"Close to their Hearts":

Experiences of Breastfeeding Mothers in Ireland during the COVID-19 Pandemic

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Abstract

Background & Aim: Virtually all members of society, including breastfeeding mothers, have been impacted by the public health restrictions implemented as a result of the COVID-19 pandemic. Breastfeeding is important for the health of mother and baby. The aim of this study is to explore the experiences of breastfeeding mothers in Ireland during the pandemic using a qualitative approach. **Method:** One–to-one semi-structured interviews were carried out with 12 breastfeeding mothers. **Results:** A thematic analysis was carried out and 4 main themes were identified; (i) breast is best but best take it day by day, (ii) it takes a village but quality over quantity, (iii) no pain, no gain and (iv) not in my back yard. **Conclusion:** Participants were motivated by the enhanced health and bonding benefits of breastfeeding and had an array of supports available to them when breastfeeding, however, the quality of these supports varied. Pain associated with breastfeeding and lack of social acceptance are ongoing issues encountered by breastfeeding mothers. These findings have implications for the initiation and duration of breastfeeding. Overall, the pandemic does not appear to have created new motivations, supports or challenges for breastfeeding mothers, although it has had some indirect effects.

Keywords: Breastfeeding, COVID-19, benefits, supports, challenges

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"Close to their Hearts": Experiences of Breastfeeding Mothers in Ireland during the COVID-19 Pandemic

The World Health Organisation (WHO) declared the outbreak of a novel coronavirus called COVID-19 in China a public health emergency on 30th January 2020 (Sohrabi, et al., 2020) and on 11th March 2020 due to the rapid spread of the virus across the globe, the situation was declared a pandemic (World Health Organisation, 2020a). COVID-19 affects the lower respiratory tract and symptoms range from mild to severe, with vulnerable populations being at a higher risk of severe illness or death (U.S. Department of Health and Human Services Centers for Disease Control and Prevention, 2020). It is highly contagious (World Health Organisation, 2020b) and the long term health implications for those that recover from the initial symptoms are unknown. The WHO issued technical guidance to countries in terms of how to prevent and reduce virus spread, including social distancing, mask wearing and hand washing (World Health Organization, 2020c). The COVID-19 global pandemic began impacting Ireland in earnest in March 2020, with the introduction of rolling government sponsored lockdown measures based on the WHO technical guidance, including restrictions on in-person social gatherings and unnecessary travel. These measures impacted most members of society, including breastfeeding mothers.

Breastfeeding plays an important role in both the physical health (Scoccianti, et al., 2015) and mental health of mothers (Kendall-Tackett, 2007; Krol & Grossmann, 2018), as well as the physical health (Cushing, et al., 1998) and cognitive development of infants (Binns, Lee, & Yun Low, 2016; Kramer & Kakuma, 2012). In particular for mothers, breastfeeding has been associated with a decreased risk of breast cancer (Zhou, et al., 2015) and ovarian cancer (Luan, et al., 2013), and also linked with a reduction in maternal stress (Kendall-Tackett K. , 2007) and

maternal depression (Kendall-Tackett, Cong, & Hale, 2011). The physical health benefits of breastfeeding outlined above are relevant at any stage; but perhaps even moreso during a pandemic. Breastmilk contains amongst other substances, anti-inflammatory and antimicrobial substances and can lower the instances of respiratory tract infections in infants (Williams, et al., 2020). Newborn babies lack immunoglobin A (IgA) antibodies and when a mother encounters any substance that triggers an immune response IgA is released in the breast milk and this will bind to provide protection against infection (Arabi & Jamani, 2020). Evidence suggests that the benefits of breastfeeding outweigh the possible risks of COVID-19 and that the virus is not transmitted from mother to infant via breastmilk (Lubbe, Botha, Niela-Vilen, & Reimers, 2020). As such, during this global pandemic it is imperative that mothers are encouraged to breastfeed and supported during their breastfeeding journey.

Breastfeeding also plays a role in mother-baby bonding, and problems associated with breastfeeding have been associated with poorer mother baby bonding which in turn can have an impact on forming a secure attachment (Rossen, et al., 2017). Furthermore, breastfeeding mothers tend to display increased sensitivity in the early days of their child's infancy, which may aid the formation of secure attachments (Britton, Britton, & Gronwaldt, 2006). Secure attachment has been linked with the development of resilience in children (Masten & Barnes, 2018) and the quality of the attachment is associated with a child's psychological adjustment (Lamb, 2012).

It is recommended that mothers should exclusively breastfeed their infant for the first six months of their lives and that breastfeeding should supplement suitable solid foods up until at least two years of age and beyond (World Health Organisation, 2020d). A mother's enjoyment of breastfeeding is postively correlated with the duration of breastfeeding (Granberg, Ekström-

Bergström, & Bäckström, 2020), so providing breastfeeding mothers with support to continue breastfeeding through the more difficult early stages is hugely important. There are a number of factors which will influence whether or not a mother will choose to breastfeed at the outset. Firstly, whether or not the mother was breastfed as a child and secondly, whether or not they perceive breastfeeding as a social norm (DeMaria, Ramos-Ortiz, & Basile, 2020). The latter is likely influenced by their family, peer group and community/culture.

Ireland has one of the highest birth rates in the European Union, however, despite the known benefits of breastfeeding, it has one of the lowest breastfeeding rates in the world (Tarrant, Younger, Sheridan-Pereira, & Kearney, 2011). Just 15% of Irish children are exclusively breastfed up to 6 months of age versus the global average of 38% (Health Service Executive, 2016). The literature identifies some of the challenges to breastfeeding as: perceived restricted freedom, return to work, and societal isolation (Stewart-Knox, Gardiner, & Wright, 2003); as well as negative cultural attitudes towards breastfeeding and lack of supports and information provision (Desmond & Meaney, 2016).

The literature suggests that healthcare providers such as midwives play an important role in encouraging mothers to breastfeed (Burgio, et al., 2016), however, a study of UK mothers found that breastfeeding mothers encountered guilt and suffered a lack of confidence when heathcare providers provided idealistic rather than unrealistic expectations around breastfeeding (Fox, McMullen, & Newburn, 2015), suggesting that the quality of the support recieved is extremely important.

A review of the literature indicates that there are multiple factors which play a role in breastfeeding duration including, support from family, paid maternity leave, and professional support (Thulier & Mercer, 2009). Professional supports available to mothers include lacation

consultants. One US study indicated that women were more likely to breastfeed beyond 5 months if they were visited by a lactation consultant (Bonuck, Trombley, Freeman, & McKee, 2005).

Peer based breastfeeding support groups have also been identified as a key factor in terms of improving breastfeeding rates (Thomson, Crossland, & Dykes, 2012) and are popular among breastfeeding mothers as they appear to normalise breastfeeding in social situations and provide mothers with a safe place to practice breastfeeding in public (Hoddinott, Chalmers, & Pill, 2006). In order for a mother to continue breastfeeding, it is likely that she will need to feel comfortable breastfeeding in public so seeing other mothers breastfeeding in public has been identified as helpful, whereas, unsuitable environment or lack of comfortable seating have been identified as challenges, particularly by Irish mothers (Hauck, et al., 2020). Traditionally, breastfeeding supports such as those outlined above, occur in person or face-to-face, however, online support groups are growing in popularity and are another forum for advice and a study has indicated that membership of an online support group may prolong breastfeeding (Robinson, Lauckner, Davis, Hall, & Anderson, 2019).

Due to the restrictions imposed, breastfeeding mothers may have been unable to access the traditional supports within their extended family or peer group or through an in-person breastfeeding support group. Mothers are more likely to breastfeed beyond 2 months if they received extensive support, classifed as support from family, friends, and health professionals (Emmott, Page, & Myers, 2020). Breastfeeding support groups are also used by breastfeeding mothers to get support, advice and as a social outlet (McCarthy Quinn, Gallagher, & de Vries, 2019).

The importance of breastfeeding in in terms of the benefits to both the baby and mothers physical and mental health is clear, as well the importance of mothers recieving adequate and appropriate support and care to encourage them to commence and continue breastfeeding, particularly through the use of in-person support groups, lactation consultants or time spent with midwives immediately after labour. Due to the COVID-19 pandemic, Irish mothers' access to in-person breastfeeding groups, lactaction consultants, family and friends has been curtailed due to rolling national or regional lockdowns, and the duration of hospital stays post giving birth have generally been reduced, which in turn reduces in-person access to midwives or other medical practitioners.

The aim of the current study is to understand the experiences of breastfeeding women in Ireland during the COVID19 global pandemic by drawing from the experiences of breastfeeding mothers in a breastfeeding support group in an attempt to gain insights into how to encourage and support breastfeeding mothers throughout the pandemic and after it ends and additionally provide suggestions to inform campaigns which attempt to increase breastfeeding rates in Ireland.

This study seeks to examine if the COVID-19 associated restrictions have impacted on mothers' abilities or desire to breastfeed and due to the sudden and recent onset of the pandemic, a gap in the literature exists in terms of Irish breastfeeding mothers' experiences during the pandemic, including; their motivations to breastfeed, how they have been supported, and the challenges to breastfeeding they may have faced and what impact, if any, the pandemic has had on their experiences.

A qualitative approach will be used for this study to capture the detail of the experiences of breastfeeding mothers and due to the complex interplay of emotion, practiality and intent that

surrounds the motivations of breastfeeding mothers, a qualtative approach is preferred over a quantative approach. Due to the once in a liftetime nature of such a widespread pandemic, a gap in the literaure exists around breastfeeding mothers' experiences during such a time, so using a qualtative approach and asking open-ended questions to explore the topic is expected to yield richer results.

