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Research Article

Breastfeeding Aversion Response (BAR): A Descriptive Study

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Introduction: For many women, breastfeeding their infant is an enjoyable experience. Some, however, have reported negative sensations such as an overwhelming need to unlatch while breastfeeding. This phenomenon is known as breastfeeding aversion response (BAR). The incidence of BAR is unknown and literature on this experience is limited. This study therefore aimed to expand the understanding of BAR using an online survey targeting those who have experienced feelings of aversion while breastfeeding.

Methods: An online survey was distributed within Australia using purposive sampling to those who self-identified as experiencing BAR. This survey contained 5 sections: (1) demographics and health-related characteristics, (2) breastfeeding difficulties and onset of BAR, (3) the experience of BAR, (4) birth and breastfeeding experience, and (5) coping with BAR and support. Questions were included to test the generalizability of previous qualitative findings on BAR.

Results: Participants (N = 210) predominantly were aged between 25 and 35 years (69.2%), were in a relationship (96.2%), and had one child (80%). BAR was more commonly experienced when feeding the first-born child (44.8%), breastfeeding while pregnant (31%), or tandem feeding (10%). The feelings of aversion were experienced by most respondents throughout the feed while the child was latched (76.7%). More than half (52.4%) of participants reported that BAR had caused them to end breastfeeding sessions before their child was ready to stop feeding. Almost half of the participants (48.6%) reported receiving no support from a health care provider for BAR.

Discussion: This study contributes new information about the experience of BAR, including when it commonly happens and who may be at greater risk. More support is needed for women who want to breastfeed while experiencing BAR. New public health policies which promote breastfeeding are needed to help women achieve satisfying breastfeeding experiences and meet their own breastfeeding goals.

Keywords: breastfeeding, breastfeeding experience, mother-child relations, maternal health, breastfeeding aversion response, nursing aversion, chest-feeding, tandem breastfeeding

INTRODUCTION

The World Health Organization (WHO) recommends that infants are breastfed a minimum of 12 months and children up to 2 years and beyond.[1,2] Breastfeeding has proven short- and long-term physical and mental health benefits for women, infants, children, and families[3] and offers protection against child infections, obesity, and diabetes.[4] However, less than half of women globally continue to breastfeed exclusively after 6 months.[5,6] Global rates of infants fed with any breastmilk at age 6 months have only increased slightly in recent years,[6,7] as many women who intend to breastfeed report a lack of adequate support to achieve their breastfeeding goals.[8,9] It is therefore vital to better understand breastfeeding complexities from the perspective of breastfeeding women.[10] Strategies and policies are needed to support women in achieving their personal breastfeeding goals[11] and enable national health services to achieve the WHO targets.[12]

Postpartum mental health difficulties have become more prevalent in recent years. Evidence has cited activating factors such as traumatic birth experiences,[13] lack of postpartum support,[14] and complex breastfeeding issues.[15] Previous research has also identified that postpartum infant feeding complications can trigger feelings of guilt and shame,[16] which can be associated with an increased risk of postpartum depression.[17] Breastfeeding can generate positive and negative experiences for women that range from feelings of connectedness and pride, to negative emotions such as frustration and disappointment.[18] Common breastfeeding challenges such as inadequate milk supply, poor latch, nipple trauma, and mastitis can cause physical and mental distress.[14] Less commonly, some women have described feelings of aversion while breastfeeding, with the overwhelming urge to unlatch their infant.[18] This negative phenomenon is referred to as breastfeeding aversion response.

Breastfeeding Aversion Response

Breastfeeding aversion response (BAR) is a complex breastfeeding experience that is poorly understood, and there is limited literature to guide diagnosis and management. BAR has been defined as a compulsion to unlatch in reaction to negative physical sensations while breastfeeding. This reaction

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Quick Points

- Breastfeeding aversion response is an overwhelming urge to unlatch in response to feelings of aversion while breastfeeding, which occur while the child is latched.
- Breastfeeding the first child, tandem breastfeeding, menstruation, and breastfeeding while pregnant can trigger breastfeeding aversion response.
- Breastfeeding aversion response can have a negative effect on maternal mental health such as higher levels of severe stress and anxiety.
- Most women who experience this complex breastfeeding challenge want to continue breastfeeding and need support from knowledgeable health care professionals and peers.

can last throughout the entire feeding session and ranges from mild to repellent, conflicting with the desire to continue breastfeeding.[15] BAR was first reported in nonacademic breastfeeding literature in 2003,[19] which led to the creation of online support groups for BAR. Anecdotal findings from these online communities were then added to later editions of international breastfeeding resources.[19] Social media discourse and lay literature around breastfeeding aversion has further increased in recent years, with several blogs, books, and websites supporting this issue.[20–22] To date, however, empirical research on this phenomena remains sparce.

