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Challenges and lessons learned birthing during the COVID-19 pandemic: A scoping review

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Abstract

Background and Aims: The impact of the COVID-19 pandemic on the healthcare system facilitated a change in policies to redress the consequences of increased demand and fear of disease transmission. Restrictive measures throughout the healthcare system limiting access to accompanying partners of birthing people in addition to fears of contracting COVID-19, an increasing number of birthing people chose to have an out-of-hospital birth. Out-of-hospital births are not prevalent in the United States. However, in recent years the percentage of out-of-hospital births has been steadily increasing. COVID-19 was a novel virus imposing a unique birthing situation for millions of women, complicated by lack of integration and varied policies in the U.S.

Methods: To better understand the challenges of birthing people during the pandemic a scoping review was conducted to explore the literature during the first wave of the pandemic related to out-of-hospital births. The approach for this review made use of the methodology manual published by the Joanna Briggs Institute for scoping reviews. All manner of publications (i.e. peer-reviewed published articles, grey articles, conference proceedings, webinars, editorials, and textbook chapters) were included in the review.

Results: Articles retrieved from the database search yielded sixty-three articles, after duplicate removal forty-six records were available for screening. Articles were further excluded using the PRISMA process, yielding thirty-one remaining records. From the thirty-one records twelve themes emerged, which were collapsed into four meta-themes.

Conclusion: These meta-themes focused on (a) advocacy, (b) homebirth infrastructure, (c) support networks, and (d) uncertainty during the pandemic. COVID-19 has accelerated this movement to birthing at home and thought must be given to how the healthcare system is going to support and integrate this mode of birthing.

KEYWORDS

COVID-19, freebirth, homebirth, maternity care, midwives, pregnancy

1 | INTRODUCTION

In March 2020, the United States, like numerous other nations began implementing lockdowns to address the rapid spread of COVID-19. The ferocity of the virus particularly in the US epicenters burdened the US healthcare system causing overcrowding, delays in services, and supply and staff shortages. The impact of the pandemic on the healthcare system facilitated a change in policies to redress the consequences of increased demand. Additionally, pandemic mitigation policies were developed and implemented to reduce COVID-19 transmission within hospitals. The implementation of these policies in conjunction with patient fear of contracting COVID-19 significantly impacted the delivery of care and informed patient behaviors as it related to healthcare decision-making. COVID-19 has shifted the healthcare landscape, shaping how patients decide to obtain care. Data from the US Centers for Disease Control and Prevention showed that approximately 40% of US adults delayed or avoided medical care during the early months of the pandemic.[1] Patients who had conditions that did not afford them the ability to delay or avoid care, sought alternative care options. In a current climate where perinatal care has become more restrictive in number or personnel permitted to accompany a birthing person during their birth journey, an increasing number of individuals have chosen to have a home or out-of-hospital birth as an alternative option.

1.1 | Background

The American College of Obstetrics and Gynecologists (ACOG), the premier professional organization for obstetricians-gynecologist with aims of improving women's health and advocating on behalf of their patients and members, has long advocated for a birthing person's right to make a medically informed decision about site of delivery.[2–4] They advocate for current local data concerning delivery location be shared with birthing people making these decisions. Data detailing differences between hospital and out-of-hospital births to help women balance the risks and benefits to herself and her fetus, including fewer maternal interventions but a more than twofold increased risk of perinatal death (1–2 in 1000) and a threefold increased risk of neonatal seizures or serious neurologic dysfunction (0.4–0.6 in 1000) for out-of-hospital births.[2,3] Out-of-hospital births should be attended by a certified nurse-midwife or midwife with education and licensure that meet International Confederation of Midwives' Global Standards for Midwifery Education, a physician practicing obstetrics within an integrated and regulated health system, and access to safe and timely transport to nearby hospitals.[2] Absolute contraindications include fetal malpresentation, multiple gestation or prior history of cesarean delivery.[2] In a recent updated guideline by ACOG, the organization outlined the differences in maternal and perinatal care available at various facilities depending on their level of care or capabilities.[5] These levels of care range from I to IV being most basic to regional perinatal health care, respectively. Additionally, ACOG includes accredited birth centers within in the levels of maternal care as a designation before level I, however home birth attended by a midwife is not included in the levels of care. The lack of inclusion of home birth can only be interpreted as a nonendorsed option for birth. By explicitly outlining the providers availability and capabilities, the organization hopes to improve the pressing issues of disparities in severe maternal morbidity and mortality by directing women to levels with risk-appropriate care.[5]

