

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<u>http://bmjopen.bmj.com</u>).

If you have any questions on BMJ Open's open peer review process please email <u>info.bmjopen@bmj.com</u>

BMJ Open

Breast-Exit: Women's experiences of ceasing to breastfeed; An Australian qualitative study

Journal:	BMJ Open
Manuscript ID	bmjopen-2018-026234
Article Type:	Research
Date Submitted by the Author:	29-Aug-2018
Complete List of Authors:	Ayton, Jennifer; University of Tasmania, School of Medicine College of Health and Medicine Tesch, Leigh; University of Tasmania, College of Creative Arts Hansen, Emily; University of Tasmania, School of Social Sciences
Keywords:	Breastfeeding, Cessation, QUALITATIVE RESEARCH, Infant formula, Mothers

SCHOLARONE[™] Manuscripts

1		
2		
3	1	TITAL PAGE
4 5	2	
5 6	3	Title: Breast-Exit: Women's experiences of ceasing to breastfeed; An Australian qualitative
7	4	study
8	5	
9	6	Authors names
10		
11	7	Jennifer Ayton, Leigh Tesch, Emily Hansen
12	8	
13	9	Corresponding author
14	10	Jennifer Ayton
15	11	PhD, Lecturer in Public Health
16	12	Private Bag 34, School of Medicine, College of Health and Medicine, University of Tasmania,
17	13	Hobart, Australia, 7001, Jennifer.ayton@utas.edu.au, Phone +61409430248
18	14	
19	15	Leigh Tesch
20		
21	16	PhD Candidate
22	17	College of Creative Arts, University of Tasmania, Hobart, Australia, 700,
23	18	Leigh.tesch@utas.edu.au
24	19	
25	20	Emily Hansen
26	21	PhD, Senior Lecturer in Sociology
27	22	School of Social Sciences, University of Tasmania, Hobart Australia, 700,
28	23	Emily.Hanse@utas.edu.au
29	24	
30 31	25	Word count: Abstract: 205 Main manuscript: 4630
32	23 26	
33		
34	27	Word count:
35	28	Abstract: 205
36	29	Main manuscript: 4630
37	30	Tables: 2
38	31	Figures: 1
39	32	References: 47
40	33	
41	34	
42	54	
43		
44		
45		
46		
47		
48		
49 50		
50		
51 52		
52 53		
55 54		
55		
56		
57		
58		1
59		

1 2		
2 3 4 5	35 36	ABSTRACT
6 7	37	Objective: To investigate mothers infant feeding experiences (breastfeeding/formula milk
8 9 10	38	feeding) with the aim of understanding how women experience cessation of breastfeeding.
10 11 12	39	Design: Multi-method, qualitative study; questionnaire, focus groups and interviews.
13 14	40	Setting: Northern and southern Tasmania, Australia.
15 16	41	Participants: 127 mothers from a broad age and social demographic completed a questionnaire
17 18 19	42	and participated in 22 focus groups and 19 interviews across the north and south of Tasmania,
20 21	43	2011-2013.
22 23	44	Findings: Mothers experience a tension between breastfeeding as "natural" and "best" and
24 25	45	formula milk as "wrong" and "unnatural." They experience and endure multiple issues (e.g. pain,
26 27 28	46	low milk, mastitis, public shaming) whilst making use of social capital and other resources such
29 30	47	as father/partner support, expressing breastmilk, bottles and dummies to prolong breastfeeding
31 32	48	before cessation. Overall cessation of breastfeeding was frequently experienced as unexpected
33 34 25	49	and "devastating" leaving mothers with a prolonged sense of loss and failure; "breastfeeding
35 36 37	50	grief."
38 39	51	Conclusions and implications: The exit from breastfeeding (cessation) results in lingering
40 41	52	feelings of grief and failure making it harmful to women's emotional wellbeing. Reframing
42 43	53	breastfeeding as a family practice where fathers/partners are incorporated as breastfeeding
44 45 46	54	partners has potential to help women negotiate and prolong breastfeeding. Proactive counselling
47 48	55	and debriefing are needed to assist women to manage feelings of loss and "breastfeeding grief."
49 50	56	
51 52	57	Key words: Breastfeeding, Cessation, Infant Formula, Qualitative Research, Mothers
53 54 55	51	Key words. Dreastreeding, Cessation, mant Formula, Quantative Research, Moulers
55 56 57		
58		2

1 2 3 4 5	58	ARTICLE SUMMARY
6 7	59	Strengths and limitations of this study
8 9 10	60	• Elicits the experiences of women stopping breastfeeding across a diverse demographic
10 11 12	61	including 50% of women aged below 24 years of age, and who were living in
13 14	62	socioeconomic disadvantaged areas.
15 16 17	63	• Original research that is hypothesis generating about the low rates of breastfeeding and
18 19	64	will help inform policy and practice and preventative strategies.
20 21	65	• The findings may not be representative of all mothers experiences in other settings or
22 23 24	66	countries, and relied on the mothers memories.
25 26	67	• The complex nature of the data limited the exploration of the concept "exclusive
27 28	68	breastfeeding."
29 30 31	69	• The findings reveal fathers/partners as forms of social capital.
32 33 34 35 36	70	
37 38 39 40 41 42		
43 44 45 46		
47 48 49 50		
51 52 53 54		
55 56 57 58		3
59 60		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

The comp	olex nature	of the data	limited	the explorat	ion of	the	concept	"exclusive
breastfeed	ing."							
The findin	gs reveal fa	uthers/partners	s as forms	of social cap	ital.			

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

A recent Lancet¹ series demonstrates the public health imperative to promote and support breastfeeding as a social and cultural norm. However, despite the convincing evidence of the benefits of exclusive (where the child is only feed breastmilk/breastfed) and continued breastfeeding (any) for both mothers and their children,²⁻⁴ few women fulfil their choice to breastfeed. In well-resourced countries such as Australia, United Kingdom (UK) and United states it is estimated that more children are now formula milk feed (exclusively and partially) than exclusively breastfed within their first 6 months of life.²⁵ In Australia, whilst it is estimated that over 90% of mothers start exclusive breastfeeding by the first two months of age 50% of Australian infants who initiate at birth, are no longer exclusively breastfeeding.⁶⁷ In the UK. 69% of infants start exclusive breastfeeding, and by six weeks a quarter (23%) are continuing.⁸ Victor et al,² cite that as few as 37% of infants are exclusively breastfed worldwide.

Cessation of breastfeeding occurs as a result of either partially or completely replacing breastfeeding or breastmilk feeding with formula milk feeding, or other fluids / foods. Our earlier analysis of the first Australian Institute of Health and Welfare (AIHW) first Australian National Infant Feeding (ANIFS) cross-sectional survey revealed a high prevalence of early cessation of exclusive breastfeeding within the first 6 months. The fathers infant feeding preference (formula or indifferent) maternal obesity (BMI>30) and regular dummy use increased the risk of cessation within the first 6 months.⁷ Others have noted that maternal smoking, low maternal education levels, young mothers aged<24 years, returning to work within the first 13 weeks (mother), preterm infant, and postnatal/perinatal depression are associated with not breastfeeding and cessation of any breastfeeding.⁷⁹⁻¹¹

Page 5 of 29

BMJ Open

Mothers make decisions about how to feed their babies based on a range of factors that may include past experiences, family history, social context and what they know and understand about infant feeding from public health promotion, nutritional and nurturing perspectives.¹²⁻¹⁴ These decisions are also influenced knowingly or unknowingly by health promotion public health campaigns such as the UNICEF Baby Friendly Hospital Initiative,¹⁵ health professionals discourses¹⁶ and by the mother's social, cultural, and political environments.¹⁴ When the choice is made to breastfeed but breastfeeding is unsuccessful mothers are often left bereft and confused, citing feelings of failure.¹⁷ Women have also described feeling relief and disconnectedness when they have chosen to not breastfeed.¹⁶ To explore these issues in greater depth we undertook a state wide qualitative study investigating mothers infant feeding experiences (breastfeeding/formula milk feeding) with the aim of understanding how women experience interrupting breastfeeding with formula milk in the context of the their everyday lives. Our research contributes to informing preventative and appropriate context based support strategies for mothers and their families.

, 107 **METHODS**

Design, setting, rational

109 The Tasmanian Infant Feeding (TIF) study was a state wide multi-method qualitative study.¹⁸ 110 investigating the infant feeding practices of women whose infants were aged from 0 through to 111 36 months. A total of 22 focus groups (FG) and 19 semi-structured one-one interviews were 112 conducted with mother/child dyads across the north and south of Tasmania, Australia, November 113 2011-March 2013. Ethics approval was obtained from the Tasmanian Social Science Ethics 114 Committee (Ethics Ref No: H0011838).

115 Patient and Public Involvement

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

116 There was no patient or public involvement in setting the research agenda.

117 Sampling strategy and recruitment

Mothers who were aged over 16 years, with children aged 0-36 months were recruited from different areas of Tasmania (urban, rural, remote). A requirement of the funding body was that 50% of the sample should include women who lived in areas classified as socioeconomically disadvantaged SEIFA index ranks (1=most disadvantaged 5=least disadvantaged).¹⁹ To attain a diverse sample we recruited women from pre-existing groups (mothers' groups), used snowballing techniques such as word-of-mouth, advertising and promoting the study within local newspapers, and flyers at community clinics and hospitals, direct contact with mothers, health professionals, and parenting support groups. Mothers could opt to participate in either a FG or one to one interview within their community and venue of choice. Recruitment ended when we judged that both data saturation and the sampling requirements of the funding body had been met.

129 Data collection

All data (demographic questionnaire and qualitative) were collected concurrently. Mother and child demographics and self-reported infant feeding practices were collected prior to the start of each FG/interview using a paper based questionnaire. One researcher conducted the interviews (Author 1 or 2) and two researchers were present at each FG (Authors 1 and 2 or 3). A FG/interview topic guide with open ended prompts (tell us how you are feeding, tell us more about that? what helped; what didn't? tell us about stopping) was used to encourage and explore experiences and facilitate the consistency of the data collection. The topic guide was piloted on one FG and one interview, and minor revisions were made. Field notes and a research log were kept, and all qualitative data were audio taped. Team debriefing occurred at the end of each

58

59

60

BMJ Open

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.	3MJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES)
--	--

2		
3 4	139	FG/interview. Each participant received a \$20.00 supermarket gift voucher in recognition of their
5 6 7	140	time.
8 9 10	141	Data analysis
10 11 12	142	Data were analysed using an iterative thematic approach and a coding framework informed by
13 14	143	the aims of the study and interpretivist qualitative methodology. ^{18 20} Demographic data were
15 16	144	analysed for frequencies and distributions using the statistical software Stata (v. 14). ²¹ NVivo (v.
17 18 19	145	10.2) was used to support the analysis of qualitative data. Qualitative data were transcribed
20 21	146	verbatim and checked against the audio recording for accuracy after each FG/interview by two
22 23	147	researchers. Pseudonyms were used in the transcripts to maintain participant confidentiality.
24 25 26	148	Three female researchers (Author's 1, 2, 3) with postgraduate qualifications in public health &
20 27 28	149	midwifery, sociology and allied health analysed the transcripts using an iterative thematic
29 30	150	analysis. A broad coding framework was developed during preliminary analysis. These were
31 32	151	then reduced into broad subthemes and themes. An abductive process revealed three final
33 34 35	152	themes; Value-to breastfeed, Endurance and Grief. (Figure 1)
36 37	153	
38 39	154	Definitions
40 41 42	155	All infant feeding definitions were consistent with the World Health Organizations (WHO)
43 44	156	indicators for assessing infant and young child feeding practices. ²² Exclusive breastfeeding refers
45 46	157	to an infant who receives breast milk (including expressed breast milk or breast milk from a wet
47 48 49	158	nurse) and allows ORS, drops, syrups (vitamins, minerals, medicines), but nothing else.
49 50 51	159	Breastfeeding is where the infant receives breast milk (including expressed or from a wet nurse
52 53	160	and food or liquid including non-human milk / formula. ²²
54 55	161	Validation and trustworthiness
56 57		7

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

Oualitative transcripts were linked to demographic data and used to cross check themes, sources, references and adequate participate representation. Emerging data analysis/ themes were also cross checked with different data sources (interview, field note and focus group data). Text searches using the "query" option within NVivo verified the frequency of use and relevance of the concepts and themes. For example, transcripts were searched for commonly-used terms such as "best" and "formula" this help to verify that women used that term to explain why they preferred to breastfeed over formula feeding, and their use of formula. A research log recorded the coding process, ideas, questions, and reflections.^{18 23}

FINDINGS

127 mothers participated in 22 FG and 19 interviews across southern and northern Tasmanian between May, 2011 and March, 2013. (Tables 1&2) The mean age of the women was 29 years (SD 5.9), with 46% living in an area classified as most disadvantaged (SEIFA 1&2). (Table 1&2) As women did not refer directly to "exclusive breastfeeding" as a way of feeding their children, and instead spoke about "breastfeeding" "not breastfeeding" and "formula" feeding, this analysis describes the women's accounts of how they experienced breastfeeding and their use of formula milk in their day to day lives unless otherwise stated. Pseudonyms and participant ages are used to identify direct quotes.

60

BMJ Open

Mothers Characteristics	n	(%)	Mean ± SD
Feeding preference before birth		(70)	Mean ± 5D
Breast	120	94.5	
Formula	7	5.5	
*Previously breastfed	57	44.9	
Maternal age (years)	51		29 ± 5.9
15-24	33	26.0	2) = 5.7
25-29	30	23.6	
30-34	39	30.7	
35 or older	25	19.7	
Parity	23	19.7	2 ± 0.9
Pregnant at time of study	2	1.6	2 ± 0.9
One (given birth once)	6	4.7	
Two or more	0 119	4.7 93.7	
	119	95.7	
Method of delivery	70	55 1	
Spontaneous vaginal delivery	70	55.1	
	16	12.6	
[†] Caesarean (elective / emergency)	41	32.3	
Maternal smoking	24	18.9	
Living arrangements	102	01 1	
Living with father of the child (defector or married)	103	81.1	
Single parent	24	18.9	
Current Occupation	40	21.5	
Professional	40	31.5	
Clerical/Admin or Service/Sales	19	15.0	
Home duties /self employed	45	35.4	
Student or unemployed	23	18.1	
Mothers employment status		7 0 1	
Full time	75	59.1	
Part time /casual	39	30.7	
Student	13	10.2	
**SEIFA quintiles			
Quintile 1(most disadvantaged)	48	37.8	
Quintile 2	10	7.9	
Quintile 3	21	16.5	
Quintile 4	27	21.3	
Quintile 5 (least disadvantaged)	21	16.5	
Education status			
Bachelor degree /higher	54	42.5	
Diploma/Certificate	41	32.3	
Year 12 or below	32	25.2	
Country of birth			
Australia	119	93.7	
Overseas	8	6.3	

A 22 FGs and 19 $Mean \pm SD$ 2.2 ± 8.6 284 ± 689.2 8.7 ± 2.4 : vaginal delivery by forceps or revived colostrum. **Exclusive 2	BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.
to birth, with the	025 at Ag
expressed their	ence B
breast because it	3ibliograph
10 nl	ique de I

	Child Characteristics	п	(%)	Mean ± SD
	Initiated breastfeeding at birth	129	97.0	
	Gender			
	Male	67	50.8	
	Age groups (to completed months)			12.2 ± 8.6
	0-6	35	26.3	
	7-12	45	33.8	
	13 -18	28	21.1	
	19≥	25	18.8	
	Birth weight (grams)			3284 ± 689.2
	≤2499g	18	13.5	
	≥2500g	115	86.5	
	Gestational age at birth (weeks)	110	00.5	38.7 ± 2.4
	⁺ Ductorum	23	17.3	38.7 ± 2.4
	**Term			
	Diago of hirth	110	82.7	
	Place of birth	0.4	(2,2)	
	Public hospital	84	63.2	
	Private hospital	49	36.8	
	⁺⁺ Term Place of birth Public hospital Private hospital Type of birth Vaginal ^{+†} Instrumental [†] Caesarean	-	50 (
	Vaginal	70	52.6	
	^{††} Instrumental	19	14.3	
	[†] Caesarean	44	33.1	
	Singletons	120	90.2	
	[§] Multiples (twin/triplet)	13	9.8	
	*Current feeding method			
	**Exclusive breastfeeding	17	12.8	
	Infant formula milk	14	10.5	
	Breast milk & infant formula milk	7	5.3	
	(includes ****EBM)			
	Family foods & breast milk (includes EBM)	37	27.8	
	Family foods & other milk/fluids	58	43.6	
	(includes infant formula)			
	+Preterm: born at less than 36 6/7 completed weeks gestation ++Term: born on or greater than		station.24 †† Instru	imental: vaginal delivery by forceps of
	ventouse. †Caesarean: combined emergency and elective caesarean delivery! \$ sets of; twins =5			
	*Self-reported data at the time of the FG/interview; based on the previous 24 hours. Ini	-		
	breastfeeding: breast milk only no other foods or fluids with the exception of vitamins, oral reh	ydration solutions. ***EBN	1: expressed breast	milk 22
85				
186	Valuing to breastfeed and cessation			
187	In this study 94% of women reported that they had	intended to br	eastfeed p	rior to birth, with the
88	majority (97%) initiating breastfeeding at and arc	ound the time	birth. Wo	men expressed their
89	desire to "just breastfeed" and conceptualized this	as feeding dire	ectly from	the breast because i
	-	-		
				10
	For peer review only - http://bmjopen.bm	ni com/site/about	/quidelines	vhtml
	i or peer review only - http://binjopen.bin	j.com/site/about	guidelines.	AITUIII

Table 2. Characteristics of the children (n=133) whose mother participated in interviews. Values are in n(%) mean \pm standard deviation(SD).

