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Seeing both sides: wellbeing in maternity services post COVID-19

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Seeing both sides: wellbeing in maternity services post COVID-19

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Submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology

Declarations

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. All other sources are acknowledged by bibliographic references. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree unless, as agreed by the University, for approved dual awards.

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Yr wyf drwy hyn yn datgan mai canlyniad fy ymchwil fy hun yw'r thesis hwn, ac eithrio lle nodir yn wahanol. Caiff ffynonellau eraill eu cydnabod gan droednodiadau yn rhoi cyfeiriadau eglur. Nid yw sylwedd y gwaith hwn wedi cael ei dderbyn o'r blaen ar gyfer unrhyw radd, ac nid yw'n cael ei gyflwyno ar yr un pryd mewn ymgeisiaeth am unrhyw radd oni bai ei fod, fel y cytunwyd gan y Brifysgol, am gymwysterau deuol cymeradwy.

Maisy Jane Stockdale
15/05/2023

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Word Count

Thesis section	Excluding references, tables, appendices etc	Inclusive
Thesis summary	218	218
Systematic review	6731	15333
Empirical study	7669	11592
Contributions to theory and clinical practice	2383	2914
Title pages, acknowledgements, abbreviations, contents, word count	585	585
Total word count	**17586**	**30642**

Thesis Abstract

This thesis explores experiences in maternity services during and after the COVID-19 pandemic, from both the perspectives of those delivering and receiving care. Chapter one is a systematic review of qualitative and quantitative literature, examining the impact of pandemic hospital restrictions on birth experience and subsequent maternal mental health. Quantitative findings highlighted that, overall, restrictions in maternity services had an adverse impact on birth experiences, with higher rates of post-natal depression, anxiety, and post-traumatic stress. Five themes were found across the qualitative data, reflecting experiences of ‘change’, ‘neglect’, ‘emotional wellbeing’, ‘confusion’, and ‘positivity’.

Chapter two is a qualitative empirical paper, utilising interpretive phenomenological analysis to explore the experiences of nine Early Career Midwives and the factors influencing their wellbeing. Four themes were identified: ‘high stakes pressure’, ‘feeling (un)supported’, ‘safety in numbers’, and ‘on top of it all’. Of importance, high levels of moral injury were found amongst participants, differing from burnout. Consideration is given to the modifiable and non-modifiable aspects of the role that influence wellbeing, as well as clinical implications and future research.

The third chapter integrates findings from the first two chapters to discuss clinical implications and future research in more depth. This also contains a personal reflection on the process of completing the research, locating the researcher and the lens with which data was viewed.

Chapter 1

Systematic Review

Examining the impact of COVID-19 restrictions on birth experiences and mental health: a systematic review

Examining the impact of COVID-19 restrictions on birth experiences and mental health: a systematic review

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Abstract

In response to the COVID-19 pandemic, restrictions were placed on maternity services to reduce spread of the virus. This systematic review aimed to understand the impact of restrictions in maternity services, on birthing experience, and subsequent mental health. Four databases were systematically searched (PsycINFO, Medline, Embase and CINAHL) with twenty-six studies meeting inclusion/exclusion criteria. The quantitative and qualitative studies were reviewed narratively. Birth experience was negatively affected by restrictions, including absence of birth partner, mask mandates during birth, and lack of access to pain relief. Subsequent mental health also appeared impacted with higher rates of postnatal depression, anxiety, and post-traumatic stress symptoms. Overall, evidence suggests that there was an impact on birthing experience and mental health due to COVID-19 hospital restrictions during birth, with certain groups more impacted than others. Further research should consider follow up on those who gave birth during COVID-19 to ascertain any long-lasting implications.

Introduction

In December 2019, a novel virus, now formally known as COVID-19, was found in Wuhan, China. Fast forward three months to March 2020 and the world watched in shock as the World Health Organisation declared a pandemic, followed by the initiation of lockdowns across the world. These lockdowns restricted every element of individuals' lives, including work, social events, and healthcare, with far reaching consequences on health and wellbeing (Rajmil et al., 2021).

Hospitals and healthcare settings saw some of the most severe restrictions (Jasweney et al., 2022). Over time, many restrictions in the community would ease, sometimes increasing again for short periods; however, restrictions in health settings largely remained. Although originally intended to keep patients physically safe, blanket restrictions were also found to have negative implications for patients, notably, psychological distress and an impact on person-centred care (Jones-Bonofiglio, et al., 2021; Iness et al., 2022).

One specific area impacted heavily by restrictions was maternity services. Typically, pregnancy and birth are a time for shared joy for expectant parents (Zheng et al., 2022); however, due to restrictions, pregnant people[1] were attending scans alone, possibly receiving distressing news alone, enduring hours of labour alone, and on occasion, birthing alone. Birth partners were asked to leave an hour after the birth and birthing people were regularly required to stay in hospital with no visitors, or with visitation limited to two hours per day (Griffiths, 2021; Kenny, 2021; Hartley 2022).

[1] Whilst we recognise that a majority of people giving birth are women, we will be using gender neutral terms in order to be inclusive of all who give birth, including women, trans men or those who identify as non-binary.

These changes were sudden and constantly under review, making it difficult for birthing people to anticipate restrictions and plan accordingly. This meant there was a need to deviate from birth plans and to let go of potentially lifelong expectations of what birth may be like, leading, for some, to a sense of isolation and loss (Shuman et al., 2022). Deviations from birth plans (Mei et al., 2016), and a mismatch between expectations and experience, are both associated with lower birth satisfaction (Webb, et al., 2021).

A study exploring factors that influence positive birth experience in first time mothers found that one key factor was consistency of support (Nilsso et., 2013). This included trust, and importantly, also the presence of midwife *and* partner, offering responsiveness and individualised support. Bell and Anderson (2019) suggest that both supportive care, which promotes confidence, trust, respect, shared decision making, and feelings of safety are needed to promote positive birth experiences. Cook and Colleen (2012) found that positive and negative recollections of birth are related to feelings of choice and control. Blanket restrictions in place due to COVID-19 limited presence of partners and individualised support and limited the choice and control of birthing people. It is also likely that feelings of safety were reduced due to birthing during a pandemic, with risk of infection being of notable concern.

A systematic review by Bell and Anderson (2016) found that a negative birth experience may contribute to post-natal depression (PND). Experiences of PND have been extensively researched over the years and have been found to have a deleterious impact on mother-infant bonding (Moehler et al., 2006) and child development (Murray 1992; Parsons et al., 2012). Further, an integrative review

(Simpson et al., 2018) found a link between birth experiences and postnatal post-traumatic stress disorder (PTSD). Postnatal PTSD has been found to impact negatively on the mother's relationship with the child (Cook, Ayers & Horsch, 2018) and with their partner (Ayers, Eagle & Waring, 2007). These associations suggest that birth experiences should be taken seriously as a factor that influences maternal mental health, as well as impacting more broadly on the wider family.

Given the above, it is unsurprising that research has investigated the impact of COVID-19 hospital restrictions on birthing people. The current paper aims to systematically review the research relating to birth experiences/satisfaction and subsequent maternal mental health in the context of COVID-19-related restrictions in hospitals. This will be done by collating and synthesising qualitative and quantitative evidence relating to the impact of COVID-19 restrictions in hospital settings on the experience of giving birth in a hospital setting during the pandemic. Findings will contribute to our understanding of the impact of restrictions in maternity services, with implications for those who support birthing people postnatally (e.g., health visitors and perinatal mental health services).

Method

Pre-registration

The protocol for this review was registered with PROSPERO (registration number: CRD42022352239). The review was undertaken in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Paige et al, 2021).

Search Strategy and Selection Criteria

A systematic literature search was conducted by the first author in August 2022. Four databases were chosen based on the relevance to the topic of the research question: PsycINFO, Medline, Embase and CINAHL. The key-word search terms employed were: (birth OR labour OR childbirth) AND (Covid-19 OR Coronavirus) AND (stress OR Trauma OR mental health).

Searches were limited to empirical papers published in peer-reviewed journals and written in English. Date limits from March 2020 were applied to capture research generated after the start of the COVID-19 pandemic. Papers were screened for eligibility according to the following inclusion and exclusion criteria as seen in Table 1.

Inclusion Criteria	Exclusion Criteria	Rationale
Empirical data (qualitative or quantitative) relating to birth experiences and/or maternal mental health	Empirical data not relating to birth experience and/or maternal mental health	To answer the questions asked by the review, only studies focusing on these experiences were included
	Studies restricted to data collected antenatally (e.g., focusing on anticipation of restrictions during birth).	Study did not examine birth experience.

	Studies examining post-partum period only (i.e., not addressing the birth experience).	Studies did not examine birth experience.
Births occurred during the COVID-19 pandemic (post March 2020) in a hospital setting.	Papers solely focusing on births occurring before the COVID-19 pandemic Papers focusing on those who experienced home births during the COVID-19 pandemic Studies of families staying in specialist Neonatal Intensive Care Units (NICU) or Special Care Baby Units (SCBU) Studies of families where there was a baby loss.	Aim of the paper was to review studies where birth occurred during COVID-19 Aim of paper was to review births that occurred in hospital settings Having a baby in a NICU, SCBU or experiencing baby loss is an inherently difficult experience and is a distinct context from birth during COVID-19. The separating out of these experiences from birth experiences is beyond the scope of this review

	Studies including individuals who had tested positive for COVID-19 at the time of study.	Those testing positive with COVID-19 would experience a distinct experience of being cared for during birth, as well as additional anxieties which is beyond the scope of this review.
Data captured from the person who gave birth	Papers focusing on experiences of partners, family or professionals	Aim of the review is the birth experience on the person giving birth.

Table 1. Inclusion and exclusion criteria and rationale.

Data extraction

A data extraction proforma was created to collect relevant information from eligible papers. This included year of study, country, study design, participant demographics, stage of pandemic in which research took place, measures used, length of time between birth and data collection, results, and main findings. The data extraction proforma was discussed before being piloted by the first author and was reviewed again with the second author before extracting data from all included studies.

Methodological Quality

The methodological quality of each of the included studies was assessed by the first author, using the following Joanna Briggs Institute (JBI) critical appraisal checklists. This appraisal system offers checklists appropriate for both qualitative and quantitative designs. The following measures were utilised: Checklist for Qualitative Research

(JBI, 2017a; Appendix A), Checklist for Analytical Cross-Sectional Studies (JBI, 2017b; Appendix B), Checklist for Case Control Studies (JBI, 2017c; Appendix C), Checklist for Cohort Studies (JBI, 2017d; Appendix D).

Reliability was established by the second author using the same measures, with 87% consensus across studies. Discrepancies were discussed until agreement was achieved.

Thematic Analysis

Quantitative papers were summarised in a textual narrative approach due to the heterogeneity in the focus and measures of the studies, as well as varying stages of COVID-19 with differing restrictions. Qualitative papers were approached using a method of thematic analysis, as described by Braun and Clarke (2006), reviewing primary and secondary data, where available. Analysis was completed by the first author, and results discussed and finalised with the second author. Analysis included reviewing all papers with qualitative data and familiarising the author with the data before creating initial coding. Themes were then generated and reviewed with ongoing analysis to define and name themes. Finally, results were written up and presented below. As this was a mixed methods review, broadly following a textual narrative approach, it was beyond the scope of the review to undertake a more formal thematic synthesis, as such quotes are not included. This is in line with other mixed methods studies (Barr-Walker et al., 2019)

Results

In line with PRISMA guidelines, the study selection process is recorded in Figure 1. Initial searches identified 1847 papers, of which 251 were duplicates and 46 were not in English. The title and abstracts of the remaining 1550 papers were then screened for eligibility against all criteria, excluding 1504 papers. Full text reviews were then undertaken on the remaining 46 papers, with 26 papers meeting eligibility. At each stage, cross-checks on eligibility and inclusion were undertaken independently on 10% of papers by the second author. Additional reference and citation searches were undertaken; however, no further papers were identified. This resulted in a total of 26 papers for review.

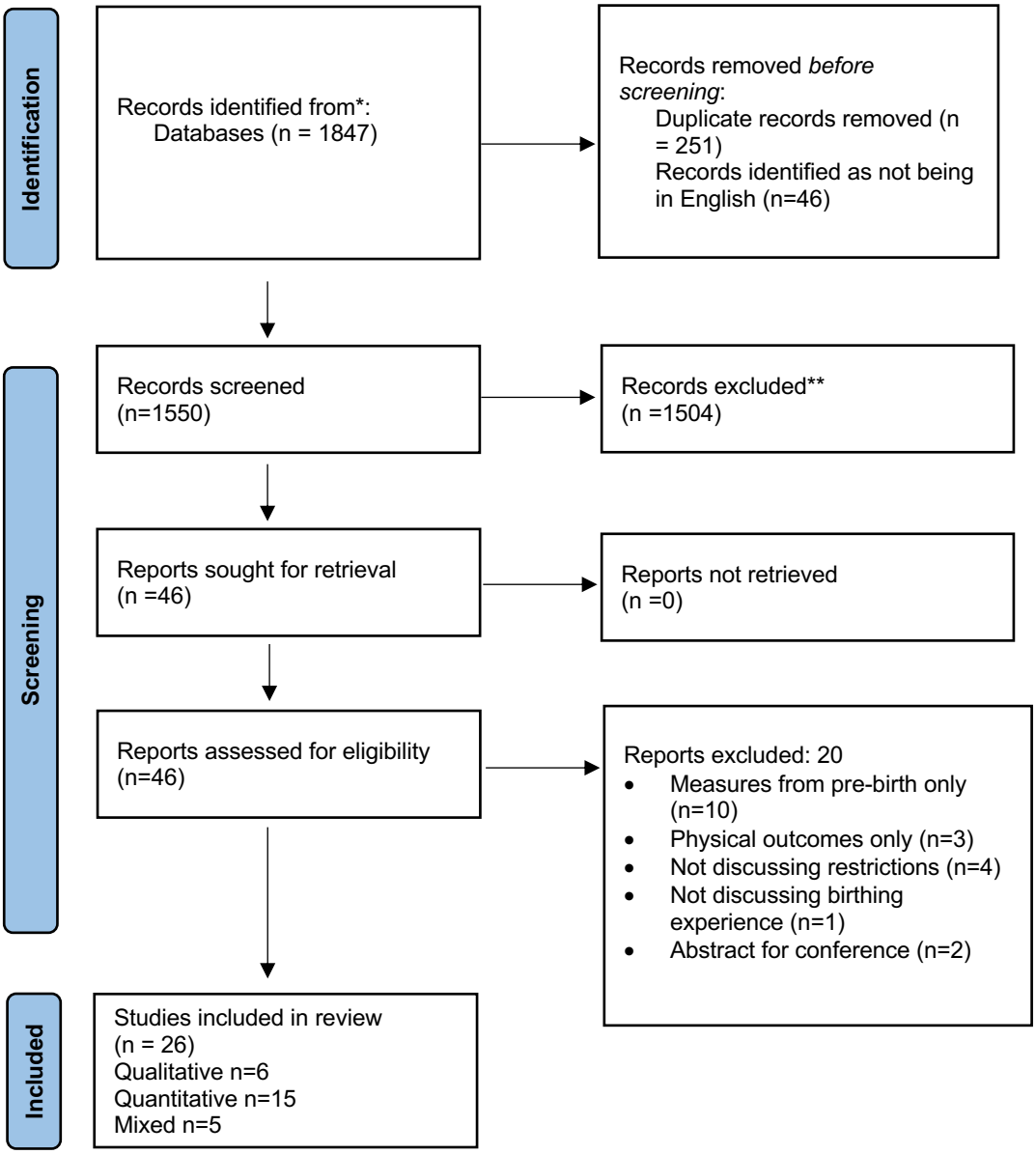

Figure 1.PRISMA flow chart showing study selection process.

Study Design

Fifteen studies were quantitative, with six qualitative and five mixed-methods design. All but one study used self-administered measures, questionnaires, and/or semi-structured interviews (*n*=25). The remaining paper used a saliva cortisol measurement alongside a questionnaire.

Study Quality

The completed quality assessment tools can be seen in Appendix E. Studies were generally rated as being of moderate quality. Many qualitative studies failed to provide philosophical perspective, a statement locating the researcher culturally or theoretically, or to address the influence of the researcher on the research and vice versa. For case control quantitative studies, it was unclear in four out of five studies if cases and controls were matched appropriately and three out of five did not discuss confounding variables and therefore did not provide strategies to manage these. Five of 14 of the cross-sectional studies did not use valid/reliable methods of measurement, opting for self-created questionnaires.

Location and/or Ethnic background

Of the 26 studies, 12 were conducted in America, three in the United Kingdom, two each in Italy and Israel, and the remaining nine were completed across multiple countries internationally. Ten studies did not report racial and/or ethnicity background but of the remaining 16, 15 included participants from several racial and/or ethnic backgrounds. Five studies highlighted the impact of race and/or ethnicity on restrictions and birth experience. Further details are available in Tables 2 and 4.

Time since birth

Eighteen studies reported (average) length of time between birth and participation in study. Two studies were conducted within the first week after birth, eight within three months, seven within six months and one within a year.

Stage of pandemic

Studies did not always specify in which stage of COVID-19 they occurred; however, 24 either provided this data or provided the dates of the study. Dates and length of each of these studies can be seen in Table 2. This shows that many studies took place around early to mid-pandemic.

Restrictions

Studies were unable to report exactly what restrictions were in place as this varied across participants and across recruitment sites, as well as changing across period of the pandemic. Common restrictions reported more generally were birth partners not being present for labour, birth partners not being present for birth, limitations on number of birth partners allowed (which also limited professional birth partners, such as doulas, if desired), limited access to preferred birthing method or pain relief, separation from baby immediately after birth, not able to perform skin-to-skin contact after birth, restrictions on birth partners staying after birth, and limited or no visiting post-birth.

Quantitative studies

Table 3 provides a summary of the 20 studies that included quantitative data including method, design, measures, participants, time since birth, stage of pandemic, and summary of results.

Study focus and measures.

There was a variety in the topics that studies focused on and in many cases, studies focused on multiple areas. Twelve studies looked at birth experience and trauma. Eight considered depression and five considered anxiety. Five examined specific COVID-related issues, four examined maternal relationships, and two measured discrimination and respect during the birth experience and subsequent hospital stay. Most quantitative studies (n=16) used at least one standardised measure. A full list of measures can be found in Table 4.

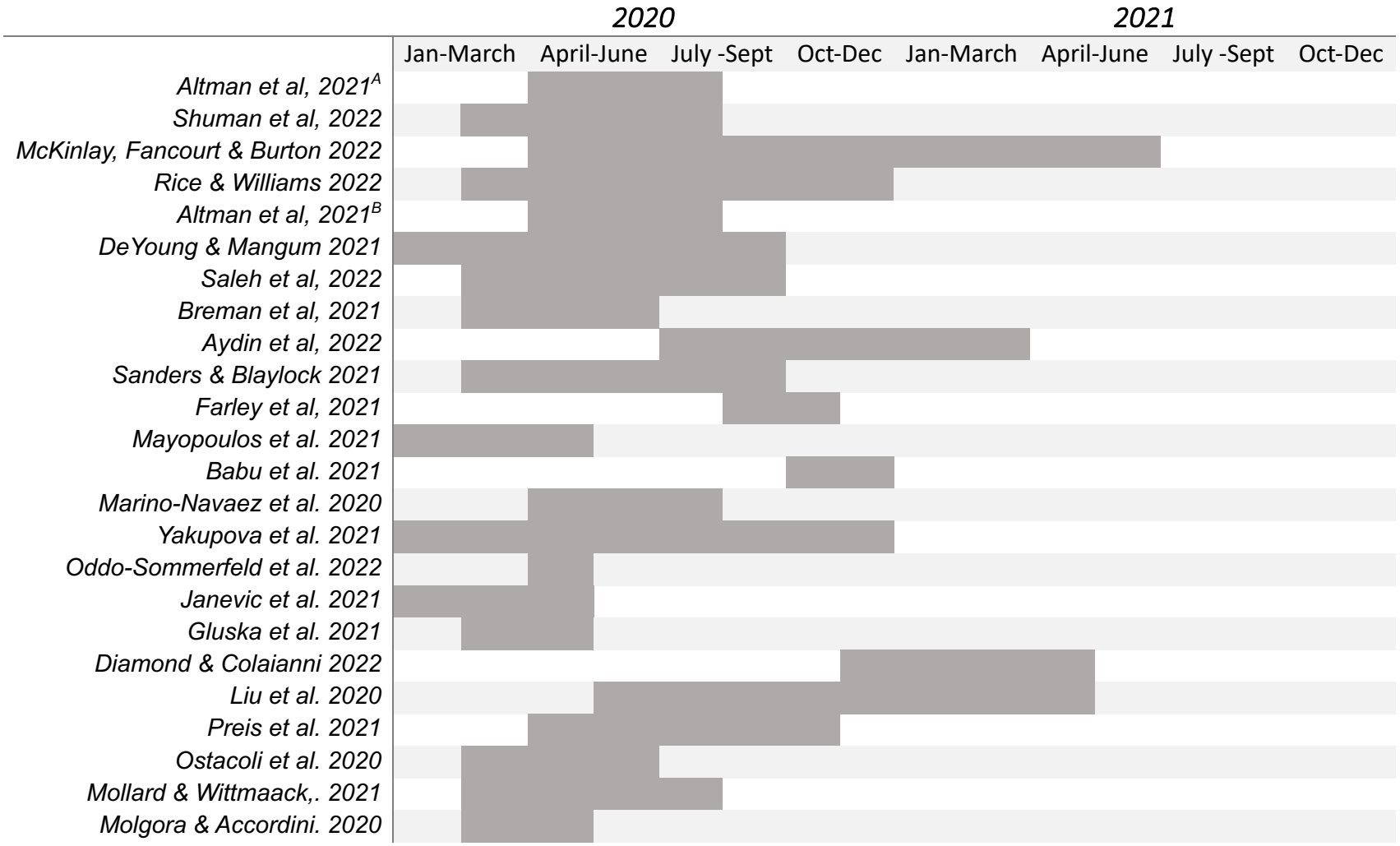

Table 2. Approximate dates and length of studies.

