BMJ Open What women want if they were to have another baby: the Australian Birth **Experience Study (BESt) cross-sectional** national survey

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ABSTRACT

Objectives To explore if Australian women would do anything differently if they were to have another baby. Design and setting The Birth Experience Study (BESt) online survey explored pregnancy, birth and postnatal experiences for women who had given birth during 2016-2021 in Australia.

Participants In 2021, 8804 women responded to the BESt survey and 6101 responses to the open text responses to the survey question 'Would you do anything different if you were to have another baby?' were analysed using inductive content analysis.

Results A total of 6101 women provided comments in response to the open text question, resulting in 10089 items of coding. Six categories were found: 'Next time I'll be ready' (3958, 39.2%) described how women reflected on their previous experience, feeling the need to better advocate for themselves in the future to receive the care or experience they wanted; 'I want a specific birth experience' (2872, 28.5%) and 'I want a specific model of care' (1796, 17.8%) highlighted the types of birth and health provider women would choose for their next pregnancy. 'I want better access' (294, 2.9%) identified financial and/or geographical constraints women experience trying to make choices for birth. Two categories included comments from women who said 'I don't want to change anything' (1027, 10.2%) and 'I don't want another pregnancy' (142, 1.4%). Most women birthed in hospital (82.9%) and had a vaginal birth (59.2%) and 26.7% had a caesarean.

Conclusion Over 85% of comments left by women in Australia were related to making different decisions regarding their next birth choices. Most concerningly women often blamed themselves for not being more informed. Women realised the benefits of continuity of care with a midwife. Many women also desired a vaginal birth as well as better access to birthing at home.

INTRODUCTION

Maternity services should be woman centred and responsive to consumer demand and feedback. The Woman-centred care strategic directions for Australian maternity services (WCC Strategy) positions women as the decisionmakers in their care and calls for respectful

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This is one of the largest surveys ever conducted on women's birth experiences in the last 5 years in Australia.
- ⇒ The national survey was made available in seven languages other than English, although response rates in these languages were low.
- ⇒ Women who responded to the survey tended to be of higher socioeconomic status, be above the age of 30 years and be university educated.
- ⇒ There were lower rates of First Nations women and migrant women in the study than in the total population of women giving birth.

care that meets individual needs. Despite this, it is apparent that many women are not satisfied with their birth experience^{2 3} and intervention rates in Australia continue to be some of the highest in the Organisation for Economic Cooperation and Development, with induction of labour rates at 35% and caesarean rates at 37%.

In Australia, women have access to a variety of maternity models of care dependent on location, access and availability. Recent figures released by AIHW⁵ indicated that the most dominant model of care (40.4% of models) is standard public maternity care that is fragmented in nature. Models in Australia that offer continuity across the whole duration of the maternity period (antenatal, intra partum and post partum) are identified as midwifery group practice or midwifery caseload care (continuity of care (CoC) with a public midwife) (14.8% of models) and private midwifery care (2.1% of models).⁵ remaining models may offer different levels of CoC including general practitioner (GP) shared care (15.3% of models) and private obstetric care (11.2% of models). There are also a variety of high risk and remote area maternity care models.



Engaging and listening to the wishes and needs of a diverse range of women in relation to maternity care is important in reviewing maternity care provision. Too often maternity services are designed to be implemented based on cost-effectiveness, and policy change occurs following limited consultation with consumers.⁶ This can lead to assumptions about the wishes and needs of women, such as increased rates of maternal requested caesarean. 7 8 International and Australian research has found women often receive mistreatment and disrespectful and abusive care from healthcare providers, 9-11 particularly for women of colour. 12 Internationally around a third of women identify their previous birth as a traumatic experience, 13 14 which can lead to increased rates of psychosocial issues such as post-traumatic stress disorder. 15 16

International studies on women's experiences of maternity care have been undertaken, such as the USA Listening to Mothers survey I, II and III, 17 18 the Canadian Maternity Experiences Survey¹⁹ and in the UK with the national survey of women's experience of maternity care. ²⁰ Across Australia there are shorter surveys sent out to women in the postnatal period through health departments such as the patient-reported experience measures and patientreported outcome measure however they are not comprehensive and there is limited opportunity to leave open text comments. ^{21 22} A cross-sectional survey into maternity experiences was undertaken in Queensland in 2010 with open text options²³ however, the Birth Experience Study (BESt) was the first Australian nationwide survey into women's experiences of maternity care. This codesigned study explored the experiences of women who had a baby in Australia from 2016 to 2021 through a national online survey. The aim of this paper was to understand what women in Australia would do differently if they were to have another baby.

METHODS

The data analysed and reported in this paper comes from a national survey undertaken as part of the Australian BESt. This paper focusses on the choices women would make in a subsequent birth. Out of a sample of 8804women, there were 6101 (69% of women) opentext comments responding to the question 'Would you do anything different if you were to have another baby?'. Descriptive statistics were used to present demographic and birth details (tables 1–3) and content analysis was used to analyse the open-ended text responses. The Standards for Reporting Qualitative Research have been used to review this paper and is available in online supplemental table 7.

Survey development

The BESt was an online survey consisted of 133 questions collecting demographic information, open and closed questions and developed by the research team and incorporated the validated tools of the Nijmegen Continuity

Table 1 Demographic information on those women who responded to open text question

Demographic	Count (%) (n=6101)
Age range	
Under 18	0 (0.00%)
18–24	222 (3.61%)
25–29	1300 (21.31%)
30–34	2641 (43.29%)
35–39	1492 (24.46%)
40+	446 (7.31%)
Income	
Less than 40 000	156 (2.56%)
40 000–99 999	1778 (29.14%)
More than 100000	3913 (64.14%)
Prefer not to answer	254 (4.16%)
Education	
Year 12 or less	616 (10.10%)
Technical college (TAFE)* or diploma	1211 (19.85%)
Undergraduate degree	2367 (38.80%)
Postgraduate qualification	1907 (31.26%)
Indigenous	
No	5962 (97.72%)
Yes, Aboriginal	97 (1.56%)
Yes, Torres Strait Islander	2 (0.03%)
Yes, both Aboriginal and Torres Strait Islander	3 (0.05%)
Prefer not to say	34 (0.56%)
Did not answer	3 (0.05%)
Country of birth	
Australian	5282 (86.58%)
European	374 (6.13%)
New Zealand	156 (2.56%)
North, Central and South American	113 (1.85%)
African and Middle Eastern	88 (1.44%)
North, South and Central Asian	85 (1.39%)
Melanesian, Papuan and Polynesian	3 (0.05%)
Relationship status	
Partnered	5837 (95.67%)
Unpartnered	248 (4.06%)
Other	16 (0.26%)
Language other than English at home	
Yes	480 (7.87%)
No	5621 (92.13%)

*TAFE is a government-run system in Australia that provides education after high school in vocational areas.