BMJ Open

was "more natural." Overall irrespective of age and social-economic status women highly valued breastfeeding and breastmilk above other milks or methods (expressing, bottle/formula milks),

Well, I'm obviously breastfeeding and picked it because of everything that I've read about it being healthy, economical, the bonding, the portability, "have boob, will travel" and it will stay warm and clean, and all those sorts of things, so it just seemed like the natural thing to do. (Elinore, 30)

Women often used normative language when talking about breastfeeding, formula and cessation; healthy, unhealthy, best, natural, "a god given right" and "the right thing to do," unnatural, failure, wrong, bad mother. They did not question the value or their choice to breastfeed, instead they accepted breastfeeding as their biological and personal right. Chelsea (26) mused "I don't know where that comes from, but that's the kind of expectation you have... it's what we are made to do." For women who did not want to breastfeed like Jane (20), the nutritional and social value attached to breastfeeding and breastmilk was a powerful motivator in directing her feeding practices, I didn't really want to but I intended to breastfeed anyway because I knew the benefits of it." (Ella, 20) These conscious and unconscious values and beliefs appeared underpin women's preferences their deep desire to feed directly from the breast and perceived need to avoid formula milks.²⁵

Endurance; resources

In our analysis the term endurance refers to the pressure women felt and put themselves under to breastfeed and avoid formula milk, and the resources they employed to mitigate this burden. Across the social spectrum and irrespective of their feeding intention women referred to using

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

formula, citing that they "had to give in"—use formula milk at some stage during their breastfeeding experience. Fiona, a mother of two who had breast and formula fed both her children until they were four months of age recalled that "it's harder than it looks…you think it's just going to happen, that you will just pop the baby on, but breastfeeding is bloody hard work." (Fiona, 28) Similarly, Harper (29) stated,

Everybody before, when you're pregnant, only tells you all the good things about breastfeeding and why you should breastfeed but nobody actually, well, I didn't find anyone . . . talked about how hard and how painful it was going to be. And then the only advice I could get from people was "just keep going, just keep going, just keep going." (Harper, 29)

The participant's desperate accounts of personal endurance "to get through it [breastfeeding]" included narratives about facing physical, personal and social battles. As reported elsewhere¹⁶ women in this study described suffering through multiple issues such as pain, low supply feelings of immorality, failure, loneliness and isolation in the effort to keep breastfeeding. Mothers breastfed through "torn and bleeding nipples," expressed for 4, 6, 9 months to "just keep going a little longer," and "just to give him a little breast milk." Many also breastfed despite experiencing shaming for breastfeeding. For example, being told that breastfeeding was dirty and disgusting and that they should "to do that [breastfeed] in private" or cover up.

Conversely, some mothers spoke about times when they had used a bottle to feed with breastmilk
and strangers had asked them why they were not breastfeeding. In the following example Mary
(30) describes to her distress at not being able to do what is she felt was "natural and right"
demonstrating the stigma felt by many participants because they were "not breastfeeding."

BMJ Open

I just wanted to always breastfeed and I'm devastated that I can't and now I'm a bad mother because I can't do something that is natural. (Mary, 30)

Infant feeding is a complex moral and physical enterprise that places a variety of demands on mothers.²⁶ In response mothers appear to employ multiple resources such as bottles and teats, dummies, expressing pumps, and medications including natural therapies to keep breastfeeding and avoid formula milk. Simultaneously many women also deployed trusted social capital^{27 28} (resources) often in the form of fathers as a source of emotional and physical support, citing their relief that "he [father of the child] could feed the baby with expressed breastmilk so I could rest and make milk." (Lee, 28) These forms of social capital/resources allowed women to exchange²⁷ their physical labour²⁹ of making milk and breastfeeding. Indeed, having the father of the child at hand to take over, to encourage "tell me keep going," " just be there to keep me sane" appeared to offer unwavering support and reassurance "when it [breastfeeding] got too much." (Jenna, 32) For those women who did not have a partner in their lives (19%), mothers and other family members, female friends acted as moral and physical supports. Generally using resources such as dummies, teats, bottles and intimate partners (father of the child) were felt to be essential in helping mothers negotiate the complex processes of infant feeding/breastfeeding.

252 Other supports such as health professionals (midwives, doctors, nurses) were frequently 253 perceived and experienced as either instructing women to try various techniques (expressing, 254 positioning and attachment, medications including homeopathic remedies) or discordant. Many 255 women in the study described health professionals as "annoying because they kept telling me 256 what to do…like grabbing my boob and telling me something different all the time." (Peta, 25) 257 This was particularly noticeable amongst women aged <24 years who felt they could not trust, or BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

felt that they were not trusted by health professionals to feed their babies. Women throughout the study repeatedly voiced their anger at being asked by health professionals if they were breastfeeding and the frequency of confusing and conflicting advice, Everyone kept asked me are you breastfeeding? I wanted to breastfeed...I initially started with breastfeeding, but I had the worst delivery, and I got problems, I saw loads different health professionals—doctors, midwives, nurses, which was really confusing. They didn't trust me and I didn't trust them. I wasn't able to breastfeed her, so I put her on formula, and now she's on solids and bottles. (Clare, 22) Grief; a sense of failure The theme Grief explores the way that mothers spoke about a prolonged sense of loss, sense of failure, shame and anguish, and the tension between their deep individual desire to breastfeed and the ensuing reality; exit from breastfeeding through the use of formula milk. Overwhelmingly women felt they failed themselves, were judged as "bad" "dirty" or "naughty" mothers who put their baby at risk because they could not—as Elizabeth (30) reflected "do what women have been doing . . . for so long: breastfeed," The first time, it's [using formula] very hard to say "I can't do this, I'm a failure" basically, that's what you feel, you feel like "I should be able to do it [breastfeed]." Because, we've been told, or had the feeling that it should [be] and is natural. (Hannah, 40) Participants across the age groups often struggled to resolve the inner conflict between something they valued and that was "meant to be so natural" and "not being able to feed my For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Page 15 of 29

BMJ Open

own baby." (Sophie, 30) Many appeared to be grieving saying repeatedly "I just wanted to breastfeed." Concurrently, women often acknowledged the practical need for formula "to feed him so he wouldn't starve." (Caitlyn, 21) Feelings of internal crisis and "anti-formula" resonated with other women's stories of confusion, and feelings of personal and moral crisis and shame. Subsequently there was a strong sense of failure and immorality around formula use likened to "doing something wrong like unprotected sex." (Kate, 24)

It was clear from the women experiences that formula had a strong physical and social presence. Referred to as "always in the back ground" the use of formula was felt to physically replace their milk and breasts and in turn replace their role as a mother by making them as Anna (30) said "redundant-and now I'm no longer a good mother." Women struggled to make sense of this tension and mourned the loss of being necessary citing as Petra (30) did, "I'm just not needed anymore." Evie (24) who had been "struggling with breastfeeding," reflected on her experience of introducing one bottle of formula to her baby who was 4 weeks of age. She had been advised by a health professional that she "didn't have to endure it [breastfeeding] or do this to herself,"

I felt a bit redundant. You don't need me anymore . . . it's your milk in there and stuff but it's just, I don't know. I don't think you can put it into words really because you just don't have that, I guess it's that closeness that you're missing out on, that precious little time that you have where they're feeding and they can look at you and when someone else is doing it it's like, "well, no, that's my little thing with them," I think, and it's that sort of 'someone else is taking over that role. (Evie, 24)

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

Coupled with a loss was a deep and penetrating sense of guilt and shame. Elisa (28), shared that after attempting to breastfeed each of her three children and then stopping at three weeks due to intense pain and low milk supply that "the guilt is huge, and I live with it each day especially when I look at them." Similarly, in the following quote, Samantha (30) a mother of two who had been persevering with breastfeeding through mastitis, and cracked and painful nipples talks of her grief,

So many people said to me "why are you still going? You don't have to go through this, you can just stop, you can bottle-feed your baby, it's fine," but like I say, I think it's just that ... it's something that you always imagined you'd do and you think it's ... well it is the best thing for your baby and you romanticise this beautiful idea about this breastfeeding relationship with your baby, and it's just so much to let go. I think there was a whole grieving process for me around that, around letting go of that dream of this lovely relationship that's going to happen. So then when she was about six weeks old it got to the point, we were just doing breastfeeding in the morning and it just got to the point where she'd just latch on and just look at me like "what are we doing?" There's not enough going on here, so I just stopped. I think by the time it came to actually stopping, I had grieved and grieved about the whole process and I was actually quite relieved in the end just to go OK, that whole entire thing is just over.... I had six months to mourn the whole thing by that point so I was quite relieved actually when that last breastfeed ended. (Samantha, 30)

As the quote suggests women struggled with their expectations of breastfeeding and the reality of cessation and moving between two mutually exclusive roles "breast-feeder" and "formulafeeder."

325	DISCUSSION

This paper draws on a large and diverse sample of women to provide in-depth, rich and highly personal accounts of their experiences of breastfeeding/formula feeding and cessing to breastfeed. Our finding that the majority of women set out (have the intention) to breastfeed yet use formula milk whilst breastfeeding is consistent with national and global trends, revealing a high breastfeeding intention and initiation followed by an exit from exclusive and any breastfeeding through increasing formula use.²⁶⁸ Our study shows that this trend is underpinned by women's desire to "just breastfeed;" embodied as a deeply held natural desire and something that reflects the notion that natural is equal to good mothering.^{26 30 31} Consequently, when breastfeeding is interrupted mothers marginalise themselves as unnatural, dirty and immoral because they and their bodies do not conform to the social, public health and cultural ideals of "good" motherhood.³²⁻³⁵ As others have suggested the public health promotional campaigns promoting exclusive breastfeeding establish an ideal and principle about what is healthy and best practice.³⁶ For women however this generates tension between the expectation to breastfeed (best and natural) and reality of cessation (bad and immoral).^{36 37} resulting in prolonged feelings of anxiety and grief; which we suggest is "breastfeeding grief" a potential mental health issue for women. Further research to explore this phenomena is needed.

A limitation of the study is the non-representativeness of the data. Many mothers in the study relied on their memories of their experiences. To address this studies that engage with mothers/fathers/intimate partners at multiple time points are recommended. Our purposive sampling allowed us to deliberately seek and include women who would normally not self-select such as younger women <24 years who made up 50% of the sample. This data would lend itself BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

to further analysis, a possible comparative analysis with the older and more socioeconomically advantaged women and follow up interviews in the future. We used the same interview guide, a common code book and coding cross-checks to improve standardization and interpretation of our results.¹⁸ In an area of research where survey and physiological research dominates, this study offers new understandings to how women conceptualise and experience breastfeeding/infant feeding and their exit from breastfeeding with the formula.

Both young and older women's experiences of cessation in this study were laced with feelings of loneliness, isolation, failure, and being morally judged.^{25 38} These negative experiences were exacerbated by the lack of-and at times absent-partner support, general public judgment, health professionals and conflicting advice and disrespect for the young mothers as a social group.^{39 40 41} Collectively these have a detrimental impact on the mother, creating tension and confusion around infant feeding choices. For young mothers and some older women in this study, the use of formula was sometimes felt to be a "practical necessity" of needing to feed their dependent child. Happy to agree "to breastfeed" because it is "natural" initially young women struggle to continue to breastfeed because they may not have the social resources to support and sustain their choice.⁴² What they do have was access to infant formula, that has now become a normalised alternative.⁴³ This helps to understand that the use of formula represents a pragmatic mercantile exchange (money for food) that was for many women in the study "a means to an end" — a well-fed baby. Despite the mothers wanting to and valuing breastfeeding. the value young mothers placed on making sure the baby was fed irrespective of the type of milk was an interesting finding as it suggest that within the social context of motherhood and being "young mum" a well fed baby offers greater social benefit than breastfeeding. This view helps

to theorise the documented breastfeeding disparities amongst younger women and those living in
 areas of social disadvantaged.⁴⁴

Our finding that mothers used fathers as a form of social capital^{27 45} (a resource that can be exchanged and used to benefit the mother) to help them navigate their breastfeeding experiences is consistent with other work, showing the positive effect fathers' support and involvement has on maternal wellbeing.⁴⁶ Indeed, breastfeeding is more likely to be sustained with intimate partner support and engagement, as father of the child offers a "bi-parental" approach in negotiating and managing care, and the feeding demands of the dependent child.⁴⁷ For many of the women in this study, feeling pressured, isolated, burdened by the demands of breastfeeding-"being the only one," and then the sense of failure (not breastfeeding/using formula) was often mitigated by a positive relationship with the father/partner. Indeed, cross-cultural evidence suggests that pair-bonding (intimacy of the relationship) is protective of continued breastfeeding.⁴⁷ This is an unexplored area in regards to breastfeeding and infant feeding in modern society, where the roles have been assigned to gender, biology and are skill-based.^{26 33} For mothers who lack secure supportive relationships, as some did in this study or those whose partner preferred or were indifferent to bottle feeding, the risk of stopping and not breastfeeding is greater.⁷ Here lies an opportunity for health policy and clinicians to increase the fathers' and family infant feeding knowledge though antenatal education, engaging both mother, father and extended family. The findings from this study highlight that the fathers' place in breastfeeding is poorly understood. Robust randomized controlled trials are need to provide evidence to inform family centered infant feeding/breastfeeding support strategies.

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

Page 20 of 29

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

BMJ Open

> The exit from breastfeeding (cessation) through formula often results in feelings of prolonged grief and failure thus making it harmful to women's emotional wellbeing. Supporting fathers/partners to become collaborative breastfeeding/infant feeding partners and reframing breastfeeding as a family practice is essential to support women and prolong breastfeeding. Proactive counselling and debriefing are needed to assist women to manage feelings of loss and breastfeeding grief.

397 Acknowledgments

We would like to thank the families, mothers and their infants, Department of Health and Human services (DHHS), Child Health and Parenting Services (CHAPS) staff and colleagues, and community members who participated and contributed to this study.

Contributors

402 All authors were involved in the design of the study, the analysis of data and the writing and 403 final editing of this manuscript. Authors 1, 2, and 3 conducted the FG/interviews with 404 participants and had full access to all the data in the study, were responsible for the integrity of 405 the data and the accuracy of the data analysis. Author 1 wrote the first draft of the paper, and all 406 authors made important in contributions to the final manuscript.

407 Funding

408 This study was funded by the Tasmanian Early Years Foundation 2011-2013. The views 409 expressed are those of the authors and the authors are all independent of the funding body.

- 7 410 **Conflict of Interest declaration:**
- ⁹ 411 There are no competing interests
- **Ethics approval**

1 2		
2 3 4	413	Ethics approval was obtained from the Tasmanian Social Science Ethics Committee (Ethics Ref
5 6	414	No: H0011838).
7 8 9	415	A data sharing statement
10 11	416	Due to the nature of the data (audio recordings and transcripts) we are not able to share the raw
12 13	417	data. We are able to share the de-identified transcripts to researchers for the purposes of further
14 15	418	analysis and comparison or research translation.
$\begin{array}{c} 16\\ 17\\ 18\\ 19\\ 20\\ 21\\ 22\\ 23\\ 24\\ 25\\ 26\\ 27\\ 28\\ 29\\ 30\\ 31\\ 32\\ 33\\ 34\\ 35\\ 36\\ 37\\ 38\\ 940\\ 41\\ 43\\ 44\\ 56\\ 47\\ 48\\ 950\\ 51\\ 53\\ 54\\ 55\end{array}$	419	analysis and comparison or research translation.
56 57		
58 59		21 For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml
60		

REFERENCES

1. The Lancet. Breastfeeding: achieving the new normal. *The Lancet* 2016;387(10017):404. doi: http://dx.doi.org/10.1016/S0140-6736(16)00210-5 2. Victora CG, Bahl R, Barros AJ, et al. Breastfeeding in the 21st century: epidemiology. mechanisms, and lifelong effect. Lancet 2016;387(10017):475-90. doi: 10.1016/s0140-6736(15)01024-7 [published Online First: 2016/02/13] 3. Sankar MJ, Sinha B, Chowdhury R, et al. Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. Acta Paediatrica 2015;104:3-13. doi: 10.1111/apa.13147 4. Chowdhury R, Sinha B, Sankar MJ, et al. Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. Acta Paediatrica 2015;104:96-113. doi: 10.1111/apa.13102 5. World Health Organization. World Health Statistics 2013: World Health Organization, 2015. 6. Australian Institute of Health and Welfare. 2010 Australian National Infant Feeding Survey: Indicator Results. Canberra: Australian Government, 2011. 7. Ayton J, van der Mei I, Wills K, et al. Cumulative risks and cessation of exclusive breast feeding: Australian cross-sectional survey. Arch Dis Child 2015(100):863-68. 8. McAndrew F, Thompson J, Fellows L, et al. Infant feeding survey 2010. Leeds: Health and Social Care Information Centre 2012 9. Baxter J, Cooklin AR, Smith J. Which mothers wean their babies prematurely from full breastfeeding? An Australian cohort study. Acta Paediatrica 2009;98(8):1274-77. 10. Oribe M, Lertxundi A, Basterrechea M, et al. [Prevalence of factors associated with the duration of exclusive breastfeeding during the first 6 months of life in the INMA birth cohort in Gipuzkoa]. Gaceta sanitaria / SESPAS 2015;29(1):4-9. [published Online First: 2014/09/27] 11. Feldens CA, Vitolo MR, Rauber F, et al. Risk factors for discontinuing breastfeeding in southern Brazil: a survival analysis. Matern Child Health J 2012;16(6):1257-65. 12. Moffat T. A biocultural investigation of the weanling's dilemma in Kathmandu, Nepal: do universal recommendations for weaning practices make sense? J Biosoc Sci 2001:33(3):321-38. [published Online First: 2001/07/12] 13. Andrew N, Harvey K. Infant feeding choices: experience, self-identity and lifestyle. Matern Child Nutr 2011;7(1):48-60. doi: 10.1111/j.1740-8709.2009.00222.x [published Online First: 2010/12/15] 14. Van Esterik P. Contemporary trends in infant feeding research. Annual Review of Anthropology 2002;31:257-78. 15. UNICEF. The Baby-Friendly Hospital Initiative; 2016 [Available from: http://www.unicef.org/programme/breastfeeding/baby.htm accessed 20 June 2016. 16. Burns E, Schmied V, Sheehan A, et al. A meta-ethnographic synthesis of women's experience of breastfeeding. Matern Child Nutr 2010:6(3):201-19. doi: 10.1111/i.1740-8709.2009.00209.x [published Online First: 2010/10/12] 17. Lee E. Living with risk in the age of 'intensive motherhood': Maternal identity and infant feeding. Health, Risk & Society 2008;10(5):467-77. doi: 10.1080/13698570802383432 18. Bourgeault I, Dingwall R, De Vries R, editors. The SAGE handbook of qualitative methods in health research. London: Sage, 2013:307-327

