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Research Article

The Impact of Legal Policies and Workplace Culture on Breastfeeding in the UK Health Sector

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Abstract

The UK remains one of the countries with the lowest breastfeeding rates in the world despite the well-recognised benefits of breastfeeding. The National Health Service (NHS) provides guidance on how breastfeeding mothers should be supported in the workplace. However, the implementation of the guidance is not consistent across the sector, hence impacting on mothers' ability to initiate or sustain breastfeeding. This study draws on data collected from 983 survey responses targeted at mothers working in the health sector. The study found that health sector employees are not well supported to breastfeed upon return to work. Only 36.3% of the participants (n=983) reported their workplace had a breastfeeding policy. Participants cited breastfeeding as a reason for staying longer on maternity leave because of lack of workplace support. This also affected mothers' ability to benefit from shared parental leave, as it would require the mother to return to work early. This study highlights the barriers mothers in the health sector face with breastfeeding upon return to work while expected to continue fulfilling their duties, which includes promoting and supporting breastfeeding to other mothers and patients. The findings of this study expose the urgent need for the UK health sector to review its workplace policy to implement the guidance provided by the NHS to support breastfeeding employees returning to work. More broadly, the study exposes the extent of breastfeeding challenges in the UK and the need for a legislative reform to include breastfeeding in the national family friendly rights which will obligate employers to provide resources to support breastfeeding mothers in the workplace.

Keywords

Breastfeeding, Infant Feeding, Breastfeeding Promotion, Equality

1. Introduction

Breastfeeding is widely recognised as the optimal source of infant nutrition, providing all necessary nutrients—fat, carbohydrates, proteins, vitamins, minerals, and water—during the first six months of life [1-5]. It offers protective benefits, including reducing respiratory infection mortality rates [6] and lowering pneumonia risks in children under two years old [7], due to the antibodies and bioactive compounds that enhance the immune system in ways infant formula cannot replicate [8]. Additionally, breast milk contains maternal microbiota and microRNAs, influencing gut colo-

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nisation and immunity, and reducing gastrointestinal infections by 64% [9]. Breastfeeding also supports neurological development, stimulating white matter growth associated with higher IQ scores later in life [10, 11]. Infants breastfed for at least 12 months score better on IQ tests than those breastfed for shorter periods [12]. Early initiation of breastfeeding is linked to a reduced risk of neonatal mortality, lower risks of obesity [13], diabetes [14, 15], asthma [16], and enhanced cognitive development [17], as well as improved renal function [18] and lung health in those breastfed exclusively for extended periods [19]. For mothers, breastfeeding lowers the risks of ovarian cancer, Type 2 diabetes, and high blood pressure [20], and is associated with a reduced risk of various breast cancer subtypes [21]. It aids postpartum recovery, with nipple stimulation promoting oxytocin release, which accelerates uterine involution and reduces the risk of postpartum haemorrhage [22, 23]. Breastfeeding also helps preserve maternal haemoglobin stores, preventing iron deficiency anaemia [24]. Thus, breastfeeding offers substantial health benefits for both mother and child. However, to realise these advantages, extended breastfeeding is often hindered by the mother's return to work.

Health bodies such as the NHS, World Health Organisation (WHO), and United Nations International Children's Emergency Fund (UNICEF) recommend exclusive breastfeeding for the first six months and continued breastfeeding for up to two years or beyond [1, 5]. The WHO aims to increase global exclusive breastfeeding rates to 50% by 2025 [25]. These guidelines align with research demonstrating breastfeeding's protective effects against various illnesses in both mothers and children, with the health sector playing a crucial role in promoting and supporting breastfeeding.

Alongside all other employers in the UK, the National Health Service (NHS) have a legal obligation to support employees who want to continue to breastfeed upon returning to work [26]. Beyond to maternity leave and pay, a risk assessment must be conducted evaluating working conditions where an employee is pregnant or has recently given birth. Despite these explicit recommendations and the well-documented benefits of breastfeeding, the UK has one of the lowest breast-feeding rates in comparison to other countries with high incomes, such as Sweden and Australia [21]. While 68% of mothers initiate breastfeeding, only 44% are still breastfeeding six-weeks after birth [27]. Substantial organisational [28] barriers have been identified that impact a mother's ability to initiate or sustain their breastfeeding goals (e.g., duration) such as inflexible parental leave policies [29] and organisational attitudes to breastfeeding [30]. Although breastfeeding is globally recognised as a human right, the lack of adequate practical and emotional support prevents mothers from initiating and sustaining breastfeeding practices [31]. Research indicates that work cultures remain a key driver in the premature weaning of babies before the WHO's recommended 12-month benchmark [32, 33]. This is further compounded by oversights in family-friendly rights such as shared parental leave (SPL).

There is a need for discourse to shift to highlight the impact family-friendly rights, such as shared parental leave (SPL), could have on the promotion of breastfeeding. The aim of the SPL policies is to allow mothers to share their maternity leave with their partner, thereby facilitating an earlier return to work. Given that there is no legal mandate requiring employers to provide resources for breastfeeding mothers in the workplace, existing literature identifies breastfeeding and SPL policies as two key factors that significantly influence the breastfeeding experience of new parents [34]. In particular, mothers who return to work report that workplace policies and occupational culture have a significant effect on their decision-making regarding breastfeeding and leave.

Returning to work affects decision to breastfeed and the duration a mother may want to breastfeed. Workplaces often offer hostile infrastructure for a breastfeeding mother, including insufficient facilities for pumping and milk storage, scarcity of breaktime availability, a lack of informational resources to promote breastfeeding education, and limited employer/colleague support [35-37]. Policies help protect an individual's rights to make an autonomous decisions relating to feeding their infant [38]. Such policies become particularly important within settings characterised by unsupportive co-workers and colleagues and should therefore be considered essential, not optional [39]. Providing space, time and equipment for breastfeeding is not costly [40], especially when placed in further context of the economic advantages enabling breastfeeding affords a company (such as greater employee retention and job satisfaction) [41]. However, policies alone are potentially insufficient if not meaningfully enacted within the work culture [42].

SPL policies are less effective when mothers lack tangible workplace breastfeeding support, such as flexible breaks or lactation spaces [43]. Global data indicates that more women are returning to the workforce following maternity leave. Yet workplace policies and organisational infrastructure continue to negatively influence breastfeeding continuation. Chang *et al.* [44] argue that women who return to work struggle to continue with breastfeeding due to the inadequate provision of facilities for either direct breastfeeding or lactation (*ibid).* Hauck *et al.* [45] also report that stigma in the workplace further compounds pressure for working mothers to cease breastfeeding, and that a lack of workplace protections and 'pumping policies' contributes to declining breastfeeding rates. Whilst it is recognised that some workplaces model positive attitudes and practices, Kendall *et al.* [46] contend that stronger action must be taken at a national level to implement more robust policy frameworks and incentivise employers to support breastfeeding parents.