The experience of BAR differs from documented characteristics and sensations of other negative embodied experiences while breastfeeding such as dysphoric milk ejection reflex (D-MER). D-MER is defined as negative sensations that occur during the letdown reflex while breastfeeding or pumping breastmilk. D-MER was first described in a case report in 2011,[23] and recent research on D-MER hypothesized that this experience may be associated with a disruption in neurotransmitter and hormone activity of prolactin and dopamine; however, more research is needed to confirm this.[24] Previous research has also explored the breastfeeding challenges of those with a history of childhood sexual assault such as increased risk of emotional distress and complications with breastfeeding.[25,26] Likewise, a history of assault can activate negative feelings while breastfeeding described as flashback traumatic memories and feelings of dissociation.[26]

In 2016, the earliest known empirical research to identify feelings of aversion while breastfeeding found that this experience can have a negative impact on maternal identity.[27] Likewise, a meta-ethnographic synthesis of the literature on BAR found that this experience may cause internal conflict and affect the mother-infant relationship; however, some of those who were able to continue breastfeeding had positive outcomes.[18] Morns et al conducted a focused qualitative investigation of BAR and found that empathy and practical support from others enabled some women to continue breastfeeding with BAR and to ultimately achieve their personal breastfeeding goals.[15] These results showed that BAR can be deleterious to maternal well-being for others without support and informed the survey development for this descriptive study. Thus, the aim of this study was to explore the experience of BAR by further describing this experience, demographics, and health characteristics of this population.

METHODS

An anonymous online cross-sectional survey was used to describe features of BAR from those who self-identified as experiencing this phenomenon. The survey focused on the experience of BAR and the demographics and health characteristics of this population. This study also investigated coping strategies used by women who experienced BAR and which types of health care and community support facilitated their ability to continue to breastfeed. Ethics approval was obtained through the researcher's host institution ethics committee (University of Technology Sydney Human Research Ethics Committee no. ETH20-5341).

Participants and Data Collection

Individuals who were 18 years of age and older, were living in Australia, and self-identified as experiencing BAR at the time of completing the survey were invited to take part in the study. Participants were recruited using purposive and snowball sampling from already established online support group communities for breastfeeding and a Facebook support group for breastfeeding aversion with a membership of approximately 6300 members. The first author was an insider and may have been known to participants, so an arm's length approach was used to distribute the survey whereby another member of the research team approached group facilitators to distribute the survey anonymously. The Australian Breastfeeding Association (ABA) approved and distributed the survey within their online social media networks. The survey was administered via Qualtrics and was available online for 4 months from mid-November 2020 until mid-March 2021. Participant information was provided prior to consent. There were no incentives offered to participants. Support contacts were provided on every page of the survey for participants to seek help if the survey triggered any negative emotions or previous trauma.

The term *child* is used throughout this article to encompass the feeding experience with newborns, infants, and children without age limits. The researchers also acknowledge that some who feed their infant human milk do not identify as female and will use the term *chestfeeding* rather than *breastfeeding* to describe the feeding experience. This study did not ask participants to provide their gender or pronouns, so for consistency, the words *breastfeed* and *women* are used throughout this article.

Survey Development

The survey was developed by the researchers for the purposes of this study. Items were informed by previous qualitative research describing the experience of women who had feelings of aversion while breastfeeding.[18] These items used Likert-type scale responses and were reviewed by one independent certified nurse-midwife and 2 expert midwifery faculty researchers for construct validity. Five prevalidated scales were built in: (1) the Depression, Anxiety, and Stress Scale short form (DASS-21), (2) The EQ-5D-3L to measure health-related quality of life, (3) the Dimensions of Anger Scale (DAR-5), (4) the Brief Resilience Scale (BRS), and (5) the Short-Form McGill Pain Questionnaire (SFMPQ). An adaptive flow strategy was used to present follow-up questions to participants based on previous answers. Participants with at least one newborn or infant were presented with up to 87 questions, and participants with a second infant or child were presented with up to 116 questions. The final version of the survey was separated into 5 key sections that integrated items developed by the researchers and the previously validated scales

Demographics and Health-Related Characteristics

This section collected information about participants, age, education, health history, current medications, general well-being, and current levels of stress, anxiety, and depression. Common neuroendocrinological conditions that could have an impact on maternal well-being[28,29] were also included. The DASS-21 has been validated previously to assess depression, anxiety, and stress among Australian and New Zealand mothers with excellent internal consistency (Cronbach's alpha = .93.[30] For this study the DASS-21 internal consistency was excellent (Cronbach's $\alpha = .93$). The DASS-21 was scored by adding the items of each subscale for depression (D), anxiety (A), and stress (S) which were multiplied by 2 (for this short form scale 21 items, which is half the full scale 42 items), and then measured using the DASS severity ratings of normal, mild, moderate, severe, and very severe. The EQ-5D-3L was used to test the general well-being of this population by measuring self-reported difficulty with mobility, self-care, usual activities, pain/discomfort and anxiety/depression on a 3 point Likert scale from none or no problems (1), some problems (2), or extreme problems (3).[31] EQ-5D-3L internal consistency in this study was acceptable (McDonalds $\omega = .57$), and the test-retest intraclass correlation coefficient was 0.54 (95% CI, 0.44-0.63; $P < .0001$).