1 2		
3	464	19. Pink B. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA),
4 5	465	Australia, 2011. Technical Paper. In: Statistics(ABS) ABo, ed. Canberra: Australian
6	466	Government, 2011.
7	467	20. Grbich C. Qualitative research in health: an introduction: Sage 1998.
8	468	21. Stata Statistical Software: Release 14 [program]. College Station TX: StataCorp LP, 2015.
9 10	469	22. World Health Organization / UNICEF. Indicators for assessing breastfeeding practices. Part
11	470 471	1 Definitions: Conclusions of consensus meeting held 6-8 November 2007. Geneva: Division of Child Health and Development, 2008.
12	471	23. Bazeley P, Jackson K. Qualitative data analysis with NVivo: Sage Publications Limited
13	472	2013:52-58.
14 15	474	24. World Health Organization. International statistical classification of diseases and related
15 16	475	health problems (ICD)10th Revision. Geneva: World Health Organization(WHO), 2010.
17	476	25. Afflerback S, Carter SK, Anthony AK, et al. Infant-feeding consumerism in the age of
18	477	intensive mothering and risk society. <i>Journal of Consumer Culture</i> 2013;13(3):387-405.
19	478	doi: 10.1177/1469540513485271
20 21	479	26. Blum L. At the breast: Ideologies of breastfeeding and motherhood in the contemporary
21	480	United States: Beacon Press 2000.
23	481	27. Bourdieu P. The Logic of Practice. Cambridge: Polity 1990.
24	482	28. Kawachi I, Kennedy BP, Lochner K, et al. Social capital, income inequality, and mortality.
25	483	Am J Public Health 1997;87(9):1491-8. [published Online First: 1997/10/07]
26 27	484	29. Dykes F. 'Supply'and 'demand': breastfeeding as labour. Soc Sci Med 2005;60(10):2283-93.
28	485	30. Sheehan A, Schmied V. The Imperative to Breastfeed: An Australian Perspective. In:
29	486	Liamputtong P, ed. Infant feeding practices: A cross-cultural perspective. New York:
30	487	Springer Science & Business Media 2011:55,73.
31	488	31. Shakespeare J, Blake F, Garcia J. Breast-feeding difficulties experienced by women taking
32 33	489	part in a qualitative interview study of postnatal depression. <i>Midwifery</i> 2004;20(3):251-
34	490 491	60. doi: 10.1016/j.midw.2003.12.011 [published Online First: 2004/09/01] 32. Sheehan A, Schmied V, Barclay L. Complex decisions: theorizing women's infant feeding
35	491	decisions in the first 6 weeks after birth. J Adv Nurs 2010;66(2):371-80. doi:
36	492	10.1111/j.1365-2648.2009.05194.x [published Online First: 2010/04/29]
37 38	494	33. Stearns CA. The work of breastfeeding. <i>Women's Studies Quarterly</i> 2009;37(3/4):63-80.
30 39	495	34. Wolf JB. Is breast really best? Risk and total motherhood in the national breastfeeding
40	496	awareness campaign. Journal of health politics, policy and law 2007;32(4):595-636.
41	497	35. Regan P, Ball E. Breastfeeding Mothers' Experiences: The Ghost in the Machine. Qual
42	498	Health Res 2013;23(5):679-88. doi: 10.1177/1049732313481641
43 44	499	36. Hoddinott P, Craig LC, Britten J, et al. A serial qualitative interview study of infant feeding
45	500	experiences: idealism meets realism. BMJ open 2012;2(2):e000504.
46	501	37. Miller T. "Is This What Motherhood Is All About?": Weaving Experiences and Discourse
47	502	through Transition to First-Time Motherhood. Gender and Society 2007;21(3):337-58.
48 40	503	doi: 10.2307/27640973
49 50	504	38. Lee E. Health, morality, and infant feeding: British mothers' experiences of formula milk use
51	505	in the early weeks. Sociol Health Illn 2007;29(7):1075-90. doi: 10.1111/j.1467-
52	506	9566.2007.01020.x
53	507 508	39. Hauck Y, Hall WA, Jones C. Prevalence, self-efficacy and perceptions of conflicting advice and self management: effects of a breastfeeding journal. <i>LAdv Nurs</i> 2007;57(3):306-17
54 55	508 509	and self-management: effects of a breastfeeding journal. <i>J Adv Nurs</i> 2007;57(3):306-17. doi: 10.1111/j.1365-2648.2006.04136.x [published Online First: 2007/01/20]
56	509	uoi. 10.1111/j.1505-2040.2000.04150.x [published Offilite Filst. 2007/01/20]
57		
58		23
59 60		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml
00		

40. Murphy E. Expertise and forms of knowledge in the government of families. The sociological review 2003;51(4):433-62. 41. Nelson AM. Adolescent attitudes, beliefs, and concerns regarding breastfeeding. MCN Am J Matern Child Nurs 2009;34(4):249-55. doi: 10.1097/01.NMC.0000357918.18229.25 00005721-200907000-00011 [pii] [published Online First: 2009/07/10] 42. MacGregor E, Hughes M. Breastfeeding experiences of mothers from disadvantaged groups: a review. Community practitioner : the journal of the Community Practitioners' & Health Visitors' Association 2010;83(7):30-3. [published Online First: 2010/08/13] 43. McFadden A, Mason F, Baker J, et al. Spotlight on infant formula: coordinated global action needed. Lancet 2016;387(10017):413-5. doi: 10.1016/s0140-6736(16)00103-3 [published Online First: 2016/02/13] 44. MacVicar S, Kirkpatrick P, Humphrey T, et al. Supporting Breastfeeding Establishment among Socially Disadvantaged Women: A Meta-Synthesis. Birth 2015 45. Browne-Yung K, Ziersch A, Baum F. 'Faking til you make it': social capital accumulation of individuals on low incomes living in contrasting socio-economic neighbourhoods and its implications for health and wellbeing. Soc Sci Med 2013;85:9-17. doi: 10.1016/j.socscimed.2013.02.026 [published Online First: 2013/04/02] 46. Tissot H, Favez N, Ghisletta P, et al. A longitudinal study of parental depressive symptoms and coparenting in the first 18 months. Family process 2017;56(2):445-58. 47. Quinlan RJ, Quinlan MB. Human Lactation, Pair-bonds, and Alloparents : A Cross-Cultural Analysis. Human nature (Hawthorne, NY) 2008;19(1):87-102. [published Online First: 2008/03/01]

1		
1 2 3	500	
4	533	Figure legends
5 6	534	Figure 1. Derivation of the themes that emerged from the thematic analysis.
7 8		
9 10		
11 12		
13 14		
15 16		
17 18		
19 20		
21 22		
23 24		
25 26		
27 28		
29 30		
31 32		
33 34		
35 36		
37 38		
39 40		
41 42		
43 44		
45 46		
47 48		
49 50		
51 52		
53 54		
55 56		
57 58		
59 60		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Page 26 of 29

Value breastmilk/ feeding from the breast is best= natural formula = normal

to breastfeed= best start in life

for the baby, most

natural, nutrition, expected not

challenged

Endurance

pressure, keep breastfeeding,

confusion, pain, no milk,

to feed baby

Capital/ Resources

baby, bottles, teats, expressing, medications, dummies, formula

< use of health

professional=confusion

use of fathers of the

ns, avoid formula, need

Cessation

proble

Final themes

Cessation

Grief

tensions generate disjuncture

between normal, natural value,

endurance, and reality-exit from BF to feed with formula

stopping

=personal crisis, immorality

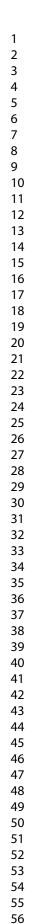
anxiety, failure

feelings of shame mistrust of the body

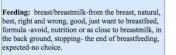
confusion and grief

unable to resolve-lives with grief

/sadness/failure



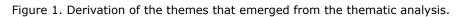




Motherhood: breastfeeding-expected to do whats right, normal, pressure, confusing, good mum, bad mum, non breastfeeder or breastfeeder, judgment, sacrifice, formula always there-not right. Did/didn't help: problems (-), sore nipples (-), low

milk supply (-), hospital (-), experts (-+), health professionals (-+), bonding & closeness (+), expectations (-), formula (-+), dummies (+), bottles (-+), father (+), expressing (-+), partner (+), husband (-+), friend (-+), public feeding (-).

Feels like: hard work, natural, not needed, sadness, shame, grief, loneliness, anxiety, stress, embarrassment, bad mother, good (breastfeeder) mother, naughty mother, doing something wrong, pressure, failure, relief.



421x277mm (300 x 300 DPI)

59 60

Table 1

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Domain 1: Research team and		
reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?
2.	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i> ye: p
3.	Occupation	What was their occupation at the time of the study? ye
4.	Gender	Was the researcher male or female?
5.	Experience and training	What experience or training did the researcher have? Author 1, 2, 3 are all experienced in qua methods and published qualitative res
Relationship with participants		
with	Relationship established	Was a relationship established prior to study commencement?
with participants	established Participant knowledge of the	
with participants 6.	established Participant knowledge of the interviewer	commencement? no relationships establ What did the participants know about the researcher?
with participants 6.	established Participant knowledge of the interviewer	commencement? no relationships establ What did the participants know about the researcher? e.g. personal goals, reasons for doing the research
with participants 6. 7.	established Participant knowledge of the interviewer the partic	commencement? No relationships estable What did the participants know about the researcher? e.g. personal goals, reasons for doing the research sipants were informed about the purpose/ reasons for the research as per ether What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons

Νο	ltem	Guide questions/description
9.	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? <i>e.g. grounded theory, discourse</i> analysis, ethnography, phenomenology, content analysis
		Yes P7 Interpretivist methodolog
Participa selection		
10.	Sampling	How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i> p 3,4
11.	Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email p 3,4
12.	Sample size	How many participants were in the study? N=127 p 3-4 & 6
13.	Non-participation	How many people refused to participate or dropped out? Reasons? no drop outs and no refusals
Setting		
14.	Setting of data collection	Where was the data collected? e.g. home, clinic, workplace
		Multiple sites; community, homes- p 4-5
15.	Presence of non- participants	Was anyone else present besides the participants and researchers?
16.	Description of sample	What are the important characteristics of the sample? e.g. demographic data, date Listed in tables 1, 2; . P 7, 8.
Data collectior	ı	
17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested? Yes; p 4,5
18.	Repeat interviews	Were repeat interviews carried out? If yes, how many? no repeat interviews .
19.	Audio/visual recording	Did the research use audio or visual recording to collect the data? Yes audio recorder
20.	Field notes	Were field notes made during and/or after the interview or focus group? Yes; p 5
Skip to Mai		
21.	Duration	What was the duration of the interviews or focus group? 1-2 hours

2/3

Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups | Oxford Academic

22.	Data saturation	Was data saturation discussed?
23.	Transcripts returned	Yes p 4 Were transcripts returned to participants for comme and/or correction?
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	How many data coders coded the data?
25.	Description of the coding tree	Three; all authors Did authors provide a description of the coding tree Yes; p 5
26.	Derivation of themes	Were themes identified in advance or derived from t data? Derived from the data Figure 1.
27.	Software	What software, if applicable, was used to manage th data?
28.	Participant checking	Did participants provide feedback on the findings?
Reporting		
29.	Quotations presented	Were participant quotations presented to illustrate t themes / findings? Was each quotation identified? e. <i>participant number</i> Yes; p 9-14
30.	Data and findings consistent	Was there consistency between the data presented a the findings? Iderpin the data and findings presented . Figure 1 for the derivation and from p-9>
31.	Clarity of major themes	Were major themes clearly presented in the findings
32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?

BMJ Open

Women's experiences of ceasing to breastfeed; An Australian qualitative study

Journal:	BMJ Open
Manuscript ID	bmjopen-2018-026234.R1
Article Type:	Research
Date Submitted by the Author:	05-Jan-2019
Complete List of Authors:	Ayton, Jennifer; University of Tasmania, School of Medicine College of Health and Medicine Tesch, Leigh; University of Tasmania, School of Creative Arts Hansen, Emily; University of Tasmania, School of Social Sciences
Primary Subject Heading :	Qualitative research
Secondary Subject Heading:	Public health
Keywords:	Breastfeeding, Cessation, QUALITATIVE RESEARCH, Infant formula, Mothers



2		
3	1	TITLE PAGE
4	2	
5	3	Title: Women's experiences of ceasing to breastfeed; An Australian qualitative study
6		The women's experiences of ceasing to breastreed, An Australian quantative study
7	4	
8	5	Authors names
9	6	Jennifer Ayton, Leigh Tesch, Emily Hansen
10	7	
11	8	Corresponding author
12	9	Jennifer Ayton
13	10	PhD, Lecturer in Public Health
14		
15	11	Private Bag 34, School of Medicine, College of Health and Medicine, University of Tasmania,
16	12	Hobart, Australia, 7001, Jennifer.ayton@utas.edu.au, Phone +61409430248
17	13	
18	14	Leigh Tesch
19	15	PhD Candidate
20	16	School of Creative Arts, University of Tasmania, Hobart, Australia, 7001,
21	17	Leigh.tesch@utas.edu.au
22	18	Leign. iesen aj dias. edu. au
23		
24	19	Emily Hansen
25 26	20	PhD, Senior Lecturer in Sociology
26 27	21	School of Social Sciences, University of Tasmania, Hobart
27 28	22	Australia,7001, <u>Emily.hansen@utas.edu.au</u>
28 29	23	
30	24	
31	25	Word count: Abstract: 222 Main manuscript: 4818 Tables: 2 Figures: 1 References: 52
32	26	Word count:
33		Al stre ste 222
34	27	Abstract: 222
35	28	Main manuscript: 4818
36	29	Tables: 2
37	30	Figures: 1
38	31	References: 52
39	32	
40	33	
41	00	
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		1
58		1
59		

ABSTRACT **Objective:** To investigate mothers infant feeding experiences (breastfeeding/formula milk feeding) with the aim of understanding how women experience cessation of exclusive breastfeeding. **Design:** Multi-method, qualitative study; questionnaire, focus groups and interviews. Setting: Northern and southern Tasmania, Australia. Participants: 127 mothers from a broad age and social demographic contexts completed a questionnaire and participated in 22 focus groups or 19 interviews across the north and south of Tasmania, 2011-2013. **Results:** Mothers value breastfeeding but experience a tension between breastfeeding as "natural" and "best" and formula milk as "wrong" and "unnatural." In an effort to avoid formula and prolong exclusive breastfeeding mothers endure multiple issues (e.g. pain, low milk supply, mastitis, public shaming) and make use of various forms of social and physical capital; resources such as father/partner support, expressing breastmilk, bottles, and dummies to prolong breastfeeding. Overall cessation of exclusive breastfeeding was frequently experienced as unexpected and "devastating" leaving mothers with a prolonged sense of loss and failure: "breastfeeding grief." **Conclusions and implications:** Cessation of exclusive breastfeeding results in lingering feelings of grief and failure making it harmful to women's emotional wellbeing. Reframing breastfeeding as a family practice where fathers/partners are incorporated as breastfeeding partners has the potential to help women negotiate and prolong breastfeeding. Proactive counselling and debriefing are needed to assist women to manage feelings of loss and "breastfeeding grief." Key words: Breastfeeding, Cessation, Infant Formula, Qualitative Research, Mothers

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

This qualitative study was the first in Australia to explore a wide range of mothers'
experiences, including 50% of women aged below 24 years of age and who were living in

socioeconomic disadvantaged areas.

In an area of research where survey and biological research dominates this study offers a new
 approach and greater insight into understanding cessation of exclusive breastfeeding from the
 mother's perspective.

• The multi method qualitative approach generated rich and highly complex perspectives about breastfeeding and cessation supporting the triangulation of the data.

68 INTRODUCTION

A recent Lancet¹ series demonstrates the public health imperative to promote and support breastfeeding as a social and cultural norm. However, despite the convincing evidence of the benefits of exclusive (where the child is only fed breastmilk/breastfed) and continued breastfeeding (any) for both mothers and their children,²⁻⁴ few women fulfil their choice to breastfeed. In well-resourced countries such as Australia, the United Kingdom (UK) and the United states it is estimated that more children are now formula milk feed (exclusively and partially) than exclusively breastfed within their first 6 months of life.²⁵ Whilst 90% of Australian women choose to and initiate exclusive breastfeeding around the time of birth, 50% have stopped by the first two months.⁶⁷ In the UK, 69% of mothers initiate exclusive breastfeeding, and by six

weeks a quarter (23%) are continuing.⁸ Victor et al,² cite that as few as 37% of infants are
exclusively breastfed worldwide.

Cessation of exclusive breastfeeding occurs as a result of either partially or completely replacing breastfeeding or breastmilk feeding with formula milk feeding, or other fluids/foods. Our earlier analysis of the first Australian Institute of Health and Welfare (AIHW) first Australian National Infant Feeding (ANIFS) cross-sectional survey revealed a high prevalence of early cessation of exclusive breastfeeding within the first 6 months. The fathers infant feeding preference (formula or indifferent) maternal obesity (BMI>30) and regular dummy use increased the risk of cessation within the first 6 months.⁷ Others have noted that maternal smoking, low maternal education levels, young mothers aged<24 years, mother returning to work within the first 13 weeks, preterm infant, and postnatal/perinatal depression are associated with not breastfeeding and cessation of any breastfeeding.79-11

Mothers make decisions about how to feed their babies based on a range of factors that may include past experiences, family history, social context and what they know and understand about infant feeding from public health promotion, nutritional and nurturing perspectives.¹²⁻¹⁴ These decisions are also influenced knowingly or unknowingly by health promotion and public health campaigns such as the UNICEF Baby Friendly Hospital Initiative,¹⁵ health professionals discourses¹⁶ and by the mother's social, cultural, and political environments.¹⁴ When the choice is made to breastfeed but breastfeeding ceases unexpectedly mothers are often left bereft and confused, citing feelings of failure.¹⁷ Women have also described feeling relief and disconnectedness when they have chosen to not breastfeed.¹⁶ To explore these issues in greater depth we undertook a qualitative study investigating mothers' infant feeding experiences

Page 5 of 30

BMJ Open

1 2	
2 3 4	100
5 6	101
7 8	102
9 10 11	103
12 13	
13 14 15	104
16 17	105
17 18 19	106
20 21	107
22 23	108
24 25 26	109
20 27 28	110
29 30	111
31 32	112
33 34	
35 36	113
37 38	114
39 40	115
41 42 43	116
44 45	117
46 47	118
48 49	119
50 51 52	120
53	424
54 55	121
56	122
57 58	
50	

60

(breastfeeding/formula milk feeding) with the aim of understanding how women experience
 cessation of breastfeeding with formula milk in the context of their everyday lives. Our research
 contributes to informing preventative and appropriate context-based support strategies for
 mothers and their families.

104 METHODS

105 Design, setting, rational

The Tasmanian Infant Feeding (TIF) study was a state wide multi-method qualitative study¹⁸ investigating the infant feeding practices of women whose infants were aged from 0 through to 36 months. A total of 22 focus groups (FG) and 19 semi-structured one to one interviews were conducted with mother/child dyads across the north and south of Tasmania, Australia, November 2011-March 2013. Mother/child demographic characteristics and feeding practices were collected using a questionnaire. Field notes were kept throughout the study. Ethics approval was obtained from the Tasmanian Social Science Ethics Committee (Ethics Ref No: H0011838).

113 Patient and Public Involvement

114 There was no patient or public involvement in setting the research agenda.

² 116 Sampling strategy and recruitment

Mothers who were aged over 16 years, with children aged 0-36 months were recruited from urban, rural, remote areas of Tasmania. A requirement of the funding body was that 50% of the sample should include women who lived in areas classified as socioeconomically disadvantaged SEIFA index ranks (1=most disadvantaged 5=least disadvantaged).¹⁹ To attain a diverse sample, we recruited women using multiple techniques; purposeful and snowballing such as word-of-mouth, advertising and promoting the study within local newspapers, and flyers at community clinics and

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

hospitals, direct contact with mothers, health professionals, and young mothers and parenting support groups. Participants contacted the researchers using the advertised email address/phone number or via health professionals, support groups. Mothers could opt to participate in either FG's or a one to one interview within their community and venue of choice. Recruitment ended when we judged that both data saturation and the sampling requirements of the funding body had been met. Written informed consent was obtained from participants prior to commencing FG's and interviews.