Breastfeeding practices are strongly shaped by the healthcare sector, which is expected, by default, to provide systemic support for breastfeeding [47]. Yet, despite the considerable demands on healthcare professionals to advocate

for breastfeeding, the perceptions of employees desiring to breastfeed at work within the healthcare sphere remain notably absent in current literature [48]. Women comprise more than 80% of the workforce in the health sector [49] and studies have reported inconsistent levels of perceived breastfeeding support amongst employees [50]. Hearfield *et al.* [51] demonstrate that NHS doctors returning to work received little or no support with breastfeeding, with mothers forced to express in cars and toilets due to a lack of comfortable, accessible and adequate facilities. This research highlights the discrepancy between the support healthcare employees are expected to deliver and the resources and support available to them. Therefore, it is urgent to reflect upon how the intense pressure to deliver breastfeeding support is experienced by mothers returning to work within the health sector, particularly amongst employees who would themselves like to breastfeed.

Family-friendly policy frameworks and workplace culture play a crucial role in shaping mothers' decisions about breastfeeding initiation [52], the return to work and duration of breastfeeding. While health professionals advocate for breastfeeding, support for health sector employees who wish to breastfeed remains inconsistent and insufficient. Existing workplace policies in the UK health sector often lack legally protected family-friendly provisions, such as SPL, which negatively impacts the promotion and continuation of breastfeeding among working mothers [34]. Consequently, employees in the health sector find that their decision to breastfeed and the duration of breastfeeding is inextricably linked to the level of breastfeeding information and support offered by the employer [53].

The study will explore mothers' experiences of the complex interplay between breastfeeding practices, SPL and workplace culture in the health sector.

2. Materials and Methods

2.1. Data Collection

The study adopted a quantitative approach as part of a larger project investigating the shared parental leave and breastfeeding practices in the health sector. The questionnaire consisted of structured questions to understand employees' breastfeeding experiences and challenges in the health sector. Participants (n=983) were recruited using the Prolific participant sourcing platform commonly used in research as a way of gathering high quality data from diverse populations [54]. Participants were invited to read a participant information sheet and participate in a 10–15-minute online survey on the Qualtrics platform. Ethical approval for the study was gained from the University Research Ethics Committee prior to commencement. Participant informed consent was obtained electronically prior to completion of the questionnaire.

2.2. Data Analysis

Following data clean up (removal of erroneous or replicated submissions), 983 survey responses were included in the data analyses. Not all 983 participants answered every question in the survey, therefore sample size for individual questions varied from 782 (a question that concerned only participants who chose to exclusively breastfeed for a period of their leave) to 983 (for the initial demographic questions e.g., age and ethnicity). For the survey question where participants could provide their reasoning behind choosing whether to take shared parental leave in the form of free text, responses were put into the following categories: "breastfeeding", "career repercussions", "choice", "logistics", "money", "no children", "no choice", "same sex couple", "sickness", "single parent", "SPL unavailable" and "unaware of SPL". In the instance of more than one reason given, the primary reason (first factor given and/or factor most emphasised in the answer) dictated the category assignment. Non-parametric tests were used given the non-normal distribution of data and statistical analyses were carried out in R [55].

2.3. Sample Characteristics

Most survey participants identified as British (83.4%) with a minority of participants identifying as Asian, Black, Mixed or "Other" (4.7%, 5.9%, 2.4% and 3.6%, respectively). A quarter of survey participants (24.5%) were in the modal age category of 31-35 years, with a total mean age of 38 years old. More than half of participants (54.8%) were employed in full-time contracts, compared to 36.5% of participants employed in part-time contracts and 8.7% in casual contracts or "other". The mean annual income salary for a participant was between £41,000 and £51,000 and the average number of children was 1-2, with 34.9% of participants having one child, 37.7% having two children, 14.5% having three or more children and 12.9% of women currently expecting their first child. We found that age was significantly associated with employment status in that older women had more flexibility in the number of hours contracted for their employed role by not working full time ($r=0.116$, $p<0.001$), however, full time roles bring in a higher annual income ($r=0.166$, $p<.001$). Older women were more likely to have multiple children ($r=0.439$, $p<0.001$).

3. Results

3.1. Breastfeeding

Out of the 976 women who answered, 54.8% reported they breastfed their child(ren) during leave, compared to 18% of women who reported they did not breastfeed at all and 20.7% used a combination of feeding methods. On average, women exclusively breastfed for at least the first four

months, with the majority exclusively breastfeeding for up to 24-weeks post-partum. Breastfeeding then continues, whether it is exclusively or in combination with other methods, beyond 18 months in 26.5% of cases reported (Figure 1).

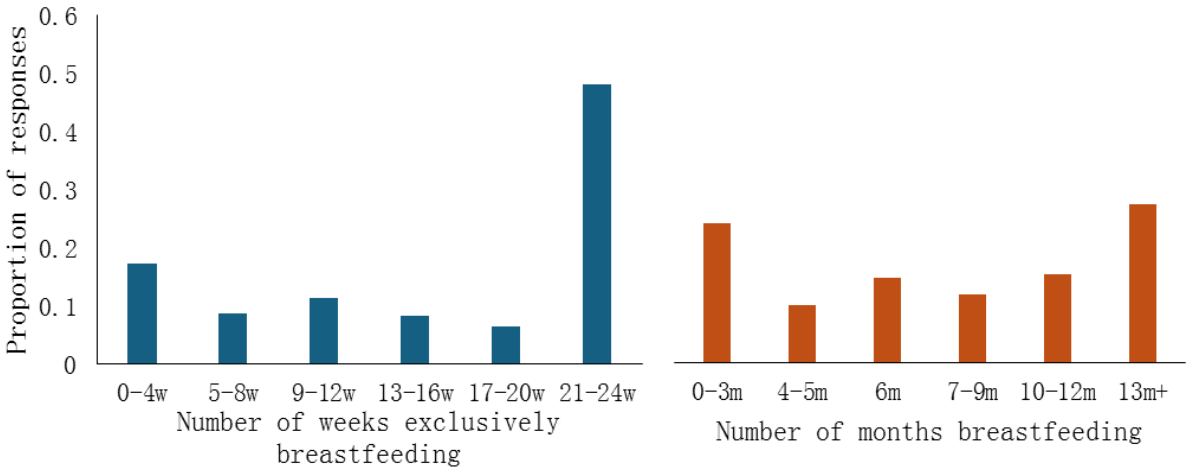

Figure 1. *Proportion of survey responses showing number of weeks exclusively breastfeeding during leave and number of months breastfeeding (either exclusively or combined with other feeding methods) during leave.*

74.1% of women agreed with the statement "I breastfed for as long as I wanted", but 15.8% of women disagreed and were not able to breastfeed for their planned duration. Underlying correlative factors include knowing about the workplace breastfeeding policy, whether your supervisor discusses the breastfeeding policy with you (either at the time of announcing the pregnancy or upon returning to work) and how supported one feels to breastfeed in the workplace generally (Table 1; Figure 2). Only 36.3% of survey participants had employers who offered a breastfeeding policy, with 27.2% of participants not having access to a workplace policy and 36.5% of participants unable to comment. Of the 36.3% of participants who reported having a breastfeeding policy at work, 84.5% of those cases involved the breastfeeding information being included within a maternal leave policy (discounting any unknowns).