Describing the Experience of BAR

This section invited participants to describe their "in-the-moment" experience of BAR and their thoughts about having had this experience. Participants were asked to rate statements describing thoughts and feelings associated with BAR[15] on a 5-point Likert scale rating from agree (1) to disagree (5). Respondents were also asked to score their pain associated with BAR on a 10-point scale (0 = no pain to 10 = the worst pain possible) and to rate their experience of pain associated with BAR on a 6-point Likert-type scale (1 = no pain to 6 = excruciating). Validated scales were included in this section to measure pain descriptors and participants' general levels of anger. The SFMPQ[32] was presented to respondents to determine if validated pain descriptors appropriately described their experience of BAR. The SFMPQ items are measured on an 11-point numeric rating scale (0-1 = none/very mild, 2-5 = mild, 6-8 = moderate, 9-10 = worst). Participants were asked to rate whether any of 22 pain words described their feelings of BAR (eg, throbbing, stabbing, pain caused by light touch, itching, sickening). SFMPQ internal consistency in this study sample was very good (Cronbach's $\alpha = .87$). This section included the DAR-5, which measures anger frequency, intensity, duration, antagonism, social relations interference, and the impact on functioning over the previous 4 weeks. The DAR-5 has been validated in Australian populations to measure problematic anger.[33] DAR items are scored on a 5-point Likert scale (1 = none of the time to 5 = all the time); scores for all items are summed (total range = 5-25), with scores above 12 indicative of psychological distress and functional impairment because of anger. DAR internal consistency in this study was very good (Cronbach's $\alpha = .84$).

Onset of BAR and Breastfeeding Difficulties with Each Child

This section included multiple-choice questions with an open-text option about when participants first experienced BAR and if respondents had also experienced other breastfeeding difficulties such as nipple pain. Multiple-choice items with an open-text response option also inquired about the birth and individual breastfeeding experience for each infant who the participant had breastfed.

Coping With BAR and Support from Others

Questions investigated participants' resilience and their experiences of receiving support from others (peers, family, and health care providers). This included multiple-choice questions and Likert-type items about coping strategies used when experiencing BAR. The BRS is a validated scale used to measure personal resilience and the ability to adapt and bounce back from stress and adversity.[34] Scoring categories for this scale are 1.00 to 2.99 = low resilience, 3.00 to 4.30 = normal resilience, and 4.31 to 5.00 = high resilience.

Data Analysis

Data was cleaned and analyzed using SPSS statistical analysis software. Frequency tables were exported from SPSS to Excel to investigate the data. Variables were analyzed using descriptive frequencies, means, and SDs. All participants in this study self-identified as currently experiencing BAR at the time of completing the survey, so there was a preconfirmed correlation between respondent's experience of BAR and survey variables.

RESULTS

In total, 533 participants clicked on the survey link. Participants who did not give consent were removed during data cleaning (n = 42). Screening questions removed an additional 108 responses from those who were not within Australia, and

Table 1. Demographic Characteristics of Study Participants

Demographics	Distribution of Responses n (%)
Age range (n = 208), y	
18-24	11 (5.3)
25-30	68 (32.7)
31-35	76 (36.5)
36-40	43 (20.7)
41-50	10 (4.8)
Relationship status (n = 209)	
Single	7 (3.3)
De facto	46 (22.0)
Married	155 (74.2)
Other	1 (0.5)
Level of education (n = 208)	
High school	24 (11.5)
Trade certificate	17 (8.2)
Diploma or advanced diploma	29 (13.9)
Bachelor's degree	75 (36.1)
Postgraduate qualification	63 (30.3)
Number of children (n = 210)	
1	168 (80)
2	42 (20)
3+	0 (0)
Place of birth for first child (n = 210)	
Public hospital	145 (69.0)
Private hospital	37 (17.6)
Home or another community location	11 (5.2)
Birth center	17 (8.1)

173 responses were removed due to missing values and zero progress. This left a final sample of 210 with a response rate of 39.4%.

Descriptive Demographics

Most respondents were aged between 25 and 40 years (89.9%), had education beyond high school (66.4%), were married or in a de facto relationship (96.2%), and had one child (80%). No participants reported having more than 2 children. The place of birth was most frequently reported as a public hospital (69%) and least frequently at home or other location (5.2%). (Table 1).

Health-Related Characteristics

Table 2 details the health-related characteristics of respondents. The DASS-21 mean scores from this study showed that those most who experienced BAR had normal levels of anxiety, depression, and stress, however a small proportion had slightly elevated levels of mild to very severe anxiety, mild and moderate depression, and moderate to severe stress. These

Table 2. Health-Related Characteristics of Participants Currently Experiencing BAR (N = 2)

Medical History and Sleep (n = 208)	Value n (%)
Current medications	
Oral contraceptive	25 (12.0)
Anxiety medication	8 (3.8)
Antipsychotic	2 (1.0)
Antidepressant or SSRI	15 (7.2)
Thyroid medication	17 (8.2)
Regular pain medication	5 (2.4)
Medication to increase milk supply	3 (1.4)
CBD oil	1 (0.5)
Blood pressure medication	3 (1.4)
No medication	131 (63.0)
Neurologic conditions	
Sensory processing disorder	3 (1.4)
Autism or Asperger's	2 (1.0)
Anxiety disorder	58 (27.9)
Postnatal anxiety	3 (1.4)
Depression	3 (1.4)
Postnatal depression	37 (17.8)
Posttraumatic stress disorder	15 (7.2)
Bipolar disorder	2 (1.0)
Dissociative disorder	1 (0.5)
None of the above	123 (59.1)
Endocrine conditions	
Cushing's syndrome	2 (1.0)
Addison's disease	2 (1.0)
Hyperthyroidism	3 (1.4)
Hypothyroidism	18 (8.6)
Hypopituitarism	2 (1.0)
Lupus	1 (0.5)
None of the above	185 (88.1)
Menstrual conditions	
Premenstrual dysphoric disorder	6 (2.9)
Amenorrhea	5 (2.4)
Dysmenorrhea	12 (5.8)
Polycystic ovary syndrome	18 (8.7)
Menorrhagia	13 (6.3)
Endometriosis	14 (6.7)
Irregular periods	29 (13.9)
Premenstrual tension syndrome	10 (4.8)
"I have not had any menstrual problems"	79 (38.0)
None of the above	53 (25.5)

