

Negative experiences of breastfeeding beyond the infancy age of one year in public – a deductive content analysis of a cross-sectional global sample

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Declaration

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Abstract

Background: The global recommendations of continuing breastfeeding for two years and beyond are not being realised. Barriers to breastfeeding beyond the infancy age of one year continue to be seen globally despite the recognition that facilitating it could prevent 823,000 child and 98,000 parent deaths every year. The visibility of breastfeeding in public, particularly for those who continue to breastfeed, is thought to be reducing and this in turn impacts public acceptability. However, research exploring women's experiences breastfeeding in public typically focuses on newborns. Therefore, this study explores negative experiences of continuing breastfeeding, between the ages of 1 to < 2 years, in a global sample of participants.

Methods: A cross-sectional design via an online self-completed questionnaire was adopted to collect data from women, at one point in time, who had experience of breastfeeding a child between the ages of 1-2 years. Participants who had experienced a negative response were asked to share their experiences in a free text question. A content analysis was adopted to explore the information conveyed by the participants through the conceptualising of condensed broad category descriptions.

Results: There were 2,562 women who had a negative experience of breastfeeding in public places, 1,674 from five continents (Europe 994, America 948, Asia 51, Australia 161, Africa 20, Unknown 12) shared their experience. The findings present four categories: Unsolicited Opinion (56%), Judgemental (39%), Indecent Act (16%) and, Prohibited (7%). Commonly there were experiences of unwanted advice or being shamed and stigmatised to undermine breastfeeding practice. More zealous public reactions, such as implying child abuse,

sexualising breastfeeding, or expressing shock and disgust were less common. The least likely to occur were experiences of being told to refrain from, move away or cover up.

Conclusions: The findings reaffirmed that there is a wider social stigma experienced by women breastfeeding beyond infancy in public. This highlights that women who continue to breastfeed are being shamed and blamed for their breastfeeding choices. More efforts are needed to address social and cultural challenges, with an increase in wider knowledge to support breastfeeding beyond infancy.

Keywords: Breastfeeding duration, Maternal health, Child and Family Health, Public health, cross-sectional study, Public Breastfeeding

Background

To foster optimal health benefits, the World Health Organization (WHO) (1) recommend the continuation of breastfeeding for two years and beyond, along with the introduction of safe and adequate complementary foods from six months. A substantial body of evidence supporting this global recommendation has been synthesised in a series of Lancet publications (2-6). The series demonstrates long- and short-term maternal and child health benefits, economic benefits and multiple societal challenges. Scaling up breastfeeding could prevent 823,000 child and 98,000 parent deaths every year (7). However, there are substantial differences in the breastfeeding duration globally, with high-income countries being less likely to continue past the infancy age of one year (2). Additionally, a significant influence on the public perception of breastfeeding has been attributed to the widespread marketing of commercial milk formula which undermines its importance (5, 6).

Although the advantages of breastfeeding are significantly clear to healthcare professionals and scientists, the public perception of differences between breastfeeding and formula feeding are sufficiently narrow enough for it to be inadequately valued leaving the practice vulnerable to adverse cultural forces (8). For example, the heterosexual framework of contemporary Western culture means breasts are often sexualised, and women are expected to manage their desirability whilst at the same time ensuring their maternal attributes are independent (9). This is one reason which is attributed to the rise in popularity of expressing breastmilk so that women avoid the need to expose themselves in public (10, 11). Additionally, a global integrated review of publications covering 12 countries revealed that women who breastfeed a newborn child in public can experience unwanted attention and a lack of suitable places to feed their child (12). Consequently, the less breastfeeding is seen by the public in public spaces the more unusual the practice becomes and in turn impacts its acceptability by the public (13). Therefore, further research is needed to understand the specific experiences of breastfeeding an older child in public.

Anthropologist Dettwyler (14) research suggests that the normal and natural duration of breastfeeding for modern humans falls between 2.5 years at a minimum and about 7 years at a maximum and until around the last 100 years natural term breastfeeding was a cultural norm. Research exploring women's overall experiences of breastfeeding a child beyond infancy (< 1 year) has limited qualitative sample sizes (15). In the UK, research has suggested an increase in discrimination against breastfeeding within this age range because the duration is viewed as outside the cultural norm (16, 17). This indicates that more efforts are needed to identify what is required to support women wanting to move towards breastfeeding according to the WHO guidance of breastfeeding to the age of two years and beyond. Therefore, this study specifically aimed to explore the experiences of negative public

breastfeeding experiences in a global sample of participants' continuing breastfeeding between the ages of 1 to < 2 year.