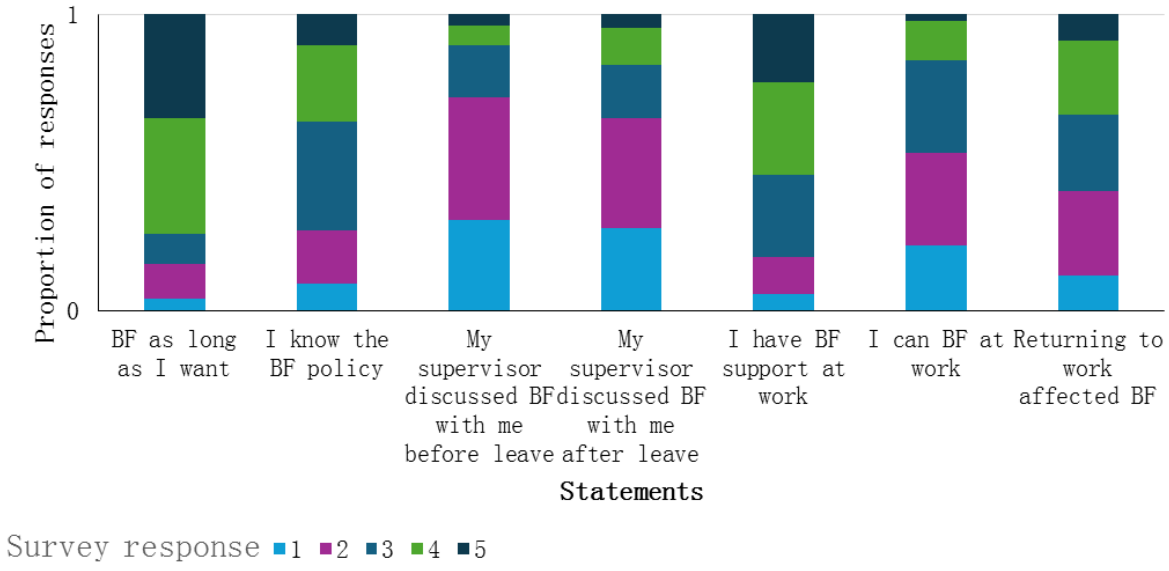

Figure 2. *Proportion of survey responses scoring levels of agreement with several statements concerning breastfeeding, where 1 = strongly disagree and 5 = strongly agree.*

Table 1. Significant correlative factors underpinning responses to the statement "I breastfed for as long as I wanted", where responses were on a scale of 1-5 with 1 being strongly disagree and 5 being strongly agree. NB: significance determines using a $p < 0.05$ threshold.

Factor	N	Correlation	95% CI	P-value
Breastfeeding policy	793	0.088	(0.018, 0.156)	0.013
Supervisor discussion about breastfeeding upon pregnancy announcement	793	0.105	(0.036, 0.174)	0.003
Supervisory discussion about breastfeeding upon returning to work after pregnancy leave	791	0.098	(0.028, 0.166)	0.006
Feeling supported to breastfeed in the workplace	792	-0.115	(-0.184, -0.046)	0.001
Being able to express milk at work	793	0.154	(0.086, 0.222)	0.000
Return time to work	786	0.085	(0.015, 0.154)	0.017

Women who chose to breastfeed found that it affected their decision on when to return to work and would delay their return to work (r=0.150 p<0.001; r-0.094 p<0.005, respectively). These patterns were the same for whether breastfeeding was exclusive or combined with other feeding methods. Of the 965 responses about timelines on returning to work, around half of all respondents returned to work after 40 weeks (50.6%), meaning they had taken the full 39-weeks offered as part of a standard maternity leave policy. However, it appears a significant proportion of women are not comfortable expressing milk at work, as more than half (53.3%) reported that they disagreed with the statement ("I am comfortable expressing milk at work"). This suggests that women make the most of the leave offered to them because it maximises the time, they can spend breastfeeding their child(ren) at home and are less likely to continue breastfeeding once they return to work. Although only 33.8% confirmed this by directly agreeing with the statement "Returning to work affected my ability to breastfeed".

3.2. Shared Parental Leave

Of the 963 women who answered, 91.8% of participants chose to take maternity leave exclusively. Only 3.2% of participants used a combination of maternity leave with shared parental leave and 3.9% took shared parental leave for the full duration. The remaining 1.1% of responses concerned adoption policies. When asked to provide reasons for their decision, a wide range of reasons were presented (Figure 3). It appears that being in a fortunate position to choose based on preference was the most common response (36%), though money (22.6%) and being unaware of all policies (13.2%) were also leading responses. When participants were asked whether they had prior knowledge of shared parental leave and to answer either "yes", "some knowledge" or "no", responses were 60%, 30% and 10%, respectively. It appears that there a range of information sources about shared parental leave, with friends and articles/newspapers being most common, followed by the employer (Figure 4).

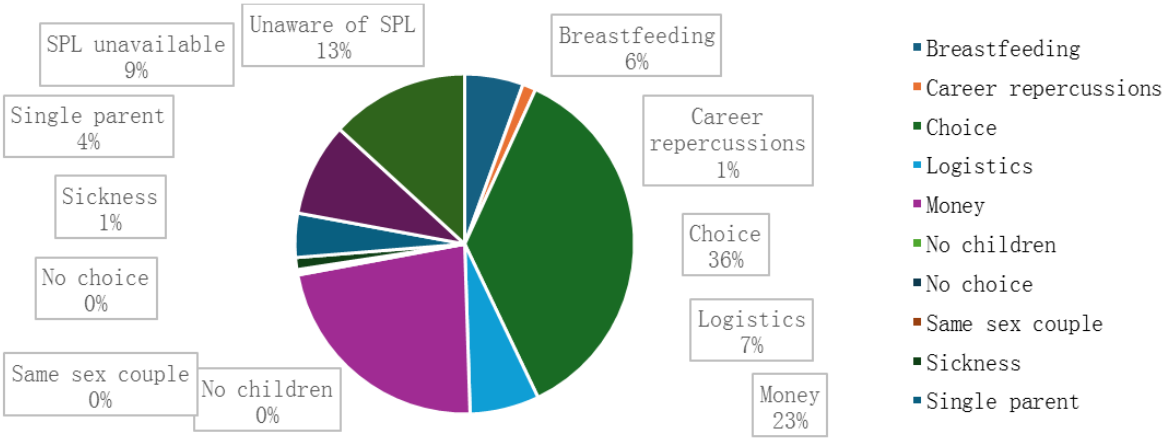

Figure 3. Reasons provided for decision-making with regards to parental leave.