Out-of-hospital births are not prevalent in the United States. The proportion of out-of-hospital births in the United States has remained below 1% for several decades.[6] However, in recent years the percentage of out-of-hospital births has been steadily increasing.[7,8] Studies show an overall increase of 85% from 2004 to 2017 with home births increasing by 77% and the number of birth center births doubling.[8] By 2017, 1 of every 62 births in the United States was an out-of-hospital birth.[8] The proportion of out-of-hospital births varies significantly throughout the United States. Several studies have demonstrated a geographic pattern where out-of-hospital births are generally more likely in the northwestern states of the United States than in the southeastern states.[6–11] In 2017, it ranged from 0.43% of births in Alabama to approximately 8% of births in Alaska.[8] This trend has been consistently observed since 1990.[6,9,11] The overall increase in out-of-hospital births was primarily due to an increase for non-Hispanic white women.[9] The gap between the proportion of out-of-hospital births for non-Hispanic white women and women of other racial and ethnic groups has ranged from 3 to 5 times higher for almost two decades.[10,11] Until 2011, the proportion of out-of-hospital births for women of all other racial and ethnic groups, including non-Hispanic black women, had been declining. Since then, the percentages began to increase for all groups and the proportion of out-of-hospital births for non-Hispanic black women increased by 76% from 2004 to 2017.[8] This is the second highest increase in proportions of out-of-hospital births by maternal race and ethnicity.

Recent trends show that home births generally have a lower risk profile than hospital births and are less likely to be associated with poor pregnancy outcomes like preterm and low birth weight births.[8] This trend may be influenced by the fact that most home births are planned, and women with lower risk are supported in their choice of out-of-hospital birth. In 2017, 85% of home births were planned while only 15% were unplanned, based on data for 49 states in the United States.[7] Out-of-hospital births are less likely to have population characteristics associated with poor pregnancy outcomes, including teen birth, non-Hispanic black race/ethnicity, smoking during pregnancy, obesity, lack of insurance, and preterm, low birth weight, multiple births.[12] In Europe, studies show that out-of-hospital births are a safe option for women with a low-risk profile.[13–15] A general review of low-risk and planned out-of-hospital births in high-income countries also found lower odds of obstetric intervention, maternal morbidity, lower admission to NICU, and higher odds of normal vaginal births.[12,16] The same benefits have been observed in the United States. A national-level study of planned out-of-hospital births attended by midwives demonstrated an association with positive outcomes and low obstetric intervention rates.[17] Ultimately,

for low-risk women, having an out-of-hospital birth provides health benefits and benefits toward quality and cost of maternity care.[18]

Some of these benefits may be influenced by the more conservative approach to interventions within the out-of-hospital birth maternity care model.[16] Birth centers led by midwifery were highlighted for their high rates of positive outcomes for women and infants.[19] As the number of women selecting the option to deliver out-of-hospital increases, resources must be made available to allow them to make informed decisions.[18,20] Women have reported that the key determinant of their choice of birthplace is their ability to control the birthing environment and the process of care.[21] They also highlight that planned home births increase their sense of privacy, comfort, and convenience while decreasing the rates of medical interventions, providing greater cultural and spiritual congruence, changing the provider-patient power dynamics, and facilitating family involvement by creating a relaxed, peaceful atmosphere.[22,23]