Methods

This explored common themes and patterns in negative experiences of women breastfeeding beyond infancy who were yet to meet the WHO guidance of breastfeeding to the age of two years and beyond. Participants were excluded if they had not provided their child with human milk for at least one year and beyond. Therefore, this group could provide insight into the issues experienced by those moving towards meeting the WHO recommendation. A cross-sectional design via an anonymous online self-completed questionnaire was adopted to collect data from women, at one point in time. The questionnaire was made up of demographics and six open-ended text questions. Demographic information included residing country, age, number of children, ethnic group and religious group. The free-text questions asked why they initially started breastfeeding and about partner, family, and peer support (see supplementary material for full questionnaire). One question specifically asked the participants if they had experienced a negative response from the wider public regarding feeding a child aged one year and above in public. Those who indicated yes were then presented with a free text question: 'Please give an example of your experience of a negative response from the wider public'. This paper analyses the open-text responses to this question. To pilot the questionnaire and test its reliability four representatives of breastfeeding women completed it and advised on its wording and usability (18). These women were local members of the public who volunteered for this purpose.

Purpose sampling and snowballing techniques were utilised to recruit participants as these are effective ways to recruit a large cross-sectional sample of this population (19). Permission to share an invitation to participate was sought from four Facebook closed group

moderators of social media parenting support with a breastfeeding focus. Members of the social media groups were additionally asked to share the invitation amongst their networks. The invitation link to a participant information sheet could be downloaded. This is then linked to an informed consent form. All women who gave consent were directed to a link to the questionnaire that was live between May-June 2019.

The study obtained full ethical approval from the higher institution's ethics committee. Only participants who gave full informed consent participated in the study. All participants created a unique participant code that was used for secure data storage. This number could be used by participants to withdraw their data up to 14 days after taking part in the study. No participants chose to withdraw.

Development of the content analysis coding manual

A deductive approach to content analysis was adopted to understand the information conveyed by the participants through the conceptualising of condensed broad category descriptions (20). Condensation of the data is a process performed by grouping texts, in the form of broader descriptions which are related to each other through content and context, whilst still preserving the core meaning for participants (21). These broad category descriptions derive from a built-up coding manual of categories (22). The content analysis was employed in three phases: Preparation, Organising and Reporting (23).

In the preparation phase, a coding manual with categories based on issues identified in a literature review of breastfeeding literature (22) was developed. This deductive approach was adopted as it allowed the potential relevance of key issues within the literature to be tested for this group of women. The first researcher generated these categories and then discussed them with the second researcher for agreement. Each of the categories listed in Table 1 provided the initial basis for coding the qualitative data.

| Category |
|---|
| Unsolicited opinion <ul style="list-style-type: none"> • Talks directly to the child. • Mothers were told duration was not beneficial. • Mothers were told the baby child was too old. • Questioning / unwanted advice |
| Judgemental <ul style="list-style-type: none"> • Stigmatised or shamed • Surprised/weird / not acceptable • Stares and made feel uncomfortable. • Told its selfish |
| Indecent <ul style="list-style-type: none"> • Perverted/disgusted or shocked reaction. • Implied exhibitionist (exposing breast) • Sexualised / child abuse. • Implied affects husband |
| Prohibited <ul style="list-style-type: none"> • Informed of complaints • A person moves away from them. • Asked to stop/leave the place completely. • Asked to move or cover up |

Table 1. Initial Coding Manual

To assess the internal validity of the coding manual, 100 participants' entries were coded independently by the 1st researcher and 2nd researcher using the initial coding manual. During this process, the researchers met following coding every 20 participant responses. Where participants had listed several issues, each issue was coded separately to accurately capture the prevalence of each category in the data set. Where data was entered into multiple categories, disagreements were noted and discussed, with the reasons as to why the item had been coded differently. Therefore each item where there was disagreement was discussed in turn by the first and second authors. During these discussions, the authors reached an agreement as to where the item should be coded and the reasons for this. These discussions enabled the refinement of the coding categories further. The first researcher then went on to code the remaining data by hand, ensuring that the coding categories accurately reflected the experiences shared by the participants.