130 Data collection

All data (demographic questionnaire and qualitative, field notes) were collected concurrently. Mother and child demographics and self-reported infant feeding practices were collected prior to the start of each FG/interview using a paper-based questionnaire. One researcher conducted the interviews (Author 1 or 2) and two researchers were present at each FG (Authors 1 and 2 or 3). An FG/interview topic guide with open ended prompts (tell us how you are feeding, tell us more about that? what helped; what didn't? tell us about stopping) was used to encourage and explore experiences and facilitate the consistency of the data collection.²⁰ The topic guide was initially piloted on one FG and one interview, and minor revisions were made. Field notes and a research log were kept, and all qualitative data were audio-recorded. Team debriefing occurred at the end of each FG/interview. Written notes taken at the debriefings were added to the field notes and used to verify, confirm and support the triangulation of the data.²⁰²¹ Each participant received a \$20.00 supermarket gift voucher in recognition of their time.

All qualitative data (FG, interviews, field notes) were analysed using an iterative thematicapproach using a preliminary coding framework informed by the aims of the study and an

Page 7 of 30

BMJ Open

interpretivist qualitative methodology.^{18 20} Demographic data were used to ensure an adequate variation within the sample¹⁸ and analysed for frequencies and distributions using the statistical software Stata (v.14).²² NVivo (v.10.2) was used to data manage; store and collate all qualitative data. Qualitative data were transcribed verbatim and checked against the audio recording for accuracy after each FG/interview by two researchers. Pseudonyms were used in the transcripts to maintain participant confidentiality. Three female researchers (Author's 1, 2, 3) with postgraduate qualifications in public health and midwifery, sociology and allied health analysed the transcripts using an iterative thematic analysis. Researchers read and reread the transcripts meeting weekly for 8 months to discuss and reflect on emerging patterns and themes from the data; first organising, summarising and coding the data into the four broad preliminary codes, then following an abductive process expanding and reducing themes with the relevant sources.¹⁸ Three final themes were identified 'Valuing breastfeeding', 'Endurance' and 'Grief'. (Figure 1) Validation and trustworthiness

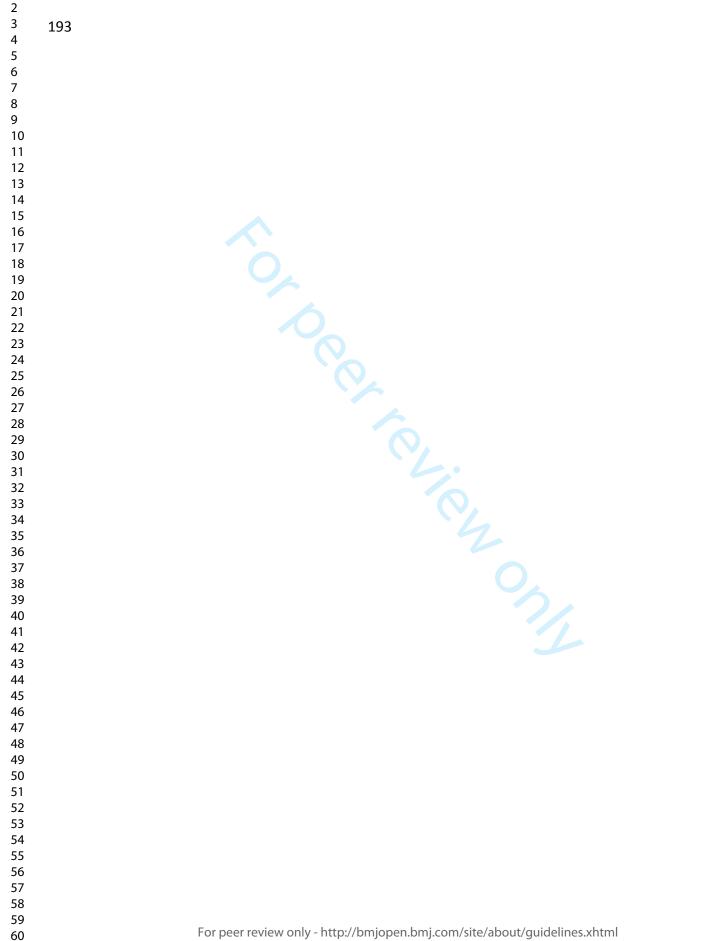
All data (FG, interview transcripts, field notes) were linked to demographic data and used to cross check themes, sources, references support adequate participant representation and triangulation of the data.²¹ Emerging data analysis/themes were also cross checked with different data sources (FG, interview, field notes). Text searches using the "query" option within NVivo verified the frequency of use and relevance of the concepts and themes. For example, transcripts were searched for commonly-used terms such as "best" and "formula" this help to verify that women used that term to explain why they preferred to breastfeed over formula feeding, and their use of formula. A research log recorded the coding process, ideas, questions, and reflections.1823

1 2		
2 3 4	169	
5 6	170	Definitions
7 8	171	All infant feeding definitions were consistent with the World Health Organizations (WHO)
9 10 11	172	indicators for assessing infant and young child feeding practices ²⁴ and the Australian Institute of
12 13	173	Health and Welfare (AIHW) National Infant Feeding Survey. ⁶ Exclusive breastfeeding refers to
14 15	174	an infant who receives breast milk (including expressed breast milk or breast milk from a wet
16 17 18	175	nurse) and allows oral rehydration solutions, drops, syrups vitamins, minerals, medicines, but
19 20	176	nothing else. Breastfeeding (any) is where the infant receives breast milk (including expressed or
21 22	177	from a wet nurse and food or liquid including non-human milk/formula. ²⁴
23 24 25	178	
25 26 27	179	RESULTS
28 29	180	A total of 127 mothers participated in 22 FGs and 19 interviews across southern and northern
30 31	181	Tasmanian between May 2011 and March 2013. (Tables 1&2) The mean age of the women was
32 33 34	182	29 years (SD 5.9), with 46% living in an area classified as most disadvantaged (SEIFA 1&2). A
35 36	183	quarter (26%) of the children where aged less than 6 months at the time of the study. (Table
37 38	184	1&2) As women did not refer directly to "exclusive breastfeeding" as a way of feeding their
39 40 41	185	children, and instead they spoke about "breastfeeding" "not breastfeeding" and "formula"
42 43	186	feeding, this analysis describes the women's accounts of how they experienced breastfeeding and
44 45	187	their use of formula milk in their day to day lives unless otherwise stated. Pseudonyms,
46 47 48	188	participant ages are used to identify quotes. FG numbers are used to distinguish the source; all
48 49 50	189	other quotes are derived from interviews.
51 52		
53 54		
55 56 57		
50		0

58 59

Mothers Characteristics		(%)	Mean ± SE
	n	(70)	Weath \pm SL
Feeding preference before birth	120	015	
Breast	120	94.5	
Formula	7	5.5	
*Previously breastfed	57	44.9	• • • • •
Maternal age (years)			29 ± 5.9
15-24	33	26.0	
25-29	30	23.6	
30-34	39	30.7	
35 or older	25	19.7	
Parity			2 ± 0.9
Pregnant at time of study	2	1.6	
One (given birth once)	6	4.7	
Two or more	119	93.7	
Method of delivery	/		
Spontaneous vaginal delivery	70	55.1	
^{††} Assisted delivery	16	12.6	
[†] Caesarean (elective / emergency)	41	32.3	
Maternal smoking	24	18.9	
•	24	10.9	
Living arrangements	102	01.1	
Living with father of the child (de-facto or married)	103	81.1	
Single parent	24	18.9	
Current Occupation			
Professional	40	31.5	
Clerical/Admin or Service/Sales	19	15.0	
Home duties /self employed	45	35.4	
Student or unemployed	23	18.1	
Mothers employment status			
Full time	75	59.1	
Part time /casual	39	30.7	
Student	13	10.2	
**SEIFA quintiles			
Quintile 1(most disadvantaged)	48	37.8	
Quintile 2	10	7.9	
Quintile 3	21	16.5	
Quintile 4	27	21.3	
Quintile 5 (least disadvantaged)	21	16.5	
Education status	21	10.5	
	54	42.5	
Bachelor degree /higher			
Diploma/Certificate	41	32.3	
Year 12 or below	32	25.2	
Country of birth			
Australia	119	93.7	
Overseas *Previoulsy breastfeed: any breastfeeding irrespective of length of time (hours, days, weeks or months)	8	6.3	

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml



	Child Characteristics	п	(%)	Mean \pm SD
	Initiated breastfeeding at birth	129	97.0	
	Gender	127	97.0	
	Male	67	50.8	
	Age groups (to completed months)	07	20.0	12.2 ± 8.6
	0-6	35	26.3	12.2 - 0.0
	7-12	45	33.8	
	13 -18	28	21.1	
	19≥	25	18.8	
	Birth weight (grams)	25	10.0	3284 ± 689.2
		18	13.5	$5264 \pm 0.09.2$
	≤2499g			
	≥2500g	115	86.5	
	Gestational age at birth (weeks)		. – .	38.7 ± 2.4
	⁺ Preterm	23	17.3	
	++Term	110	82.7	
	Place of birth			
	Public hospital	84	63.2	
	Private hospital	49	36.8	
	Type of birth			
	Place of birth Public hospital Private hospital Type of birth Vaginal	70	52.6	
	^{††} Instrumental	19	14.3	
	†Caesarean	44	33.1	
	Singletons	120	90.2	
	^{\$} Multiples (twin/triplet)	13	9.8	
	*Current feeding method			
	**Exclusive breastfeeding	17	12.8	
	Infant formula milk	14	10.5	
	Breast milk & infant formula milk	7	5.3	
	(includes ***EBM)			
	Family foods & breast milk (includes EBM)	37	27.8	
	Family foods & other milk/fluids	58	43.6	
	(includes infant formula)			
	+Preterm: born at less than 36 6/7 completed weeks gestation ++Term: born on or greater than		sestation.25 †† Ins	trumental: vaginal delivery by
	or ventouse. †Caesarean: combined emergency and elective caesarean delivery! \$ sets of; twir			
	*Self-reported data at the time of the FG/interview; based on the previous 24 hours. Init	-		
	breastfeeding: breast milk only no other foods or fluids with the exception of vitamins, oral re	hydration solutions. ***E	BM: expressed b	reast milk 24
196				
197	Valuing breastfeeding			
198	In this study 94% of women reported that they had	intended to br	eastfeed p	prior to birth, with
			-	
199	majority (97%) initiating breastfeeding at and around	d the time birth	. Women	expressed their o
200	to "inst here at food" 1 : + " (1"	d		fooding 1: 1
200	to "just breastfeed" because it was "more natural" an	a conceptualiz	zea this as	reeaing airectly

the breast. Overall irrespective of age and social-economic status women valued breastfeeding and breastmilk above other milks or methods (expressing, bottle/formula milks), Well, I'm obviously breastfeeding and picked it because of everything that I've read about it being healthy, economical, the bonding, the portability, "have boob, will travel" and it will stay warm and clean, and all those sorts of things, so it just seemed like the natural thing to do. (Elinore, 30, FG 6) Women throughout the study often used normative language when talking about breastfeeding, formula and cessation; healthy, unhealthy, best, natural, "a god given right" (Pricilla, 27, FG 3) and "the right thing to do," (Sally, 34) unnatural, failure, wrong, bad mother. When talking about breastfeeding participants did not differentiate between partial and any breastfeeding and made no reference to exclusivity as a type of breastfeeding. The women did not spontaneously use the term or discuss exclusive breastfeeding as a distinct way to feed their infants. The notion of exclusivity was rarely, if at all, talked about by the women without prompting from the researcher/facilitator of the groups. When completing the questionnaire and during the FGs/interviews women often asked, "what does exclusive mean ... isn't that just breastfeeding?" (Anthia, 30 FG 8) Prompts such as "how does exclusive breastfeeding fit in?" or "what are your thoughts about exclusive breastfeeding?" produced responses such as "isn't it recommended that you feed them [babies] to 6 months?" (Lucy, 29) Women did not question the value of breastfeeding or their choice to breastfeed, instead they accepted breastfeeding as their biological and personal right. Chelsea (26) mused "I don't know where that [need to breastfeed] comes from, but that's the kind of expectation you have... it's what

Page 13 of 30

BMJ Open

we are made to do." For women who were reluctant breastfeed like Jane (20), the nutritional and social value attached to breastfeeding and breastmilk was a powerful motivator in directing feeding practices; "I didn't really want to, but I intended to breastfeed anyway because I knew the benefits of it." These conscious and unconscious values and beliefs appeared underpin women's deep desire to feed directly from the breast and perceived need to avoid formula milks.²⁶

229 Endurance

In our analysis the theme endurance refers to the pressure women felt and put themselves under to
breastfeed and avoid formula milk, and the resources they employed to mitigate this burden. These
resources are described as social and physical capital; resources that can be exchanged and used
for personal or social benefit.²⁷

Across the social spectrum and irrespective of their feeding intention when women referred to using formula, they described having to give in and use formula milk at some stage during their breastfeeding experience. Fiona (28), a mother of two who had breast and formula fed both her children until they were four months of age, recalled that "it's harder than it looks…you think it's just going to happen, that you will just pop the baby on, but breastfeeding is bloody hard work." Similarly, Harper (29) stated,

Everybody before, when you're pregnant, only tells you all the good things about breastfeeding and why you should breastfeed but nobody actually, well, I didn't find anyone [who] talked about how hard and how painful it was going to be. And then the only advice I could get from people was "just keep going, just keep going, just keep going."

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

The participant's often desperate accounts of personal endurance "to get through it [breastfeeding]" (Sue, 36), included narratives about facing physical, personal and social battles. As reported elsewhere¹⁶ women in this study described suffering through multiple issues such as pain, low supply feelings of immorality, failure, loneliness and isolation in the effort to keep breastfeeding. Mothers breastfed through torn and bleeding nipples, or expressed for 4, 6, 9 months to "just keep going a little longer and give him a little breast milk." (Wendy, 31) Many also breastfed despite being socially shamed for example, being told that breastfeeding was dirty and disgusting and that they should do that [breastfeed] in private or cover up. Conversely, some mothers spoke about times when they had used a bottle to feed with breastmilk and strangers had asked them why they were not breastfeeding. In the following example Mary (30) describes her distress at not being able to do what she felt was "natural and right" demonstrating the stigma felt by many participants because they were not breastfeeding. I just wanted to always breastfeed, and I'm devastated that I can't and now I'm a bad mother because I can't do something that is natural. Infant feeding is a complex moral and physical enterprise that places a variety of demands on mothers.²⁸ In response mothers appeared to employ multiple forms of social (kin, family, social groups) and physical (embodied skills and material) capital/resources.²⁷ These included consumables²⁶ such as bottles and teats, dummies, expressing pumps, and medications including natural therapies to help them negotiate breastfeeding and avoid formula milk. For example, Selina (21) used a combination of resources,

BMJ Open

She [the baby] would want to feed some days all day, sometimes use my breast like a dummy, and sometimes you needed a little break from it but she would just want to be on it all the time, so I put her on the dummy at three or four months, and sometimes used a bottle so my partner could help just to give myself a break. Many women simultaneously also deployed trusted social capital^{27 29} such as fathers as emotional and physical supports. Women spoke about their relief that "he [father of the child] could sometimes feed the baby with expressed breastmilk so I could rest and make milk." (Lee, 28) These forms of social capital allowed women to exchange²⁷ their physical labour³⁰ of making milk and breastfeeding. Indeed, having the father of the child at hand to take over, to encourage "tell me keep going," "just be there to keep me sane" (Tara, 23) or to offer unwavering support and reassurance "when it [breastfeeding] got too much" (Jenna, 32) seemed to be the most important resource available to many participants. For the 19% of women who did not have a partner in their lives, other family members, and female friends sometimes provided similar support. Overall, for women in this study using dummies, teats, bottles and intimate partners (father of the child) as social and physical capital was felt to be essential in helping them to negotiate the complex processes of infant feeding/breastfeeding. Other supports such as health professionals (midwives, doctors, nurses) were frequently perceived

and experienced as either instructing women to try various techniques (expressing, positioning and
attachment, medications including homeopathic remedies) or confusing. Many women in the study
described health professionals as "annoying because they kept telling me what to do…like
grabbing my boob and telling me something different all the time." (Peta, 25) This narrative was
particularly noticeable amongst women aged <24 years who felt they could not trust or felt that

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES)

data mining, AI training, and similar technologies

Protected by copyright, including for uses related to text

BMJ Open

they were not trusted by health professionals to feed their babies. Women throughout the study repeatedly voiced their anger at being asked by health professionals if they were breastfeeding and the frequency of confusing and conflicting advice, Everyone kept asked me are you breastfeeding? I wanted to breastfeed...I initially started with breastfeeding, but I had the worst delivery, and I got problems, I saw loads different health professionals—doctors, midwives, nurses, which was really confusing. They didn't trust me and I didn't trust them. I wasn't able to breastfeed her, so I put her on formula, and now she's on solids and bottles. (Clare, 22, FG 19) Despite wanting to breastfeed and using social and physical capital, young (<24 years) and older mothers struggled to avoid formula milk while breastfeeding. Grief The theme grief explores the way that mothers spoke about cessation of exclusive breastfeeding and their prolonged sense of failure, loss, shame and anguish. Throughout the study women talked of their deep individual desire to breastfeed and the ensuing reality of cessation though the use of formula milk. Overwhelmingly women felt they had failed themselves, were judged as "bad" "dirty" or "naughty" mothers who put their baby at risk because they could not-as Elizabeth (30) reflected "do what women have been doing . . . for so long: breastfeed." Throughout the study participants across the age groups struggled to resolve the inner conflict between what was "meant to be so natural" and "not being able to feed my own baby." (Sophie, 30) Many appeared to be grieving saying repeatedly "I just wanted to breastfeed." Concurrently, women acknowledged the practical need for formula "to feed him so he wouldn't starve." (Caitlyn,

309 21) Feelings of internal crisis and anti-formula resonated within stories of confusion, and feelings
310 of personal and moral crisis and shame. Subsequently there was a strong sense of failure and
311 immorality around formula use which was likened by Kate (24, FG 22) as "doing something wrong
312 like unprotected sex."