(*Continued*)

Table 2. (Continued)	
Medical History and Sleep (n = 208)	**Value n (%)**
Average h of sleep per night	
<5	23 (11.1)
5-7	141 (67.8)
7-9	43 (20.7)
>9	1 (0.5)[a]

Abbreviations: BAR, breastfeeding aversion response; CBD, cannabidiol; SSRI, selective serotonin reuptake inhibitor.
[a]Some percentages total greater than 100 because respondents could choose multiple answers.

results are similar to previous DASS-21 findings for Australian and New Zealand mothers (N=3601) who predominately scored in the normal range for levels of anxiety (80.8%), depression (71.1%), and stress (72.1%). Respondents' mean scores for the EQ-5D-3L were similar to previous validation research Australian age and sex population norms for mobility, self-care, pain and discomfort.[31] Respondents mean scores for the EQ-5D-3L were similar to Australian age and sex population norms for mobility, self-care, pain and discomfort.[31] This BAR population scored predominatly level 1 (no problems) for all EQ-5D-3L categories (Table 3 and 4).

Breastfeeding Difficulties and Onset of BAR

Complications with breastfeeding were commonly reported by respondents. The most frequent breastfeeding difficulty with the first child was "feelings of aversion while breastfeeding" (80.7%), followed by "nipple pain" (69.6%), "engorgement" (49.7%), and "mastitis" (34.8%). The most reported breastfeeding difficulties for the second child were "too much milk" or "engorged breasts" (48.7%), followed by "tongue tie" (35.9%).

Respondents most often reported the onset of BAR when breastfeeding their first child (44.8%) or when pregnant and breastfeeding a toddler (31%). For those who experienced BAR while breastfeeding during pregnancy, most reported that BAR began in the first 2 trimesters (41.5% and 47.7%, respectively) and that the feeling of BAR lasted throughout the entire breastfeeding session while the child was latched. Some respondents experienced BAR during and around the time of menstruation, with most reporting that BAR felt the strongest in the days leading up to their period (53.3%). Respondents who reported tandem breastfeeding predominately experienced BAR only with their oldest child (95.2%) (Table 5A, 5B).

Describing the Experience of BAR

Participants responding to items describing the experience of BAR largely agreed with each statement, most strongly agreeing with "I feel guilty for feeling like that" (84.2%). When describing the in-the-moment feelings of BAR, respondents most often agreed with the statement "as soon as I stop breastfeeding that feeling stops" (87%). Statements women identified that were specifically assessing emotional aspects of BAR were sadness (81.3%), anger (79%), worry (71.6%), and anxiety (63.7%) (Table 6A, 6B).

Table 3. DASS-21 Results[51]

DASS-21 n=186	Depression n (%)	Anxiety n (%)	Stress n (%)
Normal	125 (67.2)	126 (67.7)	113 (60.1)
Mild	25 (13.4)	18 (9.7)	19 (10.1)
Moderate	26 (14.0)	22 (11.8)	28 (14.9)
Severe	2 (1.1)	11 (5.9)	22 (11.7)
Very severe	8 (4.3)	9 (4.8)	6 (3.2)
Total	186 (100)	186 (100)	188 (100)

Abbreviation: DASS-21, Depression, Anxiety, and Stress Scale short form.

Table 4. EQ-5D-3L Results

EQ-5D-3L	Mobility n (%)	Self-Care n(%)	Usual Activity n (%)	Pain/Discomfort n (%)	Anxiety/Depression n (%)
Level 1 No problems	192 (93.2)	202 (98.5)	161 (78.5)	148 (72.2)	111 (54.4)
Level 2 Some problems	14 (6.8)	3 (1.5)	42 (20.5)	54 (26.3)	82 (40.2)
Level 3 Extreme problems	-	-	2 (1.0)	3 (1.5)	11 (5.4)
Total	206 (100)	205 (100)	205 (100)	205 (100)	204 (100)

Table 5A. Breastfeeding Difficulties With Each Child and Onset and Duration of BAR (Part 1)

Have You Had Any of the Following Problems When Breastfeeding This Child? (Choose All That Apply)	Distribution of Responses: Eldest Child 1 n = 161 n (%)	Child 2 n = 39 n (%)
I had sore nipple pain	112 (69.6)	11 (28.2)
Felt embarrassed around others	49 (30.4)	1 (2.6)
I experienced mastitis/infection	56 (34.8)	11 (28.2)
Too much milk/engorged breasts	80 (49.7)	19 (48.7)
Infant had colic/irritable/crying	52 (32.3)	5 (12.8)
Not enough milk	25 (15.5)	3 (7.7)
Infant had lactose intolerance	11 (6.8)	2 (5.1)
Infant had tongue tie	42 (26.1)	14 (35.9)
Feelings of aversion (BAR)	130 (80.7)	8 (20.5)
None of the above	1 (1.9)	1 (2.6)