158 At the end of this preparation phase, the coding manual outlined in Table 2 was finalised.

| Category | Description |
|----------------------------|--|
| Unsolicited opinion | Women experienced being approached by a member of the public to express their opinion on their breastfeeding practice. The members of the public attempted to educate the mother with their advice that breastfeeding is not beneficial, their child was too old or that they thought it would be affecting the child's health. Women also experienced members of the public talking directly to their children and the need for them to stop breastfeeding. Women also experienced members of the public asking why they were choosing to continue breastfeeding their child or implying that it was only providing comfort and therefore not required. |
| Judgemental | Women experienced being ridiculed, stigmatised, or shamed by a member/s of the public whilst breastfeeding. The woman experienced a public reaction of surprise about breastfeeding in a public space. The public implied that it was not normal or acceptable to be breastfeeding in a public space. The public implied that they were weird, and the woman was made to feel uncomfortable. Members of the public would stare at the women breastfeeding and they are made to feel uncomfortable. Members of the public implied that the woman was being selfish for breastfeeding their child. |
| Indecent | Women experienced members of the public react in a way of disgust or demonstrate a clear display of shock towards the woman breastfeeding. Women were told that what they were doing was perverted and accused or implied they were being an exhibitionist for exposing their breasts. Women experienced members of the public sexualising their act of breastfeeding. Members of the public implied that women breastfeeding would impact the sexual needs of their husbands. Members of the public implied that the woman was committing an act of abuse by breastfeeding their child. Women experienced members of the public imply they will cause long-term psychological damage to their children. |
| Prohibited | Women experienced being approached by a staff member in a public facility to be informed that a member of the public had made a complaint against them. Women who began to breastfeed in a public facility experienced members of the public moving away from them. Women experience being asked to immediately stop breastfeeding altogether and/or asked to leave the premises. Women experience being advised to move to an inappropriate place to continue breastfeeding such as a toilet. Women experience being asked to cover the baby and their body whilst breastfeeding in a public facility. |

159 Table 2 Description of the final coding manual

160

161 To test inter-rater agreement the Kappa coefficient was used the 1st and 2nd researchers
162 separately coded 10% of the dataset using the agreed coding manual. The accepted
163 interpretation of Kappa coefficients is that a score between 0.6–0.8 represents a substantial

agreement, while a score above 0.8 is an excellent agreement (24). As outlined in Table 3 the Kappa coefficient agreement in the decisions ranged from .727 to .933 for each five categories at excellent or substantial.

| Categories | <i>k, p-value</i> | Agreement |
|--------------------|-------------------|-------------|
| Unsolicited Advice | .866, <.001 | excellent |
| Stigmatised | .866, <.001 | excellent |
| Indecent | .822, <.001 | excellent |
| Prohibited | .727, <.001 | substantial |
| Other | .933, <.001 | excellent |

Table 3. Kappa Coefficients agreement

Given these levels of agreement, the first researcher then entered the organisation phase and coded the rest of the data set. Therefore, the organisation phase involved looking at each issue raised in the data and assigning it to one of the categories outlined in the coding manual. The definition of each category, captured in table 3, was used to guide this process to ensure that the coding was consistent and that the richness of the data was not lost during the organisation process. This process enabled all the relevant issues to be grouped together so that the frequency and percentage of each coding category could be outlined in the reporting phase. Furthermore, grouping issues together in this way without altering the phrasing meant that quotes could easily be identified and incorporated into the reporting phase to add depth.