Method

Participants

A total of 14 women expressed an interest in partaking in the study, however, due to cancellations, the final sample comprised of 12 women (N=12), all were recruited by convenience sampling from the LLL breastfeeding group and an informal parenting group by word of mouth through Whatsapp. The leaders of the LLL group provided permission for an invitation being sent to members via the group Whatsapp group seeking volunteers. All participants met the inclusion criteria; they were currently residing in the Republic of Ireland, were over the age of 18, were English speaking and were currently breastfeeding or had breastfed during the COVID-19 pandemic.

As there is no consensus as to what constitutes an acceptable sample size for qualitative research, the sample size was determined during the data collection process (Braun & Clarke, 2019) and the researcher used their own judgement to determine when data saturation had been obtained based on the adequacy of the data collected is in terms of how it answers the research aim and questions.

Design

The research was carried out using an exploratory qualitative approach, through the use of semi-structured interviews and the data was analysed using thematic analysis (Braun & Clark, 2006). This design was chosen to enable the researcher to gather insights into the experiences of breastfeeding mothers during the pandemic. At the time of data collection, the pandemic had been ongoing for approximately 8 months and as a result research in this area is lacking and therefore a qualitative approach provides a richness of detail which a quantitative approach could

not obtain. As the semi-structured interview format used open questions, this approach allowed the researcher to respond to new information discovered during the interview process.

Measures/Materials

The interviews were carried out using open ended questions (see Appendix A) which were designed by the researcher in order to elicit responses which would address the research aims and research questions. During the interviews, some questions were omitted if a participant had answered them already or if they were not relevant. Interviews were carried out on a one-to-one basis using Microsoft Teams to conduct an audio call, which was recorded and transcribed verbatim using the Teams app. Interviews could not take place face to face due to the prevailing social distancing guidance in place due to the COVID-19 pandemic. As these interview questions were being used for the first time, a pilot study was conducted using one participant, this was successful and as a result, the data was included in the final study for analysis. The transcribed interviews were then put through Microsoft Stream Transcript cleaner which removed metadata in the transcript and made the transcripts easier to read for analysis but kept them verbatim (a sample of an extract from a transcript can be found in Appendix B). The Doodle app was used to schedule interview dates and times with each participant and Google Forms was used to screen participants for the inclusion criteria and to provide their consent.

Procedures

A message was sent via Whatsapp to a local LLL group and a local parenting group inviting mothers who were breastfeeding during the pandemic to take place. A copy of the participant information sheet was attached (see Appendix C). Prospective participants were asked to contact the researcher by email at a given email address if they wished to volunteer.

After a participant had volunteered by email, the researcher responded by email with another copy of the participant information sheet and a copy of the consent form (see Appendix D), a link to a Doodle schedule which allowed the participant to choose an interview slot from a range of dates and times and a link to a Google form which included inclusion criteria screening questions and the consent form, as well as a checkbox to indicate they provided their consent to participate. Once participants had selected a date and time and completed the Google Form, the researcher scheduled a meeting in Microsoft Teams for the designated time. At the specified time, the interview commenced with the participant and the researcher on Microsoft Teams and the researcher asked the participant to reconfirm that they had read the participant information sheet and that they consented to participate. The participant was asked to turn off their camera and use audio only prior to commencing the recording. The participant was not offered any breaks, however, they were advised that if they wished to pause or stop at any time, to notify the researcher. Participants were advised that the interviews would take approximately 35-45 minutes in length. Once the recording had started and the interview had commenced, the researcher asked the interview questions. The participant was given adequate time to answer each question in detail. When the interview was completed, the participant was thanked, and the interview session was terminated. After the interview was completed, each participant was sent an email, thanking them for their participation in the study and asking that if they had any questions, to contact the researcher and with a link to the HSE list of local breastfeeding support groups.

Data Analysis

Theoretical Position & Approach

It should be acknowledged that the beliefs and assumptions of the researcher, who is a breastfeeding mother, may influence the interpretation of the data. The analysis was carried out using thematic analysis (Braun & Clark, 2006) as the theoretical position of the researcher was to take an essentialist or realist approach and report on the experiences and meaning of the participants. The entire dataset was examined using thematic analysis, rather than honing in on one particular aspect. An inductive approach was taken whereby the researcher allowed the themes to come to the surface rather than selecting themes from an existing theory (Thomas, 2019), this was chosen over a theoretical approach due to the exploratory nature of the research and because the researcher is not trying to prove or disprove a specific theory or theories. Braun and Clarke (2006) state that a theme, in the context of the research question, reveals something of relevance within the data and will emerge as a pattern within the data. The themes were identified at a semantic level by analysing the descriptions provided by the participants and then interpreting that information to find broader themes and understand how it relates to the previous literature.

Thematic Analysis

The researcher applied the six phases of thematic analysis (Braun & Clark, 2006) as follows; firstly, the transcripts were read to familiarize the researcher with the data and the data was pre-coded by highlighting pieces of data which stood out to the researcher, secondly, the researcher generated initial codes using written notes and coloured highlighting to identify interesting aspects of the data, thirdly, the researcher searched the codes for themes and grouped items into potential themes, fourthly, the themes were reviewed to assess if they applied to the entire data set or just within that specific coded extract and a thematic map was created (see Appendix E), fifthly, the themes were defined and named when the researcher at that point was

able to look at the overall story that had emerged from the data and finally the results of the research were produced using the most evocative extract examples and relating the analysis back to the research questions.

Ethical Considerations

The present study was carried out in accordance with the Psychological Society of Ireland Code of Professional Ethics and the National College of Ireland Ethical Guidelines and Procedures for Research involving Human Participants. Permission to carry out this study was provided by the National College of Ireland upon submission of a Research Ethics Proposal. No incentive was provided to participants for taking part. All participants were provided with a participant information sheet with details of the study and all participants provided their informed consent via an electronic consent form. Although participants were not expected to suffer any distress or come to any harm due to the nature of the study, contact details for breastfeeding support groups published by the HSE were provided to all participants upon completion of the interview.

Results

During the data analysis process, using Braun & Clark's (2006) thematic analysis, four overarching themes were identified in the data, namely, "Breast is best but best take it day by day", "It takes a village but it's quality over quantity", "No pain, no gain", and "Not in my back yard".

Theme 1: "Breast is Best but Best Take it Day by Day"

Mothers' motivations for breastfeeding differed between participants (N=12) but generally all were influenced either by the health benefits or the perception of enhanced bonding between mother and baby. The overriding theme was the perception amongst mothers of the benefits of breastfeeding and that breastfeeding was better than alternative forms of nutrition.

"[I] understood the value of it from a postnatal depression perspective." (Participant 4)

"I knew that there was going to be health benefits with regards to lower breast cancer rates." (Participant 6)

9 participants stated that they were aware of the health benefits to mother, however, the general consensus amongst participants was that the health benefits to their own self was secondary to the health benefits to their baby and that the health benefits to mother were an after-though and not necessarily something that encouraged them to initiate breastfeeding but rather something that helped keep them motivated once they had started.

"I just wanted to give my child the best possible start I could." (Participant 2)

"You felt a sense of protection like you were creating that bubble that you wanted for your child." (Participant 3)

7 participants described the health benefits to their child as being factors in their decision to breastfeed, increased immunity was the most frequently stated health benefit, however none of the participants explicitly stated concerns around the health implications of COVID-19 as a primary motivation for breastfeeding, rather that breastfeeding provided a universal protection against many unspecified illnesses. A sense that breastfeeding created a protective bubble around their babies, which other forms of nutrition could not provide was apparent in the participants responses, mothers felt powerful and able to provide protection to their babies because they were breastfeeding.

"I think it's amazing, the bonding, because she looks into my eyes most of the time she's feeding and that's amazing really, the emotion." (Participant 8)

"...how important breastfeeding can be in that kind of attachment." (Participant 11)

Another benefit of breastfeeding that was shared amongst 6 participants was that of increased bonding. The participants described feeling that breastfeeding had increased their bond with their baby and how this closeness was of great comfort to them and generated very strong positive emotions within them.

While all of the mothers interviewed spoke of the benefits of breastfeeding and how they felt that breastfeeding was the best approach for them and their babies, nearly all mothers mentioned that their approach to breastfeeding was just to take it a day at a time and aim to hit certain milestones, for example, one mother mentioned she set out to breastfeed for 3 months initially, and when the 3 months was up, she set a goal of 6 months and so on. This approach seems to be beneficial as they felt that, as new mothers, they were not heaping pressure on themselves at an already stressful time and it appears that reaching each milestone increased their

own confidence in their ability to breastfeed as all who took this approach continued to breastfeed beyond their initial milestone.

Theme 2: "It Takes a Village but Quality over Quantity"

As the proverb goes, "it takes a village to raise a child" and all participants discussed in detail the different areas in which they sought support. It became clear from the data that having access to a range of supports is extremely important to both the initiation and continuation of breastfeeding but that the quality of support provided is equally important and it is very much a case of quality over quantity. As such, two sub-themes were identified; the range of supports available and the quality of supports available.

Sub-Theme 1: Range of Supports Available

The participants described a wide range of supports available to them, family support was identified by 7 participants as being integral to their breastfeeding journey.