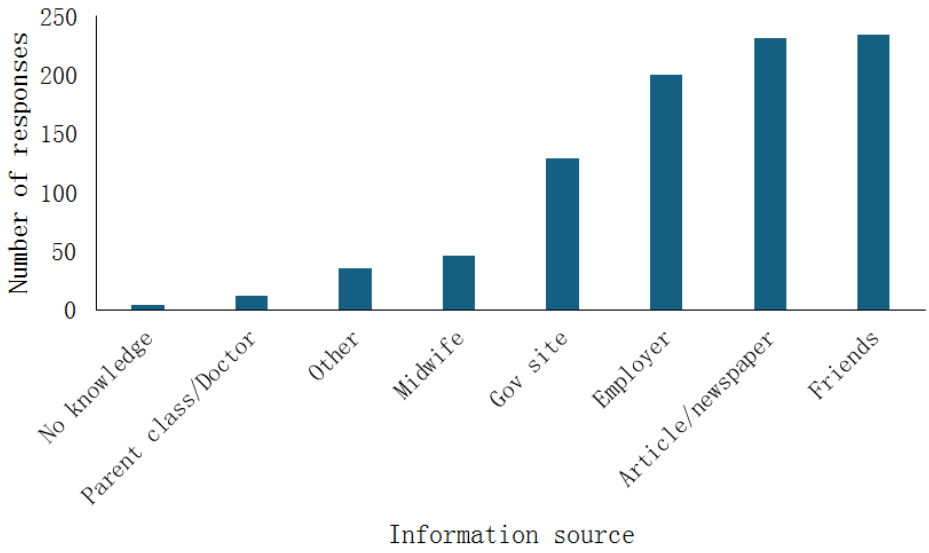

Figure 4. *Information sources on shared parental leave, based on survey responses.*

Results show that knowing about shared parental leave means you are more likely to know how and where to access further information about the policy (r=0.761, p<0.001) and enhanced shared parental leave pay (r=0.423, p<0.001). Furthermore, it also means you are likely to better understand the policy itself (r=0.604, p<0.001) and make use of it (r=0.539, p<0.001). Age did not predict likelihood of knowing about the shared parental leave policy, but it did associate with ability to access information about it and understanding that information (r=0.097 p<0.005; r=0.071 p<0.05; respectively). When presented with statements concerning shared parental leave and asked to score a response between 1-5 based on level of agreement, the 16-20 age category appears to be an outlier. Most women, regardless of age, gave an average score of 4/5 for knowing about shared parental leave, whereas no women aged 16-20 gave this score. Likewise, most women, regardless of age, gave an average score of 4/5 for knowing where to access information about shared parental leave, whereas women aged 16-20 would score 3/5 with no woman giving a score of 5/5. However, all age categories appear to have responded similarly to the statement about understanding information presented about the shared parental leave policy.

3.3. A "Good Employer"

Results suggest that an employee feels supported by their employer when they have access to firmly established policies for both parental leave and breastfeeding (Table 2). They are more likely to rate their employer highly if they have been offered enhanced shared parental leave, and in doing so, are more likely to then take shared parental leave (r=0.350, p <0.001). However, only 22.7% of survey participant (n = 891) confirmed their workplace offered enhanced shared parental leave.

Additionally, women who rate their employers report that they are more likely to have better access to a workplace breastfeeding policy, discuss that policy with the employer (either at the time of announcing the pregnancy and/or upon returning to work from leave) and breastfeed for as long as they had planned (Table 2). Furthermore, results show that having breastfeeding signage around the workplace also significantly associates with positive employee-employer relationships and significantly links to the likelihood of a mother breastfeeding while at work (r=0.363, p<0.001). Despite this, 77.8% of survey participants (n = 979) said there was no signage about breastfeeding in their workplace, with only 10.1% confirming there was signage and 12.1% were unsure.

Table 2. *Significant correlative factors underpinning responses to the statement "I feel well-supported by my employer", where responses were on a scale of 1-5 with 1 being strongly disagree and 5 being strongly agree. NB: significance determines using a p < 0.05 threshold.*

Factor	N	Correlation	95% CI	P-value
Offering shared parental leave	888	0.530	(0.481, 0.576)	0.000
Offering enhanced shared parental leave	891	0.541	(0.493, 0.586)	0.000
Being able to breastfeed for as long as planned	721	0.092	(0.019, 0.164)	0.013

Factor	N	Correlation	95% CI	P-value
Having a workplace breastfeeding policy	888	0.376	(0.318, 0.431)	0.000
Supervisor discussion about breastfeeding upon pregnancy announcement	886	0.393	(0.336, 0.447)	0.000
Supervisory discussion about breastfeeding upon returning to work after pregnancy leave	884	0.401	(0.344, 0.455)	0.000
Having breastfeeding signage around workplace	888	0.295	(0.233, 0.354)	0.000
Feeling supported to breastfeed in the workplace	886	-0.341	(-0.398, -0.282)	0.000
Return time to work	885	-0.110	(-0.174, -0.044)	0.001
Being able to express milk at work	884	0.233	(0.170, 0.294)	0.000

Overall, there is a clear tripartite interaction between decisions concerning shared parental leave, breastfeeding, and whether an employee feels supported by their employer.

4. Discussion

This study investigated the complex interplay between breastfeeding practices, SPL, and workplace culture using survey research methods, attenuating to the nuanced factors influencing mothers' leave decisions and breastfeeding experiences. While research demonstrates the benefits of breastfeeding and the importance of promoting breastfeeding, structural and legal policies present some unique challenges [6, 11, 13-19]. Existing research recognises the effectiveness of family-friendly workplace policies (e.g., on-site lactation rooms, flexible hours [44]) in enabling and promoting breastfeeding. Correspondingly, a lack of such policies can lead to lack of breastfeeding initiation or earlier cessation of breastfeeding [56], which can negatively, and substantially, impact both infant and mother's health [57]. The findings of this study indicate that barriers to breastfeeding promotion, such lack of adequate facilities and support in the workplace can impact on mothers' breastfeeding experiences. Such oversights significantly impact on mothers' decisions to initiate, continue or cease breastfeeding. The study shows that workplace policies are critical for facilitating and promoting breastfeeding, consistent with prior evidence [34, 44, 58] and play a significant role in balancing the uptake of SPL, improve breastfeeding experiences and fostering positive employer-employee relationships. The study further demonstrates that employer support and communication with staff at strategic times could make a significant impact on mother's feeding choices and duration of feeding. Therefore, this paper invites a recognition of the interaction between breastfeeding, workplace cultures and family friendly policies (SPL policies) as part of a broader spectrum of practices that contribute to low breastfeeding rate in the UK with particular focus on the health sector.