Results

A total of 7,158 people, who were continuing to breastfeed at the time of data collection between 1 to < 2 years, participated in the study. As outlined in Table four, 2,526 women stated that they had a negative experience breastfeeding in public and 1,674 of these women gave a free-text response detailing these experiences.

| | Total N (%) | Free text response N (%) |
|--|-------------|--------------------------|
|--|-------------|--------------------------|

| | | |
|----------------------------|--------------|--------------|
| Age of participants | | |
| ≤ 24 | 130 (5) | 128 (8) |
| 25-34 | 1,419 (56) | 916 (55) |
| 35-44 | 900 (36) | 571 (34) |
| ≥ 45 | 59 (2) | 59 (4) |
| No. of Children | | |
| 1 | 841 (33) | 345 (21) |
| 2 | 1145 (45) | 1026 (61) |
| ≥ 3 | 527 (21) | 303 (18) |
| Ethnic Group | | |
| White | 2252 (89) | 1,449 (87) |
| Black | 17 (1) | 15 (1) |
| Asian | 75 (3) | 23 (1) |
| Mixed | 113 (4) | 112 (7) |
| Hispanic & Latino | 24 (1) | 11(1) |
| Indigenous | 23 (1) | 23 (1) |
| Not stated | 41 (2) | 41 (2) |
| Residing Continent | | |
| Europe | 1,214 (48) | 694 (41) |
| America | 1,055 (42) | 696 (42) |
| Asia | 55 (2) | 51 (3) |
| Australia & Oceania | 162 (6) | 161 (10) |
| Africa | 20 (1) | 20 (1) |
| Unknown | 13 (1) | 12 (1) |
| Religious Group | | |
| Christian | 1,219 (52) | 958 (57) |
| Buddhist | 21 (1) | 17 (1) |
| Jewish | 44 (2) | 21 (1) |
| Muslim | 1,036 (45) | 43 (3) |
| No Religion | 65 (3) | 537 (32) |
| Other | 47 (2) | 64 (4) |
| Not stated | 94 (4) | 34 |
| Total | 2,526 | 1,674 |

Table 4. Participant Demographics

In the reporting stage the frequency and percentage of items within the 4 category themes - *Unsolicited Opinion*, *Judgmental*, *Indecent Act* and, *Prohibited* were calculated. Table 5 presents the number and percentage of items assigned to each category theme.

| Example of a negative response from the wider public | | |
|--|------------|----------|
| <i>Category theme</i> | <i>No.</i> | <i>%</i> |
| Unsolicited Opinion | 943 | 56 |
| Judgmental | 650 | 39 |

| | | |
|--------------|------|----|
| Indecent act | 271 | 16 |
| Prohibited | 127 | 7 |
| Total | 1685 | |

Table 5 Results of the Content Analysis

Unsolicited Opinion

Over half of the full sample responses (n=943, 56%) were coded in *Unsolicited Opinion*. This indicates that the kinds of negative experiences which were more common for participants related to unwanted advice or opinions which undermined breastfeeding practice. For example, one participant responded, *'One incident of one older generation, and I did not know her, said I've used formula for all my kids and they're all healthy. Don't listen to those doctors, they don't know anything' (breastfeeding duration 1 year 2 months)* and *'They told me it's too long and my milk isn't nutrient anymore' (breastfeeding duration 1 year 2 months)*. Another participant reported *'Loud comments that baby should be old enough to have a cup or bottle in public' (breastfeeding duration 1 year 6 months)*. Additionally, participants were negatively told their child was breastfeeding for comfort *'saying it is only for comfort and a general assumption that I will already have stopped feeding' (breastfeeding duration 1 year 1 month)*. Some participants recounted experiences where they were asked about their duration intentions *'I have had strangers ask if I am going to breastfeed him until college' (breastfeeding duration 1 year 2 months)*.

Judgemental

There was n=650, 39% of responses coded in the category *Judgement*. This indicates that the negative experience of being shamed and stigmatised by a member of the public was also high. For example, *'Just comments (all from other women & mothers) like one woman at a mum and baby group asking how old my daughter was (whilst I was feeding her) and when I said, '13 months' she raised her eyebrows, turned to her friend and spluttered out laughter' (breastfeeding duration 1 year 2 months)*. Another participant responded, *'Some of my*