TAFE, technical and further education.

Questionnaire,²⁴ Mothers' Autonomy in Decision Making²⁵; Mothers on Respect index²⁶ and the Mistreatment Index.¹² The questions covered pregnancy, labour



Table 2 Maternity and birth details of those women who responded to open text question

responded to open text question	Count (%)
Maternity and birth details	(n=6101)
Parity	
Had one previous birth	3256 (53.37%)
Had more than one previous birth	2845 (46.63%)
Model of care	
Standard care (fragmented care)	2081 (34.11%)
Continuity of care with public midwife (MGP)	1581 (25.91%)
Continuity of care with doctor (private ob)	1364 (22.36%)
General practitioner shared care	542 (8.89%)
Private midwife (privately practising midwife)	505 (8.28%)
No healthcare	28 (0.46%)
Mode of birth	
Vaginal birth	3611 (59.19%)
Caesarean during labour	1008 (16.52%)
Assisted vaginal birth (forceps/vacuum)	884 (14.49%)
Caesarean before labour	558 (9.15%)
Vaginal breech	40 (0.66%)
Place of birth	
Public hospital	3833 (62.83%)
Private hospital	1071 (17.55%)
In hospital but transferred from birth centre	99 (1.62%)
Birth centre	390 (6.39%)
In hospital but transferred from home birth	57 (0.93%)
At home with midwives	436 (7.15%)
Born before arrival to hospital	80 (1.31%)
Planned freebirth	49 (0.80%)
Other	86 (1.41%)
Initiation of labour	
Spontaneous	3713 (60.86%)
Induced	1853 (30.37%)
I did not labour	535 (8.77%)
Time since birth	
Less than 6 months	1438 (23.57%)
6 months to 1 year	1153 (18.9%)
1 year to 2 years	1630 (26.72%)
2 years to 3 years	1000 (16.39%)
3 years to 4 years	482 (7.9%)
4 years to 5 years	377 (6.18%)
Did not answer	21 (0.34%)
Birth pre-COVID-19 or during COVID-19	
Pre-COVID-19	3489 (57.19%)
During COVID-19	2591 (42.47%)
Did not answer	21 (0.34%)
Experienced a traumatic birth	
	0

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Table 2 Continued	
Maternity and birth details	Count (%) (n=6101)
Yes	2037 (33.39%)
No	4062 (66.58)
Did not answer	2 (0.03%)
MGP, midwifery group practice.	

and birth and postnatal care and were designed by the researchers and consumer reference group. The survey was translated into seven languages other than English by relevant bilingual individuals with understanding of maternity care: Arabic, Simplified Chinese, Hindi, Filipino, Persian, Thai and Vietnamese. These languages are representative of the regions of migration into Australia, with the biggest migration regions being North-East and South and Central Asia, with India, China and Philippines among the top five countries of birth.²⁷ Qualtrics software was used to design and distribute the survey (Qualtrics, 2019). Forward and back translations were done by bilingual individuals with a knowledge of maternity care. The survey was piloted by 10 members of the consumer reference group who were women who had birthed in the previous 10 years, aged between 18 and 45 years of age.

Patient and public involvement

Patients and/or the public were involved in the design, recruitment, reporting and dissemination plans of this research. The BESt was a codesigned project between academics and 10 Australian maternity and consumer advocacy organisations (see online supplemental table 1 for list). Maternity consumer and professional organisations were invited to become part of a consumer reference group. The consumer reference group was involved in survey development, piloting the survey and recruitment.

Participant sampling

Recruitment for the survey was through non-probability self-selection, predominantly through social media. A BESt social media page was formed where posts were created in each language with information about the survey and a link and QR code to the survey landing page. The inclusion criteria was any individual who had a baby in Australia in the previous 5 years (2016–2021) and was able to understand and write in English or any of the available translated languages. Survey respondents who had more than one previous birth were directed to respond to the survey regarding their most recent birth experience.

There were 2653 survey responses through the QR code and 10255 through the survey link. Between March 2021 and November 2021 ten social media campaigns in English and the seven other languages were launched which resulted in a reach of 51702 accounts, 68167 impressions and 2207 clicks to the survey link. The survey received over 12000 partial and 8804 responses that were

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Table 3 Cate	Categories coding frame part 1	frame part 1						
Main category	Number of quotes	Frequency of total (%)	Subcategory	Number of quotes	Frequency of total (%)	Concept	Number of quotes	Frequency of total (%)
Next time I'll be ready	3958	39.23	Prepare myself better	1928	19.11	I will be more confident and knowledgeable	1015	10.06
						Hire a doula	264	2.62
						Ensure better personal support	204	2.02
						Prepare more mentally and physically	191	1.89
						Have a plan for my birth	180	1.78
						Prepare the birth environment or use alternate methods	74	0.73
			Choose less	1078	10.68	Avoid induction or augmentation	540	5.35
			intervention			Avoid other interventions	326	3.23
						Avoid pharmacological pain relief	212	2.10
			Advocate for	665	6.59	Better support postbirth	186	1.84
			better support and			Seek medical support sooner	145	1.44
			2000			Better support and care during pregnancy 126 and birth	, 126	1.25
						Skin to skin and be with my baby after birth	80	0.79
						Stand my ground for breast feeding	57	0.56
						Ask for physiological third stage or delayed cord clamping	51	0.51
						Advocate for my newborn	20	0.20
			Choose more	287	2.84	Use pain medications	172	1.70
			intervention			Consider interventions	115	1.14