Data regarding out-of-hospital births in the United States show contradictory outcomes. While several previously discussed studies show positive outcomes associated with out-of-hospital births, others demonstrated adverse outcomes. The increase in out-of-hospital births in the United States is associated with increased neonatal mortality and morbidity.[23–26] This contradicts recent studies showing better outcomes for women who elect to have an out-of-hospital birth. However, there is a concern about the generalizability of the results of studies conducted in the United States given the lack of regulation, integration, and uniform training for out-of-hospital practices compared with Europe.[24] There is also hesitation in the medical community to recommend out-of-hospital births. Healthcare providers and professional associations have concluded that there is insufficient evidence on the safety of home birth or out-of-hospital birth to promote this option.[27,28] Particularly when considering findings like an increased risk for first-time pregnancies, specifically those 41 or more weeks gestation presented by a study recommending against out-of-hospital births.[28] Adverse outcomes were observed for both planned and unplanned out-of-hospital births.[27,28] Ultimately, the risks and benefits of out-of-hospital births varied based on risk profile with particularly unclear results for high-risk women.[22] Assessing the reason for contradictory results may require considering the geographic level (i.e., state vs. national) and source of data, comparing risk profile and demographics of women having out-of-hospital births, and considering the type of provider present at births.

2 | METHODOLOGY

The design of this study used a scoping review methodology. Scoping reviews are an approach employed to map concepts, theories, evidence sources, and identify knowledge gaps. The purpose of this scoping review was to explore the current literature related to out-of-hospital births to examine the challenges during the COVID-19 pandemic.

2.1 | Protocol

The approach for this review made use of the methodology manual published by the Joanna Briggs Institute for scoping reviews.[29] Additionally, Arksey and O'Malley was used in framing the search strategy and selection of the relevant studies.[30] The search was limited to articles published between March 1, 2020 and September 30, 2020, focusing on the initial wave of the COVID-19 pandemic in the United States.

2.2 | Inclusion criteria

The Population, Intervention, Comparison, Outcomes, and Study Design (PICOS) framework was used to establish criteria for inclusion, which are as follows;

2.2.1 | Population

Pregnant women over the age of 18 years old, who delivered a child at home or a birthing center.

2.2.2 | Intervention, prognostic factor, or exposure

Births classified as planned out-of-hospital births occurring in the United States during the COVID-19 pandemic, specifically examining what has been termed as the first wave of the pandemic. This review will focus on published and unpublished literature between March 1, 2020 and September 30, 2020.

2.2.3 | Comparison

Any comparison to the intervention will be included. In addition to publications that do not include a comparison group.

2.2.4 | Outcomes

This scoping review will focus on outcomes derived from the subresearch questions: (1) the prevalence of out-of-hospital births and birthing practices and (2) associated birth outcomes that have been reported as adverse events.

2.3 | Study design

All types of study design are eligible for inclusion in this review, this includes observational design and qualitative methodologies. Full-text articles of the studies should be published in English and accessible by investigators. All manner of publications

(i.e., peer-reviewed published articles, grey articles, conference proceedings, webinars, editorials, and textbook chapters) were included in the review.

2.4 | Search approach

A comprehensive literature search strategy was developed for use in the following databases for peer-reviewed articles; Cumulative Index to Nursing and Allied Health Literature (CINAHL), Pubmed, Scopus, and Embase. CSA Conference Papers Index and Scopus was used to retrieve grey literature. The search strategy was reviewed by an experienced Health Science Librarian and peer-reviewed by the co-investigators conducting the scoping review. Medical Subject Headings (MeSH) vocabulary was used to identify relevant search terms, the following terms were used to search the selected databases for peer-reviewed articles and grey literature; "out of hospital birth," "home births," "home childbirth," "planned home births," "Midwifery Methods," "freebirth," "unassisted birth," and "maternity care practices."

The Health Science Librarian working independently developed the search string using terms provided by the investigators and performed the database search using the approved search strategy. Retrieved citations were reviewed for duplicates and removed. Two investigators were provided the citations to review for inclusion. Abstracts, titles, and index terms (key terms) used to describe the article were reviewed for relevance based on the inclusion criteria and research question. Citations not meeting the eligibility criteria or not able to sufficiently address the research question were removed. The remaining articles full-text were reviewed by all the investigators and each identified two or three themes which emerged from the articles. Investigators rank ordered the themes and discussed the most salient theme for each order. Overlapping themes were collapsed. Discrepancies in themes among investigators were discussed and resolved through the investigators' ranking of the most common themes. If investigators were unable to come to a consensus, articles were reviewed and discussed again to aid in the decision.