Table 5B. Breastfeeding Difficulties With Each Child and Onset and Duration of BAR (Part 2)

When Does BAR Happen?	n (%)
When did the BAR feelings first start? (n = 210)	
When I was breastfeeding my first child	94 (44.8)
When I was pregnant and breastfeeding my toddler	65 (31.0)
When my period returned	15 (7.1)
When tandem breastfeeding both my toddler and newborn	21 (10.0)
Other	15 (7.1)
When during the breastfeeding session? (n = 210)	
Throughout the entire breastfeeding session while latched	161 (76.7)
Only the first few minutes of the breastfeeding session	28 (13.3)
Only during the letdown reflex or when latching	11 (5.2)
None of these describe my experience	7 (3.3)
Other, please describe	3 (1.4)
When during the menstrual cycle? (n = 15)	
It feels strongest in the days before my period	8 (53.3)
It feels strongest during my period	2 (13.3)
It feels strongest when I'm ovulating	2 (13.3)
I'm not sure	3 (20.0)
With which child when tandem feeding? (n = 21)	
Both tandem feeding children	1 (4.8)
Only the oldest child	20 (95.2)
When during pregnancy did BAR begin? (n = 65)	
In the first trimester (first 12 wk)	27 (41.5)
In the second trimester (13-26 wk)	31 (47.7)
End of the pregnancy in the third trimester (27-40 wk)	7 (10.8)
Milk supply decreased during pregnancy when BAR increased	42 (64.6)

Abbreviation: BAR, breastfeeding aversion response.

BAR and Types of Pain

Most respondents described mild discomfort (44.8%) when experiencing BAR. The mean (SD) score participants attributed to their pain during BAR was 3.6 out of 10 (2.69) (Table 6A,6B). The majority (18/22) of pain descriptors in the SFMPQ were rated with mean scores under 0.2 (no pain to very mild). Those who experienced BAR did not rate most pain descriptors in the SFMPQ as suitable for describing their experience; only "tiring" and "sickening" rated as somewhat explanatory of the sensation of BAR. The mean (SD) BRS for this population was 2.91 (1.03), consistent with the lower resilience group (<2.99). Likewise, the mean (SD) score on the DAR was 9.55 (3.49), indicating participants did not experience problematic levels of anger (<12).

BAR Personal Management and Support from Others

Respondents were asked about practices they used to manage BAR in the moment while breastfeeding. "Distracting self" was the most common personal technique used to continue breastfeeding (83.8%). Other self-identified strategies were stopping the child from "twiddling" the other nipple while feeding (59.5%), breathing techniques (55.8%), reducing the length of each feeding session (53.3%), and reducing the number of feeds per day (45.2%). The strategies that users reported as most helpful to manage BAR was distracting self (53.8%), followed by taking or using magnesium (36.7%) and helpful company (36.4%) (Table 7A, 7B).

Support From Others for the Experience of BAR

Most participants reported receiving some support from friends, family, or people in the community, with only 13.9% indicating they received no support from others. Respondents' partners were most frequently reported (61%) to provide specific support for BAR. Online, phone, and group support services were commonly used by participants, including online breastfeeding support groups (43.8%), ABA phone counseling (21.2%), and in-person ABA or an in-person breastfeeding support group (13%). Some respondents reported that family members had discouraged them from breastfeeding (11.6%), whereas online peer/community support groups were considered the most encouraging (69.7%). Midwives (25.5%) and certified lactation consultants (24.5%) had the highest reported frequency of providing support for BAR. Many respondents however reported they received no support from health care providers (46%) when experiencing BAR. (Table 8A, 8B).

Table 6A. Describing the Experience of BAR (Part 1)

When You Think About Your Experience of Feelings of Aversion While Breastfeeding, Do You Agree or Disagree With the Following Statements?	Agree n (%)	Neither Agree nor Disagree n (%)	Disagree n (%)
As soon as I stop breastfeeding, that feeling stops (n = 209)	181 (87)	8 (3.8)	19 (9.2)
I feel touched out (n = 174)	143 (82.1)	15 (8.6)	16 (9.2)
It is as if my body is telling me that I've got to stop (n = 169)	103 (60.9)	28 (16.6)	38 (22.4)
It almost feels like I am being violated (n = 167)	106 (63.4)	15 (9)	46 (27.6)
I just start feeling angry (n = 167)	132 (79)	13 (7.8)	22 (13.2)
When my child twiddles the other nipple, it gives me BAR (n = 167)	120 (71.9)	35 (21)	12 (7.2)
It's a sudden homesick feeling of dread and despair (n = 168)	80 (47.6)	21 (12.5)	67 (39.9)
It gives me a sense of anxiety about breast feeding (n = 209)	133 (63.7)	27 (12.9)	49 (23.5)
I feel guilty for feeling like that (n = 190)	165 (84.2)	8 (4.1)	23 (11.7)
It makes me feel sad (n = 190)	154 (81.3)	16 (8.4)	20 (10.5)
I don't feel ready for breastfeeding to end (n = 190)	152 (80)	13 (6.8)	25 (13.2)
I'm worried that I will have to wean before my child is ready (n = 190)	136 (71.6)	23 (12.1)	31 (16.3)
I enjoyed breastfeeding up until I was pregnant/tandem (n = 187)	85 (45.5)	73 (39)	29 (15.5)
People talk about enjoying breastfeeding, I never understood what they meant (n = 189)	42 (22.3)	14 (7.4)	133 (70.3)
It's a disconnect between wanting to breastfeed but having negative feelings (n = 188)	153 (81.4)	23 (12.2)	12 (6.4)
Does BAR Affect Your Time Spent Breastfeeding? (n = 210)	**Most of the Time n (%)**	**About Half of the Time n (%)**	**Rarely n (%)**
Do you end breastfeeding session early because of BAR?	110 (52.4)	61 (29)	39 (18.6)
Do you need to take breaks during breastfeeding because of BAR?	114 (54.5)	60 (28.7)	35 (16.7)