Table 3 Continued	ıtinued							
Main category	Number of quotes	Frequency of total (%)	Subcategory	Number of quotes	Frequency of total (%)	Concept	Number of quotes	Frequency of total (%)
I want a	2872	28.47	Vaginal birth	1735	17.20	Homebirth	1021	10.12
specific birth			matters			Waterbirth	236	2.34
experience						VBAC	207	2.05
						Vaginal birth	155	1.54
						Freebirth	116	1.15
			Seek active	458	4.54	I want to be more mobile and sustained	276	2.74
			labour/birth			I want to be given more time	94	0.93
						Hypnobirthing, calm birth or relaxation techniques	88	0.87
			I'll choose a	438	4.34	l'Il choose a caesarean (no details given)	285	2.82
			caesarean birth			Choose a caesarean due to birth trauma, fear or risk of repeat experience	86	26.0
						I need a caesarean due to medical reasons	34	0.34
						I want a caesarean to be more in control	21	0.21
			I'll choose my	241	2.39	Give birth in a birth centre or birth house	110	1.09
			labour/birth environment			Labour away from hospital or delay going to hospital	93	0.92
						Give birth in hospital	38	0.38
Table 3 list the r	main categories,	Table 3 list the main categories, subcategories and concepts.	concepts.					

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Main	Number of	Frequency		Number of	Frequency		Number of	Frequency of
category	quotes	of total (%)	Subcategory	quotes	of total (%)	Concept	quotes	total (%)
I want a specific model	1796	17.80	Midwifery continuity model	1107	10.97	Employ a private midwife	625	6.19
of care						Seek continuity of care with a midwife	482	4.78
			I don't want the model or care provider I had last time	350	3.47			
			Private obstetric model	280	2.78			
			Use the public system	59	0.58			
I want better access as I don't currently	294	2.91	Equitable access to homebirth and private midwives	193	1.91	Restricted for financial reasons	94	0.93
have it						Restricted due to location or capacity	55	0.55
						Restricted due to risk factors	19	0.19
						Other reasons	25	0.25
			Equitable access to midwifery group practice	74	0.73	Restricted due to location or capacity	33	0.33
						Restricted due to risk factors	15	0.15
						Other reasons	26	0.26
			Equitable access to quality healthcare	27	0.27			
I don't want to change anything	1027	10.18	I would 100% choose the same	935	9.27			
			Probably not or unsure	92	0.91			
I don't want another	142	1.41	I won't be having another baby	64	0.63			
pregnancy			Avoiding another birth due to fear or trauma from past experience	59	0.58			
			Avoiding pregnancy due to medical condition	19	0.19			

Table 4 list the main categories, subcategories and concepts. Where a subcategory did not separate into concepts the area has remained shaded/grey in the table.

more than 75% completed from women in every State and Territory of Australia and was live from March 2021 to December 2021. More detailed information on the social media strategy and outcomes can be found in online supplemental tables 2 and 3. The survey landing page included ethical information, a link to the participation information sheet and an informed consent question. If

the participant chose 'yes' they were given access to the survey.

Content analysis

Qualitative content analysis is a flexible methodology which uses a variety of methods to systematically categorise textual data and report on code frequencies and is appropriate for identifying patterns and categories in large datasets.²⁸ As reported in previous perinatal content analysis studies, 9 11 the frequency distribution of the items of coding is reported in number and percentages. The open-text quotes were analysed using an inductive/ conventional content analysis where the categories were developed from the dataset. 29-31 There were 6101 women who made open text responses to the survey question 'Would you do anything different if you were to have another baby?'. A woman's response may have contained multiple items of coding and be assigned to more than one main category, subcategory or concept (eg, 'I will have a private midwife, have a natural vaginal birth with no medical pain relief and I will breastfeed baby exclusively', so in this case one response equates three data items that were coded). In total there were 10089 items of coding generated from 6101 responses. The items of coding have been referred to as comments in the results. The percentages in tables 3 and 4 refer to the number of comments (numerator) out of the total 10089 comments (denominator).

Each quote was analysed and became an item of coding which was categorised into a concept. When more than one concept was found in a quote it was broken down into different items of coding and placed in the relevant concept. At this point, a coding framework was established and the remaining quotes coded into the framework. Following coding of all quotes the concepts were organised into the hierarchy of main categories and subcategories. The larger subcategories also contained smaller concepts, as can be found in tables 3 and 4. The content analysis process was undertaken by RL, HK and HGD and a quality assurance content analysis was undertaken by WK. Data saturation was found after approximately 1000 comments when no further subcategories were found.

Reflexivity

Reflexivity is an essential component of qualitative research and included identifying the position of the researchers and transparency of processes. The content analysis was allocated to a midwifery student, RL, undertaking an undergraduate research training programme supported by supervisory research mentors. The student was given training in research methods and attended weekly meetings with the research team which provided feedback and support. HK and HGD were the supervising midwifery academics and WK a research assistant who provided a quality assurance of the content analysis and assisted with statistical analysis on the BESt research team.

FINDINGS Participants

Out of a cohort of 8804women, a total of 6101women (69% of survey respondents) left an open text response to the question 'Would you do anything different if you were to have another baby?'. Most women were between 25–39 years of age and had a combined family income of

more than \$100 000, were partnered and had a university education. The respondents were made up of 1.6% Aboriginal and/or Torres Strait Islander women. Most women were born in Australia (86.58%) and 13.42% were born overseas. There were 6095 responses written in English, 3 responses in Arabic, 2 responses in Simplified Chinese and 1 in Persian. 7.9% of women were speaking more than one language at home. There was a representative spread across States and Territories in Australia as can be found in online supplemental table 1. Further demographic information is available in table 1.