2.5 | Data synthesis

Due to the narrative nature of the articles, a qualitative thematic analysis was conducted. Investigators performed thematic analysis on the full-text articles using guidelines from Ryan and Bernard.[31]

3 | RESULTS

Articles retrieved from the database search yielded 63 articles, after duplicate removal 46 records were available for screening. Articles were further excluded using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) process detailed in Figure 1. Eight additional records were excluded during the screening process due to not meeting the established criteria, yielding 38 records. After full-text review, seven records were removed. Investigators stratified the records based on type of article, noting one quantitative and one case study. The remaining records (n = 31) were classified as commentaries, editorials, and clinical opinions. Table 1 summarizes the characteristics of the included articles. Twelve themes emerged from the 31 records, which were collapsed into four metathemes. These meta-themes focused on (a) advocacy, (b) homebirth infrastructure, (c) support networks, and (d) uncertainty during the pandemic.

3.1 | Theme I: Advocacy

In the United States out of hospital births are not supported by the medical establishment. The American Academy of Pediatrics and the American College of Obstetricians and Gynecologists recommend women planning out-of-hospital births to be informed of the risks and benefits, but citing them as less safe than a hospital or accredited birth center.[2,3] However, in the United Kingdom and Australia there are legislative provisions for homebirth which allows public funding and private insurance to cover these services.[62] The funding of these services and requirements for physicians to discuss all birthing options with pregnant women has translated into a high home birth rate for the United Kingdom and Australia.[62] However, during the early stages of the pandemic the option to choose a home birth was threatened during a time when many women due to fear were contemplating out-of-hospital birthing options.[38,43]

The metatheme advocacy in this review was defined as a construct representing the power imbalances between pregnant women and healthcare institutions. The metatheme comprises several similar themes (rights, empowerment, birthing choice/options, and restrictions) which emerged in the data that focused on emotions and actions experienced by the women as they navigated birth plan uncertainty. Seven of the articles provided narrative accounts from pregnant women, detailing their birthing experience during COVID-19.[33,36,37,41,48,49,59] The Women in these articles articulated a need to advocate for themselves and take action to obtain the birthing experience they wanted. Three articles discussed free birthing/unassisted birthing as an option.[33,41,49] Two additional studies reported on the use of hypnobirthing as an adjunctive technique to manage pain during home birth.[33,48,49]

3.2 | Theme II: Homebirth infrastructure

The United Kingdom healthcare system has developed a system that supports Home Birth and provides opportunities to choose an out-of-hospital birthing experience.[57] However, during the initial months of the pandemic even those healthcare systems restricted out-of-hospital births forcing women to change their birthing plans.[51] Compared with the United Kingdom, Homebirth infrastructure is