"I feel if you don't have family who have done it [breastfeeding] themselves, it would be very challenging" (Participant 1)

"[My husband has] ...been the most supportive partner for a breastfeeding mother" (Participant 6)

Having family support was rated very highly by those who had it and the primary supports tended to be mothers or sisters who had breastfed, and husbands. Two participants spoke about how lockdown impacted their ability to see their family, the pandemic did not appear for the majority to have prevented them accessing family support, the general consensus was that people felt comfortable to make exceptions and visit and if not, online tools such as

Zoom or Facetime were used to speak with family instead. Some participants mentioned that they didn't know how mothers without family support could continue breastfeeding, however, participants who mentioned that they had no family support felt that while this was initially a concern for them, rather than feel isolated or anxious, they were able to avail of other supports which helped them to initiate and continue breastfeeding.

Participants also availed of support through a range of healthcare providers, for example, midwives, lactation consultants, public health nurses and breastfeeding support groups. In terms of the supports available, participants didn't feel that the pandemic had prevented them from accessing support, however, the medium in which they could access support tended to be online rather than in person, however, some public health nurses were still willing to attend in person which participants generally felt more comfortable with. Some participants mentioned that they were uncomfortable accessing supports online.

"She [public health nurse] actually came to my house in person and I know a lot of public health nurses weren't…but she did... she was brilliant" (Participant 11)

"We can do Zoom calls and emails and talk but I don't want to be getting my boobs out on camera for people I don't know" (Participant 2)

Generally, participants were very complementary and spoke highly of the wide range of support on offer and felt that in the early days of breastfeeding, it was hugely important to have the supports available to them and it gave them great comfort to be able to avail of a range of different supports.

Sub-Theme 2: Quality of Supports Available

While numerous avenues of support were available to breastfeeding mothers, the quality of the support on offer often varied within caregiver groups, for example, one mother described a negative experience she had with a public health nurse, whereas others had only positive things to say about their public health nurses.

"I had a public health nurse... [who] hadn't a breeze about anything" (Participant 4)

"... that [public health nurse] was amazing" (Participant 8)

Another example of differing levels of quality was identified in the participants dealings with midwives immediately after the birth of their child. Some mothers found the midwives to be extremely helpful and a huge support to them.

"They [the midwives] could not have been nicer helping me" Participant 4

However, some participants described less than positive experiences with their midwives and felt that it was very much the "luck of the draw" and dependant on who was on shift at any given time. Those participants felt that the midwives were extremely busy and this made them feel like a burden, so much so that they were less forthcoming in asking for help and advice on how to initiate breastfeeding and often less hospital and sought advice from lactation consultants or their public health nurse.

"I found hospital a stressful experience for breastfeeding because they are so busy... I felt we were lucky to get out with [my baby] breastfeeding because they were so rushed" Participant 1

Another concern raised by mothers was around the conflicting advice provided to them. While some participants found that some midwives were extremely pro-breastfeeding, other participants described how some midwives would suggest giving formula as a "top up". This

caused confusion and feelings of guilt amongst the participants who were all very much motivated to breastfeed and didn't intend to use formula but wanted to do the best for their child and having just given birth, were very vulnerable and openly seeking advice from the midwives around them.

"The midwife said to me "maybe give him a little bit of formula because it will just settle him and he's very stressed out because he's hungry"" Participant 1

Generally, breastfeeding support groups (BSG) were described as a good quality support for breastfeeding mothers.

"I'm still on regular weekly breastfeeding support group calls... that's been another really good support" Participant 1

"It's great to have there as an option [for support]" Participant 7

7 participants described using breastfeeding support groups (BSGs) and found them to be a good provider of breastfeeding support. Most mothers had positive experiences with BSGs and felt that the social aspect of them was a huge support to them. COVID19 has seen many BSGs move to an online setting in keeping with social distancing guidelines, while some participants were uncomfortable in an online setting, some had no issue adjusting to it and one participant stated that the move to online meetings made it easier for her to join meetings as she didn't have to worry about getting organised to leave the house and be at a location at a specific time, rather she could join the meeting from the comfort of her own home.

Theme 3: "No Pain, No Gain"

When asked about the challenges faced by mothers when breastfeeding, physical ailments were mentioned by the majority of participants.

"I had a blocked duct" Participant 7

"I had mastitis" Participant 5

"…trauma to my nipple" Participant 6

8 participants described differing physical ailments that presented them with challenges in terms of breastfeeding. The most common ailments were sore nipples, blocked ducts and mastitis. The participants spoke of the pain they felt through gritted teeth which is telling in light of the fact that they had recently given birth and no doubt also suffered pain then indicating that some of the pain encountered during breastfeeding was notable and not to be easily dismissed. When the participants spoke of the pain they felt while suffering from these various issues they described how at times they questioned whether it was all worth it in order to continue breastfeeding. However, despite the extreme pain and discomfort, in all these instances, the mothers were able to overcome these ailments and continue breastfeeding. It was apparent that the participants felt that the benefits of breastfeeding clearly outweighed any pain they felt. All of the participants were able to access treatment promptly suggesting that this is important to supporting continued breastfeeding. Treatments ranged from home remedies to antibiotics prescribed by doctors. However, all of the treatments were provided reactively, after the mothers had experienced pain and prior to experiences these painful issues, none of the participants mentioned having received any formal breastfeeding pain prevention or management plans from healthcare professionals rather, their knowledge was based around prevention and treatments they had heard via word of mouth from peers or breastfeeding support groups.

Theme 4: "Not in My Back Yard"

7 participants described varying challenges around a lack of social acceptance for breastfeeding, this tended to fall into two groups. The first being that either family or peers were uncomfortable with them breastfeeding and some even questioned the participants over their decision to breastfeed some participants were asked if they had considered weaning their infant off breastmilk. There was a palpable sense of frustration and disappointment from participants at having these reactions from people close to them. Although none of the participants ceased breastfeeding as a result of these reactions, they were all highly motivated to breastfeed to begin with and that may have played a role in mitigating the effect of these reactions.

"It's difficult when you're around someone that you know is uncomfortable" Participant 1

"It was hard for them to understand that I didn't want to be covered when I breastfed" Participant 6

The second group was the reaction of strangers in a public setting, participants described how they felt uncomfortable breastfeeding outside their home in a public place due to other peoples' reactions.

"I did not feel completely safe [breastfeeding in a public park]" Participant 8

"[In Ireland] I felt a little bit more observed... a little bit of a focus of attention in certain public places" Participant 3

While participants expressed their dismay at these negative or perceived unhelpful attitudes, none of the participants were deterred from breastfeeding, rather sensing these

reactions from others, the general sense was that they felt more determined to breastfeed and a sense of indignation at the negative reactions they encountered.

Overall, it appears that while the pandemic has presented some challenges in terms of accessing facilities such as designated breastfeeding rooms or cafes in order to sit and breastfeed, the participants felt that the restrictions on movement have removed some of the pressures on mothers to be out and about with their infant, and as a result, they can comfortably breastfeed at home. This is an unfortunate advantage as ideally, breastfeeding would be universally accepted in a social setting and mothers would not sense any negativity or discomfort from others when they are breastfeeding.

Discussion

The global COVID-19 pandemic has had a worldwide impact and virtually all members of society have been impacted by the public health restrictions implemented by their own governments, including breastfeeding mothers. Breastfeeding is important for both the health of mother and of baby and provides a range of physical and cognitive benefits, increased bonding and such is the power of breastmilk, the WHO recommends that mothers should breastfeed their child exclusively for the six months of their lives and continue to breastfeed while supplementing with solid food until the age of two and beyond. Ireland lags behind the rest of the world in terms of its breastfeeding rates and evidence suggests that the quality of breastfeeding supports on offer is integral to supporting mothers to continue breastfeeding. Midwives, breastfeeding support groups and peer acceptance are commonly cited as key supports to mothers. With rolling social distancing measures in place, the aim of this study was two pronged, firstly, to examine if the restrictions had impacted on mothers' abilities to breastfeed and secondly, to explore the experiences of breastfeeding mothers during the pandemic using a qualitative approach. The research questions to be answered were:

What is motivating mothers to breastfeed during the pandemic?

Have the supports available to breastfeeding mothers changed during the pandemic?

Has the pandemic and associated restrictions created any challenges to breastfeeding?

What is Motivating Mothers to Breastfeed During the Pandemic?

"Breast is Best but Best Take it Day by Day"

The overring theme that emerged in terms of the participants motivations for breastfeeding was that “breast is best”. Over half of the participants interviewed stated that the health benefits to their infant was their main motivation for breastfeeding, the health benefits to children are well documented and include lower risk of gastroenteritis, respiratory infections, asthma, sudden infant death syndrome and obesity (Rennick Salone, Vann Jr., & Dee, 2013) (Turck, 2005) and women who are educated about the benefits of breastfeeding are more likely to initiate breastfeeding (Kornides & Kitsantas, 2013). However, none of the participants cited COVID-19 as a specific impetus to breastfeed, from the participants interviewed, the general consensus was that the participants had already made their minds up to breastfeed during their pregnancy and before the pandemic had started. This finding is important as it suggests that the decision-making process as to whether or not a woman will breastfeed begins before or during her pregnancy, so it is important for pregnant women to have access to breastfeeding education early on during pregnancy. Pre-natal breastfeeding classes have been found to significantly increase breastfeeding rates (Rosen, Krueger, Carney, & Graham, 2008) so the ability to continue delivering classes during the pandemic using an online medium is important and should be encouraged while pregnant women cannot attend group classes in person due to COVID-19 restrictions in place. Other methods of disseminating information around breastfeeding to expectant mothers should also be considered by policy makers and health care providers in an effort to continue promoting breastfeeding as details provided in the maternity hospital post-partum may be less effective in encouraging the initiation of breastfeeding than information received during pregnancy.