Thirty-four per cent of women accessed standard, fragmented maternity care in the public sector seeing multiple providers, 26% had CoC with a midwife working in a public hospital, 22% had CoC with a doctor under private health insurance, 9% had GP shared care and 9% had a privately practising midwife. Most women (60%) had a vaginal birth, 26% had a caesarean and 14% an assisted vaginal birth. The majority of births occurred in a public hospital (65%), 18% in a private hospital, 6% in birth centres and 7% at home which varies from the Australian national statistics of 74.7% birthing in a public hospital, 25.3% in a private hospital, 2.9% in birth centres and 0.4% at home. Thirty per cent of women had an induction of labour which is comparable to Australian national statistics of 31% in 2016^{33} to 35.5% in 2020^4 and 33% of women responding to this question reported experiencing a traumatic birth (29% in the total BESt cohort).

Although the survey was available for women who had a baby between 2016 and 2021, most women (69%) who responded had their baby within 2 years of completing the survey (2019–2021). When factoring in the impact of COVID-19, 57% of responses were pre-COVID-19 and 42% responded during the COVID-19 pandemic. Participants were asked to report on their most recent birth. There were 53.4% of women who had one previous birth and 46.6% of women with more than one previous birth.

There were 2703 participants in the survey that did not provide an answer to the open text question. The main differences between those that answered the question and those that did not were rates of birth trauma and parity. Participants who answered the question had nearly double the birth trauma rate (33%) than those who did not answer the question (17%) and 53% of participants who answered the question were primiparous and compared with 41% who did not answer the question. Demographic and maternity details of both groups are available as online supplemental tables 4 and 5.

Main categories and subcategories

There were six main categories, four that focused on what women wanted for their next birth (total of four n=8560, 84.8%) (figure 1), one where women did not want another pregnancy (n=142, 1.4%) and one where women did not wish to make any changes (n=1027, 10.2%). The results will be discussed under the main categories with descriptions of the subcategories and concepts given with

'What women want' concept diagram.

illustrative comments from the data and tables 3 and 4 list the categories, items of coding and percentage distribution of comments.

Next time I'll be ready

There were 3958 (39.2%) comments where women described the choices or preparations they would put in place for a future pregnancy. These included choices around intervention, preparing themselves better and being a better advocate for themselves. There was a sense that women were reflecting on previous birth experiences and feeling they needed to strongly exert control, choices, and advocate for themselves in future.

I am so much more educated since my first birth and can now advocate for myself and educate my husband. The only good thing to come out of my first birth is the strength and passion I now feel surrounding my next birth to be able to fight for myself (ID: 3522)

The subcategory with the largest number of comments was, 'prepare myself better' (1928, 19.1%). In this subcategory women specified actions they would take to be better prepared: 'I will be more confident and knowledgeable' (1015, 10.1%), 'prepare more mentally and physically' (191, 1.9%) and 'have a birth plan' (180, 1.8%). Ultimately women expressed wanting to be more confident, assertive and advocate for themselves in future births. Many wanted to stand up for themselves and their choices in future births now that they knew they could say 'no' to unwanted interventions. Others described how they would not accept mistreatment by healthcare providers and would have more confidence in a future pregnancy and birth.

Yes, instead of trusting the care provider to provide me with the latest evidence based research I will research for it myself and arm myself with it so that I get the care I deserve. I feel my best chances of VBAC is to be prepared both educationally and emotionally. I will never trust a care provider as much as I did with my first pregnancy. My maternal instincts will always come first (ID: 2952)

There were 1365 (13.5%) comments where women disclosed preferences regarding interventions, however there were over three times as many comments seeking fewer interventions (1078, 10.7%) in the future compared with choosing more interventions (287, 2.9%). The interventions women wanted to avoid or choose less of were induction or augmentation (540, 5.4%), pain relief (212, 2.1%) and a combination of other interventions (326, 3.2%). The interventions women identified as wanting more of were pain medications (172, 1.7%) and a variety of other interventions such as rupture of membranes and ultrasounds (115, 1.1%).

I would 100% opt for no induction I believe it's the reason that led me to a c section (ID: 674)

There were 665 (6.6%) comments where women said they wanted to 'advocate for better support and choices'. Most of these comments were about the postnatal period, such as 'better support postbirth' (186, 1.8%), wishing for 'skin to skin and be with my baby after birth' (80, 0.8%), 'advocate for my newborn' (20, 0.2%) and 'stand my ground for breast feeding' (57, 0.6%).

I would be more pushy with postnatal care as I feel it was inadequate at the hospital as I was described as a "confident" primagravida but I had no idea what I was doing (ID: 375)

There were 126 (1.3%) comments about 'better support and care during pregnancy', 145 (1.4%) comments stating, 'seek medical support sooner' and 51 (0.5%) comments about women wishing for a 'physiological third stage or delayed cord clamping'.

I wish I was able to speak for myself just as I do for others. I wish I did not feel vulnerable. I wished English was my language or I was white. I wish I was provided information. I wish I was treated with compassion (Nepalese, ID: 7622)

There were 468 (4.7%) comments from women who responded regarding their personal support preferences including a doula, support partner or more preparation for their support partner. There were 264 (2.6%) comments where women stated they would engage a doula for a future pregnancy, with some comments identifying the reason was to have access to an unbiased advocate so their wishes and rights were supported, even when the woman had lost her strength or will to fight.

Hire a doula—I found I needed more emotional support during labour than my husband could give. Fully respect the lying in period and again, invest in doula support for this time (ID: 2805)

There were 204 (2.0%) comments from women who wanted to 'ensure better personal support' where they would educate their partner more to enable a better support system during their most vulnerable time.

I would ask my husband to listen closely to what I was saying so he could help stop unwanted care. He also didn't know how to help me when I wanted them to stop touching me (ID: 7894)

I want a specific birth experience

There were 2872 (28.5%) comments where women expressed their wish for a specific future birth experience including the mode of birth and the labour and birth environment.

The largest category was wanting a vaginal birth (1735, 17.2%). This was predominantly the wish for a homebirth (1021, 10.1%), followed by 207 (2.0%) comments regarding wanting a 'vaginal birth after caesarean'; 236 (2.3%) comments opting for a 'waterbirth' and 116 (1.2%) comments expressing a desire to 'freebirth'.