Workplace cultures and practices are critical to a mother's breastfeeding journey and experiences. The study demonstrated that mothers who felt supported by their employers through providing breastfeeding policies, clear communications and signage in the workplace were more likely to breastfeed for as long as they intended. For some many mothers, their desire to breastfeed was impacted on by their decision on return to work, with some delaying their return to extend breastfeeding duration. On average, mothers who participated in the study, exclusively breastfed their babies for four months with majority breastfeeding for up to 24 weeks post-partum which is in line with the NHS and WHO recommendations [13]. However, 18% of the mothers did not breastfeed and 20.7% used a combination of breastfeeding and formula. Although 74% of the mothers indicated that they breastfed for as long as they wanted, about 16% had to cease breastfeeding prematurely. Return to work was identified as one of the key reasons why mothers had to cease breastfeeding. Where there is a lack of workplace support mothers may rely on the maximum duration of maternity leave (52 weeks) to fulfil breastfeeding goals at home. Most of the mothers in the study (91.8%) chose to take maternity leave exclusively partly because they wanted to breastfeed and were perhaps conscious of the limited or lack of support in the workplace. For such mothers, that would be the ideal decision because SPL would have meant they return to work sooner as they would be sharing their maternity leave with the partners. However, there is an unintended pressure on mothers who may want to return to work early to choose between ceasing breastfeeding and return to work.

Research has demonstrated that mothers who cease breastfeeding before they are ready could experience postpartum depression [59], which may lead to long lasting effect on both mother and child. Breastfeeding has been found to have positive effect on postpartum depression where it is properly supported [60], but where it is not supported a mother can equally struggle with postpartum depression. With breastfeeding and mental health are both a public health concern, workplace policies and cultures need to support and promote breastfeeding. While most mothers in our study were able to exclusively breastfeed between four-six months,

only a minority of mothers continued to breastfeed beyond 18 months, a factor that has previously been attributed to limitations in workplace support [35]. This point can also be reflected in the fact that over half of the mothers stated that they were uncomfortable with expressing milk at work due to the absence of explicit breastfeeding policies in the workplace and uncomfortable environments for expressing milk at work discouraged continuation of breastfeeding [37].

A lack of attention towards a national policy-based breastfeeding empowerment and protection emerged as an additional concern amongst the current sample. Only 36.3% of respondents reported having a local workplace breastfeeding policy, with many policies simply embedded within broader maternal leave policies. With just under 40% of respondents unable to comment on the existence of a breastfeeding policy, this study highlights a substantial information gap in the health sector. Lack of awareness or clear communication poses a significant barrier not just to the employees but also whether health sector employees are sufficiently equipped to support patients with breastfeeding information and promotion. The NHS has a responsibility towards their employees and the UK population to educate, support and promote breastfeeding. Starting with their employees, this could be addressed by integrating breastfeeding policies into employee orientation materials, employee handbooks, or mandatory informational sessions. The results show that knowledge of and access to a breastfeeding policy significantly correlate with breastfeeding duration. Together, these findings highlight a need for more explicit, standalone breastfeeding policies that are clearly communicated to employees, since accessible policy information could encourage mothers to continue breastfeeding upon returning to work.

Beyond policy recognition, even fewer respondents (10.1%) reported visible indicators of breastfeeding support, such as signage or designated lactation spaces, in their workplace. The health sector such as hospitals, general practice (GP) surgeries, dentist, etc. should have clear signage on breastfeeding benefits, support and facilities which would be useful for both employees and patients. Whilst it is mandatory for workplaces to support maternity leave support of breastfeeding is often less prioritised. Visible indicators of support can influence mothers' comfort levels with breastfeeding and expressing breast milk at work [61]. The study shows that clear signage of breastfeeding facilities at work correlates with positive perceptions of employer support, as well as increasing the likelihood of mothers continuing to breastfeed after returning to work in the current study.

The study demonstrated that while most of the mothers were aware of the SPL policies and had access to the information from various sources, they preferred to exclusively take maternity leave. While 36% of the mothers felt privilege to be able to make a choice between SPL and exclusive maternity leave, finance was a key reason for some (23%), unawareness of the policy (13%), breastfeeding (6%), etc. It is worth noting that a mother's maternity leave usually starts before the birth of the child depending on when the mother stops working. In this study 50.6% of the mothers returned to work after 40 weeks. While maternity leave is paid at 90% of a mother's average weekly pay for 6 weeks and 33 weeks statutory pay, SPL is paid at statutory rate and does not have the benefit of an enhance pay like maternity leave. Hence, depending on a mother's family financial situation SPL will not be viable. The study suggests that breastfeeding practices and decisions around SPL uptake are interconnected. Many mothers may opt for longer maternity leave to fulfil breastfeeding goals, particularly in workplaces lacking supportive policies or comfortable facilities for expressing milk. With more than half of respondents expressing discomfort with expressing milk at work, it is evident that many women may be discouraged from returning to work early or using SPL if workplace accommodations for breastfeeding are inadequate. The study's findings reinforce the idea that mothers who feel supported in their breastfeeding goals are more likely to view their employers positively and continue working, which can ultimately enhance job satisfaction and reduce turnover [35]. By increasing awareness and support for both breastfeeding and SPL, workplaces can strengthen employer-employee relationships and foster a more inclusive, supportive environment for all parents.

This position is influenced by the pervasive socio-cultural, gendered expectations around parenthood. Traditional gendered parenting ideology considers a 'good mother' as a full-time, stay-at-home, white, middle-class mother acquiring fulfilment and satisfaction through child-bearing demands and domestic commitments [62]. Despite female labour force participation rate continuing to increase across recent decades, systemic biases continue to perpetuate gender inequalities evidence in the gaps in family friendly friends like SPL and impacting significantly on breastfeeding practices [63] and breastfeeding promotion. Normative attitudes towards gender roles exert an influential impact on the social capital held by men and women in the workplace [64, 65]. It is widely recognised that organisations have their own distinctive culture in which there are shared beliefs, values and norms that shape employees' experiences and behaviours [66]. Within such an organisational culture often strong gender norms are embedded and reproduced, which are further mediated by organisational family-friendly policies [67] as demonstrated by this study.

Mothers may feel compelled to choose between breastfeeding or work due to workplace cultures and policies that do not fully support breastfeeding. The findings of this study are consistent with research that demonstrates that mothers commonly experience flexibility bias at work when trying to manage their caregiving responsibilities particularly with breastfeeding in this case [68]. Indeed, women who were informed about breastfeeding policies by their supervisors, especially at key times like pregnancy announcement or return to work, reported feeling more supported and were more likely to continue breastfeeding. Positive attitudes towards

breastfeeding and SPL at the level of those in managerial and leadership positions disseminate through the employment hierarchy, offering a feasible means of accelerating attitudinal change in the workplace. More specifically, when supervisors discuss policy options with their employees, it helps build an ethos of acceptance and support and empowers the employee to better support and promote breastfeeding with patients.

Lastly, this study and its findings demonstrate that while most of the mothers in the study breastfed their babies and were satisfied with when they stopped breastfeeding, some of the mothers ceased breastfeeding before they intended to due to lack of support in the workplace. The absence of a workplace policy on breastfeeding, facilities to use and signage to breastfeeding facilities were key contributors to breastfeeding challenges. Most of the mothers in the sample took exclusive maternity leave which provided them with the opportunity to maximise their breastfeeding goals. Some mothers clearly identified breastfeeding as the reason they did not take SPL. While SPL might be desirable, the lack of breastfeeding support in the workplace makes SPL undesirable by some mothers. While the study highlights key inter-relationships between policies and its impact on breastfeeding, further study is required further explore the points raised in detail to understand what the challenges and impact on mothers, babies and the employer.