While two thirds of the participants had an awareness of the health benefits to mothers, few stated it as a primary motivation for initiating breastfeeding, despite the wide range of health

benefits that it has for mothers such as increased cardiovascular health (Nguyen, Jin, & Ding, 2017) rather they focused instead on the benefits to their baby and the perception that it would enhance their bond with their child. This finding is interesting as there is a possibility that if campaigns and education around breastfeeding focused on the benefits to mothers, this could potentially increase rates of women initiating breastfeeding as previous research has found that structured counseling advising the benefits of breastfeeding on maternal health can strengthen a woman's intentions to breastfeed (Ross-Cowdery, Lewis, Papic, Corbelli, & Schwarz, 2017) and informing women of the benefits to maternal health can increase breastfeeding self-efficacy which in turn can lead to increased likelihood of breastfeeding (Charoghchian Khorasani, Peyman, & Esmaily, 2017).

Enhanced bonding was also mentioned as a reason for breastfeeding by participants and research suggests that the release of oxytocin as well as colostrum (which is the very first breastmilk produced post-partum) in the gastrointestinal tract can help form attachment and bonding behaviour (Moberg & Prime, 2013) while bonding is often suggested as a benefit of breastfeeding, and while previous research points to slightly higher quality mother baby relationships, it is important to note that non-breastfed babies do not have poor quality relationships with their mothers (Schulze & Carlisle, 2010). While it is important to educate mothers as to the role of breastfeeding in maternal-infant bonding, it is important not to alienate mothers who either by choice or by necessity cannot breastfeed and a balance must be struck in terms of the messaging and promotion of the reasons why breastfeeding can help form attachments and bonding but at the same time, not suggest that by failing to breastfeed, a mother will fail to bond with her child. Putting the focus on the individual mother's perception of

breastfeeding and bonding is important, if a breastfeeding mother feels that breastfeeding benefits her bond with her baby then this feeling may encourage her to continue breastfeeding.

The majority of mothers described their approach to breastfeeding as taking it one day at a time and aiming to reach a set milestone before deciding to continue breastfeeding, all of the mothers who took this approach continued to breastfeed past their initial goal once they realised that they could reach their milestone and as their confidence in their breastfeeding abilities grew. This is in keeping with the literature around maternal breastfeeding self-efficacy rates which are an important predictor of breastfeeding duration (Lau, Lok, & Tarrant, 2018) , and a recent study shows that increasing mothers' confidence in their own breastfeeding abilities, can lead to more successful breastfeeding outcomes (Brockway, Benzies, & Hayden, 2017). Campaigns to encourage breastfeeding which are centred around breastfeeding duration and hitting breastfeeding milestones should be considered by public health officials and medical professionals and could be a simple but effective way to encourage breastfeeding self-efficacy.

Overall, the data suggests that mothers' motivations to breastfeed remain unchanged during the pandemic and in keeping with the literature, are centered around the health benefits to baby and to mother and enhanced bonding but that confidence in their ability to breastfeed was important to their continued success.

Have the Supports Available to Breastfeeding Mothers Changed During the Pandemic?

"It takes a village but it's quantity over quality"

The variety of supports available was readily apparent in the interviews carried out for this study, with family, healthcare professionals and breastfeeding support groups all available to prospective and breastfeeding mothers. When breastfeeding supports are offered to women, they

tend to exclusively breastfeed for a longer duration than those without supports (McFadden, et al., 2017). However, the quality of these supports differed between participants in this current study which mirrors findings in a previous study which found that some of the supports on offer to breastfeeding mothers were at times inadequate (Cross-Barnet, Augustyn, Gross, Resnik, & Paige, 2012).

Previous research (Di Manno, Macdonald, & Knight, 2015) (Wagner, et al., 2019) shows positive associations between intergenerational breastfeeding (whether the mother was breastfed as a child) or had a family member who breastfed, and breastfeeding initiation, and in keeping with this, the participants in the present study who had family support breastfeeding, generally from their own mother or sister who had also breastfed. However, a number of participants in the present study had no history of breastfeeding in their family, yet still breastfed. Further research is warranted to help understand how big a role a lack of maternal or familial influence plays on breastfeeding initiation rates and which factors are playing a stronger role in encouraging mothers who were not breastfed to breastfeed.

Midwives are generally the primary healthcare professional providing support and help to women in the early days of breastfeeding however, mothers often report dissatisfaction with midwives (Burns, Schmied, Fenwick, & Sheehan, 2012), and a common theme in the literature is that midwives are faced with time pressures and can be found to promote unhelpful practices (Backstrom, Hertfelt Wahn, & Ekstrom, 2010). This is in keeping with the present study where a recurring theme among the participants was that the midwives were very busy and couldn't provide the necessary time required to assist them with any breastfeeding challenges they had or where midwives suggested giving infants formula to sate them and settle them and allow the mother to rest rather focusing their attention on ensuring that mother and infant were gaining

confidence to comfortably breastfeed. This is a concerning finding as COVID-19 put additional strains on healthcare professionals in terms of capacity and also in terms of the amount of time spent with and their proximity to their charges. Furthermore, a previous study indicates that midwives dealing with high numbers of mothers have lower self-efficacy in terms of providing support for breastfeeding (Edwards, Jepson, & McInnes, 2018). Policy makers and hospital management must address the staffing shortages in maternity hospitals and introduce more effective ratios of midwives to new mothers to ensure that midwives can support new mothers to breastfeed. A previous study in the UK estimated that between £11 million to £37 million could be saved in medical expenses if breastfeeding rates were increased (Pokhrel, et al., 2015) so somewhat of the cost of increasing staffing could clearly be offset by these savings.

Breastfeeding support groups (BSG) were mentioned by a number of participants as being of support to them which is in keeping with a previous study which found BSGs to be very effective, and a recent Irish study found that they provided a social outlet for mothers as well as helping mothers with breastfeeding problems (McCarthy Quinn, Gallagher, & de Vries, 2019). BSGs provide mothers with a forum where breastfeeding is normalised which can help build their confidence when breastfeeding in a public setting (Leahy-Warren, Creedon, O'Mahony, & Mulcahy, 2017). In terms of the impact that COVID-19 had on supports, there was a shift to online forms of support in place of in-person supports. Participants expressed mixed opinions on this shift, for example one participant was uncomfortable in an online setting due to privacy concerns whereas another participant preferred accessing support online from the comfort of her own home. What is apparent is that once the pandemic social distancing restrictions are lifted, having a mix of both in-person and online supports made available to all new and expectant mothers would be of great benefit. Overall, it appears that the pandemic has not impacted on the

array of supports available to breastfeeding mothers, however, the quality of supports available still lacks consistency and the pandemic has created additional challenges in terms of an already strained healthcare capacity which already appears to be strained and also restrictions on in-person support, however, technical solutions have overcome the latter.

Has the Pandemic and Associated Restrictions Created any Challenges to Breastfeeding?

"No Pain, No Gain"

In seeking to understand the challenges experiences by breastfeeding mothers, the pain suffered by mothers as a result of physical ailments related to breastfeeding was the overarching theme but mothers continued to breastfeed as their perception of the benefits outweighed the pain they suffered. 75% of participants describing a physical ailment they struggled with during breastfeeding, the most common mentioned were mastitis, blocked ducts, and nipple pain. Mastitis is an inflammation in the breast tissue and can be accompanied by an infection. It has been found to occur in 10% of breastfeeding US mothers and is a risk factor for the cessation of breastfeeding (Spencer, 2008), (Gianni, et al., 2019). Mastitis is both treatable and preventable and risk factors for developing mastitis have been identified (Kinlay, O'Connell, & Kinlay, 2009). Ensuring that breastfeeding mothers are educated as to how prevent and treat breastfeeding related issues such as mastitis and blocked ducts is very important because issues with pain associated with breastfeeding and resulting cessation of breastfeeding have been found to be associated with increased risk of postnatal depression due to the pain and also of mothers' expectations of breastfeeding not being aligned with the reality (Brown, Rance, & Bennett, 2016). Frustratingly, some of the issues can be treated successfully or even prevented using home remedies such as hot compresses or breast massage but none of the mothers interviewed for the present study were provided with any form of consistent information at the outset of their

breastfeeding journey, rather the prevention or treatment options were provided to them reactively, after they reached out for support due to the pain. It is important that mothers are provided with information on how to prevent and treat these issues before they encounter these issues, and that the information is provided in a clear and consistent fashion. A previous study has found that women provided with a breastfeeding pain self-management plan to manage breast and nipple pain had a positive effect on managing pain which in turn can lead to longer breastfeeding duration (Lucas, et al., 2019). Future research could benefit from focusing on the efficacy of breastfeeding self-management plans and their generalisability across all demographics of breastfeeding mothers. Empowering breastfeeding women by educating and informing them as to how to prevent and treat these sometimes preventable and generally treatable but potentially excruciatingly painful ailments is key to increasing women's enjoyment of breastfeeding, their confidence in their abilities to breastfeed, both of which are key determinants for breastfeeding motivations (Kestler-Peleg, Shamir-Dardikman, Hermoni, & Ginzburg, 2015). Whilst pain is not a new challenge brought about by the pandemic, it continues to be a major challenge for breastfeeding mothers and as such, should not go unrecognised.