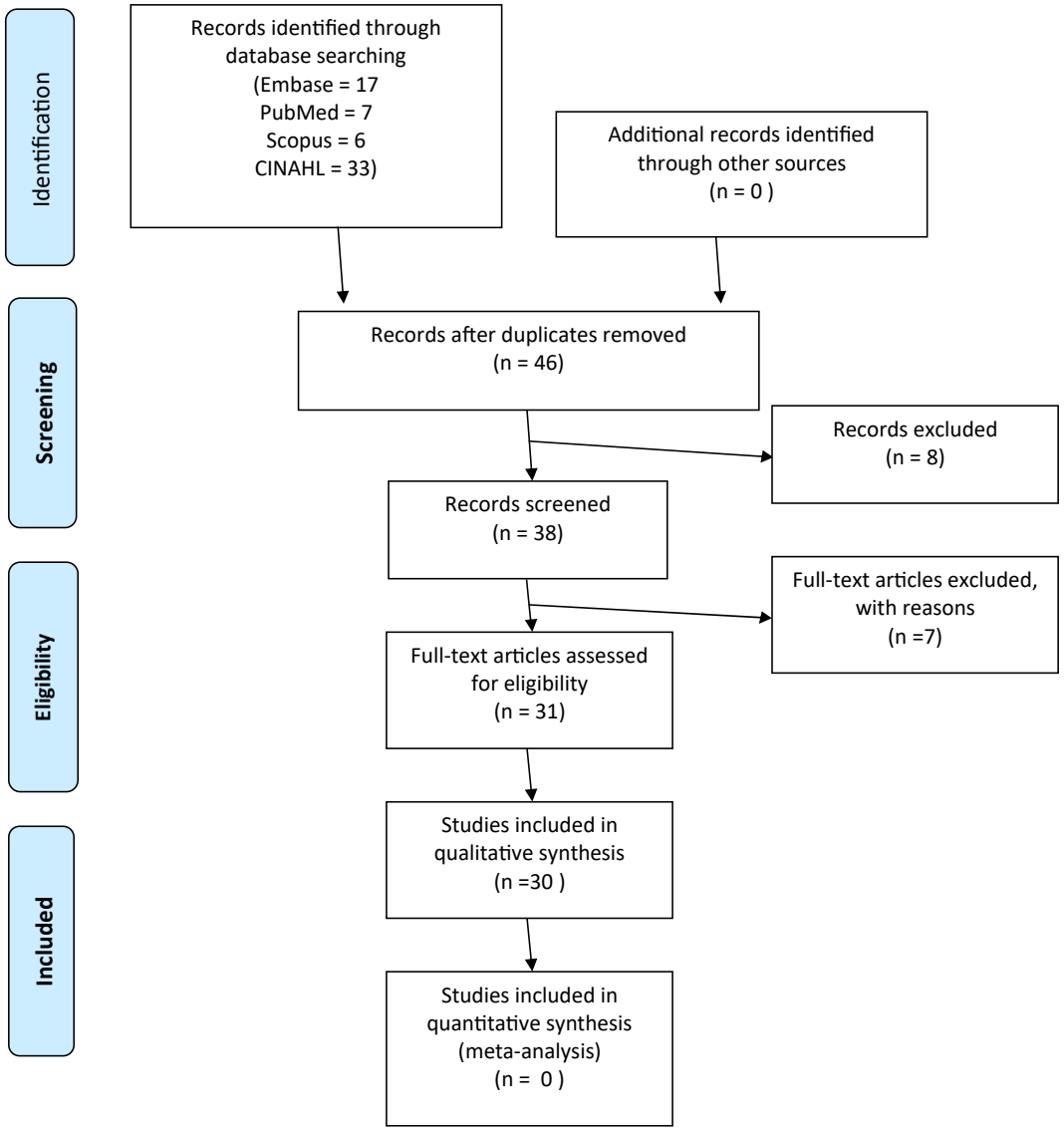

FIGURE 1 PRISMA flow diagram: Identification of published studies for inclusion.

nonexistent in the United States.[33,39] Thirteen articles identified the lack of infrastructure to support home birth as a significant problem.[33,36,37,39,41,46,48,49,51,57,59–61,63] The problem in the United States starts with a lack of universal credential processes for midwives and doulas. Each state administers the credentialing differently resulting in a lack of cohesive consistent polices and laws.

3.3 | Theme III: Support system

The pandemic restrictions have affected an essential aspect of the birthing experience—access to a support system.[34] Women have cited feeling lonelier and more anxious due to the isolation and fears of the pandemic.[51,55] Support during pregnancy and labor is essential even under "normal" circumstances, and women highlighted how much more important it has become now that it is not guaranteed.[36,49,59,60] They have expressed concerns about navigating a pregnancy during a pandemic, particularly about giving birth in a hospital due to fear of exposure to COVID-19. A strong support system composed of family and understanding healthcare providers was highlighted as a significant factor in making the experience better for birthing people. Additionally, the ability to make an informed choice through shared decision-making was discussed by both healthcare providers and birthing people.[40]

3.4 | Theme IV: Uncertainty during the pandemic

The changes in procedures and policies dictated a restriction on access to many hospitals around the world. In the United States, much like in the United Kingdom and Australia hospitals limited the number of support individuals that could be present during labor and delivery.[39,47] Additionally, for the United Kingdom and Australia access to birthing centers and midwife care was restricted.[50,57]

TABLE 1 Summary of included articles.