Author & Year	Country	Design	Time since birth	Participants	Measures	Results
Janevic, Maru, Nowlin, McCarthy Bergink, Stone, Dias, Wu, Howell, 2021	USA	Cross Sectional Survey – taken pre peak period and peak period	Unclear	237 women 9% Black 15% Asian 15% Latina 62% White	• Birth Satisfaction Scale - Revised • Discrimination in Medical Setting Scale • General Anxiety Disorder Scale • Patient Health Questionnaire • Perceived Stress Scale • Author created PTSD Checklist	43.1% birth satisfaction pandemic vs 58.6% non-pandemic (p=0.042) High proportion reported at least one discriminatory event. >discrimation scores for 'other (85.7%)', 'black(40%)' and 'Latina 35.3%)' >Birth satisfaction associated with lower anxiety (p=0.047) and PTSD (<0.001). >discrimination = > stress (p=0.001) & PTSD (p=0.021)
Mayopoulos, Ein-Dor. Dishy, Nandru, Chan, Hanley, Kaimal, Dekel, 2021	USA	Group matched survey	Average – 2 months	1611 women VS 640 pre covid Mean age - 32 No ethnicity data	• Peritraumatic Distress Inventory • Posttraumatic Stress Checklist • Life events checklist • Mother to infant bonding scale & Maternal attachment inventory	Pandemic group had significantly higher stress response to childbirth than control (rank 582.19 Vs 531.21). z=2.65, p.008, r=.07, 95% CI=.02.13 Higher acute stress was associated with more PTSD symptoms β = .42, p < .001*)* and problems with maternal bonding (β = .24, p < .001; β = .26, p < .001*)*
Gluska, Mayer, Shiffman, Daher, Elyasan, Eila,	Israel	Online survey	10 weeks	421 women Average Age - 31.5 (+-5.3 years)	• PPE questions • Fear of COVID Scale • Birth stress questions • City Birth Scale	Women who report high impact of PPE (9.2%) has significantly higher depression score 8/4 (+-5.8 VS 5.7 +-5.3) and higher total CITY BITS scores

Weiner, Miremberg, Kovo, Biron-Shental, Helpmann, Gabbay-Benziv, 2021				78.1% Jewish 22.9% Arabic	• Edinburgh Postnatal Depression Scale	9.2+-10.3 VS 5.8+-7.8. (Both <0.05) even adjusted for 'fear of covid' scores but Fear scores and stress during delivery explained PTSD scores but not PND ß = 0.103, 95% confidence intervals [CI] 0.029–1.006, p = 0.038).
Saleh, Canclini, Greer, Mathison, Shanna, Combs, Dickerson, Collins, 2022	USA	Online surveys and interviews	Unclear	32 women 31.6 (3.36) 78% Non Hispanic white, 15.6% Hispanic/Latino 3.1% Black 3.1% multi-ethnicity	• Perinatal Anxiety screening scale • Edinburgh Postnatal Depression Scale • Coronavirus Perinatal Experiences Impact Survey and • Impact update	Less pain management options available (access to doula walking, birthing ball etc) 46% had mild to moderate anxiety and 28% severe anxiety. EPDS – 34% indicative of depressive symptoms
Breman, Neerland, Bradley, Burgess, Barr, Burches, 2022	USA	Online survey – closed and open ended questions	Unclear	388 99.7% female identifying Age - 31.5 (+-5) 80.7% white 7% Black 12.3% 'other'	• Listening to mothers in California survey • The Mothers on Respect index	Black P's reported lower respect index score (estimate = 68.71, 95% CI = 64.79 to 72.63, *P* = 0.0123), (crossed into moderate respect) compared to white Ps (estimate = 72.33, 95% CI = 70.65 to 74.01 (only having high respect).
Babu, Chan, Ein-Dor, Dekel, 2022	USA	Online survey	Average 2.23 months	2205 women during pandemic	• Demographics	34.1% reported some degree of post traumatic growth and 26.35% reported more substantial growth. Commonly

				544 before pandemic comparison Age - 31.98 (+- 4.54) 86% Non Hispanic white	• Post traumatic-growth inventory expanded • Peritraumatic distress inventory • Posttraumatic Stress Checklist • Maternal attachment inventory	endorsed was appreciation for life followed by personal strength. Only during the pandemic were indirect paths from childbirth related acute stress to PTSD and bonding via post traumatic growth. (99 % bias-corrected CI -0.029, − 0.002 for CB- PTSD, and 0.006, 0.028 for mother-infant bonding).
Aydin, Glasgow, Weiss, Kahn, Austin, Johnson, Barlow, Lloyd-Fox, 2022	UK	Context of pregnancy, infancy and parenting study (online survey) open and closed	< 6 months	477 85.53% white 2.72% Black 1.46% Asian 3.14% mixed 0.4% other	• Authors own questions	33.2% expressed positive sentiment 19.9% neutral and 46.9% positive Most negative sentiment in relation to first lockdown
Asali, Farladansky-Gershnabel, Hasky, Elbaz, Fishman, Ravid, Wiser, Biron-Shental, Berkovitz Miller, 2022	Israel	Cohort study Saliva cortisol measurements and emotional stress scale	Immediate	36 COVID time 29 +- 4.7 49 pre COVID Matched No ethnicities provided	• Saliva cortisol measurements • The Stress Scale	No difference in cortisol during labour but difference in psychological stress during full dilation phase (6.2+-3/4 VS4.2+-3) 6.2 ± 3.4 *vs.* 4.2 ± 3, *p* ¼ .009; Lower cord cortisol in covid group (7.3+-2.3 VS 13.6+-3.8)
Sanders, Blaylock, 2021	UK	Online survey	< 6 months	171 women 85.9% White British 9.4% white Other	• Own created survey. Mixed methods	71.9% reported feeling lonely, 43.7% being very unhappy, and 57.5% feeling they needed visitors to provide practical support Also, positives of wards being peaceful.

				3.4% Asian 0.8% Black		31.6% staff PPE had no impact, 22.6% felt safer but 19.2% felt it made communication more difficult. 13.6% found staff PPE unsettling or scary
Marino-Narvaez, Puertas-Gonzalez, Romero-Gonzalez, Peralta-Ramirez, 2020	Spain	Survey – both face to face and online 33.84+-4.45	1 month	162 women 82 pre COVID birth, Mean Age – 34.57 (+-4.81) 75 during COVID birth, Mean age 33.84 (+-4.45) No ethnicity data reported	• Birth Satisfaction Scale – Revised • Edinburgh Postnatal Depression Scale	Women giving birth during the pandemic had worse perceptions of their medical care received (*U* = 2703.50; *P* = 0.041) as well as greater childbirth related stress *U* = 2652.50; *P* = 0.040) Differences in percentage of women who developed PND (pre was 22.4% and post pandemic with 37.3%)
Farley, Edwards, Numangoglu, Phillips, 2021	South Africa	Online Survey open and closed questions	< 10 months	496 women gave birth from Jan 2020-Oct 2020 32 (+-4) No ethnicity data reported	• Sociodemographic • Emotions around birth and early parenting • Edinburgh Postnatal Depression Scale	Prior to lockdown – more likely to have preferred method of birth (65 vs 55%), less skin to skin (86% vs 75%). More reported negative birth experience (4% vs 23%), affected birth experience (21% vs 78%), not able to have someone at birth (8% vs 47%) earlier discharge (6.4% vs 32.6%). Positive VS negative emotions (80% vs 20%). Reasons for negative were traumatic (8%), disconnected (7%) and not having partner (7%). Preferred delivery – reduced negative emotions. Mother self reporting covid impacts on birth = more

						negative emotions. Negative emotions increased odds of minor depression. THEMES
Yakupova Suarez & Kharchenko, 2021	Russia	Online	Average 6 months +- 3 months	1645 women who gave birth during the pandemic, age 30.98 (+-4.42) 611 who gave birth before, age 31.17 (+- 4.54) No ethnicity information reported	• The demographic pregnancy and childbirth experience questionnaire • City Birth Trauma Scale • Edinburgh Postnatal Depression Scale	Support person during labour decreased frequency of medical intervention (Person Chi – 37.55, p<- 0.001) (both before and during pandemic). Not significant but more obstetric violence during pandemic. Stat sig was verbal aggression and bullying (Person Chi-Square = 6.79, p=0.009). Presence of partner/doula/private midwife decreased frequency of obstetric violence. No differences PTSD and PND pre and post pandemic although there were links between more medical intervention and obstetric violence during childbirth
Oddo-Sommerfeld, Schermelleh-Engel, Konopka Rosa, Louwen, Sommerland, 2022	Germany	Survey	1-3 days	27 women who gave birth during complete visiting bans (UG) mean age 34.19 (+- 3.14) 27 women who gave birth in pandemic but had partners	• World Health Organization Well-Being Index • Impact of Event Scale • Hospital Anxiety and Depression Scale • Self-generated questionnaire	UG showed higher scores in psychological distress measures (23% VS 3.7 for anxiety, 34.6% VS11.1%PTSD and 11.5% depression, 42.3% vs 22.2% for low well-being). Women who were UG and CS suffered sig more with partners absence and all emotions were rated stronger in this group – anger anxiety, helpless,

				allowed (AG) Mean age 34.56 (+- 1.69) No ethnicity data reported		
Diamond & Colaianni 2022	USA	Cross Sectional online survey	65% <6 months	269 people who gave birth during Covid 265 female 4 other White/non – Hispanic = 228 African American/African/Black/non-hispanic – 7 Asian or Pacific Islander – 7 Hispanic/Latino/ Chicano – 17 American Indian or Alska Native – 2 Multi-ethnic – 5 Other - 3	• City Birth Trauma Scale	Three different sets of PTSD (full diagnostic criteria -5.9%, partially symptomatic – 72.3% and no symptoms (21.9%). After adjustments – rank order had sig effect limited length of stay for support person during birth and labour p=.001, one support person, same person throughout labour and birth p=.003, wearing a mask during labour and birth p.003, changed support person presenting during labour and birth p=.006, change in BF plan p=.006 and changed location of birth (p=.009) Regression model – all 6 variables entered in were significant, strongest predictor of PTSD were related to support person with limited length of stay and support (p =.001) and change of support person for labour and birth(p=.001) being the strongest and most sig. Mask mandates were next p=.006.

Liu, Koire, Erdei, Mittal, 2020	USA	Cross sectional survey	Mean – 9. 38 weeks	506 women Mean age – 33.1 White – 89.5% Black/African American – 0.6% Hispanic or Latino – 4% Asian or Pacific Islander – 3.4%	• Pre pregnancy mental health diagnosis • Two-Way Social Support Scale • Distress Tolerance Scale • Connor-Davidson Resilience Scale • Epidemic-Pandemic: Impacts Inventory • Labor and Delivery Supplement (adapted) • Centre for Epidemiological Studies Depression Scale • General Anxiety Disorder Scale • PTSD Checklist	45.8% report support people not permitted to attend delivery 13.2/12.1% reported reduced access to medications and healthcare provider unable to attend birth. 3.6% separated from baby after delivery 2.6% separated for a long time. Change to CS 5.9% Location to delivery 4.3% Higher levels of social support, distress tolerance and resilience were sig associated with lower levels of depression, GAD and PTSD. Specific unexpected birth experiences due to COVID associated with depressive and PTSD symptoms. Reduced access to medication associated with high levels of depressive symptoms B=.134, p=<.002.
Preis, Mahaffey, Heiselman, Lobel, 2021	USA	Survey	Unclear	2341 women 31.5 years (+-4.4 years) Non-Hispanic White – 84.8% Non-White and/or	• Psycho-social factors • Pandemic related prenatal perception • Pandemic related obstetric factors • Childbirth satisfaction Scale	Linear effect of Intrapartum Accompaniment on Birth satisfaction was observed. 50 women who had no accompaniment has sig lower levels of birth satisfaction. F=33.55, p<0.001 Over half reported Intrapartum mask wearing some or all of the time and these women also had sig lower birth satisfaction (F=8.98, p<0.001).

				Hispanic./Latino – 15.2%		Hierarchical linear regression showed non pandemic factors explained most of the variance in BS and pandemic related factors explained the small but sig amount of variance beyond non-pandemic factors Associations between birth congruence and BS
Ostacoli, Cosma, Bevilacqua, Berchialla, Bovetti, Carosso, Malandrone, Carletto, Benedetto, 2020	Italy	Cross sectional survey	< 3 months	163 women 34.77 (+-5.01) Italian 90.8% European 4.3% Non-European 4.9%	• Obstetric factors • Childbirth experience • COVID-19 related questions • Edinburgh Postnatal Depression Scale • Impact of event scale • Relationship questionnaire (attachment style)	No difference between IES-R and EPDS, except for age. Women w/ ptsd and depressive symptoms were younger. PTSS prevalent in 42.9% and clinical cut off at 29.4%. Majority reported an insecure attachment style, dismissive-avoidant (38%) and fearful avoidant (15.8%), preoccupied attachment (5.1%). Level of pain during birth related to EPD score (OR 2.25 p=0.002). Relational attachment style was also significantly associated with risk of depression. Insecure style had sig higher risk of developing depression (OR 2.45, p=0.024). Perceived support from healthcare staff during birth was protective (OR 0.46, p=0.001). sig associations observed due to quiet ward (p=0.018) and postnatal symptoms (as protective factor). distress due to absence of women's partner., (p=0.057)

Mollard & Wittmaack, 2021	USA	Cross sectional survey	Unclear	855 women 84.8% white, non Hispanic, 9.2% Hispanic, 2.9% Asian, 1.4% black non Hispanic 1.8% other	• Author created own Pregnancy information • Self-reported health conditions • Support/safe in hospital	97.5% had birth partner present but only 39% reported adequate support. 82.6% were not separated from their new-borns and 89.2% roomed with their child during hospital. Higher rates of anxiety/depression than typically cited (33.8%vs20%) and (18.6vs12.7%)
Cigaran, Botezatu, Minecan, Gica, Panaitescu, Peltecu, Gica 2021	Romania	Cross sectional survey	Unclear	557 women – 123 gave birth during the pandemic Age and ethnicity data not reported	• 26 item team created questionnaire, including demographic and pregnancy related questions, perception of covid pandemic and impact on pregnancy and care	68.3% considered it difficult/very difficult to cope without partner during labour. 79.7% said it was difficult/very difficult without partner during the hospitalization period. 73.2% did not feel it impacted bonding with baby during hospitalization. Negative perception of not having partner there statistically associated with negative emotional conditions (p=0.036) df 8), moderate strong effect size Phi/Cramer's V = 0.347/0.246). Not having partner statistically associated with negative perception of health system (p=0.038(df4), moderate effect size (Phi/Cramer's V = 0.363/257) and negative perception of medical staff (p=0.001(df4) moderate/strong effect size (0.363/257). Significant associated between the -perception of relationship between mother and baby during hospital and not having partner during

						labour (p<0.001(df2) strong effect size 0.364) and - perception of not having partner during hospital (p=0.014 (df2) moderate effect size (Phi/Cramer V = 0.264)
Molgora & Accordini, 2020	Italy	Cross sectional study	< 6 months	575 389 pregnant and 186 postpartum. Mean age – 32.9 (+- 4.3) No ethnicity data collected	• Sociodemographic • Psychological wellbeing • Basic pregnancy and delivery info • Specific COVID-19 questions • State Trait Anxiety Inventory • Edinburgh Postnatal Depression Scale • Wijma Delivery Experience Questionnaire • Perinatal PTSD questionnaire	21% said partners were not admitted during childbirth and 10.8% stated that they were not admitted during hospital stay. Women who partners had not been present during birth were more likely to experience both clinically sig state (x2(1,167)=4.45, p=0.035) and trait anxiety (x2(1,166)=6.84, p=0.009) as well as develop PTSD (x2(1, 154)=4.58, p=0.032). Mothers who could count of their partners during delivery showed sig lower levels of PND (B=-0.147), p=0.049). PTSD higher for those with past psychological disorders, numerous complications or baby's health at risk but this was lower when partner was present (B=-0.230, p=00.18)
Kulak-Bejda Malinowska-Glen, Bejda, Slifirczyk, Waszkiewicz 2022	Poland	Questionnaire study	Unclear	363 women Group 1 mean age 33.09 (+- 4.7)	• Family Affluence scale • Edinburgh Postnatal Depression Scale • Standardised Basic Hope Questionnaire	109 with suspected PND (group1) and 254 without (group2) Group 1 was dominated by negative aspects of the hospital stay, such as severity of the need to limit family visits during stay (4.73 +-0.55) and the even fact of hospitalization (4.46 + - 0.76).

	Group 2 mean age 32.08 (+-4.6) No ethnicity data reported	• General self-efficacy Scale • De Jong Gierveld Loneliness Scale	Group 2 dominated positive aspects such as emotional support despite direct contact family (3.25 +-1.57) and support from midwives/nurses (3.25 += 1.48). Loneliness in group 1 (27.11+-6) was significantly higher than in group 2(21.35+-7.02) Sig relationship between severity of need for hospital during pandemic and feeling of loneliness Emotional support from doctors and basic hope Sense of loneliness and better hospital care during a pandemic than usual

Table 3. Details of quantitative (including mixed methods) studies involved

Study focus	*Measure*
Birth experience	• Birth Satisfaction Scale - revised (BSS – revised, Martin & Martin, 2014), • Perceived Stress Scale (PSS, Cohen, Kamarck & Mermelstein, 1983) • Childbirth Experience Questionnaire (CEQ, Dencker et al., 2010) • Wijma Delivery Experience Questionnaire (W-DEQ, Wiljma, Wijma & Zar, 1998)
Mental Health **Depression**	• Edinburgh Postnatal Depression Scale (EPDS, Cox, Holden & Sagovsky, 1987) • Patient Health Questionnaire (PHQ, Kroenke et al, 1999) • World Health Organisation Wellbeing Index (WHO-5) • Hospital Anxiety and Depression Scale (HADS, Zigmond & Snaith, 1883)
Anxiety	• General Anxiety Disorder Scale (GADS, Spitzer et al., 2006), • Perinatal Anxiety Screening Scale (PASS, Sommerville et al., 2014) • Hospital Anxiety and Depression Scale (HADS, Zigmond & Snaith, 1883) • State Trait Anxiety Inventory (Spelberger, 1983)
Post-Traumatic Stress **Disorder/Symptoms**	• Posttraumatic Stress Disorder Checklist Scale (PCL-5, Weathers et al., 1993), • Peritraumatic Distress Inventory (PDI, Brunet et al., 2001) • City Birth Trauma Scale (Ayers, Wright & Thornton, 2018) • Impact of Event Scale (IES, Horowitz, Wilner & Alvarez, 1979) • Impact of Events Scale – Revised (IES-R, Weiss, 2007) • Post Traumatic Growth Inventory (PTGI, Tedeschi & Calhoun, 1996) • Perinatal PTSD Questionnaire (PPQ, DeMier et al., 1996).
General wellbeing	• Distress Tolerance Scale (DTS, Simons & Gaher, 2005) • Conor-Davidson Resilience Scale (CD-RISC, Connor & Davidson, 2003) • Basic Hope Inventory (BSI, Trezbinski & Zieba, 2004)

	• General Self Efficacy Scale (GSE, Chen, Gully & Eden, 2001) • De Jong-Gierveld Loneliness Scale (Jong-Gierveld & Kamphuls, 1985)
Other: **Attachment**	• Maternal Attachment Inventory (Muller, 1994) • Mother to Infant Bonding Scale (Taylor et al., 2005)
Discrimination	• Discrimination in Medical Setting Scale (DMS, Peek et al., 2011) • Mothers on Respect Index (MORi, Vedam et al., 2017)
Pandemic specific	• Fear of COVID Scale (Ahorsu et al, 2020) • Epidemic Pandemic Impacts Inventory (EPII, Grasso et al., 2020)

Table 4. Standardised measures categorised by area of focus

Birth experience

Many studies examined how restrictions impacted on birth experiences, and some were able to provide comparison groups from before the pandemic. For example, Janevic et al. (2021) compared pre-pandemic to pandemic birth experiences and found higher birth satisfaction pre-pandemic. In Russia, Yakupova et al. (2022) found support-person presence during birth decreased the frequency of medical intervention before and during the pandemic, whilst presence of partner/doula/private midwife also decreased the frequency of obstetric violence during and before the pandemic. Obstetric violence is defined as mistreatment during childbirth, ranging from humiliation, coercion, and unconsented clinical care to instances of verbal and physical abuse (Kukura, 2017). These are important findings considering wide restrictions imposed on partners and private professionals. Five percent more women experienced instances of obstetric violence during the pandemic, as compared to previous years; this reached levels of significance for verbal aggression and bullying.

Although we cannot definitively say this is due to restrictions, it is likely this was worse due to a lack of a support person to advocate and provide comfort.