100%, home/free birth next time. If it's a single, one or the other, if it's twins, freebirth because it's illegal to homebirth in SA. Will NOT be entering the hospital system again (ID: 844)

There were 458 (4.5%) comments from women who said they would be more active in labour and birth next time. This included 276 (2.7%) comments: 'I want to be more mobile', and 94 (0.9%) comments: 'I want to be given more time'. There were 88 (0.9%) comments noting they would use 'hypnobirthing, calm birth or relaxation techniques'.

I would definitely try hypnobirthing or similar—wish I had more mental strategies to help me go with the contractions. I did feel like I was fighting them at times (ID: 5673)

Caesarean births were stated as a preference in 438 (4.3%) of all comments. Of these, 98 (0.9%) comments elaborated that the choice was 'due to fear or trauma or risks of repeat experience', 21 (0.2%) comments were about 'wanting control or choice over natural labour or birth', 34 (0.3%) comments discussed medical reasons influenced their choice and 285 (2.8%) comments did not provide background for their preference for a caesarean.

I will have a planned essection for the next birth due to trauma of previous labour (ID: 5549)

There were 241 (2.4%) comments where women expressed their preference for a specific 'labour or birth environment', these included 110 (1.1%) comments where women expressed their preference for a 'birth centre or birth house' environment, 93 (0.9%) comments from women who would 'labour away from hospital or delay presenting in labour' and 38 (0.4%) comments wishing to 'birth in hospital'.

I'm not sure because what I would change is how I was treated, and I do not have control over that. I would like to go to a birth centre, but I do not have that option if my BMI is too high. The experience definitely makes me consider not having any more children (ID: 4390)

I want a specific model of care

There were 1796 (17.8%) comments where women expressed preferences for a specific model of care for their future pregnancy, birth and postnatal care. 'Midwifery continuity models' were most often mentioned with 1107 (10.9%) comments, followed by 350 (3.5%) comments stating: 'I don't want the model I had last time'. A total of 280 women (2.8%) said they would prefer a 'private obstetric model' and 59 (0.6%) comments wanted to 'use the public system'.

Under 'midwifery continuity model', 'private midwife' was mentioned in 625 (6.2%) comments, with 482 (4.8%) comments stating, 'seek continuity of care with a midwifery'.

I would do so much differently. First of all, I would ensure continuity of care for example, caseload midwifery or a private midwife or doula. It is very important to me that next time I have a care provider who I fully trust, who has a good understanding of my birth preferences and who I know will be a strong advocate for me and who will encourage, empower, support and believe in me and my ability to birth my baby (ID: 7087)

In the category 'I don't want the model or care provider I had last time', 350 comments (3.5%) conveyed their negative feelings and distrust of previous models of care elaborating on why they would change models' next time.

100% I do not trust the public hospital (ID: 7554; Persian language)

I want better access

There were 294 (2.9%) comments where women expressed their inability to access specific pregnancy care or birth experiences due to barriers such as finances, the quality of care available, ineligibility due to policy or not accessible in some regions/locations. There were 193 (1.9%) comments asking for 'equitable access to homebirth and private midwives', 74 (0.7%) comments from women wanting access to midwifery group practice models and 27 (0.3%) comments wanting 'equitable access to quality healthcare', which included wanting better quality healthcare in regional settings.

I am currently pregnant and free birthing this baby at home I would have preferred to have a private midwife but the cost is too high so free birthing (ID: 3555)

In this category, women expressed the need to access a model of care and birth environment that enabled individual, safe, respectful and empowering experiences not limited by financial standing, minority status, location or public system policies or limitations.

Yes, I live in the remote town of XXX If I ever fell pregnant again. I would move to a bigger town. Obstetric care in the bush is very much lacking. Rural women like myself are lucky to even be alive after our experiences. We didn't even have one single midwife in the town at the time of my first pregnancy. There are no providers offering specialist services, so the closest town we can travel to for high risk care is [name of location], which is 4 hours away from [name of location] (ID:8075)

I don't want to change anything

There were 1027 (10.2%) comments from women who expressed they would not change anything from their past experience in planning future pregnancy or birth experiences. These comments came from women who accessed a variety of models of care. The category included 622 (6.2%) comments with no further information given (answered no) and 405 (4.0%) comments that were overwhelmingly positive about their recent birth experience. Within each model of care group, women who answered that they did not want to change anything ranged from 30.3% of women with a private midwife to 11% of women in standard care (see online supplemental table 6). This is a representation of women who were satisfied with their chosen model of care and desired no changes for future pregnancies.

No, I think I nailed it with my third birth! Having a positive birth experience is life changing (ID: 722)

I don't want another pregnancy

There were 142 (1.4%) comments from women who said they did not want to have a future pregnancy. To 'avoid due to fear or trauma from past experience' was the reason identified in 59 (0.6%) comments. There were 19 (0.2%) comments that mentioned having a medical condition preventing them from a future pregnancy and another 64 (0.6%) comments did not provide a specific reason for not wanting another pregnancy.

Sadly, my birth experience was so scarring I would never give birth again. This makes me so sad. I have one beautiful child and that will have to be enough for me, because I honestly would not repeat this experience knowing what I know now about giving birth in a public hospital (ID: 882)

DISCUSSION

The BESt aimed to explore the choices and experiences women have had in the past 5 years and specifically this paper examines whether they would make different choices if they had another baby. The findings of this study demonstrate the importance women place on having a spontaneous, intervention free, vaginal birth and CoC with a midwife appears to be the most preferred model for future births. Women have a desire to be more active in labour, avoid interventions and have a vaginal birth. In relation to national studies into women's experiences of maternity care, these results are similar to the Canadian Maternity Experiences Survey where women had decreased satisfaction if they had experienced interventions during labour or had operative or caesarean births. ¹⁹

Self-blame

The largest category of 'Next time I'll be ready' demonstrated a concerning level of self-blame and guilt women felt about their previous birth experiences culminating in their desire and determination to have a different birth experience. It appears women were blaming themselves for system failures and this is added to their trauma which is a theme found in previous birth trauma studies.^{34–37} A Canadian study by Malacrida and Boulton³⁸ found women consistently blamed themselves when their birthing expectations were not met through questioning their behaviours and decisions at the time. The issue of women blaming themselves after a traumatic event has been described as part of 'victim blaming'. Research into violence against women identifies the societal belief that victims/survivors (mostly women) are to blame in some way for the traumatic assault, whether that be from an intimate partner, family member or stranger. 39-41 Victim blaming increases survivors' feelings of self-blame. 37 40-42