"Not in My Back Yard"

A previous study suggests that "understanding and acceptance of others" is important to breastfeeding mothers when breastfeeding in a public or social setting (Hauck Y. , et al., 2020) yet unfortunately a social stigma around breastfeeding is still apparent. The literature suggests that the social stigma increases as the infant gets older (Jackson & Hallam, 2020; Newman & Williamson, 2018) and this is echoed in some of the comments received by participants in this study when it was suggested to them that perhaps they should consider weaning as their child got older. Participants described negative reactions they received in reaction to breastfeeding both

from family, peers and strangers so it appears that there is still a stigma or at least a degree of discomfort experienced by members of society in reaction to breastfeeding and while uncovering the reasons behind this stigma are outside the investigative remit of the present study, untangling what it is that make people uncomfortable about breastfeeding and building on the existing recent research in this area (Bresnahan, Zhu, Zhuang, & Yan, 2019; Grant, 2016; Tomori, Palmquist, & Dowling, 2016), is a worthy endeavour if it prevents mothers from isolating themselves or ceasing breastfeeding due to social pressure.

Participants described how the pandemic has presented challenges in terms of accessing facilities such as designated breastfeeding rooms or cafes in order to sit and breastfeed and the risks associated with breastfeeding in public amenities has been documented in this in the literature (Wang, Han, & Lichtfouse, 2020), which mean that breastfeeding mothers may be less inclined to leave the comfort of their own homes. As a result, some of the participants felt that the restrictions on movement have removed some of the pressures on mothers to be out and about with their infant, and as a result, they can comfortably breastfeed at home. This is an unfortunate advantage as ideally, breastfeeding would be universally accepted and facilitated in all settings and mothers would not sense any negativity or discomfort from others when they are breastfeeding. However, the sliver of a silver-lining is that these mothers having had reduced exposure to potentially negative reactions or uncomfortable situations, may be less at risk of ceasing breastfeeding as a result.

Broader Implications

The Irish Health Service Executive issued a five year breastfeeding action plan in 2016 which is due for revision at the end of 2021 and while it identified recommendations under themes such as making breastfeeding everyone's business and enhancing quality control of

breastfeeding related services, it appears from speaking to the participants in this study that there is still work to be done in these and other areas related to the support of breastfeeding mothers and that rather than creating new challenges to breastfeeding mothers, the pandemic has highlighted and potentially exasperated existing issues and problems encountered by breastfeeding mothers in Ireland. Targeting areas such as increasing quality control in the support provided by midwives and other health service advisors, developing a pain self-management framework to provide mothers with a consistent level of support when it comes to prevention and treatment of breastfeeding maladies, and continuing to educate and improve public perception of breastfeeding are example of key measures that must be adopted in order to support breastfeeding mothers.

Strengths & Limitations

A strength of this study is the timing of when the research was carried out, during a pandemic with rolling restrictions enforced, carrying out qualitative research in the form of semi-structured interviews provides a unique insight into the experiences of breastfeeding mothers during this global event. Participants were able to give detailed accounts of their experiences which gave way to strong themes which in turn can be used to inform and shape a response to how to help maintain and increase breastfeeding initiation rates during and after the pandemic.

The present study was not without limitations, participants were resourced from breastfeeding support groups and therefore were motivated to breastfeed and for the most part, continued to breastfeed. The present study did not include participants who had either chosen not to breastfeed. Future studies could benefit from participants who had either chosen not to initiate breastfeeding or who had initiated and stopped breastfeeding in order to further understand the

low breastfeeding rates and the reasons why. Participants were all mothers currently residing in Ireland and therefore these results may not be generalizable across a global population. Additionally, due to the social distancing restrictions in place at the time of the interviews, all interviews were carried out online using meeting software, as such, some participants may not have felt as comfortable or focused as they would if they had been interviewed in person, however, there were no obvious signs of this during the interviews.

Conclusion

The importance of breastfeeding cannot be exaggerated, the array of benefits to both mother and child are well documented. Unfortunately, breastfeeding rates, particularly in Ireland are lower than they should be. The COVID-19 pandemic has created challenges for every member of society, among those, breastfeeding mothers. Using a qualitative approach, this study explored the experiences of breastfeeding women in Ireland during the pandemic and found; that mothers were largely motivated to breastfeeding because of the benefits of breastfeeding in terms of both health and mother/baby bond; mothers were able to access an array of supports, however, the quality of the supports varied between mothers; mothers faced challenges relating to pain arising from breastfeeding and lack of social support of breastfeeding. The COVID-19 pandemic did not directly give rise to any of these findings and did not appear to have directly influenced any of the participants in terms of their motivations for breastfeeding, however, it impacted mothers in terms of how they accessed support and in terms of their ability to breastfeed in a public place and an unintended and not entirely positive consequence of this, is that mothers felt less pressure to “be out and about” and could breastfeed comfortably in their own homes which possibly could lead to extended breastfeeding duration, however, the ability to breastfeed

comfortably in public places and universal support of breastfeeding would be by far the preferred path forward.

References

Arabi, Z., & Jamani, N. (2020). Breastfeeding and COVID-19 in Malaysia: Weighing the Risks and Benefits. *International Medical Journal Malaysia, 19*(3), 125-129.

Backstrom, C. A., Hertfelt Wahn, E. I., & Ekstrom, A. (2010). Two sides of breastfeeding support: experiences of women and midwives. *International Breastfeeding Journal, 5*(1), 1-8.

Binns, C., Lee, M., & Yun Low, W. (2016). The long-term public health benefits of breastfeeding. *Asia-Pacific Journal of Public Health, 28*(1), 7-14.

Bonuck, K. A., Trombley, M., Freeman, K., & McKee, D. (2005). Randomized, controlled trial of a prenatal and postnatal lactation consultant intervention on duration and intensiry of breastfeeding up to 12 months. *Pediatrics, 116*(6), 1413-1426.

Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Braun, V., & Clarke, V. (2019). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 1-16.

Bresnahan, M., Zhu, Y., Zhuang, J., & Yan, X. (2019). "He wants a refund because I'm breastfeeding my baby": A thematic analysis of maternal stigma for breastfeeding in public. *Stigma and Health, 5*(4), 1-10.

Britton, J. R., Britton, H. L., & Gronwaldt, V. (2006). Breastfeeding, sensitivity, and attachment. *Pediatrics, 118*(5), 1436-1443.

Brockway, M., Benzies, K., & Hayden, K. (2017). Interventions to improve breastfeeding self-efficacy and resultant breastfeeding rates: A systematic review and meta-analysis. *Journal of Human Lactation, 33*(3), 486-499.

Brown, A., Rance, J., & Bennett, P. (2016). Understanding the relationship between breastfeeding and postnatal depression: the role of pain and physical difficulties. *A Journal of Advanced Nursing, 72*(2), 273-282.

Burgio, M. A., Lagana, A. S., Sicilia, A., Prosperi Porta, R., Porpora, M. G., Ban Frangez, H., Di Venti, G., & Triolo, O. (2016). Breastfeeding education: Where are we going? A systematic review article. *Iranian Journal of Public Health, 45*(8), 970-977.

Burns, E., Schmied, V., Fenwick, J., & Sheehan, A. (2012). Liquid gold from the milk bar: Constructions of breastmilk and breastfeeding women in the language and practices of midwives. *Social Science & Medicine, 75*(10), 1737-1745.

Charoghchian Khorasani, E., Peyman, N., & Esmaily, H. (2017). Relations between breastfeeding self-efficacy and maternal health literacy among pregnant women. *Evidence Based Care, 6*(4), 18-25.

Cross-Barnet, C., Augustyn, M., Gross, S., Resnik, A., & Paige, D. (2012). Long-term breastfeeding support: Failing mothers in need. *Maternal and Child Health Journal, 16*, 1926-1932.

Cushing, A. H., Samet, J. M., Lambert, W. E., Skinner, B. J., Hunt, W. C., Young, S. A., & McLaren, L. C. (1998). Breastfeeding reduces risk of respiratory illness in infants. *American Journal of Epidemiology, 147*(9), 863-870.

DeMaria, A. L., Ramos-Ortiz, J., & Basile, K. (2020). Breastfeeding trends, influences, and perceptions among Italian women: a qualitative study. *International Journal of Qualitative Studies on Health and Well-being, 15*(1).

Desmond, D., & Meaney, S. (2016). A qualitative study investigating the barriers to returning to work for breastfeeding mothers in Ireland. *International Breastfeeding Journal, 11*, 1-9.

Di Manno, L., Macdonald, J., & Knight, T. (2015). The intergenerational continuity of breastfeeding intention, initiation, and duration; A systematic review. *Birth, 42*(1), 5-15.

Edwards, M., Jepson, R., & McInnes, R. (2018). Breastfeeding initiation: An indepth qualitative analysis of the perspectives of women and midwives using Social Cognitive Theory. *Midwifery, 57*, 8-17.

Emmott, E. H., Page, A. E., & Myers, S. (2020). Typologies of postnatal support and breastfeeding at two months in the UK. *Social Science & Medicine, 246*.

Fox, R., McMullen, S., & Newburn, M. (2015). UK women's experiences of breastfeeding and additional breastfeeding support: a qualitative study of Baby Café services. *BMC Pregnancy and Childbirth, 15*(147). doi:https://doi.org/10.1186/s12884-015-0581-5

Gianni, M. L., Bettinelli, M. E., Manfra, P., Sorrentino, G., Bezze, E., Plevani, L., Vavallaro, G., Raffaeli, G., Crippa, B.L., Colombo, L., Mornirolo, D., Liotto, N., Roggero, P., Villamor, R., Marchisio, P., & Mosca, F. (2019). Breastfeeding difficulties and risk for early breastfeeding cessation. *Nutrients, 11*(10).

