

BMJ Open Women's experiences of ceasing to breastfeed: Australian qualitative study

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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 Multimethod, qualitative study; questionnaire, focus groups and interviews.

Setting Northern and Southern Tasmania, Australia.

Participants 127 mothers of childbearing age from a broad sociodemographic 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 (eg, 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 breast milk, 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).

Conclusions and implications For many mothers, the cessation of exclusive breastfeeding results in lingering feelings of grief and failure making it harmful to women's emotional well-being. 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 who are managing feelings of 'breastfeeding grief'.

INTRODUCTION

A recent *Lancet*¹ series demonstrates the public health imperative to promote and support breastfeeding as a social and cultural norm. However, despite convincing evidence of the benefits of exclusive (where the child is only fed breast milk/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 UK and the 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.^{2–5} While

Strengths and limitations of this study

- This qualitative study was the first in Australia to explore the cessation experiences of women from varied socioeconomic backgrounds. Women aged below 24 years of age who were living in socio-economic disadvantaged areas comprised half the sample.
- In an area of research dominated by survey and biological research, this qualitative study generated rich and highly complex perspectives about breastfeeding and cessation, facilitating increased understanding of the cessation of exclusive breastfeeding from the mother's perspective.
- The multimethod qualitative approach supported data triangulation.
- Although we draw from a large sample of women, the findings cannot be extended to wider populations.

90% of Australian women choose to initiate exclusive breastfeeding around the time of birth, 50% have ceased by the first 2 months.^{6,7} In the UK, 69% of mothers initiate exclusive breastfeeding, and by 6 weeks only a quarter (23%) are continuing.⁸ Victora *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 breast milk 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 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 (body mass index >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.^{7,9–11}

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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. 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.

METHODS

Design, setting, rationale

The Tasmanian Infant Feeding study was a state-wide multimethod 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 (FGs) and 19 semistructured one-to-one interviews were conducted with mother/child dyads across Tasmania, Australia, between November 2011 and March 2013. Mother/child demographic characteristics and feeding practices were collected using a questionnaire. Field notes were kept throughout the study.

Patient and public involvement

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

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 Socio-Economic Indexes for Areas (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 of mouth, 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 an 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 interviews.

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). An FG/interview topic guide with open-ended prompts (tell us how you are feeding, tell us more about that? what helped; what did not? 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.^{20 21} Each participant received a \$A20.00 grocery food gift voucher in recognition of their time.

Data analysis

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 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 (Authors 1, 2 and 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 and field notes) were linked to demographic data and used to cross-check themes, sources and support adequate participant

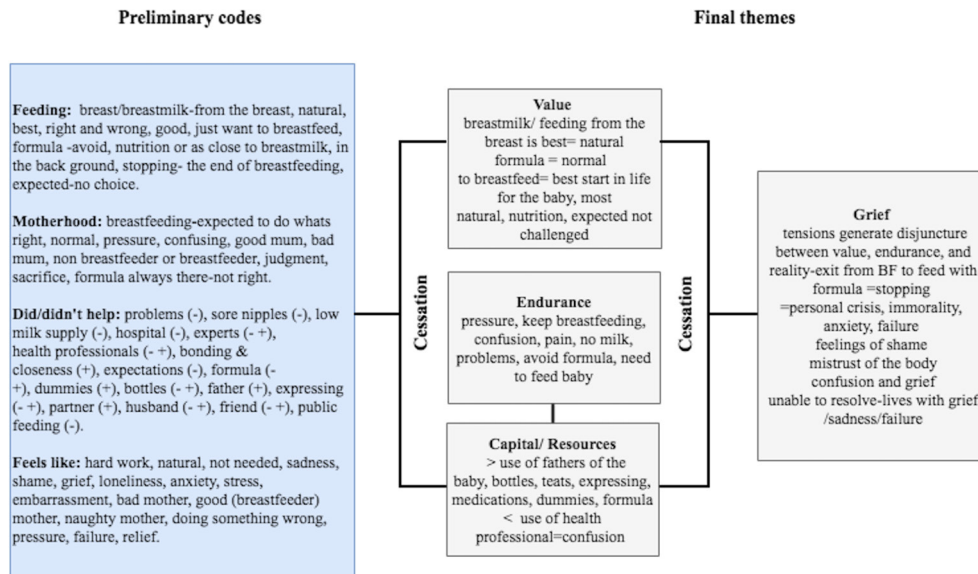


Figure 1 Derivation of the themes that emerged from the thematic analysis. BF, breastfeeding.

representation and triangulation of the data.²¹ Emerging data analysis/themes were also cross checked with different data sources (FG, interview and 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

All infant-feeding definitions were consistent with World Health Organizations indicators for assessing infant and young child-feeding practices²⁴ and the 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

RESULTS

A total of 127 mothers participated in 22 FGs and 19 interviews between May 2011 and March 2013 (tables 1 and 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 and 2). A quarter (26%) of the children were aged less than 6 months at the time of the study (tables 1 and 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.