In the maternity environment too many women experience coercion, obstetric violence and disrespectful care and are subject to victim blaming. ¹⁰ 11 37 An example of this is healthcare providers dismissive attitudes to birth plans. 43 44 A survey of maternity healthcare providers in the USA found 66% did not recommend birth plans and 31% believed they led to poorer outcomes. 45 A UK study that interviewed women and midwives found midwives felt challenged if women planned for a physiological birth with rigid birth plans, but experienced intervention and complications and this could result in midwives blaming women for their unrealistic expectations. 46 This is in comparison to a recent systematic review on birth plans that found using a birth plan had positive outcomes, such as the use of less interventions, better communication between women and clinicians as well as higher overall satisfaction from women. 47 Further research is needed to explore whether women who enter a model of care best suited to their values reduces the disconnect between expectations and reality and hence reduce birth trauma.

Women who do experience a traumatic birthing experience often have their feelings invalidated and the interventions they experienced validated through healthcare providers stating 'at least you have a healthy baby'. However, this study shows that having a respectful vaginal birth with minimal intervention is what most women wished for. Having access to equitable, safe, evidence

based, woman centred care is central to the values and principles in the Woman Centred Care Strategic Directions for Australian maternity services.¹

Models of care

The findings of this paper identified the importance women gave to models of care. Although only one main category referred directly to model of care there were other categories where the comments indirectly related to the model of care. This is due to the impact that model of care would have on the choices such as homebirth with a private midwife, water immersion and being supported to be active in labour and choosing a caesarean. The most recent report on models of care in Australia indicates 14.8% of models offered CoC with a midwife in a public hospital.⁵ The recognised benefits of midwifery CoC are, reduced preterm birth rates, lower intervention rates and higher satisfaction. 48 Midwifery CoC is recommended by the WHO as a health system intervention that improves the usage and quality of maternity care. 49 The findings of this study indicate that women are aware of these benefits and are seeking midwifery CoC alongside decreased use of interventions and increased active birth.

The findings also identified the lack of equitable access to midwifery models of care with women highlighting restrictions due to location, financial barriers (to private midwifery models) or perceived risk status. Women from regional, rural and remote Australia identified a lack of access to midwifery models of care. An integrative review exploring the impact of rural and remote maternity service closures across Australia found women often needed to relocate 2-4 weeks before their due date to birth in a maternity service with birthing services and antenatal services were limited, especially for women relying on public transport.⁵⁰ This is supported by Rolfe et at that found from 259 health facilities in communities with populations of 1000-25000 within a 1-hour catchment to a hospital, birthing services were provided by 42% and 68% had operative facilities. In an extensive qualitative review of nine rural or remote maternity services across four jurisdictions across Australia it was found a lack of midwifery leadership, workforce issues and little or no community consultation resulted in poor or lack of maternity services to meet the unique needs of the birthing population.⁵² Given that there are negative impacts for women and their families when needing to relocate for birth, and that Aboriginal and/or Torres Strait Islander women report a loss of cultural and spiritual dimensions of birth, ^{52 53} it is imperative that culturally safe continuity of midwifery care is available for all women across Australia, including those in regional, rural and remote communities. Further research is needed to explore the impact of providing midwifery led maternity services in these communities on women's experiences.

The data from this survey was from women pre and during the COVID-19 pandemic which had a significant impact on maternal and neonatal care globally. The disruption caused by the pandemic led to changes in the

provision of healthcare services in Australia, including reduced access to antenatal care, delays in seeking care, and disruptions in the supply of essential medicines and equipment. Both globally and within Australia, women had increased interest in accessing homebirth during the pandemic^{54 55} and this may have influenced the large number of comments wishing for a homebirth in this study. However, women in this study also identified financial barriers in accessing privately practising midwives, especially when wanting to birth at home. Previous research highlights that this financial barrier can result in women choosing an unregulated birth worker such as a doula or unregistered midwife to have a freebirth, ⁵⁶ or if available, access one of the few publicly funded homebirth services in Australia. ⁵⁷

Strengths and weaknesses of the study

A strength to this study is the volume of respondents across Australia, with 8804 completed responses and 6101 text responses to the question analysed for this paper. This large number of responses is greater than other national birth experience surveys. 17 19 20 58

Although a strength of the survey was that it was translated into seven languages other than English, a weakness was that there were limited responses in those languages despite targeted social media advertising. There were also lower rates of First Nations women (1.6%) and migrant women (13.42%) represented in this study cohort compared with the Australian maternity statistics of First Nations women (4.9%) and women who were born in countries other than Australia 64.3%.

A limitation could be the reliance on recall with 6% of women having birthed 4–5 years prior to the survey. Research suggests that childbirth memories, especially for women who had negative experiences, can be quite accurate and detailed from 1 year to 50 years post-childbirth. 59–61 Given that childbirth memories can last a lifetime, it is important that researchers and clinicians encourage and listen to women who share their experiences to identify areas for change in maternity services.

There was a slightly higher rate of women with one previous birth (53.4%) compared with women with more than one previous birth (46.6%). As the content analysis did not compare the comments from women with one previous birth to those with more than one previous birth this could be an area for further research. The objective of the study was to look at women's experiences related to their model of care for their most recent birth in the past 5 years.

As the survey was conducted online there could be lower responses from participants who had limited or no access to the internet. For the target group of this study, across Australia there is digital inequity between rural and urban areas, low and high-income households, education levels, First Nations communities and those living with a disability. This digital inequity results in less access to the digital environment due to financial restraints and

geographical availability.⁶² ⁶³ This can negatively impact the level of representation in online surveys.