It was clear from the data that formula had a strong physical and social presence in the mother's lives. Referred to as "always in the back ground" the use of formula was felt to physically replace their milk and breasts and in turn replace their role as a mother by making them as Anna (30) said "redundant-and now I'm no longer a good mother." Women struggled to make sense of this tension and mourned the loss of being necessary. Petra (30, FG 1) told us that "I'm just not needed anymore." Evie (24) from the same FG who had been "struggling with breastfeeding," reflected on her experience of introducing one bottle of formula to her baby who was 4 weeks of age. She had been advised by a health professional that she "didn't have to endure it [breastfeeding] or do this to herself,"

I felt a bit redundant. You don't need me anymore . . . it's your milk in there and stuff but it's just, I don't know. I don't think you can put it into words really because you just don't have that, I guess it's that closeness that you're missing out on, that precious little time that you have where they're feeding and they can look at you and when someone else is doing it it's like, "well, no, that's my little thing with them," I think, and it's that sort of 'someone else is taking over that role.

328 Coupled with a loss was a deep and penetrating sense of guilt and shame. Elisa (28), shared that
329 after attempting to breastfeed each of her three children and then stopping at three weeks due to
330 intense pain and low milk supply that "the guilt is huge, and I live with it each day especially when

I look at them." Similarly, in the following quote, Samantha (30) a mother of two who had been
persevering with breastfeeding through mastitis, and cracked and painful nipples talks of her grief,

I think there was a whole grieving process for me around that, around letting go of that dream of this lovely relationship that's going to happen. So then when she was about six weeks old it got to the point, we were just doing breastfeeding in the morning and it just got to the point where she'd just latch on and just look at me like "what are we doing?" There's not enough going on here, so I just stopped. I think by the time it came to actually stopping I had grieved and grieved about the whole process and I was actually quite relieved in the end just to go OK, that whole entire thing is just over... I had six months to mourn the whole thing by that point so I was quite relieved actually when that last breastfeed ended.

As this quote illustrates women struggled with their expectations of breastfeeding and the reality
of cessation and moving between two mutually exclusive roles a "breast-feeder" or "formulafeeder."

DISCUSSION

This paper draws on a large and diverse sample of women to provide in-depth, rich and highly personal accounts of their experiences of breastfeeding/formula feeding and ceasing to exclusively breastfeed. Our finding that the majority of women set out (have the intention) to breastfeed yet commonly use formula milk whilst breastfeeding is consistent with national and global trends, revealing a high breastfeeding intention and initiation followed by cessation of exclusive and any breastfeeding through increasing formula use.²⁶⁸ Mothers in our study were unable to make sense of the use of formula milk while breastfeeding^{31 32} and were often left

Page 19 of 30

BMJ Open

devastated with a prolonged "breastfeeding grief;" a sense of failure and grief which we view as
a potential mental health issue for women. ³³ In light of the prevalence of infant formula use, and
its increasing dominance, ³⁴ there is a need to explore the relationship between formula use
during breastfeeding and maternal emotional health more closely. Proactive breastfeeding
counselling and debriefing, and further research to explore this phenomenon are needed.
The tension that is generated between the deeply held desire to breastfeed (to do what is
best/natural) and the unforeseen reality of cessation (immoral/bad) is concerning. Consistent with
others work we suggest that mothers desire to just breastfeed (feed from the breast) is
underpinned by an ideology that breastfeeding is equal to "good" and formula feeding "bad"
mothering. ^{17 28 35-37} Consequently, when breastfeeding ceases through formula use, mothers
experience a sense of failure and marginalise themselves as unnatural, dirty and immoral because
they and their bodies do not conform to the social, public health and cultural ideals of "good"
motherhood. ^{16 17 38-40} These social ideals are often imbedded within the public health campaigns
and hospital practices that are perhaps out of step with what women do and understand as
breastfeeding in their day to day lives and social contexts. ^{38 41 42} Indeed, mothers in our study did
not understand the biomedical public health category "exclusive breastfeeding" as a way to feed
their infants. ⁴³ Instead they set out to just breastfeed. This helps to understand that the mothers
desire to breastfeed is a deeply embodied social practice not simply a nutritional choice. There is
also a need to re-evaluate policy and clinical practice in the way exclusive breastfeeding is
promoted and translated to women and their families.
A limitation of the study is that many mothers relied on their memories of their experiences. To
address this limitation future studies that engage with mothers/fathers/intimate partners at
19

7 8 9	355	its increasing dominance, ³⁴ there is a need to explore the relationship between formula use
9 10 11	356	during breastfeeding and maternal emotional health more closely. Proactive breastfeeding
12 13 14	357	counselling and debriefing, and further research to explore this phenomenon are needed.
15 16 17	358	The tension that is generated between the deeply held desire to breastfeed (to do what is
18 19	359	best/natural) and the unforeseen reality of cessation (immoral/bad) is concerning. Consistent with
20 21 22	360	others work we suggest that mothers desire to just breastfeed (feed from the breast) is
22 23 24	361	underpinned by an ideology that breastfeeding is equal to "good" and formula feeding "bad"
24 25 26	362	mothering. ^{17 28 35-37} Consequently, when breastfeeding ceases through formula use, mothers
27 28	363	experience a sense of failure and marginalise themselves as unnatural, dirty and immoral because
29 30	364	they and their bodies do not conform to the social, public health and cultural ideals of "good"
31 32 33	365	motherhood. ^{16 17 38-40} These social ideals are often imbedded within the public health campaigns
34 35	366	and hospital practices that are perhaps out of step with what women do and understand as
36 37	367	breastfeeding in their day to day lives and social contexts. ^{38 41 42} Indeed, mothers in our study did
38 39 40	368	not understand the biomedical public health category "exclusive breastfeeding" as a way to feed
40 41 42	369	their infants. ⁴³ Instead they set out to just breastfeed. This helps to understand that the mothers
43 44	370	desire to breastfeed is a deeply embodied social practice not simply a nutritional choice. There is
45 46	371	also a need to re-evaluate policy and clinical practice in the way exclusive breastfeeding is
47 48 49 50	372	promoted and translated to women and their families.
51 52	373	A limitation of the study is that many mothers relied on their memories of their experiences. To
53 54 55 56	374	address this limitation future studies that engage with mothers/fathers/intimate partners at
57 59		10

Page 20 of 30

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

BMJ Open

multiple time points are recommended. Our purposive sampling allowed us to deliberately seek and include women who would normally not self-select such as younger women <24 years who made up 50% of the sample. This data would lend itself to further analysis, a possible comparative analysis with the older and more socioeconomically advantaged women and follow up interviews in the future. Inviting women to participate in either a FG or interview gave rich and highly complex perspectives and helped to triangulate the data.²¹ We used the same interview guide, a coding framework and coding cross-checks to improve standardization and interpretation of our results.¹⁸ Understanding the supports mothers use while negotiating breastfeeding and cessation is important. An interesting finding from this study was that women used their social and physical capital ^{27 44} to endure/persevere through common feeding problems (such as pain, public shaming, low milk supply) whilst trying to avoid formula milk and prolong breastfeeding. Women frequently talked of how they relied on the father of the child to help them navigate their breastfeeding and cessation. Consistent with other research mothers often combined physical capital such as expressing breastmilk, bottles and dummies with social capital (fathers and other family/friends) relieve them of the intensity of feeding and mothering.⁴⁷ Although problematic because of the association with cessation of exclusive breastfeeding⁷ and breastfeeding problems⁴⁵ bottles and dummies appear to be everyday tools that mothers use to help them negotiate breastfeeding and cessation. Conversely, social capital such as fathers or other family/social supports have been shown to have a positive effect on prolonging breastfeeding⁴⁶ and supporting maternal wellbeing.^{47-49 50 51} Indeed mothers are less likely to use formula at one and 6 months when fathers are provided with support and education about exclusive breastfeeding during the antenatal period.⁵² Here lies an opportunity for health policy and

Page 21 of 30

BMJ Open

clinicians to reframe breastfeeding as a family practice with fathers/intimate partners and extended family as collaborative partners and resources for mothers.⁵³ Robust studies are needed to provide evidence to inform family centered infant feeding/breastfeeding support and education strategies.

CONCLUSION

The cessation of exclusive breastfeeding through formula often results in feelings of prolonged grief and failure, making it potentially harmful to women's emotional wellbeing. Supporting fathers/intimate partners to become collaborative breastfeeding/infant feeding partners and reframing breastfeeding as a family practice may support women and prolong breastfeeding. Proactive counselling and debriefing are needed to assist those women who are experiencing feelings of loss and breastfeeding grief.

Acknowledgments

We would like to thank the families, mothers and their infants, Department of Health and Human services (DHHS), Child Health and Parenting Services (CHAPS) staff and colleagues, and community members who participated and contributed to this study.

Contributors

JA & EH designed the study. JA & LT conducted 90% of the FG/interviews/field notes with participants and collected the data. All authors and had full access to all the data, were responsible for the integrity of the data and were involved in the analysis and interpretation of the data. JA took the lead in writing the manuscript. Both LT & EH provided critical feedback and editing to the final version of the manuscript.

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

1		
2 3 4	421	
5 6	422	Funding
7 8	423	This study was funded by the Tasmanian Early Years Foundation 2011-2013. The views expressed
9 10 11	424	are those of the authors and the authors are all independent of the funding body.
12 13	425	
14 15	426	Conflict of Interest declaration:
16 17 18	427	There are no competing interests
19 20	428	
21 22	429	Ethics approval
23 24 25	430	Ethics approval was obtained from the Tasmanian Social Science Ethics Committee (Ethics Ref
25 26 27	431	No: H0011838).
28 29	432	
30 31 32	433	A data sharing statement
32 33 34	434	Due to the nature of the data (audio recordings and transcripts) we are not able to share the raw
35 36	435	data. We are able to share the de-identified transcripts to researchers for the purposes of further
37 38	436	analysis and comparison or research translation.
39 40 41		
42		
43		
44 45		
46		
47		
48		
49 50		
50 51		
52		
53		
54		
55		
56		
57 58		22

BMJ Open

1 2		
3	438	REFERENCES
4	450	REFERENCES
5 6	439	1. The Lancet. Breastfeeding: achieving the new normal. <i>The Lancet</i> 2016;387(10017):404. doi:
6 7	440	http://dx.doi.org/10.1016/S0140-6736(16)00210-5
8	441	2. Victora CG, Bahl R, Barros AJ, et al. Breastfeeding in the 21st century: epidemiology,
9	442	mechanisms, and lifelong effect. <i>Lancet</i> 2016;387(10017):475-90. doi: 10.1016/s0140-
10	443	6736(15)01024-7.
11	444	3. Sankar MJ, Sinha B, Chowdhury R, et al. Optimal breastfeeding practices and infant and child
12 13	445	mortality: a systematic review and meta-analysis. Acta Paediatrica 2015;104:3-13.
14	446	4. Chowdhury R, Sinha B, Sankar MJ, et al. Breastfeeding and maternal health outcomes: a
15	447	systematic review and meta-analysis. Acta Paediatrica 2015;104:96-113.
16	448	5. World Health Organization. World Health Statistics 2013: World Health Organization, 2015.
17	449	6. Australian Institute of Health and Welfare. 2010 Australian National Infant Feeding Survey:
18	450	Indicator Results. Canberra: Australian Government, 2011.
19 20	451	7. Ayton J, van der Mei I, Wills K, et al. Cumulative risks and cessation of exclusive breast
20	452	feeding: Australian cross-sectional survey. Arch Dis Child 2015(100):863-68.
22	453	8. McAndrew F, Thompson J, Fellows L, et al. Infant feeding survey 2010. Leeds: Health and
23	454	Social Care Information Centre 2012
24	455	9. Baxter J, Cooklin AR, Smith J. Which mothers wean their babies prematurely from full
25 26	456	breastfeeding? An Australian cohort study. Acta Paediatrica 2009;98(8):1274-77.
20	457	10. Oribe M, Lertxundi A, Basterrechea M, et al. [Prevalence of factors associated with the
28	458	duration of exclusive breastfeeding during the first 6 months of life in the INMA birth
29	459	cohort in Gipuzkoa]. <i>Gaceta sanitaria / SESPAS</i> 2015;29(1):4-9.
30	460	11. Feldens CA, Vitolo MR, Rauber F, et al. Risk factors for discontinuing breastfeeding in
31 32	461	southern Brazil: a survival analysis. <i>Matern Child Health J</i> 2012;16(6):1257-65.
33	462	12. Moffat T. A biocultural investigation of the weanling's dilemma in Kathmandu, Nepal: do
34	463 464	universal recommendations for weaning practices make sense? <i>J Biosoc Sci</i> 2001;33(3):321-38.
35	464 465	13. Andrew N, Harvey K. Infant feeding choices: experience, self-identity and lifestyle. <i>Matern</i>
36	465	<i>Child Nutr</i> 2011;7(1):48-60. doi: 10.1111/j.1740-8709.2009.00222.x
37	467	14. Van Esterik P. Contemporary trends in infant feeding research. Annual Review of
38 39	468	Anthropology 2002;31:257-78.
40	469	15. UNICEF. The Baby-Friendly Hospital Initiative: 2016 [Available from:
41	470	http://www.unicef.org/programme/breastfeeding/baby.htm accessed 20 June 2018.
42	471	16. Burns E, Schmied V, Sheehan A, et al. A meta-ethnographic synthesis of women's
43	472	experience of breastfeeding. Matern Child Nutr 2010;6(3):201-19. doi: 10.1111/j.1740-
44 45	473	8709.2009.00209.x
46	474	17. Lee E. Living with risk in the age of 'intensive motherhood': Maternal identity and infant
47	475	feeding. Health, Risk & Society 2008;10(5):467-77. doi: 10.1080/13698570802383432
48	476	18. Bourgeault I, Dingwall R, De Vries R, editors. The SAGE handbook of qualitative methods in
49 50	477	health research. London: Sage, 2013:802-65.
50 51	478	19. Pink B. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA),
52	479	Australia, 2011. Technical Paper. In: Statistics(ABS). Canberra: Australian Government,
53	480	2011.
54	481	20. Creswell JW, Poth CN. Qualitative inquiry and research design: Choosing among five
55	482	approaches: Sage publications 2017:181-201.
56 57		
58		23
59		
60		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1 ว		
2 3	100	21 Danzin VN Lincoln SV aditors The SACE Handbook of Qualitative Descents Fifth ad
4	483 484	21. Denzin KN, Lincoln SY, editors. <i>The SAGE Handbook of Qualitative Research</i> Fifth ed. United States Of America SAGE, 2018:806-15
5	484 485	22. Stata Statistical Software: Release 14 [program]. College Station TX: StataCorp LP, 2015.
6		
7	486	23. Bazeley P, Jackson K. Qualitative data analysis with NVivo: Sage Publications Limited
8	487	2013:19-21.
9 10	488	24. World Health Organization/UNICEF. Indicators for assessing breastfeeding practices. Part 1
11	489	Definitions: Conclusions of consensus meeting held 6-8 November 2007. Geneva:
12	490	Division of Child Health and Development, 2008.
13	491	25. World Health Organization. International statistical classification of diseases and related
14	492	health problems (ICD)10th Revision. Geneva: World Health Organization(WHO), 2010.
15	493	26. Afflerback S, Carter SK, Anthony AK, et al. Infant-feeding consumerism in the age of
16	494	intensive mothering and risk society. Journal of Consumer Culture 2013;13(3):387-405.
17	495	27. Bourdieu P. The Logic of Practice. Cambridge: Polity 1990:42-62.
18 19	496	28. Blum L. At the breast: Ideologies of breastfeeding and motherhood in the contemporary
20	497	United States: Beacon Press 2000:8-25.
21	498	29. Kawachi I, Kennedy BP, Lochner K, et al. Social capital, income inequality, and mortality.
22	499	Am J Public Health 1997;87(9):1491-8.
23	500	30. Dykes F. 'Supply'and 'demand': breastfeeding as labour. Soc Sci Med 2005;60(10):2283-93.
24	501	31. Thomson G, Ebisch-Burton K, Flacking R. Shame if you doshame if you don't: women's
25	502	experiences of infant feeding. <i>Matern Child Nutr</i> 2015;11(1):33-46.
26	503	32. Lee E. Health, morality, and infant feeding: British mothers' experiences of formula milk use
27 28	504	in the early weeks. Sociol Health Illn 2007;29(7):1075-90.
28 29	505	33. Cooke M, Schmied V, Sheehan A. An exploration of the relationship between postnatal
30	506	distress and maternal role attainment, breast feeding problems and breast feeding
31	507	cessation in Australia. <i>Midwifery</i> 2007;23(1):66-76.
32	508	34. McFadden A, Mason F, Baker J, et al. Spotlight on infant formula: coordinated global action
33	509	needed. Lancet 2016;387(10017):413-5.
34	510	35. Sheehan A, Schmied V. The Imperative to Breastfeed: An Australian Perspective. In:
35	511	Liamputtong P, ed. Infant feeding practices: A cross-cultural perspective. New York:
36 37	512	Springer Science & Business Media 2011:55,73.
38	513	36. Shakespeare J, Blake F, Garcia J. Breast-feeding difficulties experienced by women taking
39	514	part in a qualitative interview study of postnatal depression. <i>Midwifery</i> 2004;20(3):251-
40	515	60.
41	516	37. Marshall JL, Godfrey M, Renfrew MJ. Being a 'good mother': managing breastfeeding and
42	517	merging identities. Soc Sci Med 2007;65(10):2147-59.
43	518	38. Knaak SJ. Contextualising risk, constructing choice: Breastfeeding and good mothering in
44	519	risk society. <i>Health, Risk & Society</i> 2010;12(4):345-55.
45 46	520	39. Miller T. "Is This What Motherhood Is All About?": Weaving Experiences and Discourse
46 47	520	through Transition to First-Time Motherhood. <i>Gender and Society</i> 2007;21(3):337-58.
48	522	40. Johnson S, Leeming D, Williamson I, et al. Maintaining the 'good maternal body':
49	523	expressing milk as a way of negotiating the demands and dilemmas of early infant
50	525 524	feeding. J Adv Nurs 2013;69(3):590-99.
51		e , , , , ,
52	525	41. Hoddinott P, Craig LC, Britten J, et al. A serial qualitative interview study of infant feeding
53	526	experiences: idealism meets realism. <i>BMJ open</i> 2012;2(2):e000504.
54 55	527	42. Wolf JB. Is breast really best? Risk and total motherhood in the national breastfeeding
55 56	528	awareness campaign. Journal of health politics, policy and law 2007;32(4):595-636.
50 57		
58		24
59		2.