Marino-Navarzez et al. (2021) used the Spanish BSS-R and compared participants' birth satisfaction before and during pandemic. There was a significant difference in subscales of stress and quality of care, with women giving birth during the pandemic experiencing worse perceptions of medical care and greater childbirth stress. However, they found no significant difference in total birth satisfaction. From a physical perspective, Asali et al. (2022) compared pandemic births with pre-pandemic births, both of which received the same pain relief, but found lower cortisol levels in umbilical cords for COVID births, indicating more chronic stress. The psychological stress scale during birth showed significantly higher stress for the COVID-19 delivery group during full dilation phase, which is when a person is typically in a pushing stage of labour. Farley et al. (2022) also compared people who gave birth before and during lockdowns, finding participants more likely to have their preferred method of birth pre-lockdown, as compared to those who gave birth during later lockdowns. Having the preferred birth method (e.g., water birth, vaginal delivery, caesarean) was found to reduce the odds of having negative birth emotions. This is in line with studies finding that changes in birth plans (Mei et al.,2016) and changes from expectations (Webb et al., 2021) impact birth experience. Farley et al. (2022) also found that there were fewer babies placed skin-to-skin after birth during lockdown and 4% reported a negative birth experience pre-lockdown compared to 23% during lockdown. Seventy-eight percent of participants felt the pandemic had affected their birth experience and almost half reported that someone who they wanted to be at their birth was not there because of the pandemic.

Some studies did not provide comparisons to pre-pandemic birth, which is a limitation. However, there are still significant results around impact of restrictions on birth experience. Mollard and Whitlock (2021) found that even though 97.5% of their participants had a birth partner present, only 39% reported adequate support during labour. Although most women were not separated from their infant (82.6%), it was observed that 17.4% were separated and 10.8% were not allowed to room-in with their infant during the hospital stay. Participants reported that 20.5% of the time they did not feel safe giving birth in the hospital during the pandemic.

Focusing on birthing partners, Cigaran et al. (2021) reported 68.3% of their participants considered that it was difficult or very difficult for them to cope without their partner for labour. Seventy nine percent considered it difficult or very difficult to cope without a partner for the hospitalization period. This suggests that women found it more difficult with restrictions after birth than during and important to keep in mind, with many studies examining the loss of a partner *during* labour, the loss of a partner after might not be as well understood. There was a significant association between those with negative emotions about the pandemic, negative perceptions of health system, medical staff and those who found labour more difficult without their partner. This implies that those who were fearful already were more likely to significantly feel the loss of a birth partner. They also found a significant association between negative perception of relationship between mother and baby during hospitalisation and negative perception of not having partner present for the birth or hospitalisation.

Interestingly, Oddo-Sommerfeld et al. (2022) compared the impact of partner restriction on women who had different methods of delivery and found that those who had caesarean sections suffered significantly more from their partner's absence, rating stronger emotions with significantly higher ratings on feelings of anger, anxiety, helplessness, frustration, worry, and depression. Preis et al. (2022) found a linear effect of support person during birth, on birth satisfaction and the 50 participants in their study without a support person had significantly lower levels of birth satisfaction. Additionally, women who had to wear a mask for some or all their birth reported lower birth satisfaction than those not made to wear a mask. It is important to note that in this study, non-pandemic factors, such as place and method of birth, were found to explain the majority of variance in birth satisfaction; however, pandemic-related factors still explained a small but significant amount.

Continuing to examine the impact of mask-wearing, Gluska et al. (2021) asked participants to rate the impact of PPE using a scale of 1-5 (1 – not at all difficult, 2- a little bit difficult, 3 – fairly difficult, 4 – very difficult, 5 - extremely difficult), with 9% reporting a high impact of PPE, which was a rating of 4 or more. This study used an author created measure rather than a standardised measure to examine the impact of PPE; however, it did use standardised measures alongside this. Sanders and Blaylock (2021) found that 14.5% of their participants were required to wear a mask or other PPE during labour. For 31.6% the wearing of PPE by staff had no real impact on them and 22.6% felt safer. However, 19.2% said it made communication more difficult and 13.6% found staff wearing PPE unsettling or scary. Overall, 88.4% reported changes to postnatal visiting policies with 49.9% feeling that staff had been too strict with implementing policies. In total, 71.9% of participants felt lonely, 43.7% felt unhappy,

and 57.5% reported feeling that they needed visitors to provide practical help not provided by staff. Participants also reported some positive aspects of restrictions, such as 52.2% agreeing that wards were peaceful and 49.7% stating that they enjoyed the time with just themselves and their baby. Once again, this study used an author created measure to examine the impact of PPE, alongside a relatively small sample size, and results should be considered in this context.

A study in the UK by Aydin et al. (2022) found that 40.2% of participants felt uncertain about restrictions relating to birth partners and a 14.9% were unaware prior to birth if birthing partners could be present. During birth, 96.2% of participants had a birth partner present. Sentiment was also examined by coding if a participant's tone was positive, neutral, or negative. Overall, 46.9% expressed negative sentiment about their birth experiences and 19.9% appeared neutral, compared to 33.2% who expressed positive sentiment. Participants showed a consistent negative sentiment towards their birthing experience during the first national lockdown. There were more positive sentiments about later lockdowns, suggesting that as the pandemic progressed and restrictions eased, there was a shift in emotional perception associated with giving birth. Although results are of note, Aydin et al. (2022) only used author created questions and created sentiment themes based on responses to a small number of questions, therefore it is important to look at these results alongside other studies. Mayopoulos et al. (2021) found higher acute stress response to childbirth during the pandemic compared to pre-pandemic. This higher acute stress response significantly mediated the path between study group and maternal bonding.

In America, Saleh et al. (2022) asked participants what pain management options they desired in their birth plan and if this was available during birth due to ongoing restrictions in hospitals. Pain management options included 31.3% of participants who desired a doula and only 9.4% were able to have them present. Fifty nine percent planned to walk around during labour but only 21.9% were allowed. This study had a smaller sample size (n=32) than most; however, this is still of concern that birthing people were unable to utilise certain pain management methods, when Ostacoli et al. (2020) found that pain during childbirth was associated with depressive symptoms. A protective factor was support by healthcare staff. A further protective factor was the quiet on the ward because of the absence of visitors during hospitalization, again showing that restrictions could sometimes produce a positive experience.

Maternal mental health

Post-Traumatic Stress

Many studies found negative birth experiences were associated with Post Traumatic Stress Disorder/Symptoms (PTSD/S). For example, revisiting Janevic et al. (2021), it was found that higher birth satisfaction was associated with lower postpartum anxiety and birth-related PTSD. Mayopoulos et al. (2021) found women giving birth during the pandemic had significantly higher stress responses to childbirth than matched controls. A strength of this study was that it was able to demonstrate that acute stress in childbirth significantly mediated the paths between COVID-19 birth group and PTSD. Unexpected birth experiences due to COVID-19 were reported by Liu et al. (2021) and shown to have subsequent impact on depressive and PTSD symptoms. These birth experiences included 45.8% of participants who reported support people not able to attend baby's delivery, 13.2% having reduced access to preferred

medications, 4.3% being separated from baby immediately after delivery, and 3.6% being separated for long periods after delivery. Reduced access to preferred medication was associated with higher levels of depressive symptoms, while other changes were associated with higher levels of PTSD symptoms. This is in line with the results of Saleh et al. (2022) discussed above. Diamond and Colaianni (2022) found six variables had significant effect on PTSS after birth: limited length of stay for support person during labour and birth, one support person, same person throughout labour and birth, changed support person who were present for labour and birth, being required to wear a mask during labour and birth, change in breastfeeding plan, and changed location of birth. A regression model showed all remained significant, the strongest predictors of PTSS were related to support persons, with limited length of stay of support persons during labour and birth and change of support person for labour and birth being the strongest most significant predictor of symptomology. This was followed by mask mandates during labour and birth. A strength of this study is its ability to explicitly connect restrictions to PTSS, with four of the six predictors being overtly due to restrictions.

Not all studies found significant differences in PTSD scores. Yakupova et al. (2022) conducted their study in Russia and found no notable changes in the prevalence of significant symptoms of PTSD from before and during the pandemic. A step further than this, Babu et al. (2022) found 34.1% of participants experienced post-traumatic growth (PTG) after giving birth during COVID-19, when using a large sample size (n=2749). They reported higher appreciation for life, followed by personal strength resulting from the experience. Only when giving birth during COVID-19 (not before), was childbirth-related acute stress linked with elevated PTG. Overall, PTG facilitated

maternal coping after traumatic childbirth and was associated with fewer symptoms of PTSD. Maternal perception of positive psychological change was significantly associated with healthy postpartum outcomes.

Depression and Anxiety

Marino-Navarzez et al. (2021) found statistically significant links between birth satisfaction and COVID-19, they also found differences in the percentage of women who developed PND after giving birth during the pandemic, with an increase of almost 15% compared to pre-pandemic. Oddo-Sommerfeld et al. (2022) were able to connect restrictions to PND when they compared women who gave birth accompanied and unaccompanied during the COVID-19 pandemic. Women in the unaccompanied group showed higher levels of psychological distress including anxiety, depression, and lower mental wellbeing. Although higher scores in the unaccompanied group, the differences were not statistically significant. Levels of depression were higher in the unaccompanied group with differences reaching significance. In Italy, Molgora and Accordini (2020) found that women whose partners were not present during delivery were more likely to experience clinically significant state and trait anxiety, as well as more likely to develop postnatal PTSD. Mothers who could count on partner support during delivery showed significantly lower levels of PND and scored lower on negative childbirth experiences. In Poland, Kulak-Bejda et al. (2022) separated out participants by scores on the EPDS as those with suspected PND and those without. Those with higher scores reported more negative features of hospital stay, including limiting family visits. It is difficult to ascertain if this is a memory bias or causal.

Sociodemographic backgrounds

Racial/Ethnic backgrounds

Three quantitative studies – all conducted in United States – explicitly looked at differences in experiences for those from different racial/ethnic backgrounds. Janevic et al. (2021) found higher healthcare discrimination associated with birth during the pandemic (42.1%) vs. pre-pandemic (14.3%). This was highest among women who identified as 'other' (85.7%), which included ethnicities such as West Indian, Indo-Caribbean, Native Hawaiian/Pacific Islander, Mixed Ethnicities, followed by Black (40%), and Latina (35.3%). The lowest healthcare discrimination was found in White (37.6%) and Asian (32.4%) participants. Higher discrimination was associated with greater postpartum stress and birth-related PTSD. Participants attributed the main reason for this discrimination to the pandemic, citing stressed or overworked staff, or staff fear of patients having COVID-19. Overall, 60% Asian women, 38% Black women, 25% Latina women and 2% white women attributed their discrimination treatment to race, ethnicity or national origin.

Lyengar et al. (2022) matched non-Hispanic White women who gave birth during COVID-19 with Black and Hispanic individuals. The minority group was three times more likely to report clinically relevant acute traumatic stress to childbirth and two times more likely to report PND than non-Hispanic White women. For those exposed to trauma, stress symptoms at this level were indicative of risk for PTSD. These results remained significant even after controlling for mental health, abuse history, prior pregnancy complications, and complications associated with delivery. They also noted that the minority group experienced fewer incidences of immediate mother-infant bonding behaviour, such as being given skin-to-skin contact.

Breman et al. (2021) used the MORI and found that Black participants reported a lower respect score than White participants, of which crossed into moderate respect and low respect. White participants only reported high respect scores. In this study, 36.1% participants felt pressured to have either a caesarean section or induction, although the majority did not think this pressure was due to COVID-19. Black participants had a higher odds ratio compared to White participants of attributing this pressure to COVID-19.

Age

All studies reported ages of participants; however, only two found any association with birth experience/maternal mental health outcomes. Janevic et al. (2021), found age was marginally associated with lowest birth satisfaction, with those aged 25-29 having lower scores. Ostacoli et al. (2020) reported that women with postnatal PTSS were more likely to be younger.

Author/Date	Country	Design	Participants	Relevant Main Themes	Time since birth
Altman, Eagen-Torkko & Mohammed, 2021 [A]	USA	Semi Structured Interview	14 women, 1 transgender male. Median age -31 40% African American 40% White 20% Asian 7% Latinx 7% Indigenous Only 60% given birth before interview	Policies not equitable and disproportionately impact BIPOC families. - Those who cultural norms to have more family present at birth - Rules applied unfairly, benefitting white and English speaking families Restricting visitors had a profound impact on experience of pregnancy and birth - Loss of control - Fear	Median – 4 weeks
Shuman, Morgan Chiangong, Pareddu Veliz, Freidman Peahl & Dalton, 2022	USA	Free text survey	371 women Age 18-35 91.9% white 0.8% African American or Black 4.6% Hispanic or Latinx 3.5% Asian 0.5% Native American 0.5% Pacific Islander 0.3% Other	Unexpected Hospital policy changes shifting birthing plans - Change of plans, more medical births or inductions - Loss of additional partners for support Expectations VS Reality - Mourning what the experiencing should have been Surprising benefits of the COVID-19 pandemic to the delivery and postpartum experience - Alone time in hospital with baby and husband	< 6 months
McKinlay, Fancourt & Burton, 2022	UK	Semi Structured interviews	19 women Age – 20-39 14 White British 5 Mixed Race 3 White Other 1 Black African	Mental health consequences of birth partner and visitor restrictions - Upset about partners being excluded from healthcare interactions - Stress of decision making and help seeking without partners present Maternity services under pressure	Unknown

				- Emotional impact of delays and staff shortages - Lack of clarity around social distancing rules within healthcare settings Lack of connection with staff - Communication difficulties - Prevention of touch due to COVID-related restrictions	
Rice & Williams, 2022	Canada	Semi Structured Interview	67 cisgender women but only 59 had given birth Average age – 34 years- Ethnic or gender minority – 12	Reduced care - Scaled back postpartum care in hospital Increased medicalisation - Biomedical technologies only option for managing due to restrictions - Lack of pain management options - Medical intervention in response to pandemic pressures - Offered ceserean section due to pandemic pressure, helping to control workflow	Unknown
Altman, Gavin, Eagen-Torkko, Kantrowitz-Gordon, Khosa, Mohammed, 2021 [B]	USA	Semi structured interview	15 self-identified women Median age – 31 40% Black/African American 40% white 20% Asian 7% Latinx 7% indigenous	Impacts from COVID-19 on patient care - Changes in care from perceived risk - Changes in care related to racism and discrimination	Median – 4 weeks
DeYoung & Mangum, 2021	USA	Free text survey	192 women 18-59 years old	General Stress	91% 6 months or less

			88% white 5% Hispanic/Latinx 2.48% Asian or Pacific Islander 2% prefer not to indicate	• Changing information about what birth will be like, fear of infection and weighing risks of monitoring with infection. Health protocols concern • Scared of hospitals • Distress from restrictions meaning additional birth partners such as doulas not being present • Fear of being separated from baby post birth • Discomfort at wearing masks during delivery	9% over 6 months
Saleh, Canclini, Greer, Mathison, Shanna, Combs, Dickerson, Collins, 2022	USA	Online surveys and interviews	32 women Average age - 31.6 (+-3.36) 78% Non Hispanic white, 15.6% Hispanic/latino 3.1% Black and 3.1% identified as more than one race	Expectations versus reality • Impact of hospital policies • Biological and medical factors Early VS late covid • Differing restrictions and difficulties across stages of COVID Mental distress versus mental health • Hard, tough, lonely depersonalized, isolated, anxious terrified VS learning to live a new normal and grow with this. Healthcare policy VS COVID-19 confusion • Uneven and haphazard policies, early groups had delay in inductions, isolating to single rooms • forgo birth plans including non medical pain management.	Unclear
Breman, Neerland, Bradley, Burgess, Barr, Burches, 2022	USA	Online survey – open ended questions	388 women Average age -31.5 (+-5) 80.7% white &% Black 12.3% ‘other’	Institutional policies Changes in care Hospital staff interactions Sub-par care	Unclear

			99.7% female identifying 85% married 85.3% insurance	Issues of support during labour. Mental health	
Aydin, Glasgow, Weiss, Kahn, Austin, Johnson, Barlow, Lloyd-Fox, 2022	UK	Online survey - open ended questionnaire	477 women 85.53% white 2.72% Black 1.46% Asian 3.14% Mixed 0.4% other	No changes to birth plan - No changes due to COVID Covid related changes to birth plan - Feeling pressured to have interventions so partners could attend - Feeling impersonal, rushed and alone Communication - Unclear and causing anxiety VS good communication Impact of fluctuating COVID related guidance - Restrictions changing daily, no one knowing what would happen, different guidance in different places Anxiety and stress related to changing guidance - Not being confident that birth partner would be present, being scared without partner, staff empathy at discussing this	< 6 months
Sanders & Blaylock, 2021	UK	Online survey – Free text	524 women but only 171 given birth 85.9% White British 9.4% white Other 3.4% Asian 0.8% Black	Care during labour and birth - Unmet expectations and use of private services - Entering maternity units alone and in pain and partners missing births Hospital postnatal stay - Postnatal visitation policies resulting in distress	< 6 months

Farley, Edwards, Numangoglu, Phillips, 2021	South Africa	Online Survey open and closed questions	496 women gave birth from Jan 2020-Oct 2020 32 (+-4) No ethnicity data reported	Social exclusion and isolation - impacted on stress and anxiety, created social isolation and loneliness. - Small minority felt it gave time for just them and partner to bond (in cases partner was allowed) Rapidly modified health services impact experiences of quality and quantity of care - Testing protocols, reduced availability of care i.e. lactation consultants. Unclear policies and conflicting advice/procedures, forced separation from new-borns partners not meeting baby until discharge. Positive birth experience can support positive transition to parenthood *Feelings of empowerment and ability to cope, linked to bonding experiences between mother/baby*	< 10 months

Table 5. Details of qualitative studies (including mixed method)

Qualitative studies

Data driven thematic synthesis was conducted on the six qualitative studies and qualitative data from the five mixed method studies, which can all be seen in Table 5. Table 6 shows a summary of the overarching analytical themes, their content, and the studies contributing to these themes.

Change

COVID-19 restrictions meant that birthing people needed to change their preferred plans for birth of their child, sometimes with warning and sometimes suddenly. People opted for more medicalised planned care, such as induction or Caesarean section, to either avoid certain restrictions or to have partners in for the whole process. The reverse was also seen, with people avoiding medicalisation as this might mean longer stays in hospital alone after birth. Limited access to pain relief or non-medical management, such as walking, gas and air, or water, also meant people did not have the birth experiences they wanted or felt forced to follow a more medical management of their birth.

Neglected

Birthing people experienced changes in care, due to perceived risk of COVID-19 and subsequent restrictions, which resulted in them feeling neglected either during or predominantly after birth. Birthing people who remained in hospital had fewer interactions with nurses and felt less well cared for, reporting feeling abandoned in side-rooms after partners had left and were not allowed to return. This care felt inadequate for some, and studies suggested that staffed were perceived as lacking compassion and/or the ability to meet birthing people's needs, with some reporting

being left in pain, alone. There was also less access to certain professional groups to help whilst in hospital, for example, lactation consultants.

Emotional Wellbeing

For some birthing people, restrictions had a profound impact on their experience and emotional wellbeing. This was primarily at the restriction of birth partners not being able to attend or remain after birth, including professionals such as doulas. The predominant emotions reported were around fear, sadness, anxiety, and isolation. Additionally, there were reports of distress from wearing masks during labour, meeting their baby for the first time with a mask on, and fear of separation from their baby after delivery. This theme also included birthing people feeling pressure to make decisions by themselves because of partners not being present and feeling pressured by healthcare workers due to lack of partners to advocate for them.

Confusion

Uncertainty was a flagstone of the pandemic for birthing people. There was confusion around restrictions, policies, and the implications of these. Studies found a lack of clarity around social distancing rules and how these were communicated, as well as restrictions changing almost daily, creating an inability to prepare physically or emotionally. Birthing people reported differences in guidance in different places and feeling that policies were uneven and haphazard. This theme also included the confusion that birthing people felt around COVID-19 risk and weighing up options for themselves based on restrictions and risk.

Positives

Although the impact of restrictions was found to be negative overall, some studies did provide an insight into positive aspects of experience for birthing people. Restrictions excluded those who were not wanted at the birth and could provide a more relaxing birth experience. Studies also reported protected bonding time for mother and baby in the hospital, feelings of empowerment and ability to cope.

Additional Themes

These are themes that although not frequently reported, provide a significant insight.

- *Discrimination*

Altman et al. (2021) found that policies were not equitable, and disproportionately impacted Black, Indigenous and people of colour (BIPOC) families. This was partly due to typical larger family structures and cultural expectations and norms around who is present for birth. It was also considered how restrictions often left BIPOC with less advocacy. Birth partners for BIPOC are considered advocates in a system which has well-documented disparities for specific communities. Without these support people, participants reported more discrimination and mistreatment from healthcare professionals. They felt this was magnified, due to the complex interplay of the pandemic and racism. Finally, there was a perception that rules were more likely to be modified for White and English-speaking families.

- *Differences in Early and Late COVID-19.*

Saleh et al. (2022) identified that there were key differences in experience, dependent on which stage of COVID-19 the birth occurred. For example, those very early on

experienced more pressure for medical intervention to deliver baby *before* restrictions were put in place. Following this, the early stages were filled with confusion given the ever-changing nature of restrictions, whereas, as the pandemic progressed, restrictions became more stable and predictable. Later stages of COVID-19 were impacted by the availability of vaccinations and easing of restrictions, which, overall, may have been perceived as positive but also increased anxiety and sense of risk for some.