CONCLUSION

This study identifies that women largely blame themselves for not being more prepared for birth or assertive about what they want. The women also mostly see vaginal birth, with minimal intervention, in a midwifery CoC model as important for the next birth. It is imperative that there is increased access to midwifery CoC across Australia, including regional, rural and remote areas of Australia. Throughout this research, what has prevailed is the data and knowledge about birth trauma. Women appear to blame themselves for their previous birth experience and are determined to plan and be better prepared for future births. Women need to be supported to choose the right model of care that is best suited to their individual values for the first baby, early in pregnancy or preferably before pregnancy, as this could reduce the disconnect between expectations and reality and subsequently reduce regrets and birth trauma. Women who stated that they would do something different for their next birth are more likely to describe their birth as traumatic. Being informed of their choices and making personalised decisions regarding the available models of care would ideally lead to less regret and improved birth experiences.

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REFERENCES

- 1 COAG Health Council. Woman-centred care: strategic directions for Australian maternity services. Canberra, 2019.
- 2 Townsend ML, Brassel AK, Baafi M, et al. Childbirth satisfaction and perceptions of control: postnatal psychological implications. *British Journal of Midwifery* 2020;28:225–33.
- 3 Dahlen H, Kumar-Hazard B, Schmied V. Birthing outside the system. Milton Park, Abingdon, Oxon; New York, NY: Routledge, 2020,
- 4 AIHW. Australia's mothers and babies 2020. Contract No.: Cat. no.PER 101. Canberra: Australian Institute of Health and Welfare, 2022
- 5 AlHW. Maternity models of care in Australia, 2022. Contract No.: Cat. no.PER 101. Canberra, 2022.
- 6 Patel N, Rajasingam D. User engagement in the delivery and design of maternity services. Best Pract Res Clin Obstet Gynaecol 2013;27:597–608.
- 7 Romanis EC. Appropriately framing maternal request caesarean section. J Med Ethics 2022;48:554–6.
- 8 Eide KT, Bærøe K. How to reach trustworthy decisions for caesarean sections on maternal request: a call for beneficial power. J Med Ethics 2020;47:e45.
- 9 Edmonds JK, Declercq E, Sakala C. Women's childbirth experiences: a content analysis from the listening to mothers in California survey. Birth 2021:48:221–9.
- 10 Keedle H, Schmied V, Burns E, et al. From coercion to respectful care: women's interactions with health care providers when planning a VBAC. <u>BMC Pregnancy Childbirth</u> 2022;22:70.
- 11 Keedle H, Keedle W, Dahlen HG. Dehumanized, violated, and powerless: an Australian survey of women's experiences of obstetric violence in the past 5 years. *Violence Against Women* 2022:10778012221140138.
- 12 Vedam S, Stoll K, Taiwo TK, et al. The giving voice to mothers study: inequity and mistreatment during pregnancy and childbirth in the United States. Reprod Health 2019;16:77.
- 13 Alcorn KL, O'Donovan A, Patrick JC, et al. A prospective longitudinal study of the prevalence of post-traumatic stress disorder resulting from childbirth events. *Psychol Med* 2010;40:1849–59.
- 14 Soet JE, Brack GA, Dilorio C. Prevalence and predictors of women's experience of psychological trauma during childbirth. *Birth* 2003;30:36–46.
- 15 Kendall-Tacket. Birth trauma: the causes and consequences of childbirth-related trauma and PTSD. In: Barnes DL, ed. Women's reproductive mental health across the lifespan. New York: Springer International Publishing, 2014.
- 16 Simpson M, Schmied V, Dickson C, et al. Postnatal post-traumatic stress: an integrative review. Women Birth 2018;31:367–79.
- 17 Declercq ER, Sakala C, Corry MP, et al. Listening to mothers II: report of the second national U.S. survey of women's childbearing experiences: conducted January-February 2006 for childbirth connection by Harris Interactive(R) in partnership with Lamaze International. J Perinat Educ 2007;16:15–7.
- 18 Declercq ER, Sakala C, Corry MP, et al. Major survey findings of listening to Mothers(SM) III: new mothers speak out: report of national surveys of women's childbearing Experiencesconducted October-December 2012 and January-April 2013. J Perinat Educ 2014;23:17–24.

- 19 Chalmers BE, Dzakpasu S. Interventions in labour and birth and satisfaction with care: the Canadian maternity experiences survey findings. *Journal of Reproductive and Infant Psychology* 2015;33:374–87.
- 20 Redshaw MH. Delivered with care. In: A National survey of women's experience of maternity care 2010. Oxford, United Kingdom: National Perinatal Epidemiology Unit, University of Oxford, 2010.
- 21 Agency for Clinical Innovation. *Using and selecting a patient survey*. NSW Government, Available: https://aci.health.nsw.gov.au/statewide-programs/prms/using-selecting-patient-survey
- 22 ACSQHC. Patient-reported outcome measures: Australian commission on safety and quality in health care. 2022. Available: https://www.safetyandquality.gov.au/our-work/indicatorsmeasurement-and-reporting/patient-reported-outcome-measures
- 23 McKinnon LC, Prosser SJ, Miller YD. What women want: qualitative analysis of consumer evaluations of maternity care in Queensland, Australia. BMC Pregnancy Childbirth 2014;14:366.
- 24 Perdok H, Verhoeven CJ, van Dillen J, et al. Continuity of care is an important and distinct aspect of childbirth experience: findings of a survey evaluating experienced continuity of care, experienced quality of care and women's perception of labor. BMC Pregnancy Childbirth 2018:18:13.
- 25 Vedam S, Stoll K, Martin K, et al. The mother's autonomy in decision making (MADM) scale: patient-led development and psychometric testing of a new instrument to evaluate experience of maternity care. PLoS One 2017;12:e0171804.
- 26 Vedam S, Stoll K, Rubashkin N, et al. The mothers on respect (MOR) index: measuring quality, safety, and human rights in childbirth. SSM Popul Health 2017;3:201–10.
- 27 Australian Bureau of Statistics. Overseas migration: ABS Website. 2022. Available: https://www.abs.gov.au/statistics/people/ population/overseas-migration/latest-release#cite-window1
- 28 Mayring P. Qualitative content analysis: theoretical background and procedures. In: Advances in mathematics education. Dordrecht: Springer Netherlands, 2014: 365–80.
- 29 Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res 2005;15:1277–88.
- 30 Morgan DL. Qualitative content analysis: a guide to paths not taken. Qual Health Res 1993:3:112–21.
- 31 Schreier M. Content analysis, qualitative. London: SAGE Publications Ltd. 2020.
- 32 Pezalla AE, Pettigrew J, Miller-Day M. Researching the researcheras-instrument: an exercise in interviewer self-reflexivity. Qual Res 2012:12:165–85.
- 33 AIHW. Australia's mothers and babies 2016-in brief. Australian Insititue of Health and Welfare, 2018: 71.
- 34 Minooee S, Cummins A, Sims DJ, et al. Scoping review of the impact of birth trauma on clinical decisions of midwives. J Eval Clin Pract 2020:26:1270–9.
- 35 Watson K, White C, Hall H, et al. Women's experiences of birth trauma: a scoping review. Women Birth 2021;34:417–24.
- 36 Cole L, LeCouteur A, Feo R, et al. ""Trying to give birth naturally was out of the question": accounting for intervention in childbirth". Women Birth 2019;32:e95–101.
- 37 Morris T, Robinson JH, Spiller K, et al. "Screaming, 'no! no!' it was literally like being raped": connecting sexual assault trauma and coerced obstetric procedures. Social Problems 2023;70:55–70.
- 38 Malacrida C, Boulton T. The best laid plans? Women's choices, expectations and experiences in childbirth. *Health (London)* 2014;18:41–59.
- 39 Whiting J, Dansby Olufowote R, Cravens-Pickens J, et al. Online blaming and intimate partner violence: a content analysis of social media comments. TQR 2019;24:78–94.
- 40 Wilson LC, Farley A, Horton SF. The impact of victim blaming and locus of control on mental health outcomes among female sexual assault survivors. Violence Against Women 2022;28:3785–800.
- 41 Anderson GD, Overby R. The impact of rape myths and current events on the well-being of sexual violence survivors. *Violence Against Women* 2021;27:1379–401.