Granberg, A., Ekström-Bergström, A., & Bäckström, C. (2020). First-time mothers enjoyment of breastfeeding correlates with duration of breastfeeding, sense of coherence, and parental couple and child relation: A longitudinal Swedish cohort study. *Nursing Research and Practice*. doi:https://doi.org/10.1155/2020/8194389

Grant, A. (2016). "I...don't want to see you flashing your bits around": Exhibitionism, othering and good motherhood in perceptions of public breastfeeding. *Geoforum, 71*, 52-61.

Hauck, Y. L., Kuliukas, L., Gallagher, L., Brady, V., Dykes, C., & Rubertsson, C. (2020). Helpful and challenging aspects of breastfeeding in public or women living in Australia, Ireland and Sweden: A cross-sectional study. *International Breastfeeding Journal, 15*(38), 1-14.

Health Service Executive. (2016). *Breastfeeding in a Healthy Ireland Health Service Breastfeeding Action Plan 2016 - 2021.* Retrieved from https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/child-health-and-wellbeing/breastfeeding-healthy-childhood-programme/policies-and-guidelines-breastfeeding/breastfeeding-in-a-healthy-ireland-report.pdf

Hoddinott, P., Chalmers, M., & Pill, R. (2006). One-to-one or group-based peer support for breastfeeding? Women's perceptions of a breastfeeding peer coaching intervention. *Birth, 33*(2), 139-146.

Jackson, J., & Hallam, J. (2020). 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*, 1-17.

Kendall-Tackett, K. (2007). A new paradigm for depression in new mothers: the central role of inflammation and how breastfeeding and anti-inflammatory treatments protect maternal mental health. *International Breastfeeding Journal, 2*(6).

Kendall-Tackett, K., Cong, Z., & Hale, T. W. (2011). The effect of feeding method on sleep duration, maternal well-being, and postpartum depression. *Clinical Lactation, 2*(2), 22-26.

Kestler-Peleg, M., Shamir-Dardikman, M., Hermoni, D., & Ginzburg, K. (2015). Breastfeeding motivation and self-determination theory. *Social Science & Medicine, 144*, 19-27.

Kinlay, J. R., O'Connell, D., & Kinlay, S. (2009). Risk factors for mastitis in breastfeeding women: results of a prospective cohort study. *Australian and New Zealand Journal of Public Health, 25*(2), 115-120.

Kornides, M., & Kitsantas, P. (2013). Evaluation of breastfeeding promotion, support, and knowledge of benefits on breastfeeding outcomes. *Journal of Child Health Care*, 264-273.

Kramer, M., & Kakuma, R. (2012). Optimal duration of exclusive breastfeeding. *Cochrane Database of Systematic Reviews*(8).

Krol, K. M., & Grossmann, T. (2018). Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz, 61*(8), 977-985.

Lamb, M. E. (2012). Mothers, fathers, families, and circumstances: Factors affecting children's adjustment. *Applied Developmental Science, 16*(2), 98-111.

Lau, C., Lok, K., & Tarrant, M. (2018). Breastfeeding duration and the theory of planned behavior and breastfeeding self-efficacy framework: A systematic review of observational studies. *Maternal and Child Health Journal, 22*(3), 327-342.

Leahy-Warren, P., Creedon, M., O'Mahony, A., & Mulcahy, H. (2017). Normalising breastfeeding within a formula feeding culture: An Irish qualitative study. *Women and Birth, 30*(2), 103-110.

Luan, N.-N., Wu, Q.-J., Gong, T.-T., Vogtmann, E., Wang, Y.-L., & Lin, B. (2013). Breastfeeding and ovarian cancer risk: A meta-analysis of epidemiologic studies. *The American Journal of Clinical Nutrition, 98*(4), 1020-1031.

Lubbe, W., Botha, E., Niela-Vilen, H., & Reimers, P. (2020). Breastfeeding during the COVID-19 pandemic - a literature reiew for clinical practice. *International Breastfeeding Journal, 15*(82).

Lucas, R., Zhang, Y., Walsh, S., Evans, H., Young, E., & Starkweather, A. (2019). Efficacy of breastfeeding pain self-management intervention: A pilot randomized controlled trial (RCT). *Nursing Research, 68*(2), E1-E10.

Masten, A. S., & Barnes, A. J. (2018). Resilience in children: Developmental perspectives. *Children, 5*(98), 1-16.

McCarthy Quinn, E., Gallagher, L., & de Vries, J. (2019). A qualitative exploration of breastfeeding support groups in Ireland from the women's perspectives. *Midwifery, 78*, 71-77.

McFadden, A., Gavine, A., Renfrew, M. J., Wade, A., Buchanan, P., Taylor, J. L., Veitch, E., Rennie, A.M., Crowther, S.A, Neiman, S, & McGillivray, S. (2017). Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews, 2*.

Moberg, K., & Prime, D. (2013). Oxytocin effects in the mothers and infants during breastfeeding. *Infant, 9*(6), 201-206.

Newman, K., & Williamson, I. (2018). 'Why aren't you stopping now?!' Exploring accounts of white women breastfeeding beyond six months in the East of England. *Appetite, 129*, 228-235.

Nguyen, B., Jin, K., & Ding, D. (2017). Breastfeeding and maternal cardiovascular risk factors and outcomes: A systematic review. *PLoSOne, 12*(11).

Pokhrel, S., Quigley, M., Fox-Rushby, J., McCormick, F., Williams, A., Trueman, P., Dodds, R., & Renfrew, M. (2015). Potential economic impacts from improving breastfeeding rates in the UK. *Archives of Disease in Childhood, 100*(4), 334-340.

Rennick Salone, L., Vann Jr., W. F., & Dee, D. L. (2013). Breastfeeding: An overview of oral and general health benefits. *The Journal of the American Dental Association, 144*(2), 143-151.

Robinson, A., Lauckner, C., Davis, M., Hall, J., & Anderson, A. (2019). Facebook support for breastfeeding mothers: A comparison to offline support and associations with breastfeeding outcomes. *Digital Health, 5*, 1-12.

Rosen, I., Krueger, M. V., Carney, L., & Graham, J. A. (2008). Prenatal breastfeeding education and breastfeeding outcomes. *The American Journal of Maternal/Child Nursing, 33*(5), 315-319.

Ross-Cowdery, M., Lewis, C. A., Papic, M., Corbelli, J., & Schwarz, E. B. (2017). Counseling about the maternal health benefits of breastfeeding and mothers' intentions to breastfeed. *Maternal and Child Health Journal, 21*, 234-241.

Rossen, L., Hutchinson, D., Wilson, J., Burns, L., Allsop, S., Elliott, E. J., Jacobs, S., Macdonald, J.A., Olsson, C., & Mattick, R. P. (2017). Maternal bonding through pregnancy and postnatal: Findings from an Australian longitudinal study. *America Journal of Perinatology, 34*(8), 808-817.

Schulze, P., & Carlisle, S. (2010). What research does and doesn't say about breastfeeding: A critical review. *Early Child Development and Care, 180*(6), 703-718.

Scoccianti, C., Key, T. J., Anderson, A. S., Armaroli, P., Berrino, F., Cecchini, M., Boutron-Rualt, M.C., Leitzmann, M., Norat, T., Powers, H., Schüz, J., Wiseman, M., & Romieu, I. (2015). European Code against Cancer 4th Edition: Breastfeeding and cancer. *Cancer Epidemiology, 39*(1), 101-106.

Sohrabi, C., Zaid, A., O'Neill, N., Mehdi, K., Kerwan, A., Al-Jabir, A., Iosifidis, C., & Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *Internatonal Journal of Surgery, 76*, 71-76.

Spencer, J. P. (2008). Management of mastitis in breastfeeding women. *American Family Physician, 78*(6), 727-731.

Stewart-Knox, B., Gardiner, K., & Wright, M. (2003). What is the problem with breast-feeding? A qualitative anaysis of infant feeding perceptions. *Journal of Human Nutrition and Dietetics, 16*(4), 265-273.

Tarrant, R. C., Younger, K. M., Sheridan-Pereira, M., & Kearney, J. M. (2011). Factors associated with duration of breastfeeding in Ireland: potential areas of improvement. *Journal of Human Lactation, 27*(3), 262-271.

Thomas, R. (2019). *Little Quick Fix: Find the Theme in Your Data.* Sage Publications Ltd (UK).

Thomson, G., Crossland, N., & Dykes, F. (2012). Giving me hope: women's reflections on a breastfeeding peer support. *Maternal & Child Nutrition, 8*(3), 340-353.

Thulier, D., & Mercer, J. (2009). Variables associated with breastfeeding duration. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 38*(3), 259-268.

Tomori, C., Palmquist, A., & Dowling, S. (2016). Contested moral landscapes: Negotiating breastfeeding stigma in breastmilk sharing, nighttime breastfeeding, and long-term breastfeeding in the U.S. and the U.K. *Social Science & Medicine, 168*, 178-185.

Turck, D. (2005). Breast feeding: Health Benefits for child and mother. *Archives de pediatrie: organe officiel de la Societe francaise de pediatrie, 12*, 145-165.