Reference	Title	Article type	Themes
N.A.[32]	What has the AIMS Campaigns team been doing?	Commentary	Advocacy
N.A.[32]	Safer at home?	Commentary	Uncertainty
N.A.[33]	My birth, my way	Commentary	Advocacy, Homebirth Infrastructure
Arora et al.[34]	Labor and delivery visitor policies during the COVID-19 pandemic: Balancing risks and benefits	Commentary	Support
Chervenak et al.[35]	Professionally responsible advocacy for women and children first during the COVID-19 pandemic: Guidance from World Association of Perinatal Medicine and International Academy of Perinatal Medicine	Commentary	Advocacy
Cobb[36]	The importance of home birth during Covid-19	Commentary	Advocacy, Homebirth Infrastructure, Support, Uncertainty
Colquhoun[37]	Positive induction during Covid-19	Commentary	Advocacy, Homebirth Infrastructure
Davis-Floyd et al.[38]	Pregnancy, birth and the COVID-19 pandemic in the United States	Qualitative design	Advocacy
Davis-Floyd et al.[39]	How birth providers in the United States are responding to the COVID-19 pandemic	Qualitative design	Homebirth Infrastructure, Uncertainty
Davis-Floyd et al.[40]	The impacts of Covid-19 on birth practices in the United States	Qualitative design	Uncertainty
Day[41]	When unassisted birth may be the safest option	Commentary	Advocacy, Homebirth Infrastructure, Uncertainty
Fakari and Simbar[42]	Coronavirus pandemic and worries during pregnancy; a letter to editor	Commentary	Uncertainty
Flint[43]	Reasons to be joyful	Commentary	Advocacy
Gildner and Thayer[44]	Maternal and child health during the COVID-19 pandemic: Contributions in the field of human biology	Commentary	Homebirth Infrastructure, Uncertainty
Goldstein[45]	Chinese case study suggests COVID-19 is not transmitted from pregnant mothers to newborns	Case Study	
Grünebaum et al.[46]	Professionally responsible counseling about birth location during the COVID-19 pandemic	Commentary	Homebirth Infrastructure
Homer et al.[47]	The impact of planning for COVID-19 on private practising midwives in Australia	Quantitative, Descriptive Cross-sectional design	Uncertainty
Hubbard[48]	Positive hospital birth during Covid-19	Commentary	Advocacy, Homebirth Infrastructure, Uncertainty
Hyde[49]	Preparing for freebirth during Covid-19	Commentary	Advocacy, Homebirth Infrastructure, Support
Kemlo[50]	The impact of Covid-19 on Tabitha's birth	Commentary	Uncertainty
Miller[51]	A time of worry and uncertainty	Commentary	Homebirth Infrastructure, Support, Uncertainty
Morano and Calleja-Agius[52]	Giving birth and dying alone in hospital during the COVID-19 pandemic—a time for shifting paradigm toward continuity of care	Commentary	Uncertainty
Noble[53]	Preparing for birth in lockdown	Commentary	Uncertainty
Nosratabadi et al.[54]	A Case report of vaginal delivery at home due to fear of Covid-19	Case Report	Uncertainty

TABLE 1 (Continued)

Reference	Title	Article type	Themes
Powell[55]	Anxious in a pandemic	Commentary	Support, Uncertainty
Premkumar et al.[56]	Home birth in the era of COVID-19: Counseling and preparation for pregnant persons living with HIV	Commentary	Uncertainty
Romanis and Nelson[57]	Homebirthing in the United Kingdom during COVID-19	Commentary	Homebirth Infrastructure, Uncertainty
Smith[58]	Midwives and Covid-19	Commentary	Advocacy, Support
Sumner[59]	Homebirth to midwife led unit transfer	Commentary	Advocacy, Homebirth Infrastructure, Support
Thayer[60]	U.S. Coronavirus advice is failing pregnant women	Commentary	Homebirth Infrastructure, Uncertainty
West[61]	When fear becomes reality	Commentary	Homebirth Infrastructure, Uncertainty