- 42 DeCou CR, Mahoney CT, Kaplan SP, et al. Coping self-efficacy and trauma-related shame mediate the association between negative social reactions to sexual assault and PTSD symptoms. Psychol Trauma 2019;11:51–4.
- 43 Keedle H, Peters L, Schmied V, et al. Women's experiences of planning a vaginal birth after caesarean in different models of maternity care in Australia. BMC Pregnancy Childbirth 2020;20:381.
- 44 Batsis JA, Boateng GG, Seo LM, et al. Development and usability assessment of a connected resistance exercise band application for strength-monitoring. World Acad Sci Eng Technol 2019;13:340–8.
- 45 Afshar Y, Mei J, Fahey J, et al. Birth plans and childbirth education: what are provider attitudes *J Perinat Educ* 2019;28:10–8.
- 46 Patterson J, Hollins Martin CJ, Karatzias T. Disempowered midwives and traumatised women: exploring the parallel processes of care provider interaction that contribute to women developing post traumatic stress disorder (PTSD) post childbirth. *Midwifery* 2019;76:21–35.
- 47 Bell CH, Muggleton S, Davis DL. Birth plans: a systematic, integrative review into their purpose, process, and impact. *Midwifery* 2022;111.
- 48 Sandall J, Soltani H, Gates S, et al. Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database Syst Rev 2016;4:CD004667.
- 49 World Health Organization. *WHO recommendations on antenatal care for a positive pregnancy experience*. Geneva: World Health Organization, 2016.
- 50 Chan MH, Hauck Y, Kuliukas L, et al. Women's experiences of their involvement around care decisions during a subsequent pregnancy after a previous caesarean birth in Western Australia. Women Birth 2021;34:e442–50.
- 51 Rolfe MI, Donoghue DA, Longman JM, et al. The distribution of maternity services across rural and remote Australia: does it reflect population need BMC Health Serv Res 2017;17:163.
- 52 Longman J, Kornelsen J, Pilcher J, et al. Maternity services for rural and remote Australia: barriers to operationalising national policy. Health Policy 2017;121:1161–8.
- 53 Donnellan-Fernandez RE, Creedy DK, Callander EJ, et al. Differential access to continuity of midwifery care in Queensland, Australia. Aust Health Rev 2021;45:28–35.
- 54 Homer CSE, Davies-Tuck M, Dahlen HG, et al. The impact of planning for COVID-19 on private practising midwives in Australia. Women Birth 2021;34:e32–7.
- 55 Schmidt CN, Cornejo LN, Rubashkin NA. Trends in home birth information seeking in the United States and United Kingdom during the COVID-19 pandemic. *JAMA Netw Open* 2021;4:e2110310.
- 56 Rigg EC, Schmied V, Peters K, et al. A survey of women in Australia who choose the care of unregulated birthworkers for a birth at home. *Women Birth* 2020;33:86–96.
- 57 Blums T, Donnellan-Fernandez R, Sweet L. Women's perceptions of inclusion and exclusion criteria for publicly-funded homebirth a survey. *Women Birth* 2022;35:413–22.
- 58 Beecher C, Greene R, O'Dwyer L, et al. Measuring women's experiences of maternity care: a systematic review of self-report survey instruments. Women Birth 2021;34:231–41.
- 59 Forssén ASK. Lifelong significance of disempowering experiences in prenatal and maternity care: interviews with elderly Swedish women. Qual Health Res 2012;22:1535–46.
- 60 Molloy E, Biggerstaff DL, Sidebotham P. A phenomenological exploration of parenting after birth trauma: mothers perceptions of the first year. Women Birth 2021;34:278–87.
- 61 Lundgren I, Karlsdottir SI, Bondas T. Long-term memories and experiences of childbirth in a Nordic context—a secondary analysis. *International Journal of Qualitative Studies on Health and Well-Being* 2009;4:115–28.
- 62 Wilson CK, Thomas J, Barraket J. Measuring digital inequality in Australia: the Australian digital inclusion index. *JTDE* 2019;7:102–20.
- 63 Afshar Ali M, Alam K, Taylor B. Do social exclusion and remoteness explain the digital divide in Australia? Evidence from a panel data estimation approach. *Economics of Innovation and New Technology* 2020;29:643–59.