Table 6B. Describing the Experience of BAR (Part 2)

Pain From BAR	n (%)
To what degree would you describe BAR as physically painful? (n = 210)	
No pain/mild rating 0-2	84 (40)
Discomforting rating 3-5	69 (32.9)
Distressing rating 6-8	36 (17.1)
Excruciating rating 9-10	21 (10)
The worst time of the day for BAR (n = 210)	
Morning and daytime	21 (10)
Evening and nighttime	122 (58.1)
All day	51 (24.3)
Unsure	16 (7.6)

Abbreviation: BAR, breastfeeding aversion response.

DISCUSSION

This is the first study to specifically explore predisposing, precipitating, and perpetuating factors of BAR and the demographics and health characteristics of those who have had this experience. This article describes the onset of BAR and investigates this phenomenon within the context of other breastfeeding challenges that may be experienced concomitantly. This research uncovered participants' personal management strategies for BAR and examined support systems women had in place that were helpful. The findings highlight that BAR is a complex phenomenon, and these results contribute to a greater understanding of describing the feelings and physical sensations of BAR: how BAR differs from other negative breastfeeding sensations such as D-MER; what is BAR and how it is different from D-MER; when BAR happens and why; who is more likely to experience BAR; and what support can be helpful.

Describing the Feeling of BAR

This study identified new language to describe the experience of BAR. Previous available research on BAR has found that those who experienced this challenge had difficulty finding the right words to describe their experience.[15] To support women who experience BAR, midwives and perinatal health care providers need appropriate communication strategies to ask about complex breastfeeding challenges including BAR. Pain descriptors identified in this study included affective pain words, such as "tiring," "exhausting," and "sickening." Sensations of BAR were described as "touched out"; "feeling violated"; feeling angry, sad, dread, anxiety, guilt, or worry; and feeling a disconnect between wanting to breastfeed and having negative feelings. These findings are consistent with previous studies that have described similar participant sensations such as feeling violated,[15] touched out, and exhausted.[15,35] This

Table 7A. Descriptive Statistics for the Personal Management of BAR and Self-Identified Coping Strategies (Part 1)

Personal Approaches Used to Manage BAR (n = 210)	Frequency n (%)
Distracting self, thinking about something else	176 (83.8)
Self-harming: biting, pinching, scratching self	5 (2.5)
Using phone to distract self	23 (11.5)
Reducing the length of each feeding session	112 (53.3)
Reducing the number of feeds per day	95 (45.2)
Night weaning	57 (27.1)
Stopping child "twiddling" other nipple while feeding	125 (59.5)
Not feeding 2 infants at once	34 (16.2)
Breathing technique	116 (55.8)
Meditation technique	28 (13.5)
Other relaxation technique	22 (10.6)
Eating or drinking	49 (23.6)
Taking or using a form of magnesium	49 (23.6)
Taking another nutritional supplement	18 (8.7)
Having another person with you, company	44 (21.2)
"I didn't use anything to manage my feelings of BAR"	12 (5.7)

study validates that these descriptors accurately describe the experience of BAR.

Pain and BAR

Many women in this study who experience BAR also experienced other breastfeeding difficulties such as nipple trauma and tongue tie in their newborn. These are common breastfeeding complications related to latch difficulties which are associated with nociceptive breastfeeding pain.[36] Previous research[36] exploring pain and breastfeeding with the SFMPQ found that most pain was experienced with initial breastfeeding-associated nipple trauma and was described using different pain descriptions than those used to describe BAR. When specifically asked to rate the experience of physical pain with BAR, participants reported that BAR was associated with low levels of physical pain. Also, participants did not choose nociceptive descriptors when describing BAR and instead chose affective pain descriptors, which refer to the suffering quality of pain and feelings of being unpleasant or aversive.[37] The affective descriptor "tiring" was shared by those who experience BAR or early breastfeeding pain. However, unlike BAR, breastfeeding pain associated with nipple trauma and tongue tie was predominantly described using continuous and intermittent pain descriptor words such as "sharp," "stabbing," "burning," and "shooting." This study has shown that the experience of BAR is not one predominantly of nociceptive pain and is instead an experience arising from feelings and emotions of affective sensations of aversion.