60

BMJ Open

1		
2		
3 4	529	43. Still R, Marais D, Hollis JL. Mothers' understanding of the term 'exclusive breastfeeding': a
5	530	systematic review. Matern Child Nutr 2017;13(3):e12336-n/a.
6	531	44. Browne-Yung K, Ziersch A, Baum F. 'Faking til you make it': social capital accumulation of
7	532	individuals on low incomes living in contrasting socio-economic neighbourhoods and its
8	533	implications for health and wellbeing. Soc Sci Med 2013;85:9-17.
9	534	45. O'Connor NR, Tanabe KO, Siadaty MS, et al. Pacifiers and breastfeeding: A systematic
10	535	review. Arch Pediatr Adolesc Med 2009;163(4):378-82.
11	536	46. Quinlan RJ, Quinlan MB. Human Lactation, Pair-bonds, and Alloparents : A Cross-Cultural
12	537	Analysis. <i>Human nature (Hawthorne, NY)</i> 2008;19(1):87-102.
13	538	47. Abbass-Dick J, Stern SB, Nelson LE, et al. Coparenting breastfeeding support and exclusive
14 15	539	breastfeeding: a randomized controlled trial. <i>Pediatrics</i> 2015;135(1):102-10.
15 16	540	48. Mahesh PKB, Gunathunga MW, Arnold SM, et al. Effectiveness of targeting fathers for
17	540 541	
18		breastfeeding promotion: systematic review and meta-analysis. <i>BMC Public Health</i>
19	542	2018;18(1):1140. doi: 10.1186/s12889-018-6037-x
20	543	49. Tohotoa J, Maycock B, Hauck YL, et al. Dads make a difference: an exploratory study of
21	544	paternal support for breastfeeding in Perth, Western Australia. Int Breastfeed J
22	545	2009;4:15.
23	546	50. Rempel LA, Rempel JK. The Breastfeeding Team: The Role of Involved Fathers in the
24	547	Breastfeeding Family. Journal of Human Lactation 2011;27(2):115-21.
25	548	51. Alianmoghaddam N, Phibbs S, Benn C. New Zealand women talk about breastfeeding
26	549	support from male family members. <i>Breastfeeding Review</i> 2017;25(1):35.
27 28	550	52. Su M, Ouyang YQ. Father's Role in Breastfeeding Promotion: Lessons from a Quasi-
20 29	551	Experimental Trial in China. Breastfeeding medicine : the official journal of the Academy
30	552	of Breastfeeding Medicine 2016.
31	553	53. Brown A, Davies R. Fathers' experiences of supporting breastfeeding: challenges for
32	554	breastfeeding promotion and education. <i>Matern Child Nutr</i> 2014;10(4):510-26.
33	555	
34		
35		
36		
37		
38 39		
39 40		
41		
42		
43		
44		
45		
46		
47		
48		
49 50		
50 51		
52		
53		
54		
55		
56		
57		
58		25

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES)

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies

Figure 1. Derivation of the themes that emerged from the thematic analysis.

2	
3	556
4	556
5	557
6	557
7	
8 9	
10	
11	
12	
13	
14	
15 16	
17	
18	
19	
20	
21	
22 23	
23 24	
25	
26	
27	
28	
29 30	
31	
32	
33	
34	
35	
36 37	
38	
39	
40	
41	
42	
43 44	
45	
46	
47	
48	
49 50	
50 51	
52	
53	
54	
55	
56	

1

Figure legends

60

for perteries only

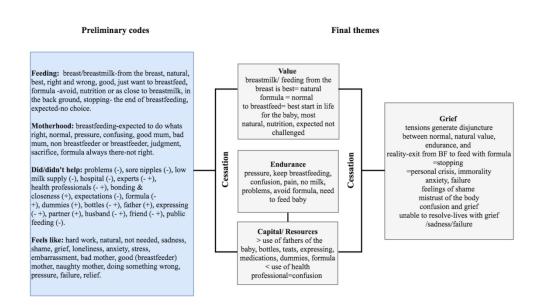


Figure 1. Derivation of the themes that emerged from the thematic analysis.

421x277mm (300 x 300 DPI)

For peer review only - http://

Table 1

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Domain 1: Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group? yes p 4
2.	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i> yes t pag
3.	Occupation	What was their occupation at the time of the study? yes
4.	Gender	Was the researcher male or female?
5.	Experience and training	What experience or training did the researcher have? Author 1, 2, 3 are all experienced in qualit methods and published qualitative resea
Relationship with participants		
		Was a relationship established prior to study
6.	Relationship established	commencement? no relationships establish
6. 7.	established Participant knowledge of the interviewer	
	established Participant knowledge of the interviewer	no relationships establish What did the participants know about the researcher? e.g. personal goals, reasons for doing the research

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Page 29 of 30

Νο	Item	Guide questions/description
9.	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis
		Yes P7 Interpretivist methodolo
Participant selection		
10.	Sampling	How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i> p 3,4
11.	Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email
12.	Sample size	How many participants were in the study? N=127 p 3-4 & 6
13.	Non-participation	How many people refused to participate or dropped out? Reasons? no drop outs and no refusals
Setting		
14.	Setting of data collection	Where was the data collected? e.g. home, clinic, workplace
		Multiple sites; community, homes- p 4-5
15.	Presence of non- participants	Was anyone else present besides the participants and researchers? the mothers child/children
16.	Description of sample	What are the important characteristics of the sample? e.g. demographic data, date Listed in tables 1, 2; . P 7, 8.
Data collection		
17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested? Yes; p 4,5
18.	Repeat interviews	Were repeat interviews carried out? If yes, how many? no repeat interviews .
19.	Audio/visual recording	Did the research use audio or visual recording to collect the data? Yes audio recorder
20.	Field notes	Were field notes made during and/or after the interview or focus group?
Skip to Main Con	tent	Yes; p 5
21.	Duration	What was the duration of the interviews or focus group?

Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups | Oxford Academic

22.	Data saturation	Was data saturation discussed? Yes p 4
23.	Transcripts returned	Were transcripts returned to participants for comment and/or correction?
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	How many data coders coded the data?
		Three; all authors
25.	Description of the coding tree	Did authors provide a description of the coding tree? Yes; p 5
26.	Derivation of themes	Were themes identified in advance or derived from the data? Derived from the data Figure 1.
27.	Software	What software, if applicable, was used to manage the data?
28.	Participant checking	Did participants provide feedback on the findings?
Reporting		
29.	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. participant number
30.	Data and findings consistent	Was there consistency between the data presented and the findings?
		nderpin the data and findings presented . Figure 1 for the derivation and from p-9>
31.	Clarity of major themes	Were major themes clearly presented in the findings?
32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes? Some description of age related diversity

BMJ Open

Women's experiences of ceasing to breastfeed; An Australian qualitative study

Journal:	BMJ Open
Manuscript ID	bmjopen-2018-026234.R2
Article Type:	Research
Date Submitted by the Author:	23-Feb-2019
Complete List of Authors:	Ayton, Jennifer; University of Tasmania , School of Medicine College of Health and Medicine Tesch, Leigh; University of Tasmania , School of Creative Arts Hansen, Emily; University of Tasmania, School of Social Sciences
Primary Subject Heading :	Qualitative research
Secondary Subject Heading:	Public health
Keywords:	Breastfeeding, Cessation, QUALITATIVE RESEARCH, Infant formula, Mothers



2		
3	1	TITLE PAGE
4	2	
5	3	Title: Women's experiences of ceasing to breastfeed; An Australian qualitative study
6		The. Women's experiences of ceasing to breasticed, All Australian quantative study
7	4	
8	5	Authors names
9	6	Jennifer Ayton, Leigh Tesch, Emily Hansen
10	7	
11	8	Corresponding author
12	9	Jennifer Ayton
13	10	PhD, Lecturer in Public Health
14		
15	11	Private Bag 34, School of Medicine, College of Health and Medicine, University of Tasmania,
16	12	Hobart, Australia, 7001, Jennifer.Ayton@utas.edu.au, Phone +61409430248
17	13	
18	14	Leigh Tesch
19	15	PhD Candidate
20	16	School of Creative Arts, University of Tasmania, Hobart, Australia, 7001,
21	17	Leigh.Tesch@utas.edu.au
22	18	Leigh. I esento utas.edu.au
23		
24 25	19	Emily Hansen
25 26	20	PhD, Senior Lecturer in Sociology
20	21	School of Social Sciences, University of Tasmania, Hobart Australia, 7001,
27	22	Emily.Hansen@utas.edu.au
20	23	
30	24	
31	25	
32	26	Word count: Abstract: 211 Main manuscript: 4273 Tables: 2 Figures: 1 References: 53
33	27	Abstract: 211
34		Austract. 211 Main manuscript: 4272
35	28	Main manuscript: 4273
36	29	Tables: 2
37	30	Figures: 1
38	31	References: 53
39	32	
40	33	
41		
42		
43		
44		
45		
46		
47		
48		
49 50		
50		
51 52		
52 53		
53 54		
54 55		
56		
57		
58		1
59		1

34 ABSTRACT

35 Objective: To investigate mothers' infant feeding experiences (breastfeeding/formula milk
36 feeding) with the aim of understanding how women experience cessation of exclusive
37 breastfeeding.

Design: Multi-method, qualitative study; questionnaire, focus groups and interviews.

39 Setting: Northern and Southern Tasmania, Australia.

Participants: 127 mothers of childbearing age from a broad socio-demographic context completed a questionnaire and participated in 22 focus groups or 19 interviews across Tasmania, 2011-2013. Results: Mothers view breastfeeding as "natural" and "best" and formula milk as "wrong" and "unnatural." In an effort to avoid formula and prolong exclusive breastfeeding, mothers will endure multiple issues (e.g. pain, low milk supply, mastitis, public shaming) and make use of various forms of social and physical capital; resources such as father/partner support, expressing breastmilk, bottles, and dummies. The cessation of exclusive breastfeeding was frequently experienced as unexpected and "devastating", leaving mothers with "breastfeeding grief" (a prolonged sense of loss and failure).

49 Conclusions and implications: For many mothers the cessation of exclusive breastfeeding results 50 in lingering feelings of grief and failure making it harmful to women's emotional wellbeing. 51 Reframing breastfeeding as a family practice where fathers/partners are incorporated as 52 breastfeeding partners has the potential to help women negotiate and prolong breastfeeding. 53 Proactive counselling and debriefing are needed to assist women who are managing feelings of 54 "breastfeeding grief."

56 Key words: Breastfeeding, Cessation, Infant Formula, Qualitative Research, Mothers

9 10	59	•	This qualitative study was the first in Australia to explore the cessation experiences of
11 12 13	60		women from varied socio-economic backgrounds. Women aged below 24 years of age who
14 15	61		were living in socioeconomic disadvantaged areas comprised half the sample.
16 17 18	62	•	In an area of research dominated by survey and biological research this qualitative study
19 20	63		generated rich and highly complex perspectives about breastfeeding and cessation,
21 22	64		facilitating increased understanding of the cessation of exclusive breastfeeding from the
23 24 25	65		mother's perspective.
26 27	66	•	The multi-method qualitative approach supported data triangulation.
28 29 30 31	67 68	•	Although we draw from a large sample of women the findings cannot be extended to wider populations.
32 33	69		
34 35 36 37 38	70	IN	TRODUCTION
39	71	А	recent Lancet ¹ series demonstrates the public health imperative to promote and support

public health imperative to promote and support demonstrates the breastfeeding as a social and cultural norm. However, despite convincing evidence of the benefits of exclusive (where the child is only fed breastmilk/breastfed) and continued breastfeeding (any) for both mothers and their children,²⁻⁴ few women fulfil their choice to breastfeed. In well-resourced countries such as Australia, the United Kingdom (UK) and the United States of America (USA) it is estimated that more children are now formula milk fed (exclusively and partially) than exclusively breastfed within their first 6 months of life.²⁵ Whilst 90% of Australian women choose to initiate exclusive breastfeeding around the time of birth, 50% have ceased by the first two

months.^{6 7} In the UK, 69% of mothers initiate exclusive breastfeeding, and by six weeks only a
quarter (23%) are continuing.⁸ Victor et al,² cite that as few as 37% of infants are exclusively
breastfed worldwide.

Cessation of exclusive breastfeeding occurs as a result of either partially or completely replacing breastfeeding or breastmilk feeding with formula milk feeding, or other fluids/foods.⁷ Our earlier analysis of the first Australian Institute of Health and Welfare (AIHW) Australian National Infant Feeding (ANIFS) cross-sectional survey revealed a high prevalence of early cessation of exclusive breastfeeding within the first 6 months. Fathers' infant feeding preference (formula or indifferent), maternal obesity (BMI>30) and regular dummy use increased the risk of cessation within the first 6 months.⁷ Others have noted that preterm infants, maternal smoking, low maternal education levels, young mothers aged<24 years, mother returning to work within the first 13 weeks, and postnatal/perinatal depression are associated with not breastfeeding and cessation of any breastfeeding.79-11

Mothers make decisions about how to feed their babies based on a range of factors that may include past experiences, family history, social context and what they know and understand about infant feeding from public health promotion, nutritional and nurturing perspectives.¹²⁻¹⁴ These decisions are also influenced knowingly or unknowingly by health promotion and public health campaigns such as the UNICEF Baby Friendly Hospital Initiative.¹⁵ health professionals discourses¹⁶ and by the mother's social, cultural, and political environments.¹⁴ When the choice is made to breastfeed but breastfeeding ceases unexpectedly, mothers are often left bereft and confused, citing feelings of failure.¹⁷ Women have also described feeling relief and disconnectedness when they have chosen to not breastfeed.¹⁶ To explore these issues in greater

Page 5 of 30

BMJ Open

1 2	
2 3 4	101
5 6	102
7 8	103
9 10 11 12	104
12 13 14 15	105
15 16 17	106
17 18 19	107
20 21	108
22 23	109
24 25 26	110
20 27 28	111
29 30	112
31 32	113
33 34	
35 36	114
37 38	115
39 40	116
41 42 43	117
44 45	118
46 47	119
48 49	120
50 51	121
52 53	122
54 55	122
56 57	123
58	
59	

60

depth we undertook a qualitative study investigating mothers' infant feeding experiences. Our
 aim was to understand how women experience the cessation of exclusive breastfeeding in the
 context of their everyday lives. Our research contributes to informing preventative context-based
 support strategies for mothers and their families.

105 METHODS

106 Design, setting, rationale

107 The Tasmanian Infant Feeding (TIF) study was a state wide multi-method qualitative study¹⁸ 108 investigating the infant feeding practices of women whose infants were aged from 0 through to 36 109 months. A total of 22 focus groups (FG) and 19 semi-structured one to one interviews were 110 conducted with mother/child dyads across Tasmania, Australia, between November 2011 and 111 March 2013. Mother/child demographic characteristics and feeding practices were collected using 112 a questionnaire. Field notes were kept throughout the study. Ethics approval was obtained from 113 the Tasmanian Social Science Ethics Committee (Ethics Ref No: H0011838).

114 Patient and Public Involvement

115 There was no patient or public involvement in setting the research agenda.

² 117 Sampling strategy and recruitment

Mothers who were aged over 16 years, with children aged 0-36 months were recruited from urban, rural and remote areas of Tasmania. A requirement of the funding body was that 50% of the sample should include women who lived in areas classified as socioeconomically disadvantaged using SEIFA index ranks (1=most disadvantaged 5=least disadvantaged).¹⁹ To attain a diverse sample, we recruited women using purposeful and snowballing sampling and techniques such as word-ofmouth, promoting the study within local newspapers, flyers at community clinics and hospitals,

direct contact with mothers, health professionals, young mother forums and parenting support groups. Participants contacted the researchers using the advertised email address/phone number or via health professionals or support groups. Mothers could opt to participate in either a FG or a one to one interview held within their community and at a venue of their choice. Recruitment ended when we judged that both data saturation and the sampling requirements of the funding body had been met. Written informed consent was obtained from participants prior to commencing FGs and

130 interviews.

131 Data collection

All data (demographic questionnaire, interview or FG and qualitative, field notes) were collected concurrently. Mother and child demographics and self-reported infant feeding practices were collected prior to the start of each FG/interview using a paper-based questionnaire. One researcher conducted the interviews (Author 1 or 2) and two researchers were present at each FG (Authors 1 and 2 or 3). A FG/interview topic guide with open ended prompts (tell us how you are feeding, tell us more about that? what helped; what didn't? tell us about stopping) was used to encourage and explore experiences and facilitate the consistency of the data collection.²⁰ The topic guide was initially piloted on one FG and one interview, and minor revisions were made. Field notes and a research log were kept, and all qualitative data were audio-recorded. Team debriefing occurred at the end of each FG/interview. Written notes taken at the debriefings were added to the field notes and used to verify, confirm and support the triangulation of the data.²⁰²¹ Each participant received a \$20.00 grocery food gift voucher in recognition of their time.

FG/Interview recordings were transcribed verbatim and checked against the audio recording for
accuracy by two researchers. Pseudonyms were used in the transcripts to maintain participant

Page 7 of 30

BMJ Open

confidentiality. Demographic data were used to ensure an adequate variation within the sample¹⁸ and analysed for frequencies and distributions using the statistical software Stata (v.14).²² NVivo (v.10.2) was used to data manage; store and collate all data. Three female researchers (Author's 1, 2, 3) with postgraduate qualifications in public health and midwifery, sociology and allied health analysed the transcripts using an iterative thematic analysis. A preliminary coding framework was informed by the aims of the study and an interpretivist qualitative methodology.^{18 20} Researchers read and reread the transcripts meeting weekly for 8 months to discuss and reflect on emerging patterns and themes from the data; first organising, summarising and coding the data into the four broad preliminary codes, then following an abductive process expanding and reducing themes with the relevant sources.¹⁸ Three final themes were identified 'Valuing breastfeeding', 'Endurance' and 'Grief'. (Figure 1) Validation and trustworthiness All data (FG, interview transcripts, field notes) were linked to demographic data and used to cross check themes, sources and support adequate participant representation and triangulation of the data.²¹ Emerging data analysis/themes were also cross checked with different data sources (FG, interview, field notes). Text searches using the "query" option within NVivo verified the frequency of use and relevance of the concepts and themes. For example, transcripts were searched for commonly-used terms such as "best" and "formula" to help verify that women used that term to explain why they preferred to breastfeed over formula feeding, and their use of formula. A research log recorded the coding process, ideas, questions, and reflections.^{18 23} Definitions

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) .

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies

All infant feeding definitions were consistent with the World Health Organizations (WHO) indicators for assessing infant and young child feeding practices²⁴ and the Australian Institute of Health and Welfare (AIHW) National Infant Feeding Survey.⁶ Exclusive breastfeeding refers to an "infant who receives breast milk (including expressed breast milk or breast milk from a wet nurse) and allows oral rehydration solutions, drops, syrups, vitamins, minerals, medicines, but nothing else". Breastfeeding (any) is "where the infant receives breast milk (including expressed or from a wet nurse and food or liquid including non-human milk/formula".²⁴

178 RESULTS

A total of 127 mothers participated in 22 FGs and 19 interviews between May 2011 and March 2013. (Tables 1&2) The mean age of the women was 29 years (SD 5.9), with 46% living in an area classified as most disadvantaged (SEIFA 1&2). A quarter (26%) of the children where aged less than 6 months at the time of the study. (Table 1&2) As participants did not refer directly to "exclusive breastfeeding" as a way of feeding their children, and instead spoke about "breastfeeding" "not breastfeeding" and "formula" feeding, this analysis makes use of the participants' own terminology for describing breastfeeding and their use of formula milk in their day to day lives unless otherwise stated. Pseudonyms, and participant ages are used to identify interview extracts. FG numbers are used to distinguish the source; all other quotes are derived from interviews.