Overall theme	Theme breakdown	Studies included
Change	• Changing birth location to avoid hospital restrictions and increase social support i.e. homebirths due to being allowed doulas • Electing for inductions to avoid restrictions. • Induction or caesarean section to allow partners in from beginning. • Increased medicalisation due to reduced opportunities for other management such as walking around or water birth. • More pressure to avoid medicalisation to reduce hospital stay time without visitors. • Limited access to certain pain relief such as gas and air so needing more medical intervention such as epidural. • Expectations of what women wanted and what they had being different.	Shuman et al. (2022) Altman et al. (2022_B) Rice & Williams (2022) Aydin et al. (2022) Breman et al. (2022) Sanders & Blaylock (2021) Saleh et al. (2022)

Neglected	• Changes in care from perceived risk resulting in fewer interactions with nurses and feeling less cared for. • Less support in hospital after birth partner leaves resulting in women feeling abandoned. • Feeling forgotten about in side rooms • Scaled back postpartum care feeling inadequate. • Lack of compassion and staff leaving women crying in pain. • Reduced availability of care from certain professional groups.	Altman et al. (2022_B) Rice & Williams (2022) Breman et al. (2022) Farley et al. (2021)
Emotional wellbeing	• Profound impact on experience of birth through loss of agency and support during family event. • Feeling pressured to do what healthcare workers wanted due to lack of support people. • Fear of delivering without birth partner • Fear of being restricted from seeing family in hospital. • Anxiety around forced separation from new-born. • Upset at partners being excluded. • Distress from not having additional support such as doulas. • Discomfort at wearing mask during delivery and meeting baby for first time wearing mask. • Stress of decision making and help seeking without partners present.	Altman et al. (2021^A) Altman et al. (2022_B) Farley et al. (2021) DeYoung & Mangum (2021) Shuman et al. (2022) McKinley et al. (2022) Saleh et al. (2022) Breman et al. (2022) Sanders & Blaylock (2021) Farley et al. (2021)

	• Emotional impact of delays and staff shortages. • Lonely, depersonalised, anxious and terrified.	
Confusion	• Lack of clarity around social distancing rules. • Communication unclear and causing anxiety. • Restrictions changing daily. • Different guidance in different places. • Uneven and haphazard policies. • Changing information about what birth will look like. • Fear of infection and weighing up risks and restrictions.	McKinley et al. (2022) Aydin et al. (2022) Sanders & Blaylock (2021) Saleh et al. (2022) DeYoung & Mangum (2021)
Positives	• Excluding those who were not wanted from the birth. • Time for mother and baby to bond (and partner if one visitor allowed). • Feelings of empowerment and ability to cope. • Increased protected bonding opportunity. • Relaxing birth experience.	Breman et al. (2022) Farley et al. (2021) Shuman et al. (2022)
Additional themes	Discrimination • Policies not equitable and disproportionately impact BIPOC families due to typical larger family structures and cultural expectations and norms around birth. • Support people for BIPOC are considered advocates who protect	Altman et al. (2021^{A}) Altman et al. (2022_{B})

	patients from discrimination and without these people, patients are at high risk of mistreatment. • Rules more likely to be modified for White and English-speaking families. • Noting incidents of disrespectful care and racism being magnified due to complex interplay of pandemic and racism.	
	Differences in early VS late COVID-19 • Birth impacted differently depending on what phase of COVID-19. • More disruption with restrictions later on in COVID with restrictions. • Late stages of COVID-19, restrictions easing and more clear and flexible policies.	Saleh et al. (2022)

Table 6. Overarching themes from qualitative data

Discussion

This systematic review aimed to understand the impact of COVID-19 hospital restrictions on birth experience and maternal mental health. Quantitative studies investigated a range of outcomes, including birth experience, PND, anxiety, PTSD, and discrimination, therefore several different measures were used. Qualitative data were also reviewed, which allowed for thematic synthesis and development of overarching themes.

Many studies examined the impact of restrictions on birth experience, with a variety of restrictions having consequences for people's birthing experience. There appeared to be a consensus amongst research comparing births before and during the pandemic

that people had worse birthing experiences during COVID-19, with restrictions playing a key role in this. For example, not having access to birthing partners led to a more negative experience for birthing people, leading to feelings of sadness, fear, anxiety, and isolation. Qualitative data supported this, with the overarching theme of 'emotional wellbeing' suggesting that birthing people suffered negative emotional states and a sense of loss at their birth experience. Not having birth partners present impacted on the birth experience and was also found to be associated with obstetric violence.

Quantitative data reported higher rates of discrimination against BIPOC, and qualitative data suggested that this was partly due to the loss of an advocate by restricting birthing partners (Altman et al, 2021[A] , Altman et al 2021[B]). This shows the far-reaching effects of birth partner restrictions, given the increased mortality rate in BIPOC women, which is linked to experiences of racism and neglect in medical settings (Taylor, 2020., Rosenthal & Lobel., 2020). It is unclear if this discrimination was greater than typical discrimination experienced by BIPOC as these studies offer no pre pandemic comparison, however, they do conclude that restrictions impacted discrimination.

When examined, more women found it difficult/very difficult to cope with their partner not being present for the hospitalisation period after birth, especially those who had a caesarean section. This is in line with the qualitative studies reviewed, which found people who were in hospital for a period after birth, felt lonely, neglected by healthcare staff, and abandoned. Participants felt a lack of compassion and inadequate care from staff, which is in line with research around staff burnout during the pandemic

(Iacobucci, 2022). Restrictions on partners staying after birth, are likely to distress birthing people *and* to exacerbate systemic issues.

Restrictions were not only placed on support people, but also on expectations to wear masks during/after delivery and access to preferred (non-medical) methods of pain relief. Studies reported restrictions on doulas for coaching and support, lack of access to water births due to sanitisation concerns, no walking around to manage contractions, and no access to gas and air for virus spread concerns. The qualitative overarching theme of 'change' also supports this. Qualitative studies also found a sense of confusion about this change, which meant very little preparation could be done by birthing people.

As discussed, the impact of negative birth experience has been found to have consequences on birthing persons' mental health (Bell & Anderson, 2016). Several studies from this review found this still to be the case when linked to COVID-19 restrictions, with higher instances of PND, PTSD/S, and anxiety found in those who gave birth during COVID-19. It is important to recognise that not all difficult birth experiences were due to restrictions; however, many of the studies provide evidence that restrictions played a direct role. Comparisons of people who gave birth during the pandemic with or without a support person also showed that those without a support person were significantly more likely to experience depressive symptoms, experience state and trait anxiety, and develop postnatal PTSD.

Alongside the difficulties reported, some studies found either no differences to pre-COVID-19 or reported positives which emerged from restrictions, including post-

traumatic growth. Qualitative studies also found reported positives, such as protected bonding time in hospital and exclusion of people from birth, who were not wanted. These qualitative positives appear to be linked to restrictions setting boundaries for people, that were enforced in hospital policies.

Limitations

A limitation of this review is the inability to conclusively differentiate the impact of restrictions and the overall impact of giving birth during COVID-19. Although every effort has been taken to ensure data relate to restrictions, these studies were measuring mental health and wellbeing at a time of great uncertainty, fear, and change. Given what was happening on a global level, it is likely that a multitude of elements would impact wellbeing at this point. Additionally, hospitals at the time were understaffed due to COVID-19 and staff present were spread thinly, therefore it is likely this also had an impact on birth experiences.

Pandemic restrictions began in 2020 and these studies were selected in 2022, many of which were already underway pre-pandemic and altered by the onset of COVID. Fortunately, this has given us a rich and timely snapshot at the impact of restrictions; however, this has led to some limitations with the data. Included papers focused on different aspects of birth experience and maternal mental health, which makes it challenging to draw conclusions. Overall, there was significant heterogeneity in the measured used, making it difficult to provide cross-study comparisons. There was also limited data about what level of restrictions were in place, understandably as this changed across time and location, however, it does provide challenges in understanding which restrictions specifically caused distress. Many focused on

partner presence during birth, which data shows is an important factor, yet there are many other restrictions that we can see impacted birth experience. Qualitative data showed us that post-birth restrictions were most impactful with strong emotional responses to feeling abandoned and neglected in hospital settings, but there is limited quantitative data to show if this is generalisable.

None of the studies provided follow-up measures or any form of longitudinal data and although this once again may be partly due to the timing of the review, it is still a limitation. Therefore, it is difficult to understand the lasting impacts of restrictions, how long clinical levels of PND/PTSD persisted, and even possible impact on subsequent pregnancies. There was also significant variability in the time between giving birth and data collection. There needs to be caution when interpreting data around mental health at such a vulnerable point, given the physical and emotional toll birth can have. For this review, only studies published in English were selected and this could possibly have excluded important research, especially considering the impact of discrimination on those were not fluent English speakers in English speaking locations.

Clinical implications and future research

Despite the limitations outlined, evidence to date suggests that COVID-19 restrictions in hospitals had a significant impact on birth experiences and subsequent maternal mental health. It is important to consider the support needed for individuals who experienced these restrictions, with an increase in availability of services, such as perinatal mental health services, to meet this additional demand. It is also crucial that professionals supporting women postnatally are aware of the potential impact, to validate experiences and signpost appropriately. Given the limitations discussed

above, it would be pertinent for future research to examine the longer lasting impact of these restrictions, as well as future impact on family planning and subsequent pregnancies.

There are also implications for policy makers when considering imposing blanket restrictions within maternity services. Although restrictions were well intentioned and aimed to keep the population safe, the unintended outcomes of these appear to have impacted on person-centred care, potentially leaving more vulnerable people to suffer the most. Although flexible guidance, which can be applied by staff as appropriate would be preferable, this is not a solution without its own difficulties. Not only would this add additional pressure on to staff to assess risk and need, but we have also seen the disparities in care for BIPOC and there would need to be safeguards and monitoring in place to ensure policies were implemented equitably.

Furthermore, it would be of interest for future research to examine the impact each of these restrictions had on maintaining safety, to complete an appropriate risk-benefit analysis and allow for only those restrictions which are essential for safety, rather than tokenistic restrictions. For example, does wearing a mask during eight hours of labour, in a room with professionals wearing masks, impact the spread of COVID-19? Does a birth partner leaving, after being in the room for multiple hours already, make any difference to virus spread, or does it increase stress for the birthing person and additional load on to understaffed team.

Conclusion

This systematic review has assembled qualitative and quantitative studies examining the impact of COVID-19 hospital restrictions on birth experience and subsequent maternal mental health. Findings suggest that, overall, restrictions led to more negative birth experiences. Some restrictions had more impact than others, such as loss of birthing partners and post-birth support. Evidence also suggests that some individuals or communities were more impacted by restrictions and saw increased discrimination. Although significant heterogeneity in the focus and measures used, several studies showed that these restrictions impacted birthing people's mental health with increased PND, anxiety and PTSD/S. These results present an argument for careful consideration of restrictions in maternity services, and how vital it is to hold these restrictions alongside person-centred care. Future research should consider the impact of these restrictions longer term, as well as consider the safety aspect of restrictions to ensure restrictions are only in place if providing actual health and safety benefits.

References

Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: development and initial validation. *International Journal of Mental Health and Addiction*, 1-9.

Altman, M. R., Eagen-Torkko, M. K., Mohammed, S. A., Kantrowitz-Gordon, I., Khosa, R. M., & Gavin, A. R. (2021). The impact of COVID-19 visitor policy restrictions on birthing communities of colour. *Journal of Advanced Nursing*, *77*(12), 4827-4835.

Altman, M. R., Gavin, A. R., Eagen-Torkko, M. K., Kantrowitz-Gordon, I., Khosa, R. M., & Mohammed, S. A. (2021). Where the system failed: The COVID-19 pandemic's impact on pregnancy and birth care. *Global Qualitative Nursing Research*, *8*, 23333936211006397.

Asali, A., Farladansky-Gershnabel, S., Hasky, N., Elbaz, M., Fishman, A., Ravid, D., ... & Miller, N. (2022). Physiological and psychological stress responses to labor and delivery during COVID-19 pandemic: a cohort study. *Journal of Psychosomatic Obstetrics & Gynecology*, *43*(4), 441-446.

Aydin, E., Glasgow, K. A., Weiss, S. M., Khan, Z., Austin, T., Johnson, M. H., ... & Lloyd-Fox, S. (2022). Giving birth in a pandemic: women's birth experiences in England during COVID-19. *BMC pregnancy and childbirth*, *22*(1), 1-11.

Ayers, S., Eagle, A., & Waring, H. (2006). The effects of childbirth-related post-traumatic stress disorder on women and their relationships: a qualitative study. *Psychology, health & medicine*, *11*(4), 389-398.

Ayers, S., Wright, D. B., & Thornton, A. (2018). Development of a measure of postpartum PTSD: the city birth trauma scale. *Frontiers in psychiatry*, *9*, 409.

Babu, M. S., Chan, S. J., Ein-Dor, T., & Dekel, S. (2022). Traumatic childbirth during COVID-19 triggers maternal psychological growth and in turn better mother-infant bonding. *Journal of Affective Disorders*, *313*, 163-166.

Barr-Walker, J., Jayaweera, R. T., Ramirez, A. M., & Gerdts, C. (2019). Experiences of women who travel for abortion: a mixed methods systematic review. *PloS one*, *14*(4), e0209991.

Bell, A. F., & Andersson, E. (2016). The birth experience and women's postnatal depression: A systematic review. *Midwifery*, *39*, 112-123.

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

Breman, R. B., Neerland, C., Bradley, D., Burgess, A., Barr, E., & Burcher, P. (2021). Giving birth during the COVID-19 pandemic, perspectives from a sample of the United States birthing persons during the first wave: March-June 2020. *Birth*, *48*(4), 524-53.

Brunet, A., Weiss, D. S., Metzler, T. J., Best, S. R., Neylan, T. C., Rogers, C., ... & Marmar, C. R. (2001). The Peritraumatic Distress Inventory: a proposed measure of PTSD criterion A2. *American Journal of Psychiatry*, *158*(9), 1480-1485.

Carmassi, C., Dell'Osso, L., Bertelloni, C. A., Pedrinelli, V., Dell'Oste, V., Cordone, A., ... & Tosato, S. (2022). Three-month follow-up study of mental health outcomes after a national COVID-19 lockdown: comparing patients with mood or anxiety disorders living in an area with a higher versus lower infection incidence. *The Journal of Clinical Psychiatry*, *83*(2), 39558.

Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational research methods*, *4*(1), 62-83.

Cigăran, R. G., Botezatu, R., Mînecan, E. M., Gică, C., Panaitescu, A. M., Peltecu, G., & Gică, N. (2021, June). The psychological impact of the COVID-19 pandemic on pregnant women. In *Healthcare* (Vol. 9, No. 6, p. 725). MDPI.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, *18*(2), 76-82.

Cook, N., Ayers, S., & Horsch, A. (2018). Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review. *Journal of affective disorders*, *225*, 18-31.

Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression: development of the 10-item Edinburgh Postnatal Depression Scale. *The British journal of psychiatry*, *150*(6), 782-786.

De Jong-Gierveld, J., & Kamphuls, F. (1985). The development of a Rasch-type loneliness scale. *Applied psychological measurement*, *9*(3), 289-299.

Dencker, A., Taft, C., Bergqvist, L., Lilja, H., & Berg, M. (2010). Childbirth experience questionnaire (CEQ): development and evaluation of a multidimensional instrument. *BMC pregnancy and childbirth*, *10*, 1-8.

DeMier, R. L., Hynan, M. T., Harris, H. B., and Manniello, R. L. (1996). Perinatal stressors as predictors of symptoms of posttraumatic stress in mothers of infants at high risk. *J. Perinatol.* 16, 276–280.

Diamond, R. M., & Colaianni, A. (2022). The impact of perinatal healthcare changes on birth trauma during COVID-19. *Women and Birth*, *35*(5), 503-510.

DeYoung, S. E., & Mangum, M. (2021). Pregnancy, birthing, and postpartum experiences during COVID-19 in the United States. *Frontiers in Sociology*, *6*, 611212.

Farley, E., Edwards, A., Numanoglu, E., & Phillips, T. K. (2021). Lockdown babies-Birth and new parenting experiences during the 2020 Covid-19 lockdown in South Africa. *medRxiv*, 2021-05.

Gluska, H., Mayer, Y., Shiffman, N., Daher, R., Elyasyan, L., Elia, N., ... & Gabbay-Benziv, R. (2021). The use of personal protective equipment as an independent factor for developing depressive and post-traumatic stress symptoms in the postpartum period. *European Psychiatry*, *64*(1), e34.

Grasso, D. J., Briggs-Gowan, M. J., Ford, J. D., & Carter, A. S. (2020). The epidemic–pandemic impacts inventory (EPII). *University of Connecticut School of Medicine*.

Griffiths, I. (2021). Covid: Maternity restrictions 'not fair' on new mums. https://www.bbc.co.uk/news/uk-wales-59320595

Hartley, A. (2022), Parents plead for COVID maternity visiting restrictions to be scappred in Wales. https://www.itv.com/news/wales/2022-02-16/parents-plead-for-covid-maternity-visiting-restrictions-to-be-scrapped-in-wales

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic medicine*, *41*(3), 209-218

Iacobucci, G. (2022). Covid-19: NHS trusts declare "critical incidents" because of staff shortages. *BMJ* 376:o3.

Iness, A. N., Abaricia, J. O., Sawadogo, W., Iness, C. M., Duesberg, M., Cyrus, J., & Prasad, V. (2022). The Effect of hospital visitor policies on patients, their visitors, and health care providers during the COVID-19 pandemic: a systematic review. *The American journal of medicine*.

Janevic, T., Maru, S., Nowlin, S., McCarthy, K., Bergink, V., Stone, J., ... & Howell, E. A. (2021). Pandemic birthing: childbirth satisfaction, perceived health care bias, and postpartum health during the COVID-19 pandemic. *Maternal and child health journal*, *25*(6), 860-869.

Jaswaney, R., Davis, A., Cadigan, R. J., Waltz, M., Brassfield, E. R., Forcier, B., & Joyner Jr, B. L. (2022). Hospital policies during COVID-19: an analysis of visitor restrictions. *Journal of public health management and practice*, *28*(1), E299-E306.

Joanna Briggs Institute. (2017*a-d*). *Checklist for systematic reviews and research syntheses*. https://jbi.global/critical-appraisal-tools

Jones-Bonofiglio, K., Nortjé, N., Webster, L., & Garros, D. (2021). A practical approach to hospital visitation during a pandemic: responding with compassion to unjustified restrictions. *American Journal of Critical Care*, *30*(4), 302-311.

Kenny, J. (2021). COVID 19: Mum-to-be's anger at nightclub reopening as maternity restricted. https://www.bbc.co.uk/news/world-europe-58847768

Kukura, E. (2017). Obstetric violence. *Geo. LJ*, *106*, 721.

Kułak-Bejda, A., Malinowska-Gleń, M., Bejda, G., Slifirczyk, A., & Waszkiewicz, N. (2022). Selected Aspects of the Mental Functioning of Women After Childbirth in a Hospital During a Pandemic. *Frontiers in Psychiatry*, 880.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (1999). Patient health questionnaire-9. *Cultural Diversity and Ethnic Minority Psychology*.

Liu, C. H., Koire, A., Erdei, C., & Mittal, L. (2021). Unexpected changes in birth experiences during the COVID-19 pandemic: Implications for maternal mental health. *Archives of gynecology and obstetrics*, 1-11.

Mariño-Narvaez, C., Puertas-Gonzalez, J. A., Romero-Gonzalez, B., & Peralta-Ramirez, M. I. (2021). Giving birth during the COVID-19 pandemic: The impact on birth satisfaction and postpartum depression. *International Journal of Gynecology & Obstetrics*, *153*(1), 83-88.

Martin, C. J. H., & Martin, C. R. (2014). Development and psychometric properties of the Birth Satisfaction Scale-Revised (BSS-R). *Midwifery*, *30*(6), 610-619.

Mayopoulos, G. A., Ein-Dor, T., Dishy, G. A., Nandru, R., Chan, S. J., Hanley, L. E., ... & Dekel, S. (2021). COVID-19 is associated with traumatic childbirth and subsequent mother-infant bonding problems. *Journal of affective disorders*, *282*, 122-125.

McKinlay, A. R., Fancourt, D., & Burton, A. (2022). Factors affecting the mental health of pregnant women using UK maternity services during the COVID-19 pandemic: a qualitative interview study. *BMC pregnancy and childbirth*, *22*(1), 1-15.

Mei, J. Y., Afshar, Y., Gregory, K. D., Kilpatrick, S. J., & Esakoff, T. F. (2016). Birth plans: what matters for birth experience satisfaction. *Birth*, *43*(2), 144-150.

Moehler, E., Brunner, R., Wiebel, A., Reck, C., & Resch, F. (2006). Maternal depressive symptoms in the postnatal period are associated with long-term impairment of mother–child bonding. *Archives of women's mental health*, *9*, 273-278.

Molgora, S., & Accordini, M. (2020). Motherhood in the time of coronavirus: the impact of the pandemic emergency on expectant and postpartum women's psychological well-being. *Frontiers in psychology*, *11*, 567155.

Mollard, E., & Wittmaack, A. (2021). Experiences of women who gave birth in US hospitals during the COVID-19 pandemic. *Journal of Patient Experience*, *8*, 2374373520981492.

Müller, M. E. (1994). A questionnaire to measure mother-to-infant attachment. *Journal of Nursing measurement*, *2*(2), 129-141.

Murray, L. (1992). The impact of postnatal depression on infant development. *Journal of child psychology and psychiatry*, *33*(3), 543-561.

Nilsson, L., Thorsell, T., Hertfelt Wahn, E., & Ekström, A. (2013). Factors influencing positive birth experiences of first-time mothers. *Nursing research and practice*, *2013*.

Oddo-Sommerfeld, S., Schermelleh-Engel, K., Konopka, M., La Rosa, V. L., Louwen, F., & Sommerlad, S. (2022). Giving birth alone due to COVID-19-related hospital restrictions compared to accompanied birth: psychological distress in women with caesarean section or vaginal birth–a cross-sectional study. *Journal of Perinatal Medicine*, *50*(5), 539-548.

