- What would you like to take home from the session?

Pilot groups

Incorporating the key elements raised by focus group participants, specific Aboriginal antenatal group sessions were piloted over a 3 month period. Consumers who attended the pilot sessions were invited to complete a voluntary, confidential evaluation survey at the conclusion of the session, with completed surveys placed in a sealed box for anonymity. The surveys included a tick box section, where consumers were invited to indicate their level of agreement with statements using a 5 point Likert scale, as well as free text sections to describe the parts of the session they liked and disliked, as well as any further comments. The results of the consumer evaluation surveys were collated by the author and thematically analysed.

A supplementary take home consumer resource was concurrently developed with Aboriginal consumer input and graphic design assistance.

Ethics approval was sought and obtained from the Women’s and Children’s Health Network Human Research Ethics Committee (Audit 993A), as well as the Aboriginal Health Council SA Human Research Ethics committee (04-18-753).

Results

Flow of participants through the study

Five consumers were recruited for the focus group but on the day, 2 women were unexpectedly unable to attend. However, one of the mothers of the participants, a respected community elder, was invited to stay, meaning there were 4 Aboriginal women present for focus group discussion.

Pilot group attendance data is summarised in Table 1. The number of Aboriginal women who attended the pilot groups (n = 9 patients, plus one support person) was almost double the number who attended the existing group sessions for the 12 month period January 1st – December 31st 2017 (n = 5), when a total of 60 sessions occurred.
Table 1: Pilot group attendance data

<table>
<thead>
<tr>
<th>Group</th>
<th>Planned to attend</th>
<th>Confirmed to attend (24 hours prior)</th>
<th>Attended</th>
<th>Support people in attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Focus group

Key focus group discussion and consumer quotes obtained during the session are tabulated below, thematically grouped into identified barriers and enablers to group attendance (Table 2 and 3):

Table 2: Barriers to attendance and participation

<table>
<thead>
<tr>
<th>Feedback received</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booking Letter – format and content</td>
<td></td>
</tr>
<tr>
<td>Too many words</td>
<td>“I would have to ask someone else to read it and tell me what it was about”</td>
</tr>
<tr>
<td>Is it for Aboriginal women only?</td>
<td>“I would worry I’d be judged, I would feel shame”</td>
</tr>
<tr>
<td>Physiotherapy?</td>
<td>“I don’t know where that is or who you are”</td>
</tr>
<tr>
<td>Session length</td>
<td>“Seems a bit long – most of my appointments here only go for 30 minutes”</td>
</tr>
<tr>
<td>Failure to attend results in discharge</td>
<td>“That’s a bit harsh. Sometimes we can’t get there – if a sister calls us to watch her kids or something, we need to go”</td>
</tr>
<tr>
<td>Exercise class access</td>
<td>Unlikely to attend</td>
</tr>
<tr>
<td>For Aboriginal women?</td>
<td>“Most of us walk everywhere so we are pretty active”</td>
</tr>
<tr>
<td>Consumer resources</td>
<td></td>
</tr>
<tr>
<td>For Aboriginal women?</td>
<td>“If I see a pamphlet with Aboriginal pictures on it in the waiting area, I might pick it up – if not, I am not interested”</td>
</tr>
</tbody>
</table>

Table 3: Enablers to attendance and participation

<table>
<thead>
<tr>
<th>Feedback received</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booking Letter – format and content</td>
<td></td>
</tr>
<tr>
<td>Crèche availability</td>
<td>“That’s good to know. Sometimes the fellas don’t want to look after the kids”</td>
</tr>
<tr>
<td>Session timing</td>
<td>“During the day is good, it’d be too hard to come in by bus at night”</td>
</tr>
<tr>
<td>Encouragement to attend</td>
<td>“I like the midwives here but when I met … (AMIC worker) she just gets me, we talk the same language. I came today because she talked to me about it… if a Dr asked me to come I would be like, no!”</td>
</tr>
<tr>
<td>Class content</td>
<td></td>
</tr>
<tr>
<td>Group introduction</td>
<td>“You should include which mob they are from”</td>
</tr>
<tr>
<td>Understanding pregnancy related body changes</td>
<td>“When you explain it, I understand” “No one has told me that before”</td>
</tr>
<tr>
<td>Pelvic floor and abdominal muscle exercises</td>
<td>“I don’t know about them” “If I know then I can tell my sisters about it when they are pregnant when they are not knowing why they have this pain”</td>
</tr>
<tr>
<td>Lumbo-pelvic support belts and abdominal tubular bandage</td>
<td>“Feels comfortable” “I would like one”</td>
</tr>
<tr>
<td>Teaching aids used e.g. bony pelvis, posters, white board</td>
<td>“They are all fine”</td>
</tr>
<tr>
<td>Physiotherapy services available through to postnatal period</td>
<td>“Just after this, I feel much better about seeing a physio because I know you”</td>
</tr>
</tbody>
</table>
The focus group revealed immediate barriers to group session attendance from the point of booking. When asked about how they would react if they received the standard group booking letter, the participants felt that they would probably need to ask someone else to read and explain it to them, and that if it wasn’t a group for Aboriginal women, they were not likely to attend. The number of words on the page was overwhelming for some, with too much information listed – the participants felt that if they had mentioned a problem to their midwife and consented to referral, they only needed to know where and when their appointment was. The key to attendance also appeared to lie in who had suggested they attend – it was evident that if they had been recommended to attend by their AMIC worker, they were more likely to attend than if any other healthcare worker encouraged them. When asked about logistics, it was felt that the length of the group was too long, and a daytime class was preferred over an evening/out of hours session. Participants were not familiar with physiotherapy staff, or the location of the Physiotherapy Department. The availability of the crèche was appealing for women with other children at home.