Women who had planned to give birth using a birthing center and/or a midwife had to change their birth plan. Eight articles focused on COVID-induced changes and the uncertainty and stress this elicited. These disruptions fomented a great deal of fear and anxiety among pregnant women. Out of the 31 articles, 20 articles reported an increase in fear and anxiety from pregnant women.[26–31,33,34,36–44,47–51,53–57,59,61–64] The primary fear that emerged in the articles was a fear of contracting COVID-19 while at the hospital during delivery. Additionally, pregnant women reported being anxious about potentially giving birth alone, being separated from their newborns, and an increased medicalization of their birth.

4 | DISCUSSION

4.1 | Theme I: Advocacy

The first meta-theme Advocacy illustrated the willingness of the women, their partners, and birth works to advocate for a birth of each woman's choosing. This focus on choice ensures patient preferences and values are considered in the decision-making process, when considering what is most efficacious for positive birth outcomes. Romanis and Nelson[57] argue the importance of choice and shared decision-making as a factor which could impact maternal well-being. Undue stress related to loss of autonomy has implications for maternal well-being, which has been correlated to birth outcomes.[44] The sudden changes in birthing options, which impacted the birth plans of women prompted many to deal with the loss of control through advocacy. In several of the articles, advocacy was not just focused on advocating for the right to labor and deliver at or with a midwife, but on increased agency and the right to participate in decision-making with regard to personal care. Proponents of home births advocate for the centering of pregnant women and the demedicalization of the birthing process, to allow women to assert control over their own bodies.[65] However, during the pandemic the crisis has lessened the perception of control for many pregnant women, which has been cited as one of the most common rationales for having an out-of-hospital birth. The loss of normalcy and agency during the pandemic has made the option of an out-of-hospital birth much more attractive. However, globally healthcare systems further restricted choice. Davis-Floyd[38] found that during crisis obstetricians tended to revert to long-held beliefs about birthing practices. The nexus between each entity's ideas of the labor and delivery process must be weighed, evaluated, and balanced judicially to provide the best outcome for the woman and fetus.[35] ACOG has advocated for informed decision-making which centers the patient, thus reflecting the stated aim of home birth advocates and pregnant women.

4.2 | Theme II: Homebirth infrastructure

There are no linkages between the midwives, doulas and the hospital networks in the US medical system.[51] Compared with the United States, the United Kingdom has a centralized system that allows and supports out-of-hospital births. The integration of midwives into the healthcare systems improves continuity of care enabling birthing people to have access to choose how they will birth. Additionally, establishing a maternity care system which is inclusive, and collaborative improves quality and outcomes.[66] The certification of Midwives in the United States varies state by state creating even more confusion around the quality of care. Interprofessional education within medical, nursing, and allied health colleges has been a significant focus for over a decade and has been included as an accrediting standard for all disciplines, due to the substantial benefits for patients. Thus, further expanding interprofessional collaboration to include birth workers, who are increasing being used by birthing people is a logical next step to improve quality of care. However, for this process to occur midwife and doula training will have to become more standardized with professional oversight to provide them with the requisite skills to be effective as a member of the maternity care team.

4.3 | Theme III: Support system

Meta-theme III showed the need for a robust support system during labor and delivery. However, in many cases, the necessary support systems were threatened due to pandemic restrictions exacerbated by longstanding hospital policies and practices related to midwives. Many midwives without hospital privileges or connections to physician groups lacked the resources they needed to truly provide the best maternity care for their patients. In the early phase of the pandemic there was a lack of information and protective equipment, which placed midwives and birthing people at risk.[58] In times of crisis, it is advantageous for healthcare systems to engage with their patients to develop patient/family centered policies to ensure normal systems of support are not dismantled. While there was a need to restrict hospital access to reduce COVID-19 transmission, earlier approaches during the pandemic were too restrictive and did not reflect the values and/or needs of the patient.