220 *partner's friends laughed at me. This makes me feel insecure and very aware to hide the*
221 *breastfeeding when they're around' (breastfeeding duration 1 year 6 months).* Participants
222 who described experiencing a public indication that their breastfeeding was weird, unnatural,
223 or not normal *'Comments about how weird it is that my child can ask for it or walk over to it'*
224 *(breastfeeding duration 1 year 7 months).* Another participant responded, *'My neighborhood*
225 *makes comments. One saying it should not be allowed in a 'civilised' society' (breastfeeding*
226 *duration 1 year 5 months).* Experiences of being stared at or made to feel uncomfortable by a
227 member of the public whilst breastfeeding were also expressed *'People pointing and talking*
228 *about me feeding an older child and using phrases such as, it's just not right' (breastfeeding*
229 *duration 1 year 1 month).*

230 ***Indecent***

231 There were fewer responses coded in the category *Indecent Act* (n=271, 16%). This indicates
232 that more zealous public reactions, such as implying child abuse, sexualises breastfeeding, or
233 expressing shock and disgust were less common. The defining feature of this category was a
234 sexual reference. Unlike the code of judgement, the experiences shared centred on the
235 sexualisation of breasts. For example, one participant stated, *'People say he's going to still be*
236 *breastfeeding when he's 20 if I don't "put a stop to it" and imply it is sexual' (breastfeeding*
237 *duration 1 year 6 months).* There was also a sense that the woman and child were gaining
238 sexual pleasure from breastfeeding *'Somebody shouted 'perverts' as they walked past us'*
239 *(breastfeeding duration 1 year 2 months).* Experiences of public shock linked to an act of
240 deviancy were also shared *'I was shouted at in public that it was disgusting' (breastfeeding*
241 *duration 1 year 6 months)* and *'Stop showing your boobs around' (breastfeeding duration 1*
242 *year 3 months)* and some participants reported sexual advances, *'I had an inappropriate*
243 *comment from a man saying they'd like a turn when he's done etc' (breastfeeding duration 1*
244 *year 2 months).* Additionally, there were experiences of the public implying child abuse or

that breastfeeding would cause psychological damage, *'One woman in public told me that it is considered sexual abuse after he has turned six months old' (breastfeeding duration 1 year 6 months)* and *'While feeding my baby in public I had a man come up to me and tell me I was gross because my son is old enough to remember sucking on his mom's tit and he will be forever damaged' (breastfeeding duration 1 year 2 months).*

Prohibited

There were only n=127 (7%) coded in *Prohibited*. This indicates, although less likely to occur, some participants experienced being told to refrain from, move away or cover up whilst breastfeeding in public. This category related more to the direct act of stopping breastfeeding, whereas judgement and indecency related more to personal reactions. For example, *'A health and safety inspector at an event I was working at complained to the organisers because I was breastfeeding 'in front of other children' apparently it was 'inappropriate' (breastfeeding duration 1.5 years).* There were also reports of a member of the public moving away *'People tutting, staring, making comments to each other, and getting up to move tables' (breastfeeding duration 1 year 5 months)* and *'Been told I should be feeding him in store cupboard, no one wants to see that' (breastfeeding duration 1 year 5 months).* Some participants were asked to cover their body and child whilst breastfeeding, *'A librarian once told me to cover up so as not to upset other users of the library' (breastfeeding duration 1 year 7 months).* Finally, there were participant responses which indicated that they had experienced hostility, threatening them to stop breastfeeding *'A man rammed his cart into the rear door of my car while I was breastfeeding my son in the backseat of my car at the grocery store. They shouted at me to put my breasts away, in less kind words' (breastfeeding duration 1 year 7 months).*

Discussion

The findings of our study have indicated that women who continue breastfeeding can experience negative reactions to breastfeeding in public globally. They align with wider research which highlights the role of the public and social stigma in breastfeeding in the UK (25). The most common category to code was unsolicited opinions (56%) where participants described the public approaching them with unwanted comments to undermine their breastfeeding practice. For example, being told that their child looked ‘too old’ to be breastfeeding and it was not beneficial. This has also been seen in another study which explored the public perception of women when shown photographs of them breastfeeding (26). This reported that there were more negative comments about photographs of older children feeding in public spaces than younger children breastfeeding at home.