5. Conclusion

The UK continues to have one of the lowest breastfeeding rates in the world [1] despite the numerous benefits of breastfeeding to the child and the mother. The lack of workplace support remains a key factor that impacts on mothers' decision to initiate and sustain breastfeeding when returning to work. While workplace support has been identified as an issue in other sectors, the health sector has not been studied. While the health sector is responsible for supporting and promoting breastfeeding, the study demonstrates the impact of lack of support on health sector employees. This study confirms the desperate need for the government to review family friendly rights like maternity leave and make breastfeeding an integral part of maternity leave as part of key strategy for promoting breastfeeding. The findings presented here form the foundations for several actionable steps that could be suggested for employers to enhance support for breastfeeding which in turn will promote the take up of SPL. Firstly, employers should establish standalone breastfeeding policies or integrate breastfeeding in their maternity leave policies that will explicitly outline breastfeeding support and resources, such as dedicated lactation spaces and flexible scheduling. Secondly, employers should invest in training for those in managerial positions to communicate breastfeeding policies effectively and having conservations to understand mothers' needs and how to support her upon return to work. By ensuring that employers and employees understand and promote these policies, organisations can cultivate a more supportive and inclusive workplace culture. Lastly, visible breastfeeding indicators, such as signage or designated rooms.

Abbreviations

GP	General Practitioner
NHS	National Health Service
SPL	Shared Parental Leave
UK	United Kingdom
UNICEF	United Nations International Children's Fund
WHO	World Health Organisation

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Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] Akre, J. (2989) "Infant feeding: the physiological basis." Bull. World Health Orga. *67* (Suppl.), 1–107.

[2] Schanler, R. (Guest ed). Preface. T*he Pediatric Clinics of North America*. 2001, *48*(1), xix–xx.

[3] Riordan, J. *Breastfeeding and human lactation*. Jones and Bartlett Publishers Sudbury, 2005.

[4] Lawrence, R. A.; Lawrence, R. M. *Breastfeeding: a guide for the medical profession*. 6th Edition. London, Mosby, 2005.

[5] World Health Organisation (WHO). *Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals*. Geneva: World Health Organization. SESSION 2, The physiological basis of breastfeeding, 2009.

[6] Di Filippo, P.; Lizzi, M.; Raso, M.; Di Pillo, S.; Chiarelli, F.; Attanasi, M. (2022) "The Role of Breastfeeding on Respiratory Outcomes Later in Childhood." Front. Pediatr., *10*, 829414. https://doi.org/10.3389/fped.2022.829414

[7] Lamberti, L. M.; Zakarija-Grković, I.; Fischer Walker, C. L.; Theodoratou, E.; Nair, H.; Campbell, H.; Black, R. E. (2013) "Breastfeeding for reducing the risk of pneumonia morbidity and mortality in children under two: A systematic literature review and meta-analysis." BMC Pub. Health, *13* (Suppl. S3), S18. https://doi.org/10.1186/1471-2458-13-S3-S18

[8] Isaacs, E. B.; Fischl, B. R.; Quinn, B. T.; Chong, W. K.; Gadian, D. G.; Lucas, A. (2010) "Impact of breast milk on intelligence quotient, brain size, and white matter development." Pediatr. Res., *67*(4), 357-362. https://doi.org/10.1203/PDR.0b013e3181d026da

[9] Eidelman, A. I.; Schanler, R. J.; Johnston, M.; Landers, S.; Noble, L.; Szucs, K.; Viehmann, L. (2012) "Breast-feeding and the use of human milk." Pediatrics, *129*(3), e827-e841. https://doi.org/10.1542/peds.2011-3552

[10] Horta, B. L.; Loret de Mola, C.; Victora, C. G. (2015) "Breastfeeding and intelligence: a systematic review and meta‐analysis." Acta Paediatr., *104*,14-19. https://doi.org/10.1111/apa.13139

[11] Victora, C. G.; Horta, B. L.; de Mola, C. L.; Quevedo, L.; Pinheiro, R. T.; Gigante, D. P.; Gonçalves, H.; Barros, F. C. (2015) "Association between Breastfeeding and Intelligence, Educational Attainment, and Income at 30 Years of Age: A Prospective Birth Cohort Study from Brazil." Lancet Glob. Health, *3*, e199–e205. https://doi.org/10.1016/S2214-109X(15)70002-1

[12] Khan, J.; Vesel, L.; Bahl, R.; Martines, J. C. (2015) "Timing of breastfeeding initiation and exclusivity of breastfeeding during the first month of life: Effects on neonatal mortality and morbidity—A systematic review and meta-analysis." Matern. Child Health J., *19*, 468–479. https://doi.org/10.1007/s10995-014-1526-8

[13] Moore, R. E.; Xu, L. L.; Townsend, S. D. (2021) "Prospecting Human Milk Oligosaccharides as a Defense Against Viral Infections." ACS Infect. Dis., *7*, 254–263. https://doi.org/10.1021/acsinfecdis.0c00807

[14] Xiao, L.; van't Land, B.; Engen, P. A.; Naqib, A.; Green, S. J.; Nato, A.; Leusink-Muis, T.; Garssen, J.; Keshavarzian, A.; Stahl, B.; et al. (2018) "Human Milk Oligosaccharides Protect against the Development of Autoimmune Diabetes in NOD-Mice." Sci. Rep., *8*, 3829.

[15] Gopalakrishna, K. P.; Hand, T. W. (2020) "Influence of Maternal Milk on the Neonatal Intestinal Microbiome." Nutrients, *12*, 823. https://doi.org/10.3390/nu12030823

[16] Dai, D. L. Y.; Petersen, C.; Hoskinson, C.; Del Bel, K. L.; Becker, A. B.; Moraes, T. J.; … Turvey, S. E. (2023) "Breastfeeding Enrichment of B. longum subsp. infantis mitigates the effect of antibiotics on the microbiota and childhood asthma risk." Med., *4*, 92–112. e5. https://doi.org/10.1016/j.medj.2022.12.002

[17] Berger, P. K.; Plows, J. F.; Jones, R. B.; Alderete, T. L.; Yonemitsu, C.; Poulsen, M.; Ryoo, J. H.; Peterson, B. S.; Bode, L.; Goran, M. I. (2020) "Human Milk Oligosaccharide 2′-Fucosyllactose Links Feedings at 1 Month to Cognitive Development at 24 Months in Infants of Normal and Overweight Mothers." PLoS ONE, *15*, e0228323. https://doi.org/10.1371/journal.pone.0228323