4.4 | Theme IV: Uncertainty during the pandemic

Over a year into the pandemic and there is still a great deal of uncertainty about how best to navigate COVID-19 and the subsequent consequences. Uncertainty arose due to a shift in daily routines, standard operating procedures, and policies.[32] Childbirth, while a time of great joy, can be stressful due to impending shifts in personal routines and concern about what the process of labor and delivery will entail. However, for many women the support of a birthing partner and a detailed birth plan can ameliorate the stress of birthing. Additionally, the expertise of physicians, nurses, and support staff along with assistive technologies to support a positive outcome made hospitals a safe place to give birth and thus, the standard of care. However, the rise of COVID-19 cases changed many pregnant women's perspectives about the relative safety of hospital-based births. To address safety concerns, hospitals adopted measures to mitigate COVID-19 exposure, but the mitigation procedures removed vital supports that have been shown to be beneficial in reducing birth stress. Metatheme IV showed the centrality of fear and anxiety during the pandemic and the importance of these constructs in predicting behavior. The increase in out-of-hospital births during the pandemic and its continued upward trend, requires a re-evaluation of the policies and relationships with midwives and homebirth to ensure a system is in place which enables all birthing people access to reliable maternity care options.[52]

5 | CONCLUSION

The COVID-19 pandemic lockdowns severely altered how many birthing people received care. The measures early in the pandemic to ensure the safety of patients through isolation resulted in birthing people having their birth plan altered, which heightened stress and anxiety. Birthing people and birth workers, just like many people acutely felt the disruption to their lives and sought to create stability and safety on their own. The increase in home births demonstrates this desire to feel secure in addition to finding agency through birthing people advocating and making decisions for their care. However, in the United States lack of integration and lack of consistent regulatory standards for midwives, impacts birthing people's ability to truly have choice of birthing locations. Despite these issues creating potential gaps in care and impacting birthing outcomes, which could be posited as the reason for conflicting data on the safety of home birth, birthing people stilled moved toward autonomy. Although, the increase in out-of-hospital births is still negligible, there has been a steady increase over the last several years that we cannot ignore. COVID-19 has accelerated this movement to birthing at home and thought must be given to how the healthcare system is going to support and integrate this mode of birthing.

6 | IMPLICATIONS FOR POLICY AND PRACTICE

This scoping review illustrated the gaps in the continuity of perinatal for birthing people seeking alternative locations to birth, which was heightened during the pandemic. This lack of continuity relates to structural problems within the healthcare system which impedes the integration of midwifery and doula services. Collaboration with other healthcare professional organizations (i.e., physicians, nurses, lactation consultants, etc.) is critical for the development of policies which would allow midwives autonomy and hospital privileges. There have already been several attempts at passing national legislation to improve access to midwifery care. Efforts to recognized certified professional midwives is a key first legislative step, which should be followed by Medicaid amendments to reimburse midwives for their services at an equitable rate. Additionally, provisions should be made to ensure be made within Medicaid to allow for midwives to provide services outside of traditional maternity care within the scope of their practice. In addition to national legislation for midwives, doula services should be incorporated into the midwifery bills to provide recognition and reimbursement for doula services. Amendments within Medicaid legislation aids in improving care access and continuity for recipients of this service in the short-term, but as Medicaid insurance policies influences private health insurers, both public and private insurance users will eventually benefit. The Center for Medicare and Medicaid (CMS) sets guidelines and standards which the healthcare system adopts due to reimbursement, so parameters set related to midwifery care and doula services will be integrated into healthcare. Collective action is required by all those engaged in caring for birthing people to re-envision care which makes provisions for a variety of perinatal professionals.

AUTHOR CONTRIBUTIONS

Francoise Knox-Kazimierczuk: Conceptualization; data curation; formal analysis; methodology; project administration; resources;

supervision; writing—original draft; writing—review and editing. **Shannon Trinh**: Formal analysis; writing—original draft; writing—review and editing. **Dorian Odems**: Formal analysis; methodology; writing—original draft; writing—review and editing. **Meredith Shockley-Smith**: Writing—original draft; writing—review and editing.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ETHICS STATEMENT

The authors have adhered to all required ethical guidelines for the development and dissemination of this article.

TRANSPARENCY STATEMENT

The lead author Francoise Knox-Kazimierczuk affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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