Valuing breastfeeding

In this study, 94% of women reported that they had intended to breastfeed prior to birth, with the majority (97%) initiating breastfeeding at and around the time of birth. Women expressed their desire to 'just breastfeed' because it was 'more natural' and conceptualised this as feeding directly from the breast. Overall, irrespective of age and socioeconomic status, women valued breastfeeding and breast milk 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

Table 1 Characteristics of the mothers (n=127) who participated in the 22 focus groups or 19 interviews

Mothers characteristics	n	(%)	Mean±SD
Feeding preference before birth			
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	
Living arrangements			
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/selfemployed	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			
Bachelor degree/higher	54	42.5	
Diploma/certificate	41	32.3	
Year 12 or below	32	25.2	

Continued

Table 1 Continued

Mothers characteristics	n	(%)	Mean±SD
Country of birth			
Australia	119	93.7	
Overseas	8	6.3	

Values are in n (%) mean ±SD.

*Previously breastfed: any breastfeeding irrespective of length of time (hours, days, weeks or months).

†Vaginal delivery by forceps or ventouse.

‡Caesarean: combined emergency and elective caesarean delivery! #Multiple birth =x6 twin x1 triplet.

§SEIFA quintiles: Socio-Economic Index for Areas Instrumental.

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 (20), the nutritional and social value attached to breastfeeding and breast milk 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.²⁵

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 include social and physical capital, resources that can be exchanged and used for personal or social benefit.²⁶

Across the socioeconomic 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 4 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’.

Table 2 Characteristics of the children (n=133) whose mother participated in 22 focus groups or 19 interviews

Child characteristics	n	(%)	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)			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			
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 and infant formula milk (includes EBM‡‡)	7	5.3	
Family foods and breast milk (includes EBM)	37	27.8	
Family foods and other milk/fluids (includes infant formula)	58	43.6	

Values are in n (%) mean ±SD.

*Preterm: born at less than 36 6/7 completed weeks gestation.

†Term: born on or greater than 37 0/7 completed weeks gestation.²⁵

‡Instrumental: vaginal delivery by forceps or ventouse.

§Caesarean: combined emergency and elective caesarean delivery!

¶Sets of; twins =5/triplet=1.

**Self-reported data at the time of the FG/interview; based on the previous 24 hours. Initiated breastfeeding: breastfed at the breast or received colostrum.

††Exclusive breastfeeding: breast milk only no other foods or fluids with the exception of vitamins, oral rehydration solutions.

‡‡EBM: expressed breast milk.²⁴

The participants often described desperate sounding accounts of personal endurance ‘to get through it [breastfeeding]’ (Sue, 36). These included narratives about facing physical, personal and social battles. As previously

reported elsewhere,¹⁶ 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 and 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 breast milk 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.²⁷ In response, mothers appeared to employ multiple forms of social (kin, family, social groups) and physical (embodied skills and material) capital/resources.²⁶ These included consumables²⁵ 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:

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 4 months, and sometimes used a bottle so my partner could help just to give myself a break.

Many women simultaneously deployed trusted social capital^{26 28} 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 breast milk so I could rest and make milk’ (Lee, 28). These forms of social capital allowed women to exchange²⁶ 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’ (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 among women aged <24 years who felt that they were not trusted to feed their babies by health professionals. These younger mothers also seemed less likely to describe trusting health professionals. 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 asking 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)

Grief

The theme grief explores the way mothers spoke about the cessation of exclusive breastfeeding and their prolonged sense of failure, loss, shame and anguish. Throughout the study, women described their deeply felt desire to breastfeed and the ensuing shock and sadness associated with cessation though the use of formula milk. Overwhelmingly, women described feeling as though 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). Women acknowledged the practical need for formula ‘to feed him so he wouldn’t starve’ (Caitlyn, 21). However, there was a strong sense of failure and immorality associated with formula use which was likened by Kate (24, FG 22) as ‘doing something wrong 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 background’ 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 3 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 dream of this lovely relationship that’s going to happen. So then when she was about 6 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 6 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 ‘breast-feeder’ or ‘formula-feeder’.