Ostacoli, L., Cosma, S., Bevilacqua, F., Berchialla, P., Bovetti, M., Carosso, A. R., ... & Benedetto, C. (2020). Psychosocial factors associated with postpartum psychological distress during the Covid-19 pandemic: a cross-sectional study. *BMC pregnancy and childbirth*, *20*, 1-8.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *International Journal of Surgery, 88*, 105906. **https://doi.org/10.1136/bmj.n71**

Parsons, C. E., Young, K. S., Rochat, T. J., Kringelbach, M. L., & Stein, A. (2012). Postnatal depression and its effects on child development: a review of evidence from low-and middle-income countries. *British medical bulletin*, *101*(1), 57.

Peek, M. E., Nunez-Smith, M., Drum, M., & Lewis, T. T. (2011). Adapting the everyday discrimination scale to medical settings: reliability and validity testing in a sample of African American patients. *Ethnicity & disease*, *21*(4), 502.

Preis, H., Mahaffey, B., Heiselman, C., & Lobel, M. (2022). The impacts of the COVID-19 pandemic on birth satisfaction in a prospective cohort of 2,341 US women. *Women and Birth*, *35*(5), 458-465.

Rajmil, L., Hjern, A., Boran, P., Gunnlaugsson, G., De Camargo, O. K., & Raman, S. (2021). Impact of lockdown and school closure on children's health and well-being during the first wave of COVID-19: a narrative review. *BMJ paediatrics open*, *5*(1).

Rice, K. F., & Williams, S. A. (2022). Making good care essential: The impact of increased obstetric interventions and decreased services during the COVID-19 pandemic. *Women and Birth*, *35*(5), 484-492.

Saleh, L., Canclini, S., Greer, K., Mathison, C., Combs, S. M., Dickerson, B., & Collins, K. (2022). Mothers' experiences of pregnancy, labor and birth, and postpartum during COVID-19 in the United States: Preliminary results of a mixed-methods study. *The Journal of Perinatal & Neonatal Nursing*, *36*(1), 55-67.

Sanders, J., & Blaylock, R. (2021). "Anxious and traumatised": users' experiences of maternity care in the UK during the COVID-19 pandemic. *Midwifery*, *102*, 103069.

Shuman, C. J., Morgan, M. E., Chiangong, J., Pareddy, N., Veliz, P., Peahl, A. F., & Dalton, V. K. (2022). "Mourning the experience of what should have been": experiences of peripartum women during the COVID-19 pandemic. *Maternal and child health journal*, 1-8.

Simons, J. S., & Gaher, R. M. (2005). The Distress Tolerance Scale: Development and validation of a self-report measure. *Motivation and emotion*, *29*(2), 83-102.

Simpson, M., Schmied, V., Dickson, C., & Dahlen, H. G. (2018). Postnatal post-traumatic stress: an integrative review. *Women and Birth*, *31*(5), 367-379.

Somerville, S., Dedman, K., Hagan, R., Oxnam, E., Wettinger, M., Byrne, S., ... & Page, A. C. (2014). The perinatal anxiety screening scale: development and preliminary validation. *Archives of women's mental health*, *17*, 443-454.

Spielberger, C. D. (1983). State-trait anxiety inventory for adults.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine*, *166*(10), 1092-1097.

Taylor, A., Atkins, R., Kumar, R., Adams, D., & Glover, V. (2005). A new Mother-to-Infant Bonding Scale: links with early maternal mood. *Archives of women's mental health*, *8*, 45-51.

Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of traumatic stress*, *9*, 455-471.

Trzebiński, J., & Zięba, M. (2004). Basic hope as a world-view: An outline of a concept.

Vedam, S., Stoll, K., Rubashkin, N., Martin, K., Miller-Vedam, Z., Hayes-Klein, H., & Jolicoeur, G. (2017). The mothers on respect (MOR) index: measuring quality, safety, and human rights in childbirth. *SSM-population health*, *3*, 201-210.

Weathers FW, Litz BT, Herman DS, Huska JA, Keane TM: The PTSD checklist: Reliability, validity and diagnostic utility. Paper pre- sented at the Annual Meeting of the International Society for Traumatic Stress Studies, San Antonio, October 1993.

Webb, R., Ayers, S., Bogaerts, A., Jeličić, L., Pawlicka, P., Van Haeken, S., ... & Kolesnikova, N. (2021). When birth is not as expected: a systematic review of the impact of a mismatch between expectations and experiences. *BMC pregnancy and childbirth*, *21*(1), 1-14.

Weiss, D. S. (2007). The impact of event scale: revised. *Cross-cultural assessment of psychological trauma and PTSD*, 219-238.

Wijma, K., Wijma, B., & Zar, M. (1998). Psychometric aspects of the W-DEQ; a new questionnaire for the measurement of fear of childbirth. *Journal of Psychosomatic Obstetrics & Gynecology*, *19*(2), 84-97.

Yakupova, V., Suarez, A., & Kharchenko, A. (2022). Birth Experience, Postpartum PTSD and Depression before and during the Pandemic of COVID-19 in Russia. *International journal of environmental research and public health*, *19*(1), 335.

Zheng, L. R., Naurin, E., Markstedt, E., Olander, P., Linden, K., Sengpiel, V., ... & Elden, H. (2022). Expectant parents' emotions evoked by pregnancy: A longitudinal dyadic analysis of couples in the Swedish Pregnancy Panel. *Social Science & Medicine*, *312*, 115362.

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta psychiatrica scandinavica*, *67*(6), 361-370

Appendices

Appendix A. JBI Critical Appraisal Checklist for Qualitative Research

JBI CRITICAL APPRAISAL CHECKLIST FOR QUALITATIVE RESEARCH

		Yes	No	Unclear	Not applicable
1.	Is there congruity between the stated philosophical perspective and the research methodology?	☐	☐	☐	☐
2.	Is there congruity between the research methodology and the research question or objectives?	☐	☐	☐	☐
3.	Is there congruity between the research methodology and the methods used to collect data?	☐	☐	☐	☐
4.	Is there congruity between the research methodology and the representation and analysis of data?	☐	☐	☐	☐
5.	Is there congruity between the research methodology and the interpretation of results?	☐	☐	☐	☐
6.	Is there a statement locating the researcher culturally or theoretically?	☐	☐	☐	☐
7.	Is the influence of the researcher on the research, and vice- versa, addressed?	☐	☐	☐	☐
8.	Are participants, and their voices, adequately represented?	☐	☐	☐	☐
9.	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	☐	☐	☐	☐
10.	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	☐	☐	☐	☐

Appendix B. JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies

JBI CRITICAL APPRAISAL CHECKLIST FOR ANALYTICAL CROSS SECTIONAL STUDIES

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	☐	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☐	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☐	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☐	☐	☐	☐
5. Were confounding factors identified?	☐	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	☐	☐	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☐	☐	☐	☐
8. Was appropriate statistical analysis used?	☐	☐	☐	☐

Appendix C. JBI Critical Appraisal Checklist for Case Control Studies

JBI CRITICAL APPRAISAL CHECKLIST FOR CASE CONTROL STUDIES

	Yes	No	Unclear	Not applicable
1. Were the groups comparable other than the presence of disease in cases or the absence of disease in controls?	☐	☐	☐	☐
2. Were cases and controls matched appropriately?	☐	☐	☐	☐
3. Were the same criteria used for identification of cases and controls?	☐	☐	☐	☐
4. Was exposure measured in a standard, valid and reliable way?	☐	☐	☐	☐
5. Was exposure measured in the same way for cases and controls?	☐	☐	☐	☐
6. Were confounding factors identified?	☐	☐	☐	☐
7. Were strategies to deal with confounding factors stated?	☐	☐	☐	☐
8. Were outcomes assessed in a standard, valid and reliable way for cases and controls?	☐	☐	☐	☐
9. Was the exposure period of interest long enough to be meaningful?	☐	☐	☐	☐
10. Was appropriate statistical analysis used?	☐	☐	☐	☐

Appendix D. JBI Critical Appraisal Checklist for Cohort Studies

JBI CRITICAL APPRAISAL CHECKLIST FOR COHORT STUDIES

	Yes	No	Unclear	Not applicable
1. Were the two groups similar and recruited from the same population?	☐	☐	☐	☐
2. Were the exposures measured similarly to assign people to both exposed and unexposed groups?	☐	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☐	☐	☐	☐
4. Were confounding factors identified?	☐	☐	☐	☐
5. Were strategies to deal with confounding factors stated?	☐	☐	☐	☐
6. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	☐	☐	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☐	☐	☐	☐
8. Was the follow up time reported and sufficient to be long enough for outcomes to occur?	☐	☐	☐	☐
9. Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	☐	☐	☐	☐
10. Were strategies to address incomplete follow up utilized?	☐	☐	☐	☐
11. Was appropriate statistical analysis used?	☐	☐	☐	☐

Appendix E. Study Quality Checklist

Study	Checklist	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11
Altman et al, 2021	Qual	√	√	√	√	√	√	U	√	√		-
Shuman et al, 2022	Qual	U	√	√	√	√	X	X	√	√	√	-
McKinlay, Fancourt & Burton 2022	Qual	U	N/A	√	√	√	X	X	√	√	√	-
Rice & Williams 2022	Qual	√	√	√	√	√	√	√	√	√	√	-
Altman et al, 2021 B	Qual	U	√	√	√	√	√	U	√	√	√	-
DeYoung & Mangum 2021	Qual	Y	U	√	√	√	X	X	√	√	√	-
Saleh et al, 2022	Qual	X	√	√	√	√	X	X	√	√	√	-
Breman et al, 2021	Qual	X	√	√	√	√	X	X	√	U	√	-

Study	Checklist	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11
Aydin et al, 2022	Qual	X	√	√	√	√	N	N	√	√	√	-
Sanders & Blaylock 2021	Qual	X	√	√	U	√	X	X	√	√	√	-
Farley et al, 2021	Qual	X	√	√	√	√	X	X	√	√	√	-
Asali et al 2022	Cohort	√	√	√	√	X	√	√	√	U	U	√
Mayopoulos et al 2021	Case control	√	U	√	NA	√	X	X	√	√	√	-
Babu et al 2021	Case control	√	U	√	NA	√	X	X	√	√	√	-
Marino-Navaez et al 2020	Case control	√	√	√	NA	√	X	X	√	√	√	-
Yakupova et al 2021	Case control	√	U	√	NA	√	√	√	√	√	√	-

Study	Checklist	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11
Sommerfeld et al 2021	Case Control	√	U	√	NA	√	√	√	U	√	√	-
Janevic et al 2021	X Sectional	U	√	√	NA	√	U	√	√	-	-	-
Gluska et al 2021	X Sectional	√	√	√	NA	√	√	√	√	-	-	-
Diamond & Colaianni 2022	X Sectional	√	√	√	NA	√	√	√	√	-	-	-
Liu et al 2020	X Sectional	√	√	√	NA	√	√	√	√	-	-	-
Preis et al 2021	X Sectional	√	√	√	NA	√	√	√	√	-	-	-
Ostacoli et al 2020	X Sectional	√	√	√	NA	√	X	√	√	-	-	-
Mollard & Wittmaack, 2021	X Sectional	√	√	√	NA	√	X	X	√	-	-	-

Study	Checklist	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11
Cigaran et al 2021	X Sectional	√	X	√	NA	√	X	X	√	-	-	-
Molgora & Accordini 2020	X Sectional	√	√	√	NA	√	√	√	√	-	-	-
Saleh et al 2022	X Sectional	√	√	√	NA	√	√	√	√	-	-	-
Breman et al 2022	X Sectional	√	√	√	NA	√	√	X	√	-	-	-
Aydin et al 2022	X Sectional	√	√	√	NA	√	X	X	√	-	-	-
Sanders & Blaylock 2021	X Sectional	√	√	√	NA	√	√	X	√	-	-	-
Farley et al 2021	X Sectional	√	√	√	NA	√	√	√	√	-	-	-

Chapter 2

Empirical Paper

Exploring factors influencing wellbeing in Early Career Midwives

Exploring factors influencing wellbeing in Early Career Midwives

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Abstract

Many professions in healthcare are facing crisis. Midwifery is no different and is currently facing large pressures with issues around staff burnout and retention, including those at the start of their career. This study explored factors influencing wellbeing in early career midwives in Wales. Semi-structured interviews were conducted with nine midwives who worked in Wales and had been qualified for less than five years. Key themes were extracted using interpretive phenomenological analysis. Participants discussed factors influencing their wellbeing, including understaffing and the emotional impact on themselves and those they care for. They discussed feeling unsupported by their team, senior management, and the public as well as feelings of moral injury and being neglected by the system they serve. Consideration was given to midwives' commitment to their role, and the high stakes nature of the role on those early in their career. COVID-19 also impacted midwives wellbeing in predictable and expected ways. Participants described feeling a calling to their position, which by nature is a complex, autonomous, and sometimes traumatic role. They were feeling unsupported by the wider system in completing this role, leading to significant distress and inability to complete their job as they wish. They were also seeing repercussions of this on the patients they support. Clinical implications and future research are discussed.

Introduction

It is no secret that the National Health Service (NHS) has been under immense pressure for some time (Mahase, 2021). Regular media reports from varying outlets, which cite leading clinicians and academics, suggest that the system is facing a significant crisis (McNally, 2023), with long waiting lists and delays in care (Morgan, 2022; Donnelly, 2022) and increases in abusive behaviour towards staff (Triggle & Pymm, 2022). Although this situation has undoubtedly worsened since the COVID-19 pandemic (Iacobucci, 2022), it is recognised that many of the current challenges within the NHS are longstanding (Abbasi, 2017).

The impact of this pressure on staff wellbeing is also well-documented (Sizmur & Raleigh, 2018). The Royal College of Nurses (RCN) and Royal College of Midwives (RCM) recently decided on strike action for the first time in over 100 years, citing, amongst other factors, failure to recognise and act on reduced staffing levels and the impact that this has on staff and patient safety (RCN, 2022, RCM, 2023). This is often discussed in relation to staff 'burnout', a term applied to chronic emotional and interpersonal stressors that go beyond general stress reactions or job dissatisfaction (Maslach & Leiter, 2016). Prevalence of burnout in the healthcare sector appears to be increasing; in 2008, 28% of healthcare staff felt unwell due to work-related stress, and by 2016, this had risen to 37% (Johnson et al., 2018). The impact of burnout on the individual can be far reaching, increasing levels of depression and anxiety, and even resulting in physical pain (Peterson et al., 2008). This has a significant impact at an organisational level, with Johnson and colleagues (2018) finding healthcare staff taking 25% more sickness absences than other public sector workers. Burnout also predicts future sick leave, even after controlling for gender, age, previous absence,

and occupation (Toppinen-Tanner et al., 2005). There are also financial implications of burnout for organisations, such as increased numbers of staff leaving service, which has been shown to have a deleterious impact on workforce morale and fidelity to evidence-based practice (Morse et al., 2012). A recent review found direct associations between staff burnout and patient safety (Hall et al., 2016), findings that demonstrate the negative impact of staff stress on the individual, the organisation, and the patients they serve.

One profession where burnout is a notable challenge is midwifery (Hunter et al., 2019). The role of the midwife is not just the physical wellbeing of the pregnant person[2] and the unborn child; it is also the emotional wellbeing of the pregnant person and family. A midwife's role can be emotionally demanding, even within straightforward pregnancies (Rayment, 2015), and there can also be risk of vicarious trauma when there are birthing complications and negative outcomes (Aydin & Aktas, 2021). Vicarious trauma is defined as "the unique, negative and accumulative changes that can occur to clinicians who engage in an empathetic relationship with clients" (McCann & Pearlman, 1990, page 131). As in other health professions, wellbeing amongst midwives has been found to be related to working conditions (Cramer & Hunter, 2019), which can be classified as modifiable and non-modifiable. Modifiable conditions refer to factors such as low staffing levels, high workload, and inadequate training. Non-modifiable conditions include factors such as working with challenging clinical situations, including traumatic births and bereavements.

[2] Whilst we recognise that a majority of people giving birth are women, we will be using gender neutral terms in order to be inclusive of all who give birth, including women, trans men or those who identify as non-binary.

One group of midwives that are at an increased risk of burnout are those early in their careers. Whilst Hunter et al. (2019) found that 83% of midwives surveyed were experiencing levels of burnout classified as moderate or above, it was highlighted that midwives under the age of 40 years and with less than 10 years of experience were more likely to record high levels of depression, anxiety, and burnout. A survey completed by the RCM (RCM, 2021), found that 57% of midwives in England were considering leaving their role, with over half of these contemplating leaving in the next year. The highest levels of dissatisfaction were amongst those who had worked in the NHS for five years or less – i.e., early career midwives (ECMs).

Additional pressure on midwives has come from increasing scrutiny of maternity services, most recently noted within the publication of the Ockenden Report (Ockenden, 2022). This independent review into maternity services found patterns of poor care, with failure to learn and improve, failure in governance and leadership, and failure to listen to patients. Responses to this report have varied: whilst some have hailed it as a much needed 'watershed moment' for maternity services (Thornton, 2022), others have claimed that the findings are not new or isolated (Knight & Stanford, 2022; Vize, 2022), citing similarities to the earlier Kirkup Report into maternity and neonatal services (Kirkup, 2015). The Ockendon Report, and accompanying media stories, followed shortly after healthcare workers were celebrated as heroes during the COVID-19 pandemic (Hockday, 2020). This conceptualisation may have unintentionally created unhelpful, potentially damaging, narratives for beleaguered NHS staff that healthcare staff are selfless and able to withstand anything (Chen, 2022; Cox, 2020, Mohammed, Killackey & Maciver, 2021).

Research Aim

Existing data suggest that ECMs are most at risk of experiencing workplace stress and subsequent desire to leave the profession (RCM, 2021). However, recent research has tended to consider wellbeing in relation to practical elements of early-career work, such as the impact of preceptorship programmes (Hughes & Fraser., 2011), or else to focus solely on the transition from student to qualified midwife (Kitsen-Reynolds, Ferns & Trenerry, 2015). Existing research has also typically occurred in countries with different healthcare frameworks, such as Australia (Fenwick et al., 2012), and the little research that has been conducted in the UK has primarily been based in England, failing to consider unique challenges within each of the four nations (Reynolds, et al., 2014). Health service provision in Wales is devolved, therefore decisions take place on a different political landscape, with differing implications for funding and service structure. This has been highlighted in recent months with strike action being voted for in Wales (RCM, 2023). There is also the added consideration of midwives training and qualifying during the COVID-19 pandemic, which has been found to have increased burnout in health staff (Galanis et al., 2021; Guixia & Hui et al., 2020; Joshi & Sharma, 2020). This may play a further role in determining midwives' stress and wellbeing post-qualification. Finally, most research in this area focuses on the first 12-months after qualification, whereas evidence above suggests that early career midwives are at increased risk of stress for a far greater period. To address these limitations, this research aimed to explore the lived experiences of, and factors influencing, wellbeing in ECMs within the Welsh NHS, specifically including those ECMs who may have trained and qualified during the COVID-19 pandemic.

Methods

Design

This was a qualitative cross-sectional study, in which semi-structured interviews were used to examine factors influencing ECMs' wellbeing at work. To enable an in-depth exploration of the lived experiences of midwives, study design was informed by an interpretative phenomenological analysis (IPA) framework. This is an approach that draws on phenomenology, hermeneutics, and ideography to systematically explore how individuals interpret and make sense of lived experiences (Smith, Flowers, & Larkin, 2009). The over-arching aim was to explore individual ECMs' subjective perceptions, rather than to establish generalisable accounts.

Ethical Issues

Ethical approval was obtained from Bangor University, School of Human Behavioural Sciences Ethics Committee (2022-17204, please see Appendix E). Research materials, such as information sheets and debrief forms (see Appendix A – D) were created with feedback from the North Wales Clinical Psychology Programme's (NWCPP) Expert by Experience group, the 'People Panel'. A member of the People Panel, a retired experienced Midwife, also read and contributed to the write up of this research.

Recruitment

As per IPA principles, we aimed to recruit a purposive sample. The inclusion criteria identified midwives who had been qualified for less than five years and were currently working clinically within midwifery in Wales. Those who were no longer working in the

profession were excluded. Midwives were offered the opportunity to have interviews conducted in Welsh or English to ensure no language exclusions.

All four university-based midwifery courses in Wales were approached to disseminate recruitment materials to recently qualified midwives in each area, ensuring wide distribution. Social media was also utilised to share recruitment materials, with potential participants encouraged to contact the lead researcher for further written information or to arrange an informal discussion. All participants were provided with comprehensive written information prior to participation.

Participants

A total of 16 potential participants contacted the researcher. All were sent the participant information sheet and ten responded with completed consent forms and were recruited. One asked to rearrange their interview and did not respond further. No reasons were provided for non-participation of the additional six, who did not return the consent form.

The nine participants interviewed worked in four different health boards in Wales and trained at four different universities across the UK. The mean age of participants was 29.3 years (SD +/- 7.05); they had been qualified between 1-3 years (M = 2.1 years, SD +/- 0.92). Most (n=7) currently worked in a hospital setting, although had experience of working within a community setting. The remaining 22.22% worked in the community exclusively. All participants identified as White British, and all interviews were conducted in English.

Procedure

Semi-structured interviews were conducted using an online platform in participants' own time and away from NHS sites. All interviews were conducted by the lead researcher, who is a trainee clinical psychologist. An interview schedule was used to guide the interview but, as per IPA principles, was used flexibly. This meant that participants were free to explore topics that they felt were relevant and/or important. The schedule explored: factors influencing wellbeing, impact of the role on personal life, suggested changes to improve experiences, impact of these factors on birthing people, and the impact of COVID-19 on experiences. If requested, a copy of the interview schedule was available in advance of interview and can be found in Appendix D. Interviews lasted between 26 and 67 minutes and all were audio-recorded to allow verbatim transcription. In accordance with IPA principles, important additional features of non-lexical communication (e.g., laughter, prolonged pauses) were included in transcription. Aspects of paraverbal communication (e.g., tone, pitch, and pace) were also recorded and field notes made to document general impressions of the interview process. Participants were reimbursed with a £25 gift voucher, and all were given contact details for local occupational health services should they wish to access support after interviews.