The findings in our study also highlighted that 39% of the women included in the sample experienced judgment which centred on disapproving looks or comments. These experiences align with another research study conducted to explore public perceptions of breastfeeding which found that it was thought women should adhere to social rules to ensure it is an ‘appropriate’ activity (27). This judgement, of women not adhering to these rules, could be linked to a lack of public understanding of why women would need to breastfeed in public and normal infant feeding behaviours as highlighted in a qualitative systematic literature review highlights (28). In the U.S. it has also been reported that there is a lack of awareness or belief that breastfeeding protects against childhood obesity or that formula feeding increases the chance of infant illness (29). Additionally, the persuasive marketing campaigns of formula milk corporations are also noted to have a massive influence on public perception (5). Therefore, this lack of understanding and the commercial promotion milk-substitute is likely to increase public judgement when they see women breastfeed

The findings of our study also reaffirm the need for wider breastfeeding education (29). They have also highlighted that this is specifically important for women breastfeeding

beyond infancy, who experience increased discrimination as their child gets older (30). One way to raise public awareness and visibility is to see more representation of breastfeeding beyond infancy in the media. Wider research also supports that viewing prime-time television clips that depicted breastfeeding in public significantly reduced the belief that breastfeeding was a private activity and improved attitudes and support for this practice (31). Additionally, when people hear about breastfeeding on the TV or radio, they are more likely to believe breastfeeding is important (32). However, another content analysis revealed that although television news reports on breastfeeding have increased, topics have become more trivial (33).

Our study also coded experiences into categories Indecent (16%) and Prohibited (7%), although described less frequently, highlighting that there are extreme views that breastfeeding beyond infancy is perverted, sexualised and in some cases seen as child abuse. This again aligns with a wider body of research which has also highlighted the views around body exposure and the cultural sexualisation of breastfeeding (12). Toledo and Cianelli (34) also explored women's internalised self-objectification in the context of breastfeeding living in a culture of the sexualisation of women. They pointed out that this is why some women might prioritise the physical appearance of the breast over the health benefits of breastfeeding. Bresnahan et al. (35) conducted a thematic analysis of social media responses to a news story describing an incident involving public breastfeeding. They also highlighted that the public links illegal bodily exposure and breastfeeding practices and assumes the mother is acting as a disrespectful exhibitionist. Additionally, they point out that attempts to manage stigma in online comments were met with resistance and opposition. There is also a need to consider the implicit bias in breastfeeding and the public perception of breastfeeding mothers according to race and ethnicity (36).

These findings also align with research conducted in upstate New York with women breastfeeding infants in public who reported safety concerns (37). According to Stevenson (38), cafes and restaurants which display ‘breastfeeding welcome here’ signs are a step forward to support women in feeling confident to breastfeed in public. Additionally, there is research which highlighted that open green spaces, safe playgrounds, walking tracks, and community spaces, including shopping centres with appropriate facilities can foster breastfeeding (39). Policy implications to legally protect breastfeeding in public and to promote safe spaces for breastfeeding with relevant implications are also important. Therefore, the findings in our study affirm the need for interventions designed to welcome women to breastfeed in public spaces is crucially important for women breastfeeding beyond infancy.

Limitations

The strength of this investigation is that it is a large global sample size to understand experiences of breastfeeding beyond infancy situated around the world for comparison to global WHO guidelines. However, this has also come with limitations in how applicable the findings are on a global level. For example, the largest proportion of women resided in Europe (694) and America (696). Additionally, the findings cannot generalise women's experiences across these vast geographical locations, which will have different levels of infrastructure and breastfeeding support. The questionnaire was also only available in English. Therefore this would have restricted participation from non-English speaking countries. It also specifically asked for negative experiences, replicable research should also consider positive experiences for women breastfeeding beyond infancy in public for comparison and consideration for enablers. The content analysis was able to examine the

large volume of ‘free text’ qualitative data. This involved the condensation of the data using a coding manual of categories. The limitation of this approach is that the codes are condensed into broad descriptions. There are also distinct features within the codes which could not be measured in frequency. A future approach could explore how prevalent issues are within each category.