When the content of the session was explained by topic, with snippets of the actual wording/language used to demonstrate how information is delivered, participants were genuinely interested in the session content. They felt that the way the information was presented was clear and easily understood. None of the women reported previous knowledge of pelvic floor or abdominal muscle strengthening exercises. The participants were able to verbalise the importance of “staying strong” in pregnancy, and could see benefits for both mother and child. Being strong, or staying strong, were key words repeated by participants often throughout the focus group, in spite of the focus being on pain management (and all participants disclosing pregnancy related back and/or pelvic pain symptoms). The participants were shown several of the teaching aids used in the existing session (e.g. bony anatomical pelvis, posters and white board) and all felt comfortable with these tools. Participants were given an opportunity to trial lumbo-pelvic support belts and abdominal tubular bandage, and all remarked on their immediate usefulness and comfort. The opportunity to attend group exercise classes was discussed but this was not appealing. When shown the current take home consumer resources, participants felt that they were long and wordy, but could see how they covered all of the information discussed and would be useful for future reference. It was felt that altering the graphics to represent Aboriginal culture and people could further enhance these resources.

The presence of the respected community elder during the focus group richly added to the conversation. Reflecting on personal experience, she linked the topics being discussed to her own situation and positively reinforced the key messages presented. She was able to draw participants in to the conversation with useful anecdotes and observations from her own experiences, family situation and prior access to health care.

**Pilot group education sessions: “Staying Strong in Pregnancy”**

Three pilot group sessions were offered, with session availability shared with key stakeholders via a promotional flyer. Aboriginal women who were experiencing back and/or pelvic joint pain in pregnancy, or Aboriginal women who had an interest in learning more about preventing the onset of musculoskeletal pain in pregnancy, were invited to attend the sessions by their healthcare worker (e.g. obstetrician, midwife, AMIC worker, AFBP staff). The group sessions were again held in the familiar AFBP clinical space, the length of the session was reduced slightly to 1½ hours, and light refreshments were provided. In contrast to the existing sessions, the opportunity to bring along a female support person was encouraged. There were no formal administrative booking processes. Women planning to attend the groups were contacted by AFBP staff the day prior to the session and transport provided where required. Take home supplementary resources were provided at the conclusion of the session to support the information discussed.

Consumer feedback was sought after each session from participants (including support people), per Table 4:

**Table 4: Consumer feedback, n = 10**

<table>
<thead>
<tr>
<th>Level of agreement</th>
<th>1 = strongly disagree</th>
<th>2 = disagree</th>
<th>3 = neither agree nor disagree</th>
<th>4 = agree</th>
<th>5 = strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>This session was useful to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 9</td>
</tr>
<tr>
<td>I am glad that I came</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>I learnt new skills and ideas to help myself</td>
<td>2 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will be able to use the skills and ideas I have learnt</td>
<td>2 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt comfortable with what was being talked about</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>The presenter spoke clearly and in a way I could understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>
All participants strongly agreed that they were glad they came, they were comfortable with what was being talked about and that the presenter spoke clearly and in a way they could understand. They felt that the session was useful, they had learnt new skills and ideas, and that they would be able to use these new skills and ideas to help themselves.