Mothers Characteristics	n	(%)	Mean ± SD
Feeding preference before birth		(70)	
Breast	120	94.5	
Formula	7	5.5	
*Previously breastfed	57	44.9	
Maternal age (years)	57	11.7	29 ± 5.9
15-24	33	26.0	2) = 5.9
25-29	30	23.6	
30-34	39	30.7	
35 or older	25	19.7	
Parity	23	17.7	2 ± 0.9
Pregnant at time of study	2	1.6	2 ± 0.7
One (given birth once)	6	4.7	
Two or more	119	93.7	
Method of delivery	11))).1	
Spontaneous vaginal delivery	70	55.1	
^{††} Assisted delivery	16	12.6	
[†] Caesarean (elective / emergency)	41	32.3	
Maternal smoking	24	18.9	
Living arrangements	24	10.7	
Living with father of the child (de-facto or married)	103	81.1	
Single parent	24	18.9	
Current Occupation	24	10.9	
Professional	40	31.5	
Clerical/Admin or Service/Sales	19	15.0	
Home duties /self employed	45	35.4	
Student or unemployed	23	18.1	
Mothers employment status	23	10.1	
Full time	75	59.1	
Part time /casual	39	30.7	
Student	13	10.2	
**SEIFA quintiles	15	10.2	
	48	37.8	
Quintile 1(most disadvantaged) Quintile 2	40	7.9	
Quintile 3	21	16.5	
Quintile 4	21 27	21.3	
Quintile 5 (least disadvantaged)	27	16.5	
Education status	21	10.5	
	51	42.5	
Bachelor degree /higher	54		
Diploma/Certificate	41	32.3	
Year 12 or below	32	25.2	
Country of birth	110	027	
Australia	119	93.7	
Overseas	8	6.3	mic Index for Areas

$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\2\\3\\14\\15\\16\\17\\8\\9\\20\\21\\22\\32\\4\\5\\26\\7\\8\\9\\01\\32\\33\\4\\5\\36\\7\\8\\9\\01\\42\\43\\4\\5\\6\\7\\8\\9\\01\\52\end{array}$		
52 53 54 55 56 57 58 59 60	For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml	1

	Child Characteristics	п	(%)	Mean \pm SD
	Initiated breastfeeding at birth	129	97.0	
	Gender		,,,,,	
	Male	67	50.8	
	Age groups (to completed months)			12.2 ± 8.6
	0-6	35	26.3	
	7-12	45	33.8	
	13 -18	28	21.1	
	19≥	25	18.8	
	Birth weight (grams)			3284 ± 689.2
	≤2499g	18	13.5	020. 000.2
	≥2500g	115	86.5	
	Gestational age at birth (weeks)	115	00.5	38.7 ± 2.4
	⁺ Preterm	23	17.3	30.1 ± 2.4
		23 110	82.7	
	Place of birth	110	02.1	
	Place of birth Public hospital Private hospital Type of birth Vaginal	84	63.2	
	Private hospital	84 49	63.2 36.8	
	Type of birth	49	30.8	
	Vaginal	70	526	
	Vaginal ^{††} Instrumental	70 19	52.6 14.3	
	mstumentai			
	[†] Caesarean	44	33.1	
	Singletons	120	90.2	
	^{\$} Multiples (twin/triplet)	13	9.8	
	*Current feeding method	17	10.0	
	**Exclusive breastfeeding	17	12.8	
	Infant formula milk	14	10.5	
	Breast milk & infant formula milk	7	5.3	
	(includes ***EBM)	27	07.0	
	Family foods & breast milk (includes EBM)	37	27.8	
	Family foods & other milk/fluids	58	43.6	
	(includes infant formula)	27.0/7	25 ++ L	
	+Preterm: born at less than 36 6/7 completed weeks gestation ++Term: born on or greater than or ventouse. †Caesarean: combined emergency and elective caesarean delivery! \$ sets of; twin		estation.25 TT Inst	frumental: vaginal delivery by forcer
	*Self-reported data at the time of the FG/interview; based on the previous 24 hours. Initi	-	tfed at the breast	or received colostrum **Exclusiv
	breastfeeding: breast milk only no other foods or fluids with the exception of vitamins, oral rel	-		
195			1	
195				
100				
196	Valuing breastfeeding			
197	In this study 94% of women reported that they had	intended to br	eastfeed p	prior to birth, with t
198	majority (97%) initiating breastfeeding at and around	nd the time of	f birth. W	omen expressed the
199	desire to "just breastfeed" because it was "more natur	al" and concep	ptualized t	his as feeding direct
		-		-

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

BMJ Open

from the breast. Overall, irrespective of age and socio-economic status, women valued
breastfeeding and breastmilk above other milks or methods (expressing, bottle/formula milks):

Well, I'm obviously breastfeeding and picked it because of everything that I've read about it being healthy, economical, the bonding, the portability, "have boob, will travel" and it will stay warm and clean, and all those sorts of things, so it just seemed like the natural thing to do. (Elinore, 30, FG 6)

Throughout the study participants often used normative language when talking about breastfeeding, formula and cessation; for example, "healthy", "unhealthy", "best", "natural", "a god given right" (Pricilla, 27, FG 3) and "the right thing to do," (Sally, 34), "unnatural", "failure", "wrong" and "bad mother". The participants did not spontaneously use the term or discuss exclusive breastfeeding as a distinct way to feed their infants. The notion of exclusivity was rarely, if at all, talked about by the women without prompting from the researcher. When completing the questionnaire and during the FGs/interviews women often asked, "what does exclusive mean . . . isn't that just breastfeeding?" (Anthia, 30 FG 8) Prompts such as "how does exclusive breastfeeding fit in?" or "what are your thoughts about exclusive breastfeeding?" produced responses such as "isn't it recommended that you feed them [babies] to 6 months?" (Lucy, 29)

Women did not question the value of breastfeeding or their choice to breastfeed, instead they accepted breastfeeding as their biological and personal right. Chelsea (26) mused "I don't know where that [need to breastfeed] comes from, but that's the kind of expectation you have... it's what we are made to do." For the small number of women who were reluctant to breastfeed like Jane Page 13 of 30

BMJ Open

1			
2			
3			
1			
5			
5			
7			
3			
3			
1	0		
1	1		
1			
1			
	4		
1			
	6		
	7		
1	/ 0		
1			
	9		
2	0		
2	1		
2	2		
2	3		
2	4		
2	5		
2	6		
2	7		
2	8		
2	9		
3	0		
3			
3			
3			
	4		
	5		
3			
3			
3			
	0 9		
	0		
4			
4			
1			
	4		
4			
	6		
4			
4			
	9		
5	0		
5	1		
5			
5	3		
	4		
5			
	6		
5			
5			
	9		
،	~		

60

(20), the nutritional and social value attached to breastfeeding and breastmilk was a powerful
motivator in directing feeding practices; "I didn't really want to, but I intended to breastfeed
anyway because I knew the benefits of it." These values and beliefs appeared to underpin women's
deep desire to feed directly from the breast and perceived need to avoid formula milks.²⁶

227 Endurance

226

In our analysis the theme endurance refers to the pressure women felt and put themselves under to
breastfeed and avoid formula milk, and the resources they employed to mitigate this burden. These
resources include social and physical capital; resources that can be exchanged and used for
personal or social benefit.²⁷

Across the socio-economic spectrum and irrespective of their feeding intention when women referred to using formula, they described having to "give in" and use formula milk. Fiona (28), a mother of two who had used a combination of breast and formula milk to feed both her children until they were four months of age, recalled that "it's harder than it looks…you think it's just going to happen, that you will just pop the baby on, but breastfeeding is bloody hard work." Similarly, Harper (29) stated:

Everybody before, when you're pregnant, only tells you all the good things about breastfeeding and why you should breastfeed but nobody actually, well, I didn't find anyone [who] talked about how hard and how painful it was going to be. And then the only advice I could get from people was "just keep going, just keep going, just keep going."

The participants often described desperate sounding accounts of personal endurance "to getthrough it [breastfeeding]" (Sue, 36). These included narratives about facing physical, personal

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

and social battles. As previously reported elsewhere¹⁶ women in this study described suffering through multiple breastfeeding issues such as pain, low supply, feelings of immorality, failure, loneliness and isolation in the effort to keep breastfeeding. Mothers breastfed through torn and bleeding nipples, or expressed for 4, 6, 9 months to "just keep going a little longer and give him a little breast milk."(Wendy, 31) Some also breastfed despite being socially shamed, for example, being told that breastfeeding was "dirty" and "disgusting" and that they "should do that [breastfeed] in private or cover up". (Tammie, 23) Conversely, some mothers spoke about times when they had used a bottle to feed with breastmilk and strangers had asked them why they were not breastfeeding. In the following example Mary (30) describes her distress at not being able to do what she felt was "natural and right" demonstrating the stigma felt by many participants because they were not breastfeeding: I just wanted to always breastfeed, and I'm devastated that I can't and now I'm a bad mother because I can't do something that is natural. Infant feeding is a complex moral and physical enterprise that places a variety of demands on mothers.²⁸ In response mothers appeared to employ multiple forms of social (kin, family, social groups) and physical (embodied skills and material) capital/resources.²⁷ These included consumables²⁶ such as bottles and teats, dummies, expressing pumps, and medications including

antural therapies to help them negotiate breastfeeding and avoid formula milk. For example,

262 Selina (21) used a combination of resources:

263 She [the baby] would want to feed some days all day, sometimes use my breast like a 264 dummy, and sometimes you needed a little break from it but she would just want to be on

BMJ Open

it all the time, so I put her on the dummy at three or four months, and sometimes used a bottle so my partner could help just to give myself a break.

Many women simultaneously deployed trusted social capital^{27 29} such as the father of the infant as emotional and physical supports. Women spoke about their feelings of relief that "he [the father of the child] could sometimes feed the baby with expressed breastmilk so I could rest and make milk." (Lee, 28) These forms of social capital allowed women to exchange²⁷ their physical labour³⁰ of making milk and breastfeeding. Indeed, having the father of the child at hand to take over, to encourage "tell me keep going," "just be there to keep me sane" (Tara, 23) or to offer unwavering support and reassurance "when it [breastfeeding] got too much" (Jenna, 32) seemed to be the most important resource available to many participants. For the 19% of women who did not have a partner in their lives, other family members, and female friends at times provided similar support. For women in this study using dummies, teats, bottles and intimate partners (father of the child) as social and physical capital was described as being essential in helping them to negotiate the complex processes of infant feeding/breastfeeding. Despite wanting to breastfeed and using social and physical capital, young (<24 years) and older mothers struggled to avoid formula milk while breastfeeding.

Other forms of support such as consulting with health professionals (midwives, doctors, nurses) were frequently described as being less important. They were commonly experienced as either being instructed to try various techniques (expressing, positioning and attachment, medications including homeopathic remedies) or as confusing. Many women in the study described health professionals as "annoying because they kept telling me what to do…like grabbing my boob and telling me something different all the time." (Peta, 25). This narrative was particularly noticeable

1 2		
- 3 4	288	amongst women aged <24 years who felt that they were not trusted to feed their babies by health
5 6	289	professionals. These younger mothers also seemed less likely to describe trusting health
7 8 9	290	professionals. Women throughout the study repeatedly voiced their anger at being asked by health
9 10 11 12	291	professionals if they were breastfeeding and the frequency of confusing and conflicting advice:
13 14	292	Everyone kept asked me are you breastfeeding? I wanted to breastfeedI initially started
15 16	293	with breastfeeding, but I had the worst delivery, and I got problems, I saw loads different
17 18 19	294	health professionals-doctors, midwives, nurses, which was really confusing. They
20 21	295	didn't trust me and I didn't trust them. I wasn't able to breastfeed her, so I put her on
22 23	296	formula, and now she's on solids and bottles. (Clare, 22, FG 19)
24 25	297	
26 27 28	298	Grief
29 30	299	The theme grief explores the way mothers spoke about the cessation of exclusive breastfeeding
31 32	300	and their prolonged sense of failure, loss, shame and anguish. Throughout the study women
33 34 35	301	described their deeply felt desire to breastfeed and the ensuing shock and sadness associated with
36 37	302	cessation though the use of formula milk. Overwhelmingly women described feeling as though
38 39	303	they had failed themselves, were judged as "bad" "dirty" or "naughty" mothers who put their
40 41 42	304	baby at risk because they could not-as Elizabeth (30) reflected "do what women have been
43 44 45	305	doing for so long: breastfeed."
46 47	306	Throughout the study participants across the age groups struggled to resolve the inner conflict
48 49 50	307	between what was "meant to be so natural" and "not being able to feed my own baby." (Sophie,
51 52	308	30). Women acknowledged the practical need for formula "to feed him so he wouldn't starve."
53 54	309	(Caitlyn, 21). However, there was a strong sense of failure and immorality associated with formula
55 56 57	310	use which was likened by Kate (24, FG 22) as "doing something wrong like unprotected sex". It
57 58 59		1
60		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Page 17 of 30

BMJ Open

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.		3MJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Biblic
--	--	---

was clear from the data that formula had a strong physical and social presence in the mother's lives: referred to as "always in the back-ground" the use of formula was felt to physically replace their milk and breasts and in turn replace their role as a mother by making them as Anna (30) said "redundant-and now I'm no longer a good mother." Women struggled to make sense of this tension and mourned the loss of being necessary. Petra (30, FG 1) told us that "I'm just not needed anymore." Evie (24) from the same FG who had been "struggling with breastfeeding," reflected on her experience of introducing one bottle of formula to her baby who was 4 weeks of age. She had been advised by a health professional that she "didn't have to endure it [breastfeeding] or do this to herself:" I felt a bit redundant. You [the baby] don't need me anymore . . . it's your milk in there and stuff but it's just, I don't know. I don't think you can put it into words really because you just don't have that, I guess it's that closeness that you're missing out on, that precious little time that you have where they're feeding and they can look at you and when someone else is doing it it's like, "well, no, that's my little thing with them," I think, and it's that sort of 'someone else is taking over that role. Coupled with a loss was a deep and penetrating sense of guilt and shame. Elisa (28), shared that after attempting to breastfeed each of her three children and then stopping at three weeks due to intense pain and low milk supply "the guilt is huge, and I live with it each day especially when I look at them." Similarly, in the following quote, Samantha (30) a mother of two who had been persevering with breastfeeding through mastitis, and cracked and painful nipples described her feelings of her grief:

I think there was a whole grieving process for me around that, around letting go of that

Page 18 of 30

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

BMJ Open

> dream of this lovely relationship that's going to happen. So then when she was about six weeks old it got to the point, we were just doing breastfeeding in the morning and it just got to the point where she'd just latch on and just look at me like "what are we doing?" There's not enough going on here, so I just stopped. I think by the time it came to actually stopping I had grieved and grieved about the whole process and I was actually quite relieved in the end just to go OK, that whole entire thing is just over... I had six months to mourn the whole thing by that point so I was quite relieved actually when that last breastfeed ended.

> Women struggled with the dissonance between their expectations of breastfeeding and the reality of cessation and the associated shift between two apparent mutually exclusive roles: a "breastfeeder" or "formula-feeder."

344 DISCUSSION

This paper draws on a large and diverse sample of women to provide in-depth, rich and highly personal accounts of their experiences of breastfeeding, formula feeding and ceasing to exclusively breastfeed. Our finding that the majority of women in this study intended to breastfeed yet frequently use formula milk whilst breastfeeding is consistent with national and global trends, revealing a high breastfeeding intention and initiation followed by cessation of exclusive and any breastfeeding through increasing formula use.²⁶⁸ Mothers in our study struggled to reconcile their use of formula milk while breastfeeding^{31 32} and were often left devastated with a prolonged "breastfeeding grief". We view 'breastfeeding grief" as a potential mental health issue for women.³³ In light of the high prevalence of infant formula use,³⁴ there is a need to explore the relationship between formula use during breastfeeding and maternal

Page 19 of 30

BMJ Open

emotional health more closely. Proactive breastfeeding counselling and debriefing, and further
research to explore this phenomenon are needed.
The tension that is generated between the deeply held desire to breastfeed (to do what is
best/natural) and the unforeseen reality of cessation (viewed as immoral/bad) is concerning.
Consistent with previous research in this area we suggest the desire expressed by mothers in ou
study to "just breastfeed" (feed from the breast) is underpinned by an ideology that breastfeeding
is equal to "good" and formula feeding "bad" mothering. ^{17 28 35-37} Consequently, when
breastfeeding ceases through formula use, mothers may experience a sense of failure and even
marginalise themselves as unnatural and immoral because they and their bodies do not conform
to the social, public health and cultural ideals of "good" motherhood. ^{16 17 38-40} These ideals
around motherhood are often embedded within public health campaigns and hospital practices
that are perhaps out of step with what women do and understand as breastfeeding in their day to
day. ^{38 41 42} Indeed, the mothers in our study did not understand the biomedical public health
category "exclusive breastfeeding" as a way to feed their infants. ⁴³ Instead they set out to "just
breastfeed". This helps to understand that the desire to breastfeed is a deeply embodied social
practice not simply a nutritional choice. There is an urgent need to re-evaluate the way exclusive
breastfeeding is promoted and translated to women and their families via policy and clinical
practice.
A limitation of the study is that many participants relied on memories of their experiences. To
address this limitation future studies that engage with mothers at multiple time points over their
infant feeding journey are recommended. Our purposive sampling allowed us to deliberately
seek and include women who would normally not self-select for research studies such as young

seek and include wome ho would normally not self-select for research studies such as younger

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

women <24 years who made up 50% of the sample. This data would lend itself to further
comparative analysis with the older and more socioeconomically advantaged women, and follow
up interviews. Inviting women to participate in either a FG or interview gave rich and highly
complex perspectives through the use of method triangulation.²¹ We used the same interview
guide, coding framework and coding cross-checks to improve standardization and interpretation
of our results.¹⁸

Understanding the forms of support that mothers use while negotiating breastfeeding and cessation is important. An key finding from this study was that women used their social and physical capital ^{27 44} to endure/persevere through common feeding problems (such as pain, public shaming, low milk supply) whilst trying to avoid formula milk and prolong breastfeeding. Women frequently talked of how they relied on the father of the child to help them navigate their breastfeeding and cessation. Consistent with other published research mothers often combined physical capital such as expressing breastmilk, bottles and dummies with social capital (fathers and other family/friends) to relieve them of the intensity of feeding and mothering.⁴⁵ Although problematic because of the association with cessation of exclusive breastfeeding⁷ and breastfeeding problems⁴⁶ bottles and dummies appear to be everyday tools that mothers use to help them negotiate breastfeeding and cessation. Conversely, social capital such as fathers or other family/social supports have been shown to have a positive effect on prolonging breastfeeding⁴⁷ and supporting maternal wellbeing.^{45 48 49 50 51} Indeed mothers are less likely to use formula at one and 6 months when fathers are provided with support and education about exclusive breastfeeding during the antenatal period.⁵² Here lies an opportunity for health policy and clinicians to reframe breastfeeding as a family practice with fathers/intimate partners and extended family as collaborative partners and resources for mothers.⁵³ Robust studies are needed

to provide evidence to inform family centered infant feeding/breastfeeding support and education strategies.