Conclusions

Our study has reaffirmed that there is a wider social stigma experienced by women breastfeeding beyond infancy in public. The findings align with broader research indicating that women face unsolicited opinions, judgment, and even extreme views that sexualise or demonise breastfeeding, reflecting a lack of public understanding and cultural support. Additionally, women are continuing to be shamed and blamed for their breastfeeding practice. Therefore, more efforts are needed for social and cultural change, with an increase in wider knowledge to support breastfeeding beyond infancy. This could be achieved through raising public awareness with positive breastfeeding visibility in the media and interventions aimed to ensure women feel safe and supported to breastfeed in public spaces. Additionally, addressing the sexualisation of breastfeeding and the resulting internalised self-objectification among women is crucial. This involves challenging cultural norms that prioritise physical appearance over the health benefits of breastfeeding. It also involves challenging implicit bias in breastfeeding. Lastly, there is also a need for continued advocacy and policy interventions to protect and promote breastfeeding rights, ensuring that women feel supported in their choice to breastfeed, particularly in public spaces. These interventions need to be mindful of the embedded stigma because of the way breasts are objectified and sexualised. Overall, our

study reinforces the significance of fostering a more supportive and informed society where breastfeeding, regardless of the child's age, is normalised and respected.

List of Abrieavtions

(WHO) World Health Organization

References

1. WHO. Breastfeeding: World Health Organization 2023 [cited 2024 4th March]. Available from: <https://www.who.int/topics/breastfeeding/en/>.
2. Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet*. 2016;387(10017):475-90.
3. Rollins NC, Bhandari N, Hajeerbhoy N, Horton S, Lutter CK, Martines JC, et al. Why invest, and what it will take to improve breastfeeding practices? *The Lancet*. 2016;387(10017):491-504.
4. Pérez-Escamilla R, Tomori C, Hernández-Cordero S, Baker P, Barros AJ, Bégin F, et al. Breastfeeding: crucially important, but increasingly challenged in a market-driven world. *The Lancet*. 2023;401(10375):472-85.
5. Rollins N, Piwoz E, Baker P, Kingston G, Mabaso KM, McCoy D, et al. Marketing of commercial milk formula: a system to capture parents, communities, science, and policy. *The Lancet*. 2023;401(10375):486-502.
6. Baker P, Smith JP, Garde A, Grummer-Strawn LM, Wood B, Sen G, et al. The political economy of infant and young child feeding: confronting corporate power, overcoming structural barriers, and accelerating progress. *The Lancet*. 2023;401(10375):503-24.
7. Walters DD, Phan LTH, Mathisen R. The cost of not breastfeeding: global results from a new tool. *Health Policy and Planning*. 2019.
8. Stuart-Macadam P. Breastfeeding: biocultural perspectives: Routledge; 2017.
9. Zaikman Y, Houlihan AE. It's just a breast: an examination of the effects of sexualization, sexism, and breastfeeding familiarity on evaluations of public breastfeeding. *BMC Pregnancy and Childbirth*. 2022;22(1):122.
10. Powell-Yost HJ. Effects of Sexualized Images in Media on Attitudes Toward Public Breastfeeding. 2020.
11. Ghaisani MP, Susilastuti DH. BREASTFEEDING IN PUBLIC: THE INTERSECTION OF BIOLOGY AND SEXUALITY. *International Journal of Humanity Studies (IJHS)*. 2022;6(1):1-11.
12. Hauck YL, Bradfield Z, Kuliukas L. Women's experiences with breastfeeding in public: An integrative review. *Women and Birth*. 2021;34(3):e217-e27.
13. Underwood H. Breastfeeding in Public and the Impact of Mass Media on Breastfeeding: An Expanded Literature Review. 2021.
14. Dettwyler K. A time to wean: the hominid blueprint for the natural age of weaning in modern human populations. Stuart-Macadam P, Dettwyler KA. Breastfeeding: Biocultural perspectives. Piscataway: Transaction Publishers. 1995:40-75.