U.S. Department of Health and Human Services Centers for Disease Control and Prevention. (2020). *Morbidity and Mortality Weekly Report.* Retrieved from https://stacks.cdc.gov/view/cdc/85951

Wagner, S., Kersuzan, C., Gojard, S., Tichit, C., Nicklaus, S., Thierry, X., Charles, M.A., Lioret, S., & de Lauzon-Guillain, B. (2019). Breastfeeding initiation and duration in France: The importance of intergenerational and previous maternal breastfeeding experiences - results from the nationwide ELFE study. *Midwifery, 69*, 67-75.

Wang, X., Han, J., & Lichtfouse, E. (2020). Unprotected mothers and infants breastfeeding in public amenities during the COVID-19 pandemic. *Environmental Chemistry Letters, 18*, 1447-1450.

World Health Organisation. (2020a). *Coronavirus disease 2019 (COVID-19) Situation Report – 51.* Retrieved from World Health Organisation: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10

World Health Organisation. (2020b). *Q&A on coronaviruses (COVID-19)*. Retrieved from World Heatlh Organisation: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses

World Health Organization. (2020c). *Country & Technical Guidance - Coronavirus disease (COVID-19)*. Retrieved from World Health Organization: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance

World Heath Organisation. (2020d). *Infant and young child feeding.* Retrieved from World Heath Organisation: https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding

Williams, J., Namazova-Baranova, L., Weber, M., Vural, M., Mestrovic, J., Carrasco-Sanz, A., Breda, J., Berdzuli, N., & Pettoello-Mantovani, M. (2020). The importance of continuing breastfeeding during Coronavirus disease-2019: in support of the World Health Organisation statement on breastfeeding during the pandemic. *European Pediatric Association*, 234-236.

Zhou, Y., Chen, J., Li, Q., Huang, W., Lan, H., & Jiang, H. (2015). Association between breastfeeding and breastcancer risk: Evidence from meta-analysis. *Breastfeeding Medicine, 10*(3), 175-182.

Appendix A

Interview Questions

- When did you decide to breastfeed?
- Why did you decide to breastfeed?
- What has been your experience in terms of accessing breastfeeding support from (i) family and friends (ii) public health or medical services, (iii) lactation consultants or (iv) organised support groups during the pandemic? If appliable, how does that compare to your experience prior to the pandemic?
- What challenges have you encountered while breastfeeding? If you have experience breastfeeding prior to the pandemic, have these challenges changed?
- How have you overcome challenges to breastfeeding?
- fHow does breastfeeding make you feel?
- What is your understanding of the health benefits of breastfeeding for both mother and child?
- If your breastfed child is older than 6 months, have you found that the pandemic has helped or hindered your ability to breastfeed beyond infancy?

Appendix B

Extract from Interview Transcript of Participant X

I wanted to maybe open up with just talking about kind of the start of your breastfeeding journey. When did you decide to breastfeed?

I was thinking about this because I saw it was one of the questions on the sheet and I don't think there was a time I had decided it to be honest. I always felt that it was something I would do, but that's probably because my mom breastfed myself and my sister and she would be a big advocate for us, so I would've been born in the 80s as possibly more formula feeding around that time and my mom was always very positive and how she spoke about breastfeeding. So I think that was probably embedded into me so that, you know, I thought when I have a baby, I just assumed that I would and so I'd never came to a decision about it as such. More so, I always felt that it was something I wanted to do

Perfect, no. That's that's really succinctly put, and I suppose that kind of the next question I had was why did you decide to breastfeed? But I think you know you've covered off. Kind of the, you know, some of the motivations there in terms of in terms of you know, your mom, your. Your mom's influence and with or any other reasons why you decided to breast feed?

I suppose because it's the most natural option rather than inviting something in that you know as separate. So formula bottles you know looking at amounts everything like that. So it was just something that like I felt would be the most normal natural thing to do. I had some concerns that it wouldn't work out based on, you know you hear different stories and I only have one baby, so it's my first child but you hear you know. People saying they couldn't breastfeed, or they different different difficulties and issues. So if anyone asked me kind of in the run up to it I would have said I'll give it ago, but in my mind I was gonna give it a really good go like I read people probably didn't realize I was going to be as passionate about it as I was. So everything. Yeah, but because I knew it was the best thing for the baby. And you know all the stats will say you know studies wise for their health, for their intelligence an there's nothing better so for those reasons.

They were, I suppose, the motivations that I had excellent and were you aware of any of the benefits and to mothers to breast feeding mothers?

Uh, no. I actually don't know if I'm still really aware. And I'm just trying to think I did the ante Natal class and would have been covered at that stage. I probably probably was an I did that. That was done in person. I did that back in February before lockdown then and then I did a breastfeeding online class through the hospital as well and they probably did cover it. I don't know if I really focused on it, so it's not really in my head. Yeah, but one thing I suppose I had in mind was possibly that I may find it Easier to lose weight or maybe not. Cakes and biscuits on maternity leave but yeah that was one thing I had in my head and there was another one as well. Anne. Add now. And also my period so that my period may not come back for awhile is another benefit, but I have not not nothing sticks out to be honest, it’s more for you know the baby. I suppose in bonding that the baby and I would have together.

Yeah perfect no no that's upset you perfect. I suppose to go to the next question? Then I was going to ask in terms of the in terms of the types of breastfeeding support. So you mentioned that you attended an

online breastfeeding class and I suppose maybe you want to talk maybe about that. You know whether you find it informative and then maybe after that. Then we can move into what other supports you had.

Yeah, an the online class. It wasn't that it wasn't informative I I don't think possibly it was difficult to do it over. Zoom over video in the 1st place. Yeah yeah I got the impression that the lactation consultant doing it wouldn't have done that before, so she was, let's say on the call and she was good. But I think tech from a technical interview was a big change for her. But not only that, I think it's probably a very difficult thing to explain to somebody who isn't there, anyway, so like before your baby is now. Maybe that's just how I absorbed it as well, because I did hear. Kind of after I had my son people saying that they had watched you know videos on YouTube on how to latch and want a good latch. Looks like an I probably just never occurred to me to do anything like that and maybe I should have. So maybe it depends on the type of learner that you are as well where some people maybe will study hard and we really make sure they're super well informed. Where I kind of felt as I did that class, but I felt I was going to go in. Have my baby and it would just workout. That was kind of what I hope for, I suppose. So yes, support I I may be other people find it really good. I didn't find it amazing, but I probably took down some notes from it an you know, even notes around how long if you express a bottle, how long it can be in the fridge or how long it would be left out and that type of thing. Yeah, so it's kind of touch and go really. And then when I had my son I found hospital kind of a stressful experience for breastfeeding. Because they are so busy in there. So he was born and he wasn't was alone. No, he wasn't a low birth rate, but he wasn't heavy. So obviously you know when your baby is born. It's quite urgent to get them fed anyway, but I had had a section. It had an emergency section. Was a little bit dramatic, so you know you're after just having your baby you're after having major surgery in your back up in the room and we were trying I I barely remember this to be honest, but my partner was there with me an we were trying to feed him and when he was latching on immediately the one of the midwives was like. Well I got him formula because he needs to keep his blood sugars up, you know because I was really wanting to feed myself and we got him on but in that situation probably it was urgent that he got fed and she maybe didn't just didn't have time. But that was my experience in general in hospital with the midwives. When I went in was that they were very understaffed to give you time. If you wanted to breastfeed. I felt that we were lucky to get out of it with him breastfeeding. To be honest, you know, because they were so rushed. Yeah and I've since read. I haven't read it all. I'm kind of reading a little bit at night during the night feeds a book. You've probably heard that it's called breastfeeding on coverage by counting your name, Amy Brown or something like that. She's a doctor. But all the stats are English, but she was saying midwives tend to separate into two categories so they are either technical experts or the other type of midwife. I can't think of the name, but it's kind of like a carer and the technical experts I felt or who I encountered so they would come over literally put your baby on your breast and kind of walk off then so there there helping him latch which is good for getting fit fed but he would fall off then I wouldn't know how to get him back on. You kinda have that kind of all. I don't press the Bell again and being an idea past you know? Yeah absolutely only have so many times that you can do that, yeah? I found it tough in hospital. We were in on a Thursday, had him on Thursday morning and I was out on the Saturday and on the Thursday night it had gone on where he hadn't had a feed in awhile and he's getting hungry and he was crying last and one of the midwives came along and asked if she could take him away for to the nursery, which I didn't actually know was a thing like there was no God. Take my baby you know. Yeah, hold of this concept and now I wouldn't balk at it at all. But at the time. And she said look should give maybe a little bit of formula because it will just settle and he's very, you know, stressed out because he's hungry. So I agreed to it. And then that came with its own kind of snowball of emotions and obviously you're tired as well But on the second night on the Friday night and really nice midwife, and they're all really nice. And they were all fantastic and super, but she might have been maybe in the other cash. Agree yeah, she kind of just sat

with me for awhile when I was feeding him and she was the first person to kind of do that where the rest some of them would say a little while, but mostly they just put him on and left an whether it was that confidence that she gave me or whatever the case. Maybe he felt a little bit that night and then the next day fed a little bit again. And by the time we were leaving, hospital was set up, but I felt like you're in a kind of a risky few days, and if you don't get the support. An if you wanted to breastfeed, it's an awful shame you know. I had asked to see the lactation consultant when I was in hospital. And I didn't get to see them and they kind of just ignored that request to be honest. And maybe she wasn't around and. They were very busy.