Comparison of BAR and D-MER

Women in this study experienced BAR throughout the feeding session while their child was latched, which contrasts with the experience of D-MER. Previous descriptive research on D-MER found that participants were more likely to experience D-MER during the letdown reflex within the first 1 to 5 minutes of the feeding session.[38] However, if there are multiple letdown reflexes during a feeding session, the feeling of D-MER may occur on and off throughout the feed.[24] When describing the sensation of BAR in this study, participants least agreed with the descriptors "dread" and "despair," which were taken from previous research describing the feelings of D-MER.[38] Although BAR and D-MER are both negative embodied sensations that are felt while breastfeeding, this study has identified that they are distinct breastfeeding difficulties.

When Does BAR Happen and Why?

Most participants in this study who experienced BAR had this response to breastfeeding throughout the entire feeding

Table 7B. Descriptive Statistics for the Personal Management of BAR and Self-Identified Coping Strategies (Part 2)

Please Rate How Helpful the Following Measures Were in Managing BAR	Not Helpful n (%)[a]	Somewhat Helpful n (%)[a]	Very Helpful n (%)[a]	Unsure n (%)[a]
Breathing (n = 116)	7 (6.0)	89 (76.7)	18 (15.5)	2 (1.7)
Mediation (n = 27)	5 (18.5)	18 (66.7)	4 (14.8)	
Relaxation method (n = 22)	8 (36.4)	13 (59.1)		1 (4.5)
Eating or drinking (n = 48)	6 (12.5)	38 (79.2)	3 (6.3)	1 (2.1)
Magnesium (n = 49)	6 (12.2)	16 (32.7)	18 (36.7)	9 (18.4)
Other nutritional (n = 18)	4 (22.2)	11 (61.1)	1 (5.6)	2 (11.1)
Helpful company (n = 44)	4 (9.1)	24 (54.5)	16 (36.4)	
Distracting self (39)	1 (2.6)	16 (41.0)	21 (53.8)	1 (2.6)

Abbreviation: BAR, breastfeeding aversion response.
[a]Some percentages total greater than 100 because respondents could choose multiple answers.

Table 8A. Support from Others (Part 1)	
Please Choose Any of the Following People Who Have Helped or Supported You Specifically With Your Experience of BAR? (n = 187)	**Frequency n (%)**
Partner	114 (61.0)
Parent	43 (23.0)
Other family members	28 (15)
Friend	69 (36.9)
Neighbor	2 (1.1)
People in your community, group, or club	22 (11.8)
Online friends or online community	74 (39.6)
None of the above	26 (13.9)
Health care providers (n = 208)	
Midwife	53 (25.5)
Certified lactation consultant	51 (24.5)
Counselor or other mental health care worker	17 (8.2)
Doula	5 (2.4)
Acupuncturist	1 (0.5)
GP	25 (12.0)
Maternal and child health nurse	36 (17.3)
Naturopath or herbalist	1 (0.5)
Obstetrician	3 (1.4)
None of the above	101 (48.6)
Phone, online or group support (n = 208)	
ABA phone support	44 (21.2)
13 Health phone support	2 (1.0)
In-person ABA, or in-person breastfeeding support group	27 (13.0)
Online breastfeeding support group	91 (43.8)
Phone counseling: Lifeline, Beyond Blue, or other	1 (0.5)
Online counseling: Lifeline, Beyond Blue, or other	1 (0.5)
None of these	11 (5.3)

Abbreviations: ABA, Australian Breastfeeding Association; BAR, breastfeeding aversion response; GP, general practitioner; N/A, not applicable.

session while the child was latched. This research has validated findings from previous qualitative research on BAR,[15] which identified that as soon as the breastfeeding session ends, the negative sensations of BAR may cease. Some participants who were menstruating reported that breastfeeding in the days leading up to their period was a trigger for BAR, which may imply neuroendocrinal contributing factors.[39]

Who Is More Likely to Experience BAR?

Almost all participants in this study had also experienced other breastfeeding challenges when breastfeeding their first child. However, recent research suggests that breastfeeding challenges (ie, painful latch) may be ubiquitously common among breastfeeding women.[40] This study revealed that almost half of those who experienced BAR had this experience when breastfeeding their first child, and a further 41% of participants experienced BAR when breastfeeding while pregnant or tandem breastfeeding. These findings coupled with previous research on BAR may indicate that those who breastfeed while pregnant or tandem breastfeeding may have a heightened risk for experiencing BAR.[15]

At the time of this survey, those who experienced BAR were in otherwise good health and did not frequently take any medication. This population scored low resilience (<2.99) on the resilience scale included in this survey,[41] which may indicate that those who experience BAR may be less able to "bounce back" from hardship.[42,43] However, it is unclear if this outcome indicates an independent (cause) or dependent (effect) result. Previous research has shown that a sample of women with constant pain scored lower resilience than those who were not suffering with constant pain[43] and that resilience can be affected by lack of social support and feelings of loneliness.[43] This population scored low to average mean scores of anger on the DAR-5, indicating that although participants described feeling angry while breastfeeding with BAR, they did not have ongoing functionally problematic anger.[44] This population did not have any notable or defining demographic or health-related characteristics other than almost half were breastfeeding while pregnant or tandem breastfeeding.