[18] Boutrid, N.; Rahmoune, H.; Bioud, B.; Abdelmalek, D.; Amrane, M. (2022) "Breastfeeding Impact on Kidney Functions: A Systematic Review." Am. Heart J., *254*, 258. https://doi.org/10.1016/j.ahj.2022.10.064

[19] Tsanidou, E.; Gougoula, V.; Tselebonis, A.; Kontogiorgis, C.; Constantinidis, T. C.; Nena, E. (2019) "Socio-Demographic Factors Affecting Initiation and Duration of Breastfeeding in a Culturally Diverse Area of North Eastern Greece." Folia Med., *61*, 566–571. https://doi.org/10.3897/folmed.61.e47858

[20] Al Sabati, S. Y.; Mousa, O. (2019) "Effect of early initiation of breastfeeding on the uterine consistency and the amount of vaginal blood loss during early postpartum period." Nurs. Prim. *Care*, *3*(3), 2-7. https://doi.org/10.33425/2639-9474.1108

[21] Stordal, B. (2023) "Breastfeeding reduces the risk of breast cancer: A call for action in high-income countries with low rates of breastfeeding." Cancer Med., *12*(4), 4616-4625. https://doi.org/10.1002/cam4.5288

[22] Muro-Valdez, J. C.; Meza-Rios, A.; Aguilar-Uscanga, B. R.; Lopez-Roa, R. I.; Medina-Díaz, E.; Franco-Torres, E. M.; Zepeda-Morales, A. S. M. (2023) "Breastfeeding-Related Health Benefits in Children and Mothers: Vital Organs Perspective." Medicina, *59*, 1535. https://doi.org/10.3390/medicina59091535

[23] Maswime, S.; Buchmann, E. (2017) "A systematic review of maternal near miss and mortality due to postpartum hemorrhage." Int J Gynaecol Obstet, *137*(1), 1-7. https://doi.org/10.1002/ijgo.12096

[24] Sobhy, S. I.; Mohame, N. A. (2004) "The effect of early initiation of breast feeding on the amount of vaginal blood loss during the fourth stage of labor." J. Egypt. Public Health Assoc., *79*(1-2), 1-12.

[25] World Health Organization (WHO), 2023. Infant and young child feeding. [online] Available at: https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding [Accessed 22 November 2024].

[26] Munday, D. (2008) "Back to work: breastfeeding: it is imperative that mothers returning to work after childbirth are able to continue to breastfeed their infant if they choose to do so. In recognition of this, the NHS and all other employers throughout the UK have a legal obligation to support employees who want to continue to breastfeed." Community Practitioner., *81*(5), 40-42.

[27] Simmons V. (2002) "Exploring inconsistent breastfeeding advice". British Journal of Midwifery, *10*(5), 297-301. https://doi.org/10.12968/bjom.2002.10.10.10623

[28] Wallenborn, J. T.; Perera, R. A.; Wheeler, D. C.; Lu, J.; Masho, S. W. (2019) "Workplace support and breastfeeding duration: The mediating effect of breastfeeding intention and self-efficacy." Birth, *46*(1), 121-128. https://doi.org/10.1111/birt.12377

[29] Gheyoh Ndzi, E. (2023) "Shared Parental Leave: A Key Barrier to Breastfeeding in the UK." Int. J. Law Soc., *6*(1), 62-69. https://doi.org/10.11648/j.ijls.20230601.19

[30] Glass, J. L.; Noonan, M. C. (2016) "Telecommuting and earnings trajectories among American women and men 1989–2008." Soc. Forces, *95*(1), 217-250. https://doi.org/10.1093/sf/sow034

[31] Keevash, J.; Norman, A.; Forrest, H.; Mortimer, S. (2018) "What influences women to stop or continue breastfeeding? A thematic analysis." Br. J. Midwifery, *26*(10), 651-658. https://doi.org/10.12968/bjom.2018.26.10.651

[32] Ogbuanu, C.; Glover, S.; Probst, J.; Liu, J.; Hussey, J. (2011) "The effect of maternity leave length and time of return to work on breastfeeding." Pediatrics, *127*(6), e1414-e1427. https://doi.org/10.1542/peds.2010-0459

[33] Pounds, L.; Fisher, C. M.; Barnes-Josiah, D.; Coleman, J. D.; Lefebvre, R. C. (2017) "The role of early maternal support in balancing full-time work and infant exclusive breastfeeding: A qualitative study." Breastfeed. Med., *12*(1), 33-38. https://doi.org/10.1089/bfm.2016.0151

[34] Gheyoh Ndzi, E.; Raj Westwood, A. (2021) "The un-acknowledged relationship between shared parental leave, breastfeeding and workplace support in UK Universities." Int. J. Bus. Soc. Sci. Res., 1-7. https://doi.org/https://doi.org/10.47742/ijbssr.v2n12p1

[35] Snyder, K.; Hansen, K.; Brown, S.; Portratz, A.; White, K.; Dinkel, D. (2018) "Workplace breastfeeding support varies by employment type: the service workplace disadvantage." Breastfeed. Med., *13*(1), 23-27. https://doi.org/10.1089/bfm.2017.0074

[36] Sayres, S.; Visentin, L. (2018) "Breastfeeding: uncovering barriers and offering solutions." Current Opinion in Pediatrics, *30*(4), 591-596. https://doi.org/10.1097/MOP.0000000000000647

[37] Vilar-Compte, M.; Hernández-Cordero, S.; Ancira-Moreno, M.; Burrola-Méndez, S.; Ferre-Eguiluz, I.; Omaña, I.; Pérez Navarro, C. (2021) "Breastfeeding at the workplace: a systematic review of interventions to improve workplace environments to facilitate breastfeeding among working women." Int. J. Equity Health, *20*(1), 110. https://doi.org/10.1186/s12939-021-01432-3

[38] Schmied, V.; Lupton, D. (2011) "Blurring the boundaries: breastfeeding and maternal subjectivity." Sociol. Health Illn., *23*, 234–250.

[39] Dodgson, J. E.; Chee, Y. O.; Yap, T. S. (2004) "Workplace breastfeeding support for hospital employees." J. Adv. Nurs., *47*(1), 91-100. https://doi.org/10.1111/j.1365-2648.2004.03070.x

[40] Rollins, N. C.; Bhandari, N.; Hajeebhoy, N.; Horton, S.; Lutter, C. K.; Martines, J. C.;... Group, T. L. B. S. (2016) "Why invest, and what it will take to improve breastfeeding practices?" Lancet, *387*(10017), 491-504.