CONCLUSION

The cessation of exclusive breastfeeding through formula use often results in feelings of prolonged grief and failure, making it potentially harmful to women's emotional wellbeing. Supporting fathers/intimate partners to become collaborative breastfeeding/infant feeding partners and reframing breastfeeding as a family practice may support women and prolong breastfeeding duration. Proactive counselling and debriefing may assist those women who are experiencing feelings of loss and breastfeeding grief.

Acknowledgments

We would like to thank the families, mothers and their infants. The Tasmanian Department of Health and Human Services (DHHS), Child Health and Parenting Service (CHAPS) staff and the many community members who participated and contributed to this study.

Contributors

JA & EH designed the study. JA & LT conducted 90% of the FG/interviews/field notes with participants and collected the data. All authors had full access to all the data, were responsible for the integrity of the data and were involved in the analysis and interpretation of the data. JA took the lead in writing the manuscript. Both LT & EH provided critical feedback and editing to the final version of the manuscript.

Funding

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.

1

59

2		
3 4	423	This study was funded by the Tasmanian Early Years Foundation 2011-2013. The views expressed
5 6	424	are those of the authors and the authors are all independent of the funding body.
7 8	425	
9 10 11	426	Conflict of Interest declaration:
12 13	427	There are no competing interests
14 15	428	
16 17 18	429	Ethics approval
19 20	430	Ethics approval was obtained from the Tasmanian Social Science Ethics Committee (Ethics Ref
21 22	431	No: H0011838).
23 24 25	432	
25 26 27	433	A data sharing statement
28 29	434	Due to the nature of the data (audio recordings and transcripts), research ethics approvals and the
30 31 32	435	demographics of the study population we are not able to share the data.
32 33 34		
35 36		
37		
38 39		
40 41		
42		
43 44		
44 45		
46		
47		
48 49		
49 50		
51		
52		
53		
54 55		
55 56		
57		
58		2:

2 3	407	DEEDENCES
4	437	REFERENCES
5 6	438	1. The Lancet. Breastfeeding: achieving the new normal. The Lancet 2016;387(10017):404. doi:
7	439	http://dx.doi.org/10.1016/S0140-6736(16)00210-5
8	440	2. Victora CG, Bahl R, Barros AJ, et al. Breastfeeding in the 21st century: epidemiology,
9	441	mechanisms, and lifelong effect. Lancet 2016;387(10017):475-90. doi: 10.1016/s0140-
10	442	6736(15)01024-7
11	443	3. Sankar MJ, Sinha B, Chowdhury R, et al. Optimal breastfeeding practices and infant and child
12 13	444	mortality: a systematic review and meta-analysis. Acta Paediatrica 2015;104:3-13. doi:
13 14	445	10.1111/apa.13147
15	446	4. Chowdhury R, Sinha B, Sankar MJ, et al. Breastfeeding and maternal health outcomes: a
16	447	systematic review and meta-analysis. Acta Paediatrica 2015;104:96-113. doi:
17	448	10.1111/apa.13102
18	449	5. World Health Organization. World Health Statistics 2013: World Health Organization, 2015.
19 20	450	6. Australian Institute of Health and Welfare. 2010 Australian National Infant Feeding Survey:
20 21	451	Indicator Results. Canberra: Australian Government, 2011.
22	452	7. Ayton J, van der Mei I, Wills K, et al. Cumulative risks and cessation of exclusive breast
23	453	feeding: Australian cross-sectional survey. Arch Dis Child 2015(100):863-68.
24	454	8. McAndrew F, Thompson J, Fellows L, et al. Infant feeding survey 2010. Leeds: Health and
25	455	Social Care Information Centre 2012.
26	456	9. Baxter J, Cooklin AR, Smith J. Which mothers wean their babies prematurely from full
27 28	457	breastfeeding? An Australian cohort study. Acta Paediatrica 2009;98(8):1274-77.
28 29	458	10. Oribe M, Lertxundi A, Basterrechea M, et al. [Prevalence of factors associated with the
30	459	duration of exclusive breastfeeding during the first 6 months of life in the INMA birth
31	460	cohort in Gipuzkoa]. Gaceta sanitaria / SESPAS 2015;29(1):4-9.
32	461	11. Feldens CA, Vitolo MR, Rauber F, et al. Risk factors for discontinuing breastfeeding in
33	462	southern Brazil: a survival analysis. <i>Matern Child Health J</i> 2012;16(6):1257-65.
34 35	463	12. Moffat T. A biocultural investigation of the weanling's dilemma in Kathmandu, Nepal: do
35 36	464	universal recommendations for weaning practices make sense? J Biosoc Sci
37	465	2001;33(3):321-38.
38	466	13. Andrew N, Harvey K. Infant feeding choices: experience, self-identity and lifestyle. Matern
39	467	Child Nutr 2011;7(1):48-60. doi: 10.1111/j.1740-8709.2009.00222.x
40	468	14. Van Esterik P. Contemporary trends in infant feeding research. Annual Review of
41	469	Anthropology 2002;31:257-78.
42 43	470	15. UNICEF. The Baby-Friendly Hospital Initiative: 2016 [Available from:
44	471	http://www.unicef.org/programme/breastfeeding/baby.htm accessed 20 June 2018.
45	472	16. Burns E, Schmied V, Sheehan A, et al. A meta-ethnographic synthesis of women's
46	473	experience of breastfeeding. Matern Child Nutr 2010;6(3):201-19. doi: 10.1111/j.1740-
47	474	8709.2009.00209.x
48	475	17. Lee E. Living with risk in the age of 'intensive motherhood': Maternal identity and infant
49 50	476	feeding. Health, Risk & Society 2008;10(5):467-77. doi: 10.1080/13698570802383432
50 51	477	18. Bourgeault I, Dingwall R, De Vries R, editors. The SAGE handbook of qualitative methods in
52	478	health research. London: Sage, 2013: 802-65.
53	479	19. Pink B. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA),
54	480	Australia, 2011. Technical Paper. In: Statistics(ABS) ABo, ed. Canberra: Australian
55	481	Government, 2011.
56		
57 58		2.
59		2.
60		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1

2			
3	482	20. Creswell JW, Poth CN. Qualitative inquiry and research design: Choosing among five	
4	483	approaches: Sage publications 2017:181-201.	
5	484	21. Denzin KN, Lincoln SY, editors. The SAGE Handbook of Qualitative Research Fifth ed.	
6 7	485	United States Of America SAGE, 2018:806-15	
8	486	22. Stata Statistical Software: Release 14 [program]. College Station TX: StataCorp LP, 2015.	
9	487	23. Bazeley P, Jackson K. Qualitative data analysis with NVivo: Sage Publications Limited	
10	488	2013:19-21.	
11	489	24. World Health Organization/UNICEF. Indicators for assessing breastfeeding practices. Part 1	
12	490	Definitions: Conclusions of consensus meeting held 6-8 November 2007. Geneva:	
13	491	Division of Child Health and Development, 2008.	
14	492	25. World Health Organization. International statistical Classification of Diseases and related	
15 16	492 493	health problems (ICD)10th Revision. Geneva: World Health Organization(WHO), 2010.	
17	495 494		
18		26. Afflerback S, Carter SK, Anthony AK, et al. Infant-feeding consumerism in the age of	
19	495	intensive mothering and risk society. <i>Journal of Consumer Culture</i> 2013;13(3):387-405.	
20	496	doi: 10.1177/1469540513485271	
21	497	27. Bourdieu P. The Logic of Practice. Cambridge: Polity Press;1990:42-62.	
22	498	28. Blum L. At the breast: Ideologies of breastfeeding and motherhood in the contemporary	
23	499	United States: Beacon Press 2000:8-25.	
24	500	29. Kawachi I, Kennedy BP, Lochner K, et al. Social capital, income inequality, and mortality.	
25 26	501	Am J Public Health 1997;87(9):1491-8. [published Online First: 1997/10/07]	
26 27	502	30. Dykes F. 'Supply' and 'demand': breastfeeding as labour. Soc Sci Med 2005;60(10):2283-93.	
28	503	31. Thomson G, Ebisch-Burton K, Flacking R. Shame if you doshame if you don't: women's	
29	504	experiences of infant feeding. <i>Matern Child Nutr</i> 2015;11(1):33-46.	
30	505	32. Lee E. Health, morality, and infant feeding: British mothers' experiences of formula milk use	е
31	506	in the early weeks. Sociol Health Illn 2007;29(7):1075-90. doi: 10.1111/j.1467-	
32	507	9566.2007.01020.x	
33	508	33. Cooke M, Schmied V, Sheehan A. An exploration of the relationship between postnatal	
34 25	509	distress and maternal role attainment, breast feeding problems and breast feeding	
35 36	510	cessation in Australia. <i>Midwifery</i> 2007;23(1):66-76. doi: 10.1016/j.midw.2005.12.003	
37	511	34. McFadden A, Mason F, Baker J, et al. Spotlight on infant formula: coordinated global action	L
38	512	needed. Lancet 2016;387(10017):413-5. doi: 10.1016/s0140-6736(16)00103-3	
39	513	35. Sheehan A, Schmied V. The Imperative to Breastfeed: An Australian Perspective. In:	
40	514	Liamputtong P, ed. Infant feeding practices: A cross-cultural perspective. New York:	
41	515	Springer Science & Business Media 2011:55,73.	
42	516	36. Shakespeare J, Blake F, Garcia J. Breast-feeding difficulties experienced by women taking	
43 44	517	part in a qualitative interview study of postnatal depression. <i>Midwifery</i> 2004;20(3):251-	
44 45	518	60. doi: 10.1016/j.midw.2003.12.011	
46	519	37. Marshall JL, Godfrey M, Renfrew MJ. Being a 'good mother': managing breastfeeding and	
47	520	merging identities. Soc Sci Med 2007;65(10):2147-59.	
48	521	38. Knaak SJ. Contextualising risk, constructing choice: Breastfeeding and good mothering in	
49	522	risk society. <i>Health, Risk & Society</i> 2010;12(4):345-55. doi:	
50	523	10.1080/13698571003789666	
51	524	39. Miller T. "Is This What Motherhood Is All About?": Weaving Experiences and Discourse	
52	525	through Transition to First-Time Motherhood. <i>Gender and Society</i> 2007;21(3):337-58.	
53 54	526	doi: 10.2307/27640973	
54 55	520	401. 10.2307227070773	
56			
57			
58			2
59			

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies.	Enseignement Superieur (ABES)	3MJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Biblio
--	-------------------------------	---

1		
2		
3	527	40. Johnson S, Leeming D, Williamson I, et al. Maintaining the 'good maternal body':
4	528	expressing milk as a way of negotiating the demands and dilemmas of early infant
5	529	feeding. J Adv Nurs 2013;69(3):590-99. doi: 10.1111/j.1365-2648.2012.06035.x
6	530	41. Hoddinott P, Craig LC, Britten J, et al. A serial qualitative interview study of infant feeding
7	531	experiences: idealism meets realism. <i>BMJ open</i> 2012;2(2):e000504.
8 9		1 1 1 1
9 10	532	42. Wolf JB. Is breast really best? Risk and total motherhood in the national breastfeeding
11	533	awareness campaign. <i>Journal of health politics, policy and law</i> 2007;32(4):595-636.
12	534	43. Still R, Marais D, Hollis JL. Mothers' understanding of the term 'exclusive breastfeeding': a
13	535	systematic review. Matern Child Nutr 2017;13(3):e12336-n/a. doi: 10.1111/mcn.12336
14	536	44. Browne-Yung K, Ziersch A, Baum F. 'Faking til you make it': social capital accumulation of
15	537	individuals on low incomes living in contrasting socio-economic neighbourhoods and its
16	538	implications for health and wellbeing. Soc Sci Med 2013;85:9-17. doi:
17	539	10.1016/j.socscimed.2013.02.026
18	540	45. Abbass-Dick J, Stern SB, Nelson LE, et al. Coparenting breastfeeding support and exclusive
19	541	breastfeeding: a randomized controlled trial. <i>Pediatrics</i> 2015;135(1):102-10. doi:
20	542	10.1542/peds.2014-1416
21	543	46. O'Connor NR, Tanabe KO, Siadaty MS, et al. Pacifiers and breastfeeding: A systematic
22		
23	544	review. Arch Pediatr Adolesc Med 2009;163(4):378-82. doi:
24 25	545	10.1001/archpediatrics.2008.578
25 26	546	47. Quinlan RJ, Quinlan MB. Human Lactation, Pair-bonds, and Alloparents : A Cross-Cultural
20 27	547	Analysis. Human nature (Hawthorne, NY) 2008;19(1):87-102.
28	548	48. Mahesh PKB, Gunathunga MW, Arnold SM, et al. Effectiveness of targeting fathers for
29	549	breastfeeding promotion: systematic review and meta-analysis. BMC Public Health
30	550	2018;18(1):1140. doi: 10.1186/s12889-018-6037-x
31	551	49. Tohotoa J, Maycock B, Hauck YL, et al. Dads make a difference: an exploratory study of
32	552	paternal support for breastfeeding in Perth, Western Australia. Int Breastfeed J
33	553	2009;4:15.
34	554	50. Rempel LA, Rempel JK. The Breastfeeding Team: The Role of Involved Fathers in the
35	555	Breastfeeding Family. Journal of Human Lactation 2011;27(2):115-21. doi:
36	556	10.1177/0890334410390045
37		51. Alianmoghaddam N, Phibbs S, Benn C. New Zealand women talk about breastfeeding
38	557	
39 40	558	support from male family members. <i>Breastfeeding Review</i> 2017;25(1):35.
40 41	559	52. Su M, Ouyang YQ. Father's Role in Breastfeeding Promotion: Lessons from a Quasi-
42	560	Experimental Trial in China. Breastfeeding medicine : the official journal of the Academy
43	561	of Breastfeeding Medicine 2016 doi: 10.1089/bfm.2015.0144
44	562	53. Brown A, Davies R. Fathers' experiences of supporting breastfeeding: challenges for
45	563	breastfeeding promotion and education. Matern Child Nutr 2014;10(4):510-26.
46	564	
47		
48		
49		
50		
51		
52		
53		
54		

BMJ Open: first published as 10.1136/bmjopen-2018-026234 on 6 May 2019. Downloaded from http://bmjopen.bmj.com/ on June 13, 2025 at Agence Bibliographique de Enseignement Superieur (ABES)

Protected by copyright, including for uses related to text and data mining, Al training, and similar technologies

[
	0
1 2 3	4 5 6 7 8 9 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3

56 57 58

59

60

1

566 Figure 1. Derivation of the themes that emerged from the thematic analysis.

to perteries only

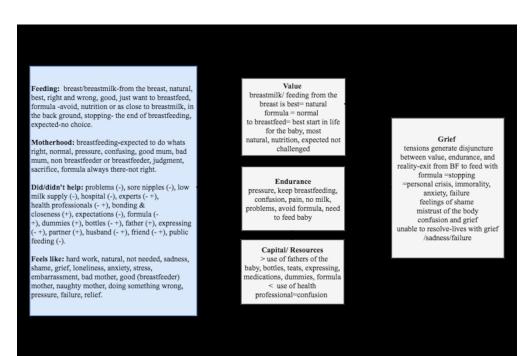


Figure 1. Derivation of Themes

275x189mm (300 x 300 DPI)

Table 1

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Domain 1: Research team and reflexivity			
Personal Characteristics			
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?	р4
2.	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i>	es ti pag
3.	Occupation	What was their occupation at the time of the study?	es j
4.	Gender	Was the researcher male or female?	es
5.	Experience and	What experience or training did the researcher have?	
5.	training	Author 1, 2, 3 are all experienced in qu methods and published qualitative re	ualita
Relationship with participants		Author 1, 2, 3 are all experienced in qu	ualita
Relationship with participants		Author 1, 2, 3 are all experienced in qu	ualita
Relationship with participants 6.	training Relationship established Participant knowledge of the interviewer	Author 1, 2, 3 are all experienced in que methods and published qualitative re Was a relationship established prior to study commencement?	ualita esea Dlish
Relationship with	training Relationship established Participant knowledge of the interviewer	Author 1, 2, 3 are all experienced in que methods and published qualitative re Was a relationship established prior to study commencement? No relationships established What did the participants know about the researcher e.g. personal goals, reasons for doing the research	ualita esea blish ? thics

Page 29 of 30

Νο	Item	Guide questions/description
9.	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis
		Yes P7 Interpretivist methodolo
Participant selection		
10.	Sampling	How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i> p 3,4
11.	Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email
12.	Sample size	How many participants were in the study? N=127 p 3-4 & 6
13.	Non-participation	How many people refused to participate or dropped out? Reasons? no drop outs and no refusals
Setting		
14.	Setting of data collection	Where was the data collected? e.g. home, clinic, workplace
		Multiple sites; community, homes- p 4-5
15.	Presence of non- participants	Was anyone else present besides the participants and researchers? the mothers child/children
16.	Description of sample	What are the important characteristics of the sample? <i>e.g. demographic data, date</i> Listed in tables 1, 2; . P 7, 8.
Data collection		
17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested? Yes; p 4,5
18.	Repeat interviews	Were repeat interviews carried out? If yes, how many? no repeat interviews .
19.	Audio/visual recording	Did the research use audio or visual recording to collect the data? Yes audio recorder
20.	Field notes	Were field notes made during and/or after the interview or focus group?
Skip to Main Con	tent	Yes; p 5
21.	Duration	What was the duration of the interviews or focus group?

Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups | Oxford Academic

22.	Data saturation	Was data saturation discussed? Yes p 4
23.	Transcripts returned	Were transcripts returned to participants for comment and/or correction?
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	How many data coders coded the data?
		Three; all authors
25.	Description of the coding tree	Did authors provide a description of the coding tree? Yes; p 5
26.	Derivation of themes	Were themes identified in advance or derived from the data? Derived from the data Figure 1.
27.	Software	What software, if applicable, was used to manage the data?
28.	Participant checking	Did participants provide feedback on the findings?
Reporting		
29.	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. participant number
30.	Data and findings consistent	Was there consistency between the data presented and the findings?
21		Inderpin the data and findings presented . Figure 1 for the derivation and from p-9>
31.	Clarity of major themes	Were major themes clearly presented in the findings?
32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes? Some description of age related diversity