All participants chose to write free text comments in the “parts they liked” section, with most respondents commenting on the opportunity to learn new things, particularly the key exercises \((n = 8)\), the comfortable environment created \((n = 1)\), the opportunity to sit, chat and have a laugh while meeting new people \((n = 1)\) and recognising that they were not alone in the symptoms they were experiencing \((n = 1)\). There were two constructive comments from the first session which identified areas for improved physical comfort \((e.g.\) using different chairs, being able to move around) – both comments were acted upon for subsequent sessions, with no further concerns identified.

**Discussion**

By unpacking the existing physiotherapy service offered to women with back/pelvic pain in pregnancy through a targeted consumer focus group, it was clear that the content was deemed interesting and relevant, but the delivery of the existing service was identified as culturally incompetent with several immediate barriers to attendance highlighted by participants. By addressing some of these barriers and making subtle yet powerful alterations to the way this service was delivered, cultural appropriateness has been enhanced. As a result, the co-designed session has appeal and relevance to the target consumer group, as demonstrated by attendance figures and highly positive consumer feedback.

The value of the AMIC workers and AFBP midwives in promoting and facilitating group attendance was grossly evident. Women were counselled regarding the benefits of the session by their AFBP midwife or AMIC worker, and the strong rapport (and guiding influence) between the AMIC workers/ AFBP midwives and group session participants was clear. This is in keeping with previous papers outlining the value of specific Aboriginal maternity programs in improving healthcare access and providing culturally competent care \([8, 9]\).

Wilson (2009) described the preference of many Aboriginal women to be cared for by female healthcare workers in pregnancy – further to this, some wanted to be cared for by Aboriginal women, while others did not for privacy reasons \([10]\). In this study, it did not seem to be a barrier to participation or attendance that the group sessions were not facilitated by an Aboriginal physiotherapist. Wilson (2009) described the kind of behaviour that Aboriginal women preferred from non-Aboriginal healthcare workers, including a preference for clear understandable explanations about pregnancy \((i.e.\) in their Aboriginal language), confidentiality, privacy, an understanding of culture as it relates to women’s business, sensitivity to the particular needs of a young woman, and understanding of her family context \([10]\). This was largely facilitated in the opening minutes of the pilot groups, where women were invited to introduce themselves to others, stating their gestation and site/nature of their pain, providing a typical “snapshot” of their day, and comments about their family background \((o.r “mob”\)).

The group education session structure and flow marries well with the concept of clinical yarning \([11]\). This style of communication has been shown to be effective in promoting health service engagement for Aboriginal patients with chronic back pain \((n o t pregnancy specific)\) \([12]\). Yarning, in addition to the healthcare worker taking time to listen, were deemed significant enablers to health service engagement, particularly when culturally appropriate supplementary information was also available \([12]\). As the key principles underpinning clinical yarning were already in place, there was a deliberate decision made to limit pilot group sessions to smaller groups \((m a x i m u m 10 bookings)\) to enable more personable interaction and communication during the session, and implement some previously described learnings related to non-Indigenous health professionals working in Indigenous contexts \([13]\). The group facilitator used self-disclosure to build rapport prior to session commencement, and used communication strategies that were less centred on clinical interviewing and direct questioning and more conversational and responsive to the group’s needs and dynamics. The teaching aids used, the opportunities for active interaction and participation \((e.g.\) practicing exercises to confirm correct technique), and sourcing and/or creating culturally appropriate resources were also engagement strategies supported in the literature \([10]\). There may be opportunities to take the learnings from this project and apply them to service delivery models in other relevant clinical areas \(e.g.\) childbirth education.

This study is small in nature with the results potentially biased due to the convenience sample used for the focus group and the decision to limit pilot group participant numbers. However, the consistent strong positive feedback received from pilot group attendees suggests this is a culturally appropriate service delivery model. It should be noted there were incentives offered to help facilitate pilot session attendance and should this model of care be embedded into practice, some of these incentives may not be sustainable, potentially impacting on the future success of the program.
Acknowledgements

The author wishes to thank the Physiotherapy and Aboriginal Family Birthing Program teams for their commitment and support, particularly Ms Sue Bulluss (Physiotherapy) who facilitated the pilot group sessions. The author would like to acknowledge the support received from the Consumer Engagement Unit, WCH, as well as the Friends of the WCH Inc. This project was supported by a Passion Project grant (max $5000) from the Women's and Children's Hospital. Lastly, the author would also like to thank each of the consumers who participated in this project.

References


The Australian Indigenous HealthBulletin (ISSN 1445-7253) is the electronic journal of the Australian Indigenous HealthInfoNet.

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Core funding is provided by the Australian Government Department of Health