15. Zhao Y, Ouyang Y-Q, Redding SR. Chinese women's experiences, emotions and expectations of breast-feeding in public: a qualitative study. *Public Health Nutrition*. 2018;21(8):1565-72.
16. Jackson JE, Hallam JL. 'It's quite a taboo subject': an investigation of mother's experiences of breastfeeding beyond infancy and the challenges they face. *Women & Health*. 2021;61(6):572-80.
17. Jackson JE, Hallam J. 'I felt like I was doing something wrong': A qualitative exploration of mothers' experiences of breastfeeding. *Journal of Health Visiting*. 2019;7(4):166-72.
18. Braun V, Clarke V, Boulton E, Davey L, McEvoy C. The online survey as a qualitative research tool. *International journal of social research methodology*. 2021;24(6):641-54.
19. Nardi PM. *Doing survey research: A guide to quantitative methods*: Routledge; 2018.
20. Krippendorff K. *Content analysis: An introduction to its methodology*: Sage publications; 2018.
21. Erlingsson C, Brysiewicz P. A hands-on guide to doing content analysis. *African journal of emergency medicine*. 2017;7(3):93-9.
22. Grove SK, Burns N, Gray J. *The practice of nursing research: Appraisal, synthesis, and generation of evidence*: Elsevier Health Sciences; 2012.
23. Kyngäs H. Qualitative research and content analysis. *The application of content analysis in nursing science research*. 2020:3-11.
24. Landis JR, Koch GG. The measurement of observer agreement for categorical data. *biometrics*. 1977:159-74.
25. Boyer K. The emotional resonances of breastfeeding in public: the role of strangers in breastfeeding practice. *Emotion, Space and Society*. 2018;26:33-40.
26. Chan K, Whitfield KC. "Too Old" and "Too Cold": Discomfort Towards Photographs of Breastfeeding Beyond Infancy and Public Breastfeeding in Nova Scotia, Canada. *Journal of Human Lactation*. 2022;38(2):353-63.
27. Sheehan A, Gribble K, Schmied V. It's okay to breastfeed in public but. *International Breastfeeding Journal*. 2019;14(1):N.PAG.
28. Grant A, Pell B, Copeland L, Brown A, Ellis R, Morris D, et al. Views and experience of breastfeeding in public: A qualitative systematic review. *Maternal & Child Nutrition*. 2022;18(4):e13407.
29. Nelson JM, Li R, Perrine CG, Scanlon KS. Public opinions about infant feeding in the United States. *Birth: Issues in Perinatal Care*. 2016;43(4):313-9.
30. Jackson JE, Hallam J. Against all odds—why UK mothers' breastfeeding beyond infancy are turning to their international peers for emotional and informative support. *Health Care for Women International*. 2020:1-17.
31. Foss KA, Blake K. "It's natural and healthy, but I don't want to see it": Using Entertainment-Education to Improve Attitudes Toward Breastfeeding in Public. *Health Communication*. 2019;34(9):919.
32. Ware JL, Mzayek F, Levy M. Lessons learned in a breastfeeding media campaign. *Breastfeeding Medicine*. 2016;11(7):380-5.
33. Gearhart S, Dinkel D. Mother knows breast: A content analysis of breastfeeding in television network news. *Health Communication*. 2016;31(7):884-91.
34. Toledo C, Cianelli R. Self-objectification in the context of breastfeeding: A concept analysis. *Public Health Nursing*. 2019;36(2):207-14.
35. Bresnahan M, Zhu Y, Zhuang J, Yan X. 'He wants a refund because I'm breastfeeding my baby': A thematic analysis of maternal stigma for breastfeeding in public. *Stigma and Health*. 2019.
36. Schindler-Ruwisch J, Aluc A. The Relationship of Race and Ethnicity to the Perception of Visual Images of Breastfeeding Mothers. *Breastfeed Med*. 2022 May;17(5):459-465. doi: 10.1089/bfm.2021.0296. Epub 2022 Feb 17. PMID: 35180357.
37. Rosen-Carole C, Allen K, Fagnano M, Dozier A, Halterman J. Mothers' Concerns for Personal Safety and Privacy While Breastfeeding: An Unexplored Phenomenon. *Breastfeeding Medicine*. 2018;13(3):181-8.

- 457 38. Stevenson LE. The Australian Breastfeeding Association's Breastfeeding Welcome Here
458 program in rural South-West Victorian settings. *Breastfeeding Review*. 2019;27(1):7-11.
- 459 39. Virginia S, Elaine B, Athena S. Place of sanctuary: an appreciative inquiry approach to
460 discovering how communities support breastfeeding and parenting. *International Breastfeeding*
461 *Journal*. 2019(1):1.

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