Data Analysis

Interviews were transcribed verbatim and immediately anonymised, with pseudonyms assigned prior to analysis. Analysis involved reading and re-reading a transcript to immerse the researcher in the data. This was then followed by initial detailed notes and comments on the data, comprising of descriptive, conceptual, and linguistic comments. Themes were then developed by working with the initial notes rather than

the transcript. Subsequently, data was reorganised by themes and connections among identified themes were explored. These steps were undertaken for each interview before moving to the next case, where steps were repeated. Finally, patterns were examined across cases to identify final themes. To promote transparency, themes are presented in a narrative account, with verbatim quotes included. All analysis was undertaken by the interviewing researcher. Annotated transcripts and quotes/themes were reviewed by the second author to support the credibility of the data (Smith, Flowers & Larkin 2009). Throughout the process, consideration was given to Yardley's four criteria for quality in qualitative research: sensitivity to context, commitment and rigor, transparency and coherence, and impact and importance (Yardley, 2000). As part of this commitment to quality, an Expert by Experience from the NWCPP People Panel, an experienced former midwife in Wales, was invited to review the final analysis. This supported sensitivity to context and helped ensure coherence from a professional perspective.

Reflexivity Statement

In IPA, it is recognised that participants are attempting to make sense of their experiences, whilst the researcher also aims to make sense of, and to interpret, those experiences. This is described as a 'double hermeneutic' (Shinebourne, 2011). It is acknowledged that the researcher's experiences and beliefs can influence their interpretation, making reflexivity a crucial part of the process. Therefore, a reflexivity statement has been provided below.

I am a woman in my late 20s, completing this research to partially fulfil requirements for a doctorate in Clinical Psychology. I currently work in the NHS supporting people

with their mental health and have always had an interest in supporting staff teams within my roles. This provides me with my own understanding of working in the NHS and a level of experience of working with staff wellbeing and distress which will influence how I interpret data. This will influence my analysis of the data, as I am particularly sensitive to nuances in team dynamics and relationships. Being employed by the NHS will also likely influence how I perceive and interpret information about the system. I am, however, not a midwife and this must be acknowledged, as it can bring advantages and disadvantages. For example, I am not part of the midwifery system and may not comprehend every nuance or fully understand the demands of the role. There was an acknowledgement from multiple participants that midwives tend to talk to other midwives about their difficulties. On the other hand, this research utilises IPA and is interested in midwives' lived experience and how they make sense of and interpret their *own* experiences. Therefore, not being a midwife allows me space to step back and immerse myself in participants experience rather than having my own midwifery-based lens. Participants commented on the benefits of speaking to someone about their wellbeing and did not appear impeded by my not being a midwife. Three participants commented that it was positive to see someone outside of the profession taking an interest in their wellbeing.

Results

A summary of themes can be found in Table 1. Four key themes were identified reflecting the factors that influenced midwives' wellbeing and are discussed in detail below. Within each theme, additional sub-themes were identified that further reflect midwives' experiences in relation to these themes. Participant endorsement of each theme can be seen in Table 2.

Theme	Subtheme
3. High Stakes Pressure *Explores the specific elements of the role and how midwives feel this impacts them*	***Nature of the role*** *Captures midwives' experience of working with high levels of responsibility and more frequently with higher risk women, pushing their skills to the limit.* ***Bearing witness*** *Considers the effect of working in repeated traumatic and emergency situations.* ***More than just midwifery*** *Describes the impact of the complexities of the role of midwifery, including working with social issues.* ***Calling and commitment*** *Considers how midwives typically perceive a calling to their role and how this commitment influences their interaction with the position.*
2. Safety in numbers *Considers the implications of understaffing on midwives' physical and emotional wellbeing*	***Taking an emotional toll*** *Explores the impact of understaffing on midwives' emotional wellbeing.* ***Fear/isolation*** *Captures midwives' feelings of fear and isolation during shifts due to understaffing.* ***Unable to care*** *Describes midwives' experiences of not being able to complete their role to the level they want and the subsequent difficulties.* ***Not just us*** *Examines the perceived impact of understaffing on patients receiving care.*
3. Feeling (un)supported *Illustrates what factors midwives perceive play a role in feeling (un)supported in their job*	***Team Support*** *Examines the importance of the team around the midwife.* ***Neglected by the system*** *Explores midwives' perception of being neglected by the system they serve.* ***Failure of current support*** *Describes midwives' thoughts of the current system of wellbeing support.*

4. On top of it all *Examines the COVID-19 specific influences on wellbeing.*	***Fear & restrictions*** *Explores the impact of restrictions and feelings of fear experienced by midwives and patients during the pandemic.*

Table 1. Summary of overarching and subthemes

	Rachel	Lauren	Holly	Sophie	Clare	Alex	Amy	Jessica	Rebecca
High stakes pressure; Nature of the role	√	√	√	√	√	√	√	√	√
High stakes pressure; Bearing witness		√		√	√		√	√	√
High stakes pressure; More than just midwifery		√	√	√	√	√		√	
High stakes pressure; Calling and commitment	√	√		√	√	√	√	√	√
Safety in numbers; Taking an emotional toll	√	√	√	√	√	√	√	√	√
Safety in numbers; Fear/isolation		√	√	√	√	√			√
Safety in numbers; Unable to care	√	√	√	√	√	√	√		√
Safety in numbers; Not just us	√	√	√	√	√	√	√	√	√
Feeling (un)supported; Team support		√	√	√	√	√	√	√	√
Feeling (un)supported; Neglected by system	√	√	√	√	√	√		√	√
Feeling (un)supported; Failure of current support	√	√	√	√	√	√	√	√	√
On top of it all; Fear and restrictions		√	√	√	√	√	√	√	√

Table 2. Participant endorsement of each theme

1. High Stakes Pressure

Participants discussed aspects of the midwife role which impacted wellbeing: the significance of working with trauma was highlighted, alongside recognition of the high levels of risk and responsibility inherent within the role.

Nature of the role

Participants identified specific elements of the role that impacted on wellbeing whereby all noted that they had been trained to hold high levels of responsibility and to act autonomously. Lauren had been most keenly aware of this when moving from being a student to being newly qualified:

> That transition… is terrifying. It is like you have got someone's life, someone's unborn child, in your hands. If you miss something, you know, this could be catastrophic.…you don't have someone's hand to hold, and it's really nerve-wracking.

For Lauren, this transition was '*terrifying*', which is perhaps unsurprising given the level of responsibility that she highlights, using a visceral image of an unborn baby in her hands to emphasise just how much responsibility she holds. She describes an abrupt change with little preparation.

Holly discussed the changing nature of the role over time, noting growing complexity:

> We're seeing a lot more general nursing being incorporated into our role, given drugs that were not used to giving, having to run it by medical teams, surgical teams, …we should be having majority of just well healthy women… I'm not a nurse, I'm a midwife, but I feel like we're doing a lot more nursing care. And seeing a lot more unwell women as opposed to women that just come in, labour, and have a baby.

For Holly, the role had changed from the one she originally trained for. She was firm in her assertion of what her role was and was not, and described how this was being blurred. There was also an underlying narrative that working with more unwell women meant working with greater risk and with the unknown. Historically, midwifery was typically completed as a specialism after a nursing degree, however this began to change after 1996 with the widening of midwifery-only degrees (Briscoe & Clarke, 2018). Holly goes on to talk about this further, discussing the need for more training around nursing skills to meet these new responsibilities: "*We're not having that knowledge base, but we're expected to know it still, and we're not being given that extra training because we can't facilitate it. We can't fund it. We can't allow for it...".* Holly appeared frustrated; she shares the list of reasons for training not being supported despite the unrealistic expectations on midwives to complete this work to a safe standard. The reasons given had little to do with the midwives on the ground and more to do with systemic issues; the use of the word '*allow*' shows a declining of permission, a feeling of senior or powerful systems working against individuals.

Bearing witness

Participants described bearing witness to traumatic situations, some of which had been expected in maternity services and some not. Although there was a tendency for

participants to focus on patients' experiences and putting others first, there was a narrative of these events having real significance for midwives and an unrecognised impact.

Clare discussed a difficult birth that occurred a year ago and the impact this had on her: "*Just took me weeks upon weeks upon weeks, sleepless every night and then the daytime, I'd be absolutely fine. I'd go to bed and I just, just that baby being born was just horrendous, horrendous. [gets tearful]".* Clare describes a trauma response, an understandable reaction to a difficult event. Her stammering whilst describing what was happening when she went to bed shows the challenge of articulating the trauma with the repetition, emphasising the intensity of what she has experienced. Clare became emotional at the end of the quote, demonstrating that these events can stay with and impact midwives in the longer term.

Lauren reflected on the personal resonance that working with trauma can have:

> We are exposed to quite emotive subjects on a daily basis, not just stillbirth, but we see horrific domestic abuse, we see violence, we see trauma…especially for midwives, who've gone through it themselves. You know, they might be sexual abuse survivors…we've got midwives who have also gone through obstetric trauma themselves. And we have to relive this because we're, we're looking after women in similar situations to what we've gone through.

Lauren stressed in her communication the variety of trauma that midwives encounter, which may not be understood or appreciated. Her use of the word 'see' is of note,

almost that instead of working with trauma, midwives are required to bear witness to these traumas with little control. This is a large emotional demand for midwives to be holding by themselves.

More than just midwifery

Participants referred to the variety of their work and how this could be misunderstood, by family and the public, partly due to media representations. Lauren explained:

> As well as all the actual midwifery care… I do antenatal education… ensuring that they are being autonomous in their care making decisions. I make sure I'm safeguarding them and I'm safeguarding children... any like drug, alcohol, it's safeguarding, like, safe sleeping advice, it's bottle preparation, it's health advice, it's public health information. It's check your smears, get your contraception, do you know why we recommend this? So, it's like, yes, I'm a midwife. But I feel like I'm much bigger than just a midwife as well.

Lauren emphasised the wide range of duties that she undertakes, listing them to show the variety and to convey the expectations placed on her. This quote shows that complexities of the role are misunderstood; it is not merely a job of helping people give birth, it is also all the nuances before and after this. We can assume she feels more than others' perception of midwifery and the general belittling of the role of '*just a midwife*' when people do not understand intricacies and pressure of the midwife role.

Calling/Commitment

All participants discussed their calling or commitment to working within midwifery. This could be protective to their wellbeing, as it was a role, they felt pride in and gained satisfaction from doing. However, this could also have a negative impact, as most felt they were giving more of themselves to a system that was not caring for them.

Rebecca summarised this by saying:

> Everyone starts being in awe of midwifery…no one comes into midwifery because they like it, like a bit … it runs through your veins like you want to be a midwife more than anything. And then how many midwives are dropping out? How many midwives are dropping out within the first year? Like, that's not right. When they had that massive passion, like a few years before.

Rebecca described an almost a childlike wonder at the world of midwifery. She discussed midwifery as part of your being, which shows a true calling to the role. She then stopped abruptly and sees the reality of midwives leaving the profession, despite this passion; it feels like a painful realisation that midwives are leaving, despite the commitment they felt.

2. Safety in numbers

Concerns around staffing, and the subsequent impact on wellbeing, formed a large part of participants interviews. There were also concerns raised about the impact of understaffing on others.

Taking an emotional toll

Participants emphasised the high levels of distress caused by working understaffed shifts. Understaffed shifts in this context are defined as fewer staff on shift than recommended levels. The impact was felt even before shifts began, with high anxiety about what might happen on shift. In relation to understaffed shifts, Claire explained: *“There were times I would drive to work hoping that somebody would crash into my car, so I wouldn't make it to work because my anxiety was so high”.* This was a powerful statement from Clare, who continued to go to work despite these emotions. Significantly, a car crash would take responsibility away from Clare, allowing her to not feel guilty about not attending work. She appeared unable to make the choice herself, feeling obligated to put herself through intense distress to ensure the safety of patients on the ward.

Holly also discussed the impact of understaffing following midwives *after* shift:

> I leave and I think ‘What am I doing?’ … it's been more common to [pause] not be able to leave it at the door. … you don't necessarily process it when you're awake. I find that I'm dreaming about work and I'm waking up thinking ‘Oh gosh, I should have done this’ or ‘I should have done that’. …I think because everyone is so stretched, things will get missed.

Holly’s words suggest that understaffed shifts are disconnecting midwives from the very reason they came into the profession. The fact that work is following Holly into her dreams indicates the relentlessness of the pressure of work. She describes feeling “*stretched*”, a sense of being ‘done to’ and being pulled like an inanimate object to its limit, perhaps with an inevitability of breaking if continued.

Participants commented on the physicality of midwifery and how understaffing exacerbated the physical toll on midwives, who often did not receive breaks, resulting in 12-hour shifts without food or time to go to the toilet. Clare summarised:

> You are in a room, in the same room, for sometimes 12-hours, and if there's nobody to come and support you for a break… you're just absolutely drained, you're drained, you just need somebody to kind of come and refresh you.

Clare repeated the word '*drained*' to highlight her point; it is unspoken but communicated that a break is a *need* and a fundamental part of safe care but understaffing means this cannot happen. There was also an aspect of Clare communicating her needs clearly and openly, yet these still not being met, putting her in a position of helplessness.

Fear/isolation

Understaffing was also linked to feelings of isolation. Sophie described:

> Just feeling alone, really. Just thinking 'Oh my gosh, I'm, I'm here on my own. There's no one to help me'. And then, sometimes it does, like, you do go home, and you are upset afterwards. You just think there's no one to help me…

Maternity units are typically busy places and Sophie highlighting her feelings of being alone here is a stark difference: it conjures the image of a midwife surrounded by people but feeling a sense of despair at being alone. There are feelings of bleakness,

following her home after shifts. Her multiple uses of the word '*just*', suggests a minimisation of these strong, yet valid, emotional responses.

Alex also reflected on fear and isolation. She described a particular experience, recalling:

> I feel like I, I do need to ask questions, I need people's help at the moment I need there to be bodies around… There were two of the new band fives left on recovery and I was terrified.…I'm worried to go and get a drink because I can't leave my colleague on her own… if I leave at all, something may happen.

Alex's comments imply a need for reassurance at this point in her career, a need for not only physical safety in numbers but emotional safety and a space for learning and development. The word "*terrified*" shows the intensity of the fear felt, alongside the word '*left*', indicating a feeling of dependency. This was not merely an allocation of a role for Alex on the ward; it was also the perception of an abandonment, perhaps by seniors and/or the system.

Unable to care

Although not labelled as such, many participants described feeling moral injury. Moral injury occurs when witnessing, or engaging in actions which are not aligned with your values and beliefs (Cartolovini et al, 2021; Griffin al 2019). Amy explained:

> You're just not able to give the time that you want to give to people, and you go home feeling like you've, you know, everyone's alive and everyone's OK, but you

> don't feel like you've really given anybody any kind of great quality of care. You've just done the minimum… I'd go home feeling the worst is days where I feel like I haven't been able to really, you know, do my job how I'd like to do it.

There is a feeling of flatness here, where there is nothing explicitly wrong, there has been no serious incident or negative outcome, yet also nothing exactly right. This is seen to be chipping away at her wellbeing. Amy appeared to gain satisfaction from doing her job well and there is a sense of disappointment at the level of care she can provide.

Alex also reflects on moral injury, reporting:

> Offering this enhanced overtime has, to me, proved that it's not so much about the pay aspect, because people are still not taking these shifts, and to me it's all about 'How you feel about it? Do you feel like you're able to give good care on a shift?' At the moment, the answer is 'No' and people, I think, are leaving because they are worried about doing something wrong…

Alex captures the sense that sometimes it is not about the practicalities but the way a shift can make you feel. This is a much deeper aspect and much harder to see or quantify for others, yet it is clearly having large repercussions in terms of wellbeing and retention. There is a feeling of not giving good care being almost unbearable for people whose role is to care, alongside the suggestion that not giving good care is therefore giving bad care (i.e., potentially harmful).

Not just us

For participants, understaffing was perceived to impact on midwives *and* the patients they support. Sophie reflected on there being limited support available for people in early labour, stating:

> When you're in labour, you know, you're in pain and you're thinking like you don't know what's going on. You're thinking why is like, you know, no one's helping me. It's lonely. And that can have such an impact on their birthing experience. And then that can lead them to the, you know, trauma, postnatal depression and it just has, like, a snowball effect just because of the simple things.

Sophie shows empathy in this quote, and perceived confusion and feelings of neglect from patients, especially given that a hospital is a place we trust to provide care when we need it. There is a sense of helplessness portrayed as coming from patients, yet this could also be her own expression of guilt at not being able to give all women the support she would like to, further impacting on her own wellbeing. There is also the important reflection around birth experiences and the wider implications of this, putting an even larger pressure on midwives not only to help a person feel cared for, but the repercussions for patients' mental health if this does not go well.

A few participants touched on the impact of media reports publicising the difficulties of understaffing and how this affected pregnant people and their families. After the publication of an article about the understaffing at her hospital, Alex recalled:

> We then had families who were saying: ‘Well, if you're that understaffed, how are you going to safely look after my partner?’ I think it's, it's very scary if somebody's due to have their baby at the hospital thinking ‘Oh God, there's an article that's come out that said how poorly staffed they are and how midwives are rushed, and midwives aren't getting breaks and midwives are overstretched’. So I think from a family's point of view, you're about to have your baby at that hospital, it must be really frightening.

Interestingly, Alex discusses this not as a simple statement of understaffing with the quote illuminating just how complex the situation is, with added insight into how patients were experiencing it. Patients appeared scared by the reality and the reporting of it. The onus is once again, put on midwives, on the front line, to respond, rather than the wider system being held to account.

3. Feeling (un)supported

Participants discussed how perceived support, present and absent, impacted on wellbeing. Some experienced a sense of comradeship with people they worked alongside, whilst others reported feeling like an underappreciated ‘piece’ being moved around the system. There was a feeling of tokenism and despair at the current wellbeing support offered to midwives.

Team Support

Some participants discussed the value of being part of a team and how this influenced their wellbeing. Amy discussed the value of team members in the context working with difficult cases:

> It was really helpful to have her kind of talk to me on that day and then when I was next in, she met with me, and we went through all the notes and just talked about it. And yeah…. A bit of a debrief.

Amy described feeling held and supported by her team member, the same person discussing on the day and debriefing afterwards gave helpful consistency to the support. There was also a sense of being given the time and informal space to talk to help understand and process a difficult situation, something more than just a formal team debrief.

Jessica talked about the importance of midwives supporting midwives: *"Midwives seem to be great at supporting each other. And I say, I don't get much support from my manager at all, who is not a midwife, but I do get support from my team."* Jessica placed higher value on support from within her profession, also linking this to why she did not feel supported by her manager. This implies that only midwives can understand each other. There is also the idea that midwives are finding support from wherever it is available. Rebecca also discussed relationships with senior staff:

> I haven't had a break but as long as I know someone tried, that feels… that takes away that kind of feeling of like, oh, because then it's 'I'm not upset because I haven't had a break. I'm upset because I haven't been supported'.

For Rebecca, being kept in mind by her seniors and feeling that they are looking out for her, was important to feeling supported. This in turn could buffer the more negative

elements of the job, such as not getting a break. She uses the term '*upset*', which appears a strong emotional reaction to not feeling supported, demonstrating the sentiment and response a team can cause.

Neglected by the system.

There was a feeling from all participants that midwives had been neglected by wider systems. They did not feel supported to do their roles the way they wanted.

There was an acceptance from participants about the poor state of midwifery services and the suffering of the midwives within them, as described by Sophie: *"Everyone knows midwives are burnt out and …we've worked really hard and there's just not enough midwives, but I just think that the issues surrounding midwifery, you know, midwives themselves can't, can't solve them…."* Sophie suggests that '*everyone*' is aware of burnout amongst midwives, with a silent implication of nothing being done to change this. The belief that midwives themselves cannot change this suggests a sense of powerlessness; being made to be passive in a system that is not protecting them. Sophie emphasised that midwives have "*worked really hard*" as if this had been an unseen effort.

There was also a sense that services not only neglect midwives in relation to their wellbeing but also when it came to clinical incidents. Rachel explained:

> I do find like with NHS there is a lot of blame culture as well. So, rather than supporting you, they'll just find, I guess, find someone, find someone to blame. As, as it's a bit easier if something does go wrong.

Rachel describes neglect *and* a fear of scapegoating. This suggests that rather than a culture of reflection and improvement, blame is used as a tool. Fear of blame is then held over midwives' heads. Psychological safety is when teams have a shared belief that they can take interpersonal risks (O'donovan & Mcauliffe, 2020) and this fear of blame and overall neglect, contributes to a lack of psychological safety.

Failure of current wellbeing services

Although staff wellbeing services are available across all health boards in Wales, participants discussed the shortcomings of these services. Clare describes a particular time she needed to use wellbeing services after a traumatic work incident, explaining:

> Part of me just didn't even want to engage with that because that's where it happened [hospital] and that's my work and just trying to separate myself from that. I think I'd probably would have been more beneficial to have support probably outside of what they were offering me at the hospital.

Clare struggled to unpick the trauma from her workplace, a place she would like to feel safe. Clare mentioned not wanting to engage, using the words '*separate myself*' to show a need to pull apart and avoid the location but perhaps also the trauma.