[41] Scott, V. C.; Taylor, Y. J.; Basquin, C.; Venkitsubramanian, K. (2019) "Impact of key workplace breastfeeding support characteristics on job satisfaction, breastfeeding duration, and exclusive breastfeeding among health care employees." Breastfeed. Med., *14*(6), 416-423. https://doi.org/10.1089/bfm.2018.0202

[42] Anderson, J.; Kuehl, R. A.; Drury, S. A. M.; Tschetter, L.; Schwaegerl, M.; Hildreth, M.; ... Lamp, J. (2015) "Policies aren't enough: The importance of interpersonal communication about workplace breastfeeding support." J. Hum. Lact., *31*(2), 260-266. https://doi.org/10.1177/0890334415570059

[43] Burks, K. M. R. (2015) "Mothers' perceptions of workplace breastfeeding support." The University of Vermont and State Agricultural College. https://doi.org/10.1089/bfm.2014.0151

[44] Chang, Y.-S.; Harger, L.; Beake, S.; Bick, D. (2021) "Women's and Employers' Experiences and Views of Combining Breastfeeding with a Return to Paid Employment: A Systematic Review of Qualitative Studies." J. Midwifery Womens Health, *66*, 641-655. https://doi.org/10.1111/jmwh.13243

[45] Hauck, Y. L.; Bradfield, Z.; Kuliukas, L. (2021) "Women's experiences with breastfeeding in public: An integrative review." Women Birth, *34*(3), e217-e227. https://doi.org/10.1016/j.wombi.2020.04.008

[46] Kendall, S.; Merritt, R.; Eida, T.; Pérez-Escamilla, R. (2021) "Becoming breastfeeding friendly in Great Britain- Does implementation science work?" Maternal Child Nutr., *19,* e13393. https://doi.org/10.1111/mcn.13393

[47] Marks, D.; O'Connor, R. (2015) "Health professionals' attitudes towards the promotion of breastfeeding." Br. J. Midwifery, *23*(1), 50-58. https://doi.org/10.12968/bjom.2015.23.1.50

[48] Hussainy, S. Y.; Dermele, N. (2011) "Knowledge, attitudes and practices of health professionals and women towards medication use in breastfeeding: A review." Int. Breastfeed. J., *6*(1), 1-16. https://doi.org/10.1186/1746-4358-6-11

[49] Dodgson, J. E.; Bloomfield, M.; Choi, M. (2014) "Are health science students' beliefs about infant nutrition evidence-based?" Nurs. Educ. Today, *34*(1), 92-99. https://doi.org/10.1016/j.nedt.2013.02.015

[50] Smith, J.; Javanparast, S.; Craig, L. (2017) "Bringing babies and breasts into workplaces: Support for breastfeeding mothers in workplaces and childcare services at the Australian National University." Breastfeed. Rev., *25*(1), 45-57.

[51] Hearfield, H.; Collier, J.; Paize, F. (2022) "Breast Feeding Experiences of NHS Staff Returning to Work From Maternity Leave: A National Study.*"* BJPsych Open, 8(Suppl 1), S53–4. https://doi.org/10.1192/bjo.2022.199

[52] Dagher, R. K.; McGovern, P. M.; Schold, J. D.; Randall, X. J. (2016) "Determinants of breastfeeding initiation and cessation among employed mothers: a prospective cohort study." BMC Pregn. Childbirth, *16*(1), 194. https://doi.org/10.1186/s12884-016-0965-1

[53] Kosmala-Anderson, J.; Wallace, L. M. (2006) "Breastfeeding works: the role of employers in supporting women who wish to breastfeed and work in four organizations in England." J. Pub. Health, *3*, 183–191. https://doi.org/10.1093/pubmed/fdl012

[54] Peer, E., Brandimarte, L., Samat, S., Acquisti, A. (2017) "Beyond the turk: alternative platforms for crowdsourcing behavioral research." J. Exp. Soc. Psychol., 153-163. https://doi.org/10.1016/j.jesp.2017.01.006

[55] R Core Team. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/

[56] Morrison AH, Gentry R, Anderson J. (2019) "Mothers' reasons for early breastfeeding cessation." The American Journal of Maternal/Child Nursing, *44(*6), 325-30. https://doi.org/10.1097/NMC.0000000000000566

[57] Brahm, P.; Valdes, V. (2017) "Benefits of breastfeeding and risks associated with not breastfeeding." Rev. Chil. Pediatr., *88*(1), 15-21. https://doi.org/10.4067/S0370-41062017000100001

[58] Brugaillères, P.; Deguen, S.; Lioret, S.; Haidar, S.; Delamaire, C.; Counil, E.; Vandentorren, S. (2024) "Maternal employment characteristics as a structural social determinant of breast-feeding after return to work in the European Region: a scoping review." Int. Breastfeed J., *19*(1), 38.

[59] Thomas, C. L.; Murphy, L. D.; Mills, M. J.; Zhang, J.; Fisher, G. G.; Clancy, R. L. (2022) "Employee lactation: A review and recommendations for research, practice, and policy." Human Resour. Manag. Rev., *32*(3), 100848. https://doi.org/10.1016/j.hrmr.2021.100848

[60] Islam, M. J.; Broidy, L.; Baird, K.; Rahman, M.; Zobair, K. M. (2021) "Early exclusive breastfeeding cessation and postpar-tum depression: Assessing the mediating and moderating role of maternal stress and social support." *PLoS One*, 16(5), e0251419. https://doi.org/10.1371/journal.pone.0251419

[61] Yuen, M.; Hall, O. J.; Masters, G. A.; Nephew, B. C.; Carr, C.; Leung, K.; Griffen, A.; McIntyre, L.; Byatt, N.; Moore Simas, T. A. (2022) "The Effects of Breastfeeding on Maternal Mental Health: A Systematic Review." J. Womens Health, 31(6), 787–807. https://doi.org/10.1089/jwh.2021.0504

[62] Spitzmueller, C.; Wang, Z.; Zhang, J.; Thomas, C. L.; Fisher, G. G.; Matthews, R. A.; Strathearn, L. (2016) "Got milk? Work-place factors related to breastfeeding among working mothers." J. Organ. Behav, *37*(5), 692-718. https://doi.org/10.1002/job.2061

[63] Burns, E.; Triandafilidis, Z. (2019) "Taking the path of least resistance: a qualitative analysis of return to work or study while breastfeeding." Int. Breastfeeding J., *14*, 1-13. https://doi.org/10.1186/s13006-019-0209-x

[64] Cipollone, A.; Patacchini, E.; Vallanti, G. (2014) "Female labour market participation in Europe: novel evidence on trends and shaping factors". IZA J. Eur. Labor Stud., *3*, 1-40.

[65] Cislaghi, B.; Heise, L. (2020) "Gender norms and social norms: differences, similarities and why they matter in prevention science." Sociol. Health Illn, *42*(2), 407-422. https://doi.org/10.1111/1467-9566.13008

[66] Cavapozzi, D.; Francesconi, M.; Nicoletti, C. (2021) "The impact of gender role norms on mothers' labor supply." J. Econ. Behav. Organ, *186*, 113-134. https://doi.org/10.1016/j.jebo.2021.03.033

[67] Trice, H. M.; Beyer, J. M. *The cultures of work organizations.* Prentice-Hall, Inc., 1993.

[68] Acker, J. (2012) "Gendered organizations and intersectionality: Problems and possibilities." Equality, Divers. Inclusion, *31*(3), 214-224. https://doi.org/10.1108/02610151211209072