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 while breastfeeding is

consistent with national and global trends revealed a high breastfeeding intention and initiation followed by the 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^{30 31} and were often left devastated with a prolonged 'breastfeeding grief'. We view 'breastfeeding grief' as a potential mental health issue for women.³² In light of the high prevalence of infant formula use,³³ 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 (viewed as immoral/bad) is concerning. Consistent with previous research in this area, we suggest that the desire expressed by mothers in our 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 27 34-36} 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 37-39} 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.^{37 40 41} Indeed, the mothers in our study did not understand the biomedical public health category 'exclusive breastfeeding' as a way to feed their infants.⁴² 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 younger women <24 years who made up 50% of the sample. This data would lend itself to further comparative analysis with the older and more socio-economically advantaged women, and follow-up interviews. Inviting women to participate in either an 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 crosschecks to improve standardisation 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^{26 43} to endure/persevere through common feeding problems (such as pain, public shaming,

low milk supply) while 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 breast milk, bottles and dummies with social capital (fathers and other family/friends) to relieve them of the intensity of feeding and mothering.⁴⁴ Although problematic because of the association with cessation of exclusive breastfeeding⁷ and breastfeeding problems,⁴⁵ 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 has been shown to have a positive effect on prolonging breastfeeding⁴⁶ and supporting maternal well-being.^{44 47-50} Indeed, mothers are less likely to use formula at 1 and 6 months when fathers are provided with support and education about exclusive breastfeeding during the antenatal period.⁵¹ 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.⁵² Robust studies are needed to provide evidence to inform family-centred 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 well-being. 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.

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Data sharing statement Due to the nature of the data (audio recordings and transcripts), we are not able to share the raw data. We are able to share upon

request the deidentified transcripts to researchers for the purposes of further analysis and comparison or research translation.