Amy touched upon arranged wellbeing events: *"Coffee mornings and walks are really lovely aren't they to a certain extent, and then you just want to see, you know, some real kind of material change of a drive of things improving".* There is an acknowledgement of services trying and a polite positivity; however, the overall tone

is that these events are tokenistic and marred by the fact that no meaningful change has taken place to ensure midwife wellbeing. Her use of the word '*material change'* implies the need for something far more substantial. It suggests that wellbeing events create *im*material – and perhaps insignificant – change.

4. On top of it all.

Participants were asked about their experiences training and working during COVID-19. The key theme arising here related to fear and restrictions, adding to an already complicated role.

Fear and restrictions

A strong narrative surrounding the pandemic was fear and the impact of restrictions, as Jessica recalled:

> Nobody knew really what it was. And everyone was being told to stay at home and I was having to go out in it…I have found it terrifying. I was like 'What if I bring it home to my children?' You know, what if they die and I've killed them…And, you know, I was really worried about that… I would cry on the way to work.

Jessica showed a sense of responsibility and commitment to her role despite her distress for herself and for others in her life, with fear of catastrophic outcomes. Once again, there was felt to be huge pressure. There is a sense of confusion, not knowing how or when the virus would transmit and what the consequences of this would be, making the situation even more frightening, culminating in her being intensely distressed going to work.

Participants also discussed the impact of restrictions in hospital settings. Amy explained:

> They couldn't have visitors… that's really hard as well because a lot of the women on the antenatal ward …they may not be in labour but they're still in pain and you felt really horrible that you were almost making them go through that by themselves. When somebody is, you know, really just stressed and really upset and then you say 'Sorry, you're just going to have to do this by yourself' and that was really hard.

Amy used the word 'you' multiple times, referring to herself being the one to make others go through difficulty alone. Although she is not the one creating the rules, Amy appeared unable to separate herself from this, as she was the one enforcing them. This created feelings of guilt for the outcomes. Amy was the one seeing the painful human consequences of restrictions, which pulled at her conscience and perhaps created a sense of shame.

Discussion

This study aimed to explore factors influencing wellbeing in early career midwives. For these participants, there was a clear narrative that they were called to midwifery and committed to their role. It was also recognised that midwifery is a role that involved complexity, autonomy, and variety, alongside working in traumatic situations, all of which could be misunderstood by the public and employers. These factors impacted on midwives' wellbeing but were worsened by chronic understaffing and the feeling that these individuals were unsupported by the system. Understaffing and perceived neglect by the system underpinned almost every factor, making a difficult job feel unsustainable. This led to midwives being in significant distress and experiencing

moral injury from not being able to provide the care they wanted to. Further, they were aware of the impact of this on the patients they served. Being aware of the long-lasting influence birth experience and aftercare can have on maternal mental health appeared to increase levels of guilt and shame.

These factors can be considered as the 'modifiable' and 'non modifiable' aspects of the role that influence wellbeing (Cramer & Hunter, 2019). The theme of high stakes pressure is an example of a non-modifiable aspect, whilst the theme of understaffing highlighted modifiable aspects of the role. There also appeared to be an interplay between the modifiable and non-modifiable aspects: working with autonomy may be a non-modifiable and core aspect of the role, but working so autonomously that you worry about emergencies due to staffing, is modifiable. Working with ever changing conditions may be a non-modifiable expectation of working within maternity services, but doing so without updated training, is modifiable. These interrelationships are in-line with Cramer and Hunter's (2019) systematic review, yet extend their results, suggesting a possible additional interrelationship with 'feeling supported', by the immediate team, senior managers, and overall system. Fenwick et al. (2012) found that Newly Qualified (NQ) Midwives' wellbeing was heavily impacted by support; the results of the present study suggest that perceived support is an important factor beyond this first year. This is of note, as many programmes or support are aimed at this first year, with little accommodation made for supporting ECM's with only a few years' experience. When considering ECM's perception of support, results from this study suggest that the additional consideration of availability and suitability of wellbeing services play a part, as well as the public and media perception and support for the midwife role in general.

Moral injury was also a factor impacting ECM wellbeing. Moral injury was originally considered in the context of exceptional circumstances, specifically focused on military or emergency services (Cartolovni et al., 2021). There has been increasing research around moral injury in healthcare workers, more so focused on the impact of pandemics such as COVID-19 (Lai et al., 2019). A significant finding regarding moral injury in the present study is that it no longer applies to an exceptional circumstance, but to midwives' day to day role. Participants appear to be caught in a double bind, of feeling a responsibility to their patients to attend work despite experiencing intense emotions telling them the opposite and fearing the outcome of arriving to work in an understaffed team. For example, a midwife feeling they would rather crash their car than arrive at work and be put in the situation of not feeling able to do their job safely, but knowing that the situation will be worse for patients if they don't attend. This is particularly salient for midwives at the moment, with the release of Ockenden (2022) report and increased scrutiny of maternity services. There is a sense that these midwives are being put in a no-win scenario.

Dean et al (2019) discuss moral injury in the context of healthcare staff, highlighting a difference between this and burnout. They differentiate burnout as occurring because of individual factors, compared to moral injury, which is seen as a consequence of systemic factors. They describe moral injury as "*the challenge of simultaneously knowing what care patients need, but being unable to provide it due to the constraints that are beyond our control*" (p.400). This aligns with what participants described: understaffing and increasing expectations on midwives to do more with less, leaving midwives feeling unable to provide 'good enough' care, which resulted in feelings of guilt. Although research on outcomes of moral injury has focused primarily on military personnel, research indicates that moral injury can cause feelings of distress and

depressive symptoms (Lancaster & Erbes, 2017), lead to substance misuse, and, in some cases, suicidal ideation (Wisco et al. 2017). Koenig et al. (2018) found an inverse relationship between moral injury and community involvement and relationship quality, as well as difficulty with physical activity and sensitivity to pain. Given the significant impact moral injury can have on an individual, it is of concern that a service focused on supporting the physical and mental wellbeing of others, may cause such harm to its staff.

Clinical Implications

In this study, participants were clear about what is needed to improve wellbeing. There is an overwhelming desire amongst ECMs for systemic change in midwifery services to challenge the wider difficulties with understaffing, lack of training, and feeling neglected by the system. Some of these may have seemingly logical answers; however, there is a complexity to solving these longstanding issues such as number of midwives trained, employed, and retained. There is also the cyclical nature of these changes with participants requesting up to date training, breaks, and support on shift and this helping with staff retention, but to do this, there needs to be a suitable number of staff in place to begin with. In discussing clinical implications and ways forward, there will always be the 'elephant in the room' of understaffing, which needs to be acknowledged as impacting further workability of suggestions. To meet the needs of current and future midwives, as well as those using services, wider systemic commitment is needed, such as development of a fully funded workforce plan. This would then allow for adequate breaks, training and practical support on shift as well as factoring in support required to maintain wellbeing in an emotionally exhausting role i.e. reflective practice groups with staff given time to attend.

Limitations and future research

This research was conducted in Wales, which has devolved control over its healthcare system and therefore the results should be read with this limitation in mind. This research used an IPA approach to help understand the lived experience of the participants, however, this is also a limitation as such experiences will differ for other midwives in other healthcare systems. There was, however, homogeneity between participants' themes which demonstrates shared experiences amongst midwives. The interview schedule included a range of topics and upon reflection, it would have been helpful to limit these to provide a more in-depth understanding of fewer areas. In relation to future research, more understanding is needed around the moral injury experienced by midwives. This is also relevant in healthcare staff more generally, perhaps using quantitative methods in a large-scale survey to understand the extent of this in comparison to other professions, especially as research appears to focus on burnout instead of moral injury.

Conclusion

This study aimed to explore factors influencing wellbeing in early career midwives, in Wales. For participants, there was a sense that they were called to midwifery, a role that involved complexity, autonomy, and variety, alongside working in traumatic situations. These factors impacted wellbeing but were worsened by understaffing and feeling unsupported by the system, as well as existing wellbeing services not meeting their needs. Understaffing and perceived neglect by the system underpinned almost every factor, making a difficult job feel unsustainable. This led to midwives feeling unable to provide care as they would want, which increased distress. Additionally, COVID-19 has also exacerbated the difficulties. Participants were aware of the impact

of their wellbeing and systemic issues on the patients they served, which increased levels of guilt.

References

Abbasi, K. (2017). In a place near you, the NHS is in crisis. *Journal of the Royal Society of Medicine*, *110*(2), 47-47.

Aydın, R., & Aktaş, S. (2021). Midwives' experiences of traumatic births: A systematic review and meta-synthesis. *European Journal of Midwifery*, *5*.

Ayers, S., Eagle, A., & Waring, H. (2006). The effects of childbirth-related post-traumatic stress disorder on women and their relationships: a qualitative study. *Psychology, Health & Medicine*, *11*(4), 389-398.

Bell, A. F., & Andersson, E. (2016). The birth experience and women's postnatal depression: A systematic review. *Midwifery*, *39*, 112-123.

Briscoe, L., & Clarke, E. (2018). Midwifery education: Reflecting on the past and changing for the future. *British Journal of Midwifery*, *26*(5), 284-287.

Čartolovni, A., Stolt, M., Scott, P. A., & Suhonen, R. (2021). Moral injury in healthcare professionals: A scoping review and discussion. *Nursing Ethics*, *28*(5), 590-602.

Chen, L. L. (2022). The toxic healthcare hero narrative. *Journal of the American Association of Nurse Practitioners*, *34*(1), 1-2.

Cook, N., Ayers, S., & Horsch, A. (2018). Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review. *Journal of Affective Disorders*, *225*, 18-31.

Cox, C. L. (2020). 'Healthcare Heroes': problems with media focus on heroism from healthcare workers during the COVID-19 pandemic. *Journal of Medical Ethics*, *46*(8), 510-513.

Cramer, E., & Hunter, B. (2019). Relationships between working conditions and emotional wellbeing in midwives. *Women and Birth*, *32*(6), 521-532.

Dean, W., Talbot, S., & Dean, A. (2019). Reframing clinician distress: moral injury not burnout. *Federal Practitioner*, *36*(9), 400.

Donnelly, L. (2022) Patients wait two and a half days for an ambulance as NHS crisis deepens. https://www.telegraph.co.uk/news/2022/11/05/patients-wait-two-half-days-ambulance-nhs-crisis-deepens/

Fenwick, J., Hammond, A., Raymond, J., Smith, R., Gray, J., Foureur, M., ... & Symon, A. (2012). Surviving, not thriving: a qualitative study of newly qualified midwives'

experience of their transition to practice. *Journal of Clinical Nursing*, *21*(13-14), 2054-2063.

Galanis, P., Vraka, I., Fragkou, D., Bilali, A., & Kaitelidou, D. (2021). Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of Advanced Nursing*, *77*(8), 3286-3302.

Guixia, L., & Hui, Z. (2020). A study on burnout of nurses in the period of COVID-19. *Psychol Behav Sci*, *9*(3), 31-6.

Griffin, B. J., Purcell, N., Burkman, K., Litz, B. T., Bryan, C. J., Schmitz, M., ... & Maguen, S. (2019). Moral injury: An integrative review. *Journal of Traumatic Stress*, *32*(3), 350-362.

Griffin, Brandon J., Natalie Purcell, Kristine Burkman, Brett T. Litz, Craig J. Bryan, Martha Schmitz, Claudia Villierme, Jessica Walsh, and Shira Maguen. "Moral injury: An integrative review." *Journal of Traumatic Stress* 32, no. 3 (2019): 350-362.

Hall, L. H., Johnson, J., Watt, I., Tsipa, A., & O'Connor, D. B. (2016). Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PloS one*, *11*(7).

Hockday, J. (2020), Inside Intensive Care Unit where hero's are battling coronavirus. https://metro.co.uk/2020/04/07/inside-intensive-care-unit-nhs-heroes-battling-coronavirus-12519364/

Hughes, A. J., & Fraser, D. M. (2011). 'Sink or swim': the experience of newly qualified midwives in England. *Midwifery*, *27*(3), 382-386.

Hunter, B., Fenwick, J., Sidebotham, M., & Henley, J. (2019). Midwives in the United Kingdom: Levels of burnout, depression, anxiety and stress and associated predictors. *Midwifery*, *79*, 102526.

Iacobucci, G. (2022). Covid-19: NHS trusts declare "critical incidents" because of staff shortages. *BMJ* 376:o3.

Johnson, J., Hall, L. H., Berzins, K., Baker, J., Melling, K., & Thompson, C. (2018). Mental healthcare staff well-being and burnout: A narrative review of trends, causes, implications, and recommendations for future interventions. *International journal of Mental Health Nursing*, *27*(1), 20-32.

Joshi, G., & Sharma, G. (2020). Burnout: A risk factor amongst mental health professionals during COVID-19. *Asian Journal of Psychiatry*, *54*, 102300.

Kirkup, B. (2015) The report of the Morcombe Bay investigation. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/408480/47487_MBI_Accessible_v0.1.pdf

Kitson-Reynolds, E., Ferns, P., & Trenerry, A. (2015). Transition to midwifery: collaborative working between university and maternity services. *British Journal of Midwifery*, *23*(7), 510-515.

Knight, M., & Stanford, S. (2022). Ockenden: another shocking review of maternity services. *BMJ*, *377*.

Koenig, H. G., Ames, D., Youssef, N. A., Oliver, J. P., Volk, F., Teng, E. J., ... & Pearce, M. (2018). The moral injury symptom scale-military version. *Journal of Religion and Health*, *57*, 249-265.

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., ... & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA network open*, *3*(3), e203976-e203976.

Lancaster, S. L., & Erbes, C. R. (2017). Importance of moral appraisals in military veterans. *Traumatology*, *23*(4), 317.

Mahase, E. (2021). Under pressure: when does the NHS reach “breaking point”?.

Maslach, C., & Leiter, M. P. (2016). Burnout. In *Stress: Concepts, cognition, emotion, and behavior* (pp. 351-357). Academic Press.

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic stress*, *3*, 131-149.

Mohammed, S., Peter, E., Killackey, T., & Maciver, J. (2021). The “nurse as hero” discourse in the COVID-19 pandemic: A poststructural discourse analysis. *International Journal of Nursing Studies*, *117*, 103887.

Morgan, E. (2022), NHS at ‘breaking point’ with waiting list in England hitting new high of 7.2 million people. https://www.itv.com/news/2022-12-08/number-of-people-in-england-waiting-to-start-hospital-treatment-hits-record-high

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, *39*(5), 341-352.

Murray, L. (1992). The impact of postnatal depression on infant development. *Journal of Child Psychology and Psychiatry*, *33*(3), 543-561.

O'donovan, R., & Mcauliffe, E. (2020). A systematic review of factors that enable psychological safety in healthcare teams. *International Journal for Quality in Health Care*, *32*(4), 240-250.

Ockenden, D. (2022), Findings, conclusions and essential actions from the independent review of maternity services at the Shrewsbury and Telford Hospital NHS Trust. Our Final Report. https://www.ockendenmaternityreview.org.uk/wp-content/uploads/2022/03/FINAL_INDEPENDENT_MATERNITY_REVIEW_OF_MATERNITY_SERVICES_REPORT.pdf

Parsons, C. E., Young, K. S., Rochat, T. J., Kringelbach, M. L., & Stein, A. (2012). Postnatal depression and its effects on child development: a review of evidence from low-and middle-income countries. *British Medical Bulletin*, *101*(1), 57.

Peterson, U., Demerouti, E., Bergström, G., Samuelsson, M., Åsberg, M., & Nygren, Å. (2008). Burnout and physical and mental health among Swedish healthcare workers. *Journal of Advanced Nursing*, *62*(1), 84-95.

Rayment, J. (2015). Emotional labour: how midwives manage emotion at work. *The Practising Midwife*, *18*(3), 9-11.

Reynolds, E. K., Cluett, E., & Le-May, A. (2014). Fairy tale midwifery—fact or fiction: the lived experiences of newly qualified midwives. *British Journal of Midwifery*, *22*(9), 660-668.

Rice, H., & Warland, J. (2013). Bearing witness: midwives experiences of witnessing traumatic birth. *Midwifery*, *29*(9), 1056-1063.

Roberts, L. (2022) Midwives union fails to force strike in England. (https://www.telegraph.co.uk/news/2022/12/13/nhs-midwife-strikes-ballot-vote/).

Royal College of Midwives (RCM), Members Experience Survey (2021), https://www.rcm.org.uk/media-releases/2021/september/rcm-warns-of-midwife-exodus-as-maternity-staffing-crisis-grows/

Royal College of Midwives (RCM), (2023), Midwives announce dates for strike action in Wales. https://www.rcm.org.uk/media-releases/2023/january/midwives-announce-dates-for-strike-action-in-wales/

Royal College of Nursing (RCN), Press Release (2022, November 25) - https://www.rcn.org.uk/news-and-events/Press-Releases/first-strike-dates-announced-by-rcn-after-uk-government-declines-nhs-pay-negotiations

Shinebourne, P. (2011). The Theoretical Underpinnings of Interpretative Phenomenological Analysis (IPA). *Existential Analysis: Journal of the Society for Existential Analysis*, *22*(1).

Sizmur, S., & Raleigh, V. (2018). The risks to care quality and staff wellbeing of an NHS system under pressure. *The King's Fund: Oxford*, 24.

Smith JA, Flower, P and Larkin, M (2009), *Interpretative Phenomenological Analysis: Theory, Method and Research*. London: Sage.

Thornton, J. (2022). Ockenden report a "watershed moment". *The Lancet*, *399*(10333), 1371.

Tindall, L. (2009). JA Smith, P. Flower and M. Larkin (2009), *Interpretative Phenomenological Analysis: Theory, Method and Research*. London: Sage.

Toppinen-Tanner, S., Ojajärvi, A., Väänaänen, A., Kalimo, R., & Jäppinen, P. (2005). Burnout as a predictor of medically certified sick-leave absences and their diagnosed causes. *Behavioral Medicine*, *31*(1), 18-32.

Triggle, N., & Pym, H (2022), Nurses bitten and screens smashed - life in A & E. https://www.bbc.co.uk/news/health-63905272

Viveiros, C. J., & Darling, E. K. (2019). Perceptions of barriers to accessing perinatal mental health care in midwifery: A scoping review. *Midwifery*, *70*, 106-118.

Vize, R. (2022). Ockenden report exposes failures in leadership, teamwork, and listening to patients.*BMJ*, *376*.

Wisco, B. E., Marx, B. P., May, C. L., Martini, B., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2017). Moral injury in US combat veterans: Results from the national health and resilience in veterans study. *Depression and Anxiety*, *34*(4), 340-347.

Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health*, *15*(2), 215-228.

Appendices

A. Participant Information Sheet

26/08/22 V2

Study title: Factors influencing wellbeing in early career midwives

Participant Information Sheet

You are invited to take part in a research study. Before you decide whether or not to take part, you are encouraged to read this information sheet carefully. It will help you to understand why the research is being undertaken and what it involves. Please take time to read this information carefully. You are welcome to share the information with anyone else who might help you to decide. However, it is up to you to decide whether or not you would like to take part. You are encouraged to contact the research team if there is anything that is not clear, or if you would like further information.

This research is being completed by Maisy Stockdale as part of a Doctorate in Clinical Psychology.

Background

Over the last few years, there has been a notable difficulty in recruiting and retaining midwives within the NHS. Many midwives are leaving the NHS citing unsustainable workloads and stress, and this is more widespread amongst early career midwives (ECM).

We wish to explore stress and wellbeing in early career midwives. We are interested to hear what impacts stress and wellbeing in ECM, what (if anything) they believe needs to change to enhance their experience. We are also interested about the impact of COVID and any perceived impact on birthing people and their families.

What is the purpose of this study?

This study aims to look at the experience of ECM's, within the Welsh NHS, and specifically look at wellbeing.

. This study seeks to answer the following questions:

1. What factors influence wellbeing in ECM's?
2. What (if anything) ECM's feel needs to change to enhance their experience?
3. What is the perceived impact of above on birthing people and their families?
4. What is the impact of training/qualifying during COVID 19?

Why have you been invited to take part?

You have been invited to take part because you are an early career midwife, who has been qualified less than five years and is currently working in Wales.

What would taking part involve?

If you agree to take part, you will be asked to complete an interview with Maisy Stockdale (Trainee Clinical Psychologist). In this interview, you will be asked about your experiences of being a midwife, your wellbeing related to your role as well as the impact of COVID-19 on this. You will also be asked to provide some basic information about yourself (e.g., your age) and your professional role (e.g., how long you have been qualified as a midwife, what kind of service you work in). You can request to see the questions that will be asked before the interview.

The interview will take place at a time and date which is mutually convenient. This may be within your working hours, if requested. You will be offered a choice of being interviewed over the telephone or via online video conferencing, depending on your preference. All interviews will be audio or video recorded and transcribed by the researcher.

Do you have to take part?

No, your participation is entirely voluntary. Whether you choose to participate or not, your employee will not be informed by the research team and your employment will not be affected. If you decide to take part, you should keep a copy of this information sheet and you will be asked to sign the attached consent form. In interviews, you can choose not to answer any question that you do not wish to answer. You can also end the interview at any time and do not have to give a reason or explanation.

What are the possible benefits and risks of taking part?

Participation may be of benefit to you by providing an opportunity to reflect on your experiences of your wellbeing related to your role and how COVID-19 has also impacted this. However, it is also possible that there will be no benefit to you personally. We hope that this research will have benefit to others in the future by helping us to understand the experiences of midwives and sharing what they think can be done differently.

All participants will be compensated for their time with a £25 online retail voucher.

It is not anticipated that taking part in this study will cause any risk or discomfort to you. However, it is possible that discussing your experiences may cause some distress. If appropriate, you will be signposted to additional support services.

How will confidentiality be maintained?