Appendix C

Participant Information Sheet

Close to their hearts, experiences of breastfeeding mothers during a pandemic.

You are being invited to take part in a research study. Before deciding whether to take part, please take the time to read this document, which explains why the research is being done and what it would involve for you. If you have any questions about the information provided, please do not hesitate to contact me using the details at the end of this sheet.

What is this study about?

I am a final year student studying for a degree in psychology from the National College of Ireland (NCI). As part of my degree, for my final year project, I must complete a small-scale piece of independent research. My area of interest is in breastfeeding, specifically breastfeeding rates in Ireland and the experiences of breastfeeding mothers in Ireland during the COVID19 global pandemic.

For my project, my aim is to investigate the experiences of breastfeeding mothers in Ireland during the current COVID19 global pandemic.

The project will be supervised by Dr Michelle Kelly.

What will taking part in the study involve?

If you decide to take part in this research, you will be asked to take part in a one to one online audio interview with the researcher. The interview will be recorded for transcription purposes and the audio will be deleted once the transcription is complete. Participants will not be asked to disclose any personally identifiable information during the interviews. The duration of the interview will be approximately 45 minutes to one hour in length, during which participants will be asked questions looking for them to describe their experiences of breastfeeding during the pandemic. Breaks will not be offered, unless the participant requires a break.

Participants must be women, over the age of 18 who are living in Ireland and who are breastfeeding during the COVID 19 pandemic.

Sample questions which may be asked:

- *When did you decide to breastfeed?*
- *Why did you decide to breastfeed?*
- *What has been your experience in terms of accessing breastfeeding support from (i) family and friends (ii) public health or medical services, (iii) lactation consultants or (iv) organised support groups during the pandemic? If appliable, how does that compare to your experience prior to the pandemic?*
- *What challenges have you encountered while breastfeeding? If you have experience breastfeeding prior to the pandemic, have these challenges changed?*

Do I have to take part?

Participation in this research is voluntary; you do not have to take part, and a decision not to take part will have no consequences for you. If you do decide to take part, you can withdraw from participation at any time

During the interview, participants have the right to refuse to answer any question that they do not feel comfortable to answer. You can withdraw your data from the study after the interview has been completed, up to the point that the results have been written up for submission.

What are the possible risks and benefits of taking part?

There are no direct benefits to you for taking part in this research. However, the information gathered will contribute to research that helps us to understand how to support breastfeeding mothers during the pandemic and beyond.

There is a minor possibility that some participants may experience minor distress or upset, if the interview causes them to reflect on or discuss difficult experiences. If you feel distressed or upset for any reason during the interview, you are free to take a break or to stop the interview completely. Contact information for breastfeeding support services will be provided by email at the end of the interview process to all participants.

What about cost, reimbursement or compensation?

Your participation in this study is voluntary and there should be no cost incurred by you in taking part in this study. There will be no reimbursement or compensation offered.

Will taking part be confidential and what will happen to my data?

All data collected for the study will be treated in the strictest confidence. Only the researcher and academic supervisor will have access to the data collected.

Signed consent forms will be retained, however, these will not be linked to the specific interviews. The interviews will take place on a one to one basis online. The researcher will carry out the interview in a private setting and requests that the participant does same. The interviews will be recorded using appropriate software. The audio recordings will be deleted once the data is transcribed. The data will be transcribed using software for that explicit purpose.

Any identifying personal data (e.g. names, locations) in the interviews will be anonymised in the transcribed data. Each participant will be assigned a unique ID code, and their data will be stored under this ID code, separate from their name or other identifying information

As this is a qualitative study, direct quotes from interviews may be included in the presentation of the results, but these quotes will be anonymised and will not contain any information that could identify the participant or any other individual.

The transcribed data and the consent forms will be stored separately online securely in password protected files on a password protected personal computer. The data will be retained for 5 years in line with the NCI Data Retention Policy.

The results of this study will be presented in my final dissertation, which will be submitted to National College of Ireland. The results of the project may be presented at conferences and/or submitted to an academic journal for publication.

This research is carried out in compliance with the WHO Code on the Marketing of Breastmilk Substitutes. The Code is a marketing code which aims to protect breastfeeding and to prevent aggressive marketing practices. No monies or any other incentives have been or will be accepted or exchanged from companies, which include, amongst others, baby formula companies, who are in violation of the WHO Code.

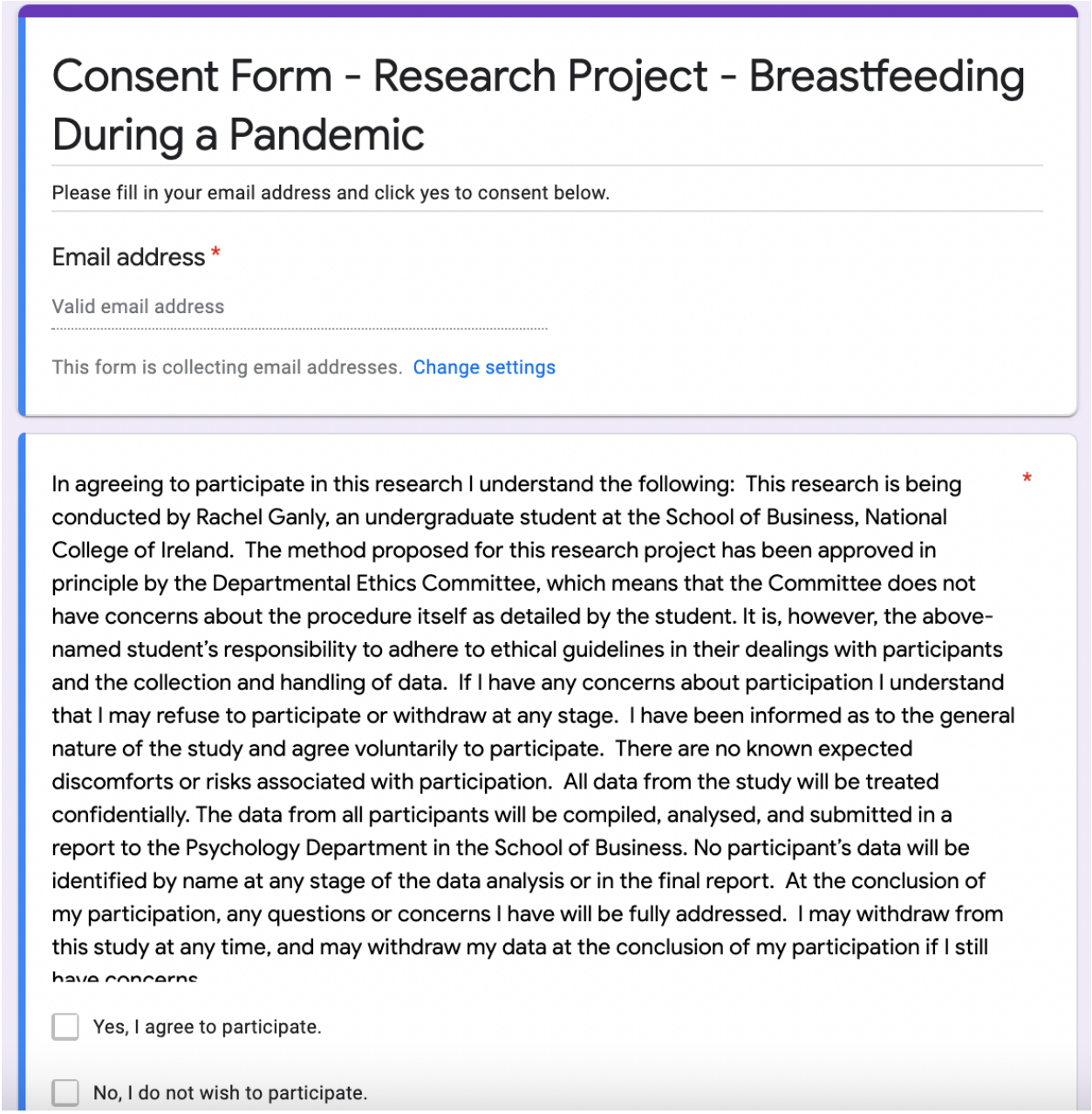
Who should you contact for further information?

Researcher: Rachel Ganly rachel.ganly@student.ncirl.ie

Supervisor: Dr Michelle Kelly michelle.kelly@ncirl.ie

Appendix D

Participant Consent Form



Consent Form - Research Project - Breastfeeding During a Pandemic

Please fill in your email address and click yes to consent below.

Email address *

Valid email address

This form is collecting email addresses. Change settings

In agreeing to participate in this research I understand the following: This research is being conducted by Rachel Ganly, an undergraduate student at the School of Business, National College of Ireland. The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student. It is, however, the above-named student's responsibility to adhere to ethical guidelines in their dealings with participants and the collection and handling of data. If I have any concerns about participation I understand that I may refuse to participate or withdraw at any stage. I have been informed as to the general nature of the study and agree voluntarily to participate. There are no known expected discomforts or risks associated with participation. All data from the study will be treated confidentially. The data from all participants will be compiled, analysed, and submitted in a report to the Psychology Department in the School of Business. No participant's data will be identified by name at any stage of the data analysis or in the final report. At the conclusion of my participation, any questions or concerns I have will be fully addressed. I may withdraw from this study at any time, and may withdraw my data at the conclusion of my participation if I still have concerns *

- [ ] Yes, I agree to participate.
- [ ] No, I do not wish to participate.

Appendix E

Thematic Map