Strategies for Maintaining the Breastfeeding Relationship

This study found that one of the main ways women coped with BAR was by seeking support from others, primarily their partner and online peer support groups. Women used self-care strategies to minimize the feelings of BAR such as taking supplements (eg, magnesium), staying well hydrated, and using breathing or meditation techniques to calm themselves during difficult feeding sessions. Some women set gentle breastfeeding boundaries with older children and used personal distraction as a coping tool when breastfeeding with BAR; however, the clinical effect of these strategies has not yet been tested. These recommendations must be considered in alignment with the individual needs, culture, and goals of those who breastfeed with BAR before being suggested for implementation.

Maternal Mental Health and BAR

This study substantiates findings from previous research that found those who experienced BAR felt guilty, sad, and worried about their breastfeeding relationship.[18] Our study found that participants who experienced BAR claimed to have a sense of anxiety about breastfeeding; however, this population did not show levels of functional anxiety higher than the population normal.[47] This result may indicate that although those who experience BAR have higher levels of in-the-moment anxiety while breastfeeding, they did not have higher levels of ongoing anxiety throughout the day. For anxiety, depression, and stress, this population scored higher than Australian normative data for age and sex,[31] however when compared with previous research on Australian mothers experiencing adversity, this cohort scored lower for depression, anxiety, and stress.[45] These findings show that previous research on

Table 8B. Support from Others (Part 2)				
Did the Following People Encourage or Discourage You With Breastfeeding?	**N/A n (%)**	**Encouraged n (%)**	**Neither n (%)**	**Discouraged n (%)**
Online peer support/online community (n = 208)	27 (13.0)	145 (69.7)	31 (14.9)	5 (2.4)
Partner (n = 207)	5 (2.4)	160 (77.3)	38 (18.4)	4 (1.9)
Parent (n = 208)	11 (5.30)	110 (52.9)	71 (34.1)	16 (7.7)
Other family members (n = 207)	15 (7.2)	86 (41.5)	82 (39.6)	24 (11.6)
Friend/s (n = 208)	4 (1.9)	100 (48.1)	94 (45.2)	10 (4.8)
Neighbor (n = 207)	124 (59.9)	19 (9.2)	60 (29.0)	4 (1.9)
In person community, group, or club (n = 206)	72 (35.0)	63 (30.6)	63 (30.6)	8 (3.9)

anxiety and breastfeeding that reports breastfeeding mothers are less anxious may not reflect the full scope of the breastfeeding experience.[46]

Support for Women Who Experience BAR

Women in this study confirmed previous findings on BAR reporting that those who experience this phenomena found it comforting to share their difficult breastfeeding journey with others and that being heard without judgment had encouraged participants to continue breastfeeding.[15,18] Our research supports previous research findings that women who are able to talk through difficult issues associated with shame, and find empathic connection with others, were more likely to have a more positive experience.[48] Many in this study reported receiving the most useful support from their partners. It is unclear, however, if this finding was because those with supportive partners are more likely to breastfeed for longer.[49] Those who experience BAR need more support from health professionals and friends and family to continue breastfeeding, if that is their goal. Women experiencing BAR may want to continue to breastfeed, and many in this study felt worried that they may need to wean their child earlier than planned and did not feel ready for breastfeeding to end. Previous research identified that health care providers must approach breastfeeding support from a holistic perspective considering not just the physical aspects of breastfeeding but also the psychological and sociocultural processes involved.[27]

Limitations

This study was a small exploratory study without a comparison group; therefore, we were unable to make comparisons to the general population. This sample may not be representative of all who experience BAR, and it is unknown if BAR is experienced in other geographic areas. This breastfeeding difficulty is likely underreported in some populations, such as those experiencing sensory processing disorder. Some item responses may have been affected by self-reporting or recall bias; however, the instruments used in this study were validated for self-reporting, and study items were aimed to specifically capture participant experience. Therefore, self-report was appropriate. The first author had a personal experience with BAR and was known to social media groups approached to participate in this study. This could represent insider bias; however, this limitation also has benefits in that as an insider the first author had greater knowledge of the target population,[50] and the first author recused herself from distribution of the study.

Implications for Practice and Further Research

Midwives and other health care professionals working to support breastfeeding should be mindful that those who are breastfeeding while pregnant or tandem breastfeeding may have an increased risk for experiencing BAR. Women who experience negative sensations while breastfeeding without an obvious cause, such as nipple trauma, should be assessed for the symptoms and feelings described in this study and provided with additional support. Further research on the triggers for BAR could allow those working in lactation to consider preventive measures for this breastfeeding difficulty that may inform possible treatment options. Prevalence data on this phenomenon would be useful to target public health breastfeeding strategies aimed at increasing breastfeeding rates. Further research on the experience of BAR would be of benefit for this population and all stakeholders supporting positive breastfeeding outcomes.

CONCLUSION

This is the first descriptive study to investigate the unique experience of BAR. This phenomenon is likely underreported, and these results add to the literature to provide evidence for midwives to help raise awareness and offer helpful support.

This study explored the experience, health characteristics, and risk factors of those who experience BAR and found that women who experienced BAR had higher levels of severe stress and anxiety. This study found that those who were able to breastfeed while experiencing BAR used strategies such as distracting self while feeding, taking a magnesium supplement, and helpful company. Participants also reported a lack of adequate support from health care professionals. More support and understanding for BAR is therefore needed to support women who have this experience to meet their own personal breastfeeding goals.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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