All the information you share as part of the study will be kept confidential. When the interview is transcribed, you will be identified by a number, which will be known only to the research team. You will not be identified by name in any report, thesis, or publication that

arises from this study. We will anonymise transcripts to remove any information that might make it possible to identify you (e.g., the names of people and places).
To help convey your experiences accurately, we would like to use anonymous quotes from your interview responses. All efforts will be made to ensure that no information will be contained in quotes that would enable anyone else to identify you.
Any personal information collected (e.g., signed consent forms and demographic information) will be stored securely at Bangor University, where it will only be accessible to the research team. This information will be stored for 10 years and then destroyed in line with Bangor University guidelines.

What are the limits of confidentiality?
If any participant discloses information during an interview that indicates a risk of significant harm, either to the participant or another person, this information will need to be shared to ensure safety. We will always discuss this with you before doing so.

How do you withdraw?
You may withdraw from this study by contacting the researcher prior to the interview using the details below, with your name and contact details. You can also choose to stop the interview and withdraw at any time. Please note that once the interview data has been collected, it will not be possible to withdraw your data. However, you are welcome to contact the researcher if you wish to discuss any concerns.

What will happen to the results of the study?
The results of the study will be published as part of a doctoral thesis and may be published in a journal article. The results will also be disseminated through oral presentations at conferences and seminars. The results may also be used for teaching purposes or to inform future research. Only anonymised data will be shared.
If you would like to receive a brief written summary of the main findings of the study, please indicate this on the attached consent form.

Will it be possible to complete interviews in Welsh?
Yes, you will be offered a choice as to whether you would like to be interviewed in English or Welsh. All written materials for this study are also available in English and Welsh.

Who has ethically reviewed the study?
The study has been reviewed and approved by the School of Psychology Research Ethics Committee at Bangor University [2022-17204].

Who can you contact if you have any concerns about the study?
If you have concerns about the study, please contact a member of the research team in the first instance (contact details below).

If you still have concerns or wish to raise a complaint about this study or the conduct of its researchers, please contact Huw Roberts, College Manager, College of Human Sciences, Bangor University on +441248383136 or huw.roberts@bangor.ac.uk

Who can you contact for further information?

If you have any further questions about the study, please contact:

Researcher: Maisy Stockdale (Trainee Clinical Psychologist) – msh19spy@bangor.ac.uk

Research Supervisor: Dr Lucy Piggin (Research Tutor) – l.piggin@bangor.ac.uk/ 01248 383204

B. **Debrief Form**

Study title: Factors influencing wellbeing in early career midwives

Thank you for participating in our research. We appreciate you sharing and discussing your experiences with us.

We hope that this was not a difficult experience for you. If, however, you have felt distressed discussing these experiences and wish to seek further support, you can contact the following local staff wellbeing services:

Cardiff and Vale University Healthboard.
Employee.wellbeing@wales.nhs.uk, 02921 844 465

Betsi Cadwaladr Healthboard
03000 855924

Swansea Bay University Healthboard.
Sbu.staffwellbeing@wales.nhs.uk, 01639 684568

Aneurin Bevan University Healthboard.
ABB.EmployeeWellbeing@wales.nhs.uk 01633 234888

Powys Teaching Healthboard
Powys.occupationalhealthadmin@wales.nhs.uk, 01874712600

Cwm Taf Morgannwg University Healthboard
CTM.Wellbeingservice@wales.nhs.uk.

Hywel Dda University Healthboard
wellbeing.hdd@wales.nhs.uk **,** 01437 772527

You can also contact your GP if you feel that you would benefit from additional health with your mental health and wellbeing.

If you have any further questions or concerns about the study, please contact: Maisy Stockdale, Trainee Clinical Psychologist, North Wales Clinical Psychology Programme, Bangor University, LL57 2DG, msh19spy@bangor.ac.uk

If you have additional concerns or wish to raise a complaint about this study or the conduct of its' researchers, please contact Huw Roberts, College Manager, College of Human Sciences, Bangor University on +441248383136 or huw.roberts@bangor.ac.uk

Thank you for participating in this study.

C. **Consent Form**

Consent Form

26/08/22 V2

Title of Study: Factors that influence wellbeing in early career midwives

Please initial in each box as appropriate:

☐ I confirm that I have read the information sheet dated 26/08/22 (Version 2) for the above study. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily.

☐ I understand that my participation is voluntary and that I am free to withdraw without giving a reason.

☐ I understand that participating in this research will involve a one-to-one interview and that I will also be asked to provide some demographic information.

☐ I agree to the interview being audio or video recorded.

☐ I understand that my data will be anonymised (e.g., I will be assigned a participant number and a pseudonym).

☐ understand that direct quotes (anonymised) will be used and may feature in the write-up and any potential publications that may follow from this research.

☐ understand that data collected about me as part of this project may be looked at by the research team, which involves members of Betsi Cadwaladr University Health Board and Bangor University. I give permission for these individuals to look at my data.

☐ I understand that I am free to ask questions or to discuss any concerns with the researcher at any time.

☐ understand that the data I provide me may be used for research dissemination, teaching, and to support other research in the future.

☐ agree to take part in the above study.

Optional:

☐ I would like to receive brief written feedback about the findings of this study.

If you would like to be informed about the findings of the study, please indicate how you would like to be informed (e.g., by letter, email or online meeting) and provide contact details below:

……
……
……
……

_____	_____	_____
Name of participant (print):	Date	Signature

_____	_____	_____
Name of researcher (print):	Date	Signature

Note. Copy for researcher and copy for participant.

Contact details of researcher/research team.

Researcher: Maisy Stockdale (msh19spy@bangor.ac.uk)
Supervisor: Dr Lucy Piggin (l.piggin@bangor.ac.uk)

D. Interview Schedule

Interview Schedule – English

1. To get us started, it would be great to hear about of your journey in midwifery so far.
   (Prompts – training, your placements, your role as a qualified midwife)
2. Can you tell me about the service you work in?
3. What type of things does your role entail?
4. What type of things about your role, influence your wellbeing?
5. Can you tell me if any aspects of your role influence your personal life?
6. What do you feel, if anything, would improve your experience as a midwife?
7. Thinking about what we've just discussed, I was wondering what you thought the consequence of these was on birthing people?
   (Prompt – how about prenatally, during birth or postnatally?)
8. How about their partners or families?
9. Was COVID around during your training and if yes, can you tell me a bit about how it shaped your training experience?
   (Prompts – How about and impact on placements, teaching, skill development, supervision, support networks)
10. Can you tell me a bit about the impact of COVID had on your role?
    Prompts – How about the level of workplace support or type of work you are undertaking?
11. What, if anything, do you think would be different without COVID?
12. Thank you for taking the time to answer my questions, before we finish, is there anything else you would like to tell me before we finish?

E. Ethics email

2022-17204 Factors influencing wellbeing in early career midwives

Your research proposal number 2022-17204
has been reviewed by the [Pre-Aug 2021] School of Psychology Ethics and Research Committee
and the committee are now able to confirm ethical and governance approval for the above research on the basis described in the application form, protocol and supporting documentation. This approval lasts for a maximum of three years from this date.

Ethical approval is granted for the study as it was explicitly described in the application

If you wish to make any non-trivial modifications to the research project, please submit an amendment form to the committee, and copies of any of the original documents reviewed which have been altered as a result of the amendment. Please also inform the committee immediately if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.

Chapter 3

Contributions to Theory and Clinical Practice

Introduction

The empirical paper and systematic review explore different perspectives on maternity services, post-COVID-19. The thesis explores the experiences of birthing people and the midwives who support them, looking to understand the experiences of both sides in order to better understand the system and impact of this on care.

Clinical Implications

Empirical Paper

The empirical paper discusses factors that influence ECM wellbeing. These can be separated in to modifiable and non-modifiable aspects of the role, in line with the work of Cramer and Hunter (2019). Participants reported feeling let down by systems around modifiable aspects, such as understaffing and limited opportunities for continuing professional development. They expressed frustrations with wellbeing services and tokenistic gestures, raising questions as to how generic wellbeing advice are received by an overstretched workforce. There was a sense of services treating the symptoms of distress, rather than the cause. General wellbeing events or person-directed approaches were utilised instead of focusing on changing an unsustainable system.

Previous literature reviewing burnout has also considered interventions on person-directed or organisation-directed levels, with some examining a combined approach (Dreison et al., 2018). Participants perceived the focus of support as being on helping people survive the system, which suggests a person-directed approach instead of an organisation-directed approach, placing blame on the individual for not ‘coping’. As there are no current reviews of interventions specifically for midwives, the first step

may be to consider interventions for healthcare staff in general. Dreison and colleagues (2018) completed a meta-analysis into burnout interventions of mental health providers and concluded that person-directed intervention may be better at remediating once burnout has occurred. However, literature around causes and more narrative research suggests that organisational changes and interventions may be more important in preventing burnout and sustaining change (Johnson, 2018, Morse et al., 2012). Dijixhorn et al. (2020) examined interventions for palliative care staff and found four out of ten interventions had no impact: all four of these interventions were person-directed only, with no apparent links to burnout causes or components. This feels in line with what participants expressed about current wellbeing services, such as coffee mornings or walks, not targeting causes of burnout. Montgomery and colleagues (2019) suggest an organisational approach to healthcare staff wellbeing, including examining burnout on a unit or departmental level rather than individual. This would allow for a better understanding for key system drivers and would be of interest when considering the moral injury and burnout being seen in maternity units.

Alongside modifiable aspects of the role were non-modifiable aspects, which participants accepted as an inevitable part of their position. Despite this acceptance, there is still a responsibility on health services to support midwives with managing these aspects – even if they may be considered unavoidable. These non-modifiable aspects include working autonomously with high levels of responsibility, working with risk, and witnessing traumatic incidents. Given this, it is important to consider what wellbeing services could do differently to engage with this population of staff. There was an emphasis on team support and feeling connected to people who understood, more specifically other midwives. It may be beneficial to consider group reflective

practice or peer supervision, as a way in which midwives can be brought together to reflect with each other in a facilitated session, regardless of number of years in service. As this may be present in hospital settings already, it would be worth considering uptake and how these opportunities are prioritised for already overworked staff. For example, are they factored into shift time or are attendees expected to attend outside of working hours, following this, is time reimbursed? There should also be a recognition of the impact of receiving wellbeing support, located at the place causing this distress, be it secondary trauma or workplace stress, and how wellbeing teams can work creatively around this. It may be worth considering how additional psychological support could be offered to the maternity departments and midwives to increase psychological safety and wellbeing, such as a Clinical Psychologist time dedicated to supporting the department.

Participants perceived that their wellbeing impacted the care of, and experiences of, their patients. This is congruent with research identifying patient safety as being impacted by staff wellbeing (Hall et al., 2016). The implication for patient safety is concerning; however, the additional association between midwife wellbeing and the impact on people's birth experience also has significant weight, given the association between birth experience, parent mental health (Bell & Anderson, 2016; Cook, Ayres & Horsch, 2018), and subsequently, child development (Murray 1992; Parsons et al., 2012). The Ockenden Report (2022) found that many individuals who had experienced traumatic events through maternity services were not given appropriate psychological support afterwards. A literature review by Viveiros and Darling (2019) found that the primary issue with accessing perinatal mental healthcare was at the very start of the care accessing process, therefore it would be pertinent for maternity services to

consider how they can improve existing links with perinatal mental health services to increase access to those who need it. Additionally, this may mean increasing provision of perinatal mental health services, to meet this need.

Systematic Literature Review

Findings from the systematic review suggest that hospital restrictions, due to the COVID-19 pandemic, impacted on birthing experiences and subsequent mental health. Restrictions included lack of birth partner(s) prior to, during and/or after labour, lack of access to preferred method of birth or pain relief and wearing a mask during labour. Overall, birth experiences were rated as more negative as a result of restrictions, with higher rates of postnatal depression, anxiety, and post-traumatic stress symptoms. This underlines the importance of agency and control around birth experience and options for support during and immediately after birth. This is of additional importance in marginalised groups who may use birthing partners for advocacy as well as emotional support. The review identifies the need for ongoing mental health support for people who gave birth during the pandemic and may still experience difficulties, for example, those with post-traumatic stress symptoms. It also highlights the wide-reaching impact that blanket restrictions on maternity services may have, and restrictions should be considered carefully in the future.

In order to examine the increased discrimination experienced by BIPOC, I must first recognise my own privilege as a white, cis-gender, able-bodied woman and how my experiences have been shaped by this. This includes my own experience of giving birth during COVID-19 restrictions. It is important to consider my position given that both qualitative and quantitative studies found additional discrimination due to

restrictions faced by Black, Indigenous, and people of colour (BIPOC). This discrimination appears to have been directly or indirectly worsened by the introduction of restrictions. Quantitative studies showed lower scores on respect measures (Breman et al., 2021) and higher discrimination scores for BIPOC (Janevic et al., 2022). Qualitative data reported restrictions impacting those who may have cultural expectations around family members present at birth, as well as absence of a support person as loss of an advocate, which led to more instances of discrimination and mistreatment from healthcare professionals (Altman et al., 2021[A]). This shows the far-reaching effects of birth partner restrictions, to not only birth experience but much wider issues, given the increased mortality rate in BIPOC women, which is linked to experiences of racism and neglect in medical settings (Taylor, 2020; Rosenthal & Lobel., 2020). Absence of a birth partner and advocate for BIPOC can not only lead to negative emotional states but much more catastrophic implications.

Altman et al. (2021[B]) interviewed maternity staff and found that they were also aware of discrimination when implementing visiting policies and flexibility around restrictions. Staff were able to reflect that those who spoke English were more able to ask for flexibility and were therefore more likely to gain an extra visitor or extended hours. They noted that these patients were more likely to be white and middle class, which left professionals feeling that rules were applied unfairly. These biases and subsequent discriminations are not new in healthcare, with racism in healthcare being widely recognised (Feagin & Bennefield, 2014). As Altman and colleagues (2021[B]) discuss, the pandemic simply magnified already held biases. This highlights the importance of examining impact of restrictions, to better understand how we need to be safeguarding against discrimination towards BIPOC, specifically in maternity

services. Additionally, it is important to consider if there was increased discrimination towards others, such as LGBTQ+ patients or those with disabilities to fully understand the impact of restrictions on minority groups.

Research Process and Personal Reflections

I have always had an interest in staff wellbeing. Clinically, I've always preferred working in areas where I can work with systems, such as services who support people with learning disabilities or dementia. A large part of this is supporting staff to enable them to optimally support service users. Whilst planning this research, I wanted to take the opportunity to explore staff groups in a health setting, as I had primarily supported those in social care settings. I initially thought about healthcare workers typically thought of high-pressure roles, such as in Accident and Emergency departments or Intensive Care Units; however, there has been research into these areas already, as well as a wealth of research on wellbeing post COVID-19. It was around this time that I went off on my maternity leave, residing myself to pick up research once I returned. During my labour, I was supported by a midwife who informed me she was a community midwife and covering for a few hours. She told me she had to leave at 5pm to get her children but she would stay with me until then and a different midwife would be with me after. When 5pm came, this midwife stayed with me. I asked about her children, and she told me not to worry; 6pm came and I asked why she was still there. She told me she was waiting for the 7pm shift to start and that's when I realised, there was no one to hand over to. All midwives were in a birth, there was no one spare. She told me not to worry and that she would not leave. I felt awful that she was not able to be home for her children, and at the same time, genuinely terrified that she might have to leave me. Of course, she stayed until almost 8pm with the handover and I am

eternally grateful to this unnamed midwife who cared for me so intently instead of being home with her children. Once I returned to work, and turned my brain back on to research, I immediately felt a pull to understand more about midwife wellbeing and what clinical psychology could do to support this. I decided to recruit away from the NHS, as I wanted to engage with midwives outside of the system that employed them. I had hoped this would allow participants to speak more freely about the difficulties they faced in their roles, and this did seem to be the case. I also wanted the research to be free from influence of NHS policies to enable me to explore what felt most important to participants and not be censored by the system. Given what participants discussed, this feels like the appropriate decision to make, positioning myself away from the unsupportive system that they describe.

My systematic review also came from a personal experience. After giving birth to my daughter, I was kept in hospital for one night, on a ward with three other women in my room. Two of whom, had been in the hospital for at least five days and were only allowed one visitor for two hours each day. Whilst I was there, both women became distressed when partners were required to leave. These women, and the injustice I felt for them, was not something I would forget in a hurry. At a time when football matches were going ahead with stadiums full of people, gyms were open, and you could meet six friends from six households in a pub, there was still heavy restrictions on birthing people. When women are already at one of their most vulnerable times, support was stripped away, as well as placing a huge responsibility to care for a baby alone. This was compounded by the busy-ness of the midwives on the ward, unable to respond to every crying woman and baby, because of observations to complete and medication to give. Now, I am able to see exactly how my empirical paper and

systematic review are intrinsically linked. Midwife wellbeing and the aspects that influence this, impact on birthing people and their birth experience. Knowing how important these experiences are for maternal wellbeing and subsequent child development shows that we have a duty to protect not only staff wellbeing but the patients they support. Restrictions were put in place to protect but now, in hindsight, we must look at what cost these restrictions had and how we can support people in moving forward.

Finally, I am unable to honestly reflect on the experience of completing research in maternity services, without reflecting on my own experience of pregnancy loss. I purposely did not consider research or reviews related to loss, due to previous experience with loss; however, I had not considered getting pregnant and losing a baby over the course of my research into maternity services. This has required me to move slower, be gentler with the process and I was initially fearful that I would need to take time away. Unexpectedly, continuing to research in this area has been an almost cathartic experience. I anticipated a pulling back and withdrawing from the topic of pregnancy and birth but by allowing myself to be open and immersed in the topic, there was no hiding from the grief and recognition that this was hard. This in turn, allowed for a more whole processing and acceptance of loss. It also provided a motivation to help people along their maternity journeys, as well services and staff that I have interacted with over the years. It has also put my own experiences with busy maternity services in context. My own personal frustrations at ever changing midwifes or not feeling supported, although still valid, are seen in a different light. It has also helped me understand the full impact of current state of midwifery services on the people they support.

References

Altman, M. R., Eagen-Torkko, M. K., Mohammed, S. A., Kantrowitz-Gordon, I., Khosa, R. M., & Gavin, A. R. (2021). The impact of COVID-19 visitor policy restrictions on birthing communities of colour. *Journal of Advanced Nursing*, *77*(12), 4827-4835.

Altman, M. R., Gavin, A. R., Eagen-Torkko, M. K., Kantrowitz-Gordon, I., Khosa, R. M., & Mohammed, S. A. (2021). Where the system failed: The COVID-19 pandemic's impact on pregnancy and birth care. *Global Qualitative Nursing Research*, *8*, 23333936211006397.

Bell, A. F., & Andersson, E. (2016). The birth experience and women's postnatal depression: A systematic review. *Midwifery*, *39*, 112-123.

Cook, N., Ayers, S., & Horsch, A. (2018). Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review. *Journal of Affective Disorders*, *225*, 18-31.

Cramer, E., & Hunter, B. (2019). Relationships between working conditions and emotional wellbeing in midwives. *Women and Birth*, *32*(6), 521-532.

Dijxhoorn, A. F. Q., Brom, L., van der Linden, Y. M., Leget, C., & Raijmakers, N. J. (2021). Prevalence of burnout in healthcare professionals providing palliative care and the effect of interventions to reduce symptoms: a systematic literature review. *Palliative Medicine*, *35*(1), 6-26.

Dreison, K. C., Luther, L., Bonfils, K. A., Sliter, M. T., McGrew, J. H., & Salyers, M. P. (2018). Job burnout in mental health providers: A meta-analysis of 35 years of intervention research. *Journal of Occupational Health Psychology*, *23*(1), 18.

Feagin, J., & Bennefield, Z. (2014). Systemic racism and US health care. *Social Science & Medicine*, *103*, 7-14.

Hall, L. H., Johnson, J., Watt, I., Tsipa, A., & O'Connor, D. B. (2016). Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PloS one*, *11*(7), e0159015.

Janevic, T., Maru, S., Nowlin, S., McCarthy, K., Bergink, V., Stone, J., ... & Howell, E. A. (2021). Pandemic birthing: childbirth satisfaction, perceived health care bias, and postpartum health during the COVID-19 pandemic. *Maternal and Child Health Journal*, *25*(6), 860-869.

Johnson, J., Hall, L. H., Berzins, K., Baker, J., Melling, K., & Thompson, C. (2018). Mental healthcare staff well-being and burnout: A narrative review of trends, causes, implications, and recommendations for future interventions. *International Journal of Mental Health Nursing*, *27*(1), 20-32.

Montgomery, A., Panagopoulou, E., Esmail, A., Richards, T., & Maslach, C. (2019). Burnout in healthcare: the case for organisational change. *Bmj*, *366*.

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, *39*, 341-352.

O'donovan, R., & Mcauliffe, E. (2020). A systematic review of factors that enable psychological safety in healthcare teams. *International Journal for Quality in Healthcare*, *32*(4), 240-250

Ockenden, D (2022), Findings, conclusions and essential actions from the independent review of maternity services at the Shrewsbury and Telford Hospital NHS Trust. Our Final Report. https://www.ockendenmaternityreview.org.uk/wp-content/uploads/2022/03/FINAL_INDEPENDENT_MATERNITY_REVIEW_OF_MATERNITY_SERVICES_REPORT.pdf

Rosenthal L, Lobel M. Gendered racism and the sexual and reproductive health of Black and Latina women. *Ethn Health*. 2020;25(3):367-392.

Taylor JK. Structural racism and maternal health among Black women. *J Law Med Ethics*. 2020;48(3):506-517.

Viveiros, C. J., & Darling, E. K. (2019). Perceptions of barriers to accessing perinatal mental health care in midwifery: A scoping review. *Midwifery*, *70*, 106-118.