

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/352912843>

Obstetric iatrogenesis in the United States: the spectrum of unintentional harm, disrespect, violence, and abuse

Article in *Anthropology and Medicine* · July 2021

DOI: 10.1080/13648470.2021.1938510

CITATIONS

7

READS

37

4 authors, including:



[Kylea L. Liese](#)

University of Illinois at Chicago

18 PUBLICATIONS 92 CITATIONS

[SEE PROFILE](#)



[Robbie Davis-Floyd](#)

Rice University

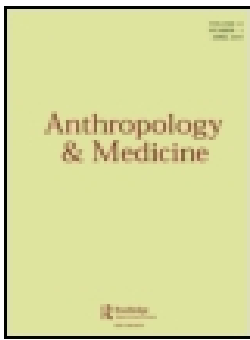
83 PUBLICATIONS 2,559 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



The Anthropology of Obstetrics and Obstetricians: The Practice, Maintenance, and Reproduction of a Biomedical Profession [View project](#)



Obstetric iatrogenesis in the United States: the spectrum of unintentional harm, disrespect, violence, and abuse

Kylea L. Liese, Robbie Davis-Floyd, Karie Stewart & Melissa Cheyney

To cite this article: Kylea L. Liese, Robbie Davis-Floyd, Karie Stewart & Melissa Cheyney (2021): Obstetric iatrogenesis in the United States: the spectrum of unintentional harm, disrespect, violence, and abuse, *Anthropology & Medicine*, DOI: [10.1080/13648470.2021.1938510](https://doi.org/10.1080/13648470.2021.1938510)

To link to this article: <https://doi.org/10.1080/13648470.2021.1938510>



Published online: 01 Jul 2021.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)



Obstetric iatrogenesis in the United States: the spectrum of unintentional harm, disrespect, violence, and abuse

Kylea L. Liese^a, Robbie Davis-Floyd^b, Karie Stewart^c and Melissa Cheyney^d 

^aDepartment of Human Development Nursing Science, University of Illinois at Chicago, Chicago, IL, USA;

^bDepartment of Anthropology, Rice University, Houston, TX, USA; ^cObstetrics and Gynecology, University of Chicago Pritzker School of Medicine, Chicago, IL, USA; ^dSchool of Language