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REFERENCES

1. The Lancet. Breastfeeding: achieving the new normal. *Lancet* 2016;387:404.
2. Victora CG, Bahl R, Barros AJ, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet* 2016;387:475–90.
3. Sankar MJ, Sinha B, Chowdhury R, et al. Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. *Acta Paediatr* 2015;104:3–13.
4. Chowdhury R, Sinha B, Sankar MJ, et al. Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. *Acta Paediatr* 2015;104:96–113.
5. World Health Organization. *World health statistics 2013*, 2015.
6. Australian Institute of Health and Welfare. *Australian national infant feeding survey: indicator results*. Canberra: Australian Government, 2010.
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;100:863–8.
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 Paediatr* 2009;98:1274–7.
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]. *Gac Sanit* 2015;29:4–9.
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;16:1257–65.
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;33:321–38.
13. Andrew N, Harvey K. Infant feeding choices: experience, self-identity and lifestyle. *Matern Child Nutr* 2011;7:48–60.
14. Van Esterik P. Contemporary Trends in Infant Feeding Research. *Annu Rev Anthropol* 2002;31:257–78.
15. UNICEF. The baby-friendly hospital initiative. 2016 <http://www.unicef.org/programme/breastfeeding/baby.htm> (Accessed 20 Jun 2018).
16. Burns E, Schmied V, Sheehan A, et al. A meta-ethnographic synthesis of women's experience of breastfeeding. *Matern Child Nutr* 2010;6:201–19.
17. Lee EJ. Living with risk in the age of 'intensive motherhood': Maternal identity and infant feeding. *Health Risk Soc* 2008;10:467–77.
18. Bourgeault I, Dingwall R, De Vries R, eds. *The SAGE handbook of qualitative methods in health research*. London: Sage, 2013:802–65.
19. Pink B. *Census of population and housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011. Technical paper*. Canberra: Australian Government, 2011.
20. Creswell JW, Poth CN. *Qualitative inquiry and research design: choosing among five approaches*: Sage publications, 2017:181–201.
21. Denzin KN, Lincoln SY, eds. *The SAGE Handbook of Qualitative Research*. Fifth edn. United States Of America: SAGE, 2018:806–15.
22. Stata Statistical Software: Release 14 [program]. *College Station TX: StataCorp LP* 2015.
23. Bazeley P, Jackson K. *Qualitative data analysis with NVivo*: Sage Publications Limited, 2013:19–21.
24. World Health Organization/UNICEF. *Indicators for assessing breastfeeding practices. Part 1 Definitions: Conclusions of consensus meeting held 6–8 November 2007*. Geneva: Division of Child Health and Development, 2008.
25. Afflerback S, Carter SK, Anthony AK, et al. Infant-feeding consumerism in the age of intensive mothering and risk society. *Journal of Consumer Culture* 2013;13:387–405.
26. Bourdieu P. *The logic of practice*. Cambridge: Polity Press, 1990:42–62.
27. Blum L. *At the breast: ideologies of breastfeeding and motherhood in the contemporary*. United States: Beacon Press, 2000:8–25.
28. Kawachi I, Kennedy BP, Lochner K, et al. Social capital, income inequality, and mortality. *Am J Public Health* 1997;87:1491–8.
29. Dykes F. 'Supply' and 'demand': breastfeeding as labour. *Soc Sci Med* 2005;60:2283–93.
30. Thomson G, Ebisch-Burton K, Flacking R. Shame if you do--shame if you don't: women's experiences of infant feeding. *Matern Child Nutr* 2015;11:33–46.
31. Lee E. Health, morality, and infant feeding: British mothers' experiences of formula milk use in the early weeks. *Sociol Health Illn* 2007;29:1075–90.
32. Cooke M, Schmied V, Sheehan A. An exploration of the relationship between postnatal distress and maternal role attainment, breast feeding problems and breast feeding cessation in Australia. *Midwifery* 2007;23:66–76.
33. McFadden A, Mason F, Baker J, et al. Spotlight on infant formula: coordinated global action needed. *Lancet* 2016;387:413–5.
34. Sheehan A, Schmied V. The imperative to breastfeed: an Australian perspective. Liampittong P, ed. *Infant feeding practices: a cross-cultural perspective*. New York: Springer Science & Business Media, 2011:55:73.
35. Shakespeare J, Blake F, Garcia J. Breast-feeding difficulties experienced by women taking part in a qualitative interview study of postnatal depression. *Midwifery* 2004;20:251–60.
36. Marshall JL, Godfrey M, Renfrew MJ. Being a 'good mother': managing breastfeeding and merging identities. *Soc Sci Med* 2007;65:2147–59.
37. Knaak SJ. Contextualising risk, constructing choice: Breastfeeding and good mothering in risk society. *Health Risk Soc* 2010;12:345–55.
38. Miller T. "Is this what motherhood is all about?": Weaving experiences and discourse through transition to first-time motherhood. *Gender and Society* 2007;21:337–58.
39. Johnson S, Leeming D, Williamson I, et al. Maintaining the 'good maternal body': expressing milk as a way of negotiating the demands and dilemmas of early infant feeding. *J Adv Nurs* 2013;69:590–9.
40. Hoddinott P, Craig LC, Britten J, et al. A serial qualitative interview study of infant feeding experiences: idealism meets realism. *BMJ Open* 2012;2:e000504.
41. Wolf JB. Is breast really best? Risk and total motherhood in the National Breastfeeding Awareness Campaign. *J Health Polit Policy Law* 2007;32:595–636.
42. Still R, Marais D, Hollis JL. Mothers' understanding of the term 'exclusive breastfeeding': a systematic review. *Matern Child Nutr* 2017;13:e12336.
43. 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.
44. Abbass-Dick J, Stern SB, Nelson LE, et al. Coparenting breastfeeding support and exclusive breastfeeding: a randomized controlled trial. *Pediatrics* 2015;135:102–10.
45. O'Connor NR, Tanabe KO, Siadaty MS, et al. Pacifiers and breastfeeding: a systematic review. *Arch Pediatr Adolesc Med* 2009;163:378–82.
46. Quinlan RJ, Quinlan MB. Human lactation, pair-bonds, and alloparents: a cross-cultural analysis. *Hum Nat* 2008;19:87–102.
47. Mahesh PKB, Gunathunga MW, Arnold SM, et al. Effectiveness of targeting fathers for breastfeeding promotion: systematic review and meta-analysis. *BMC Public Health* 2018;18:1140.
48. Tohtoa J, Maycock B, Hauck YL, et al. Dads make a difference: an exploratory study of paternal support for breastfeeding in Perth, Western Australia. *Int Breastfeed J* 2009;4:15.
49. Rempel LA, Rempel JK. The breastfeeding team: the role of involved fathers in the breastfeeding family. *J Hum Lact* 2011;27:115–21.
50. Alianmoghaddam N, Phibbs S, Benn C. New Zealand women talk about breastfeeding support from male family members. *Breastfeed Rev* 2017;25:35.
51. Su M, Ouyang YQ. Father's role in breastfeeding promotion: lessons from a quasi-experimental trial in China. *Breastfeed Med* 2016;11:144–9.
52. Brown A, Davies R. Fathers' experiences of supporting breastfeeding: challenges for breastfeeding promotion and education. *Matern Child Nutr* 2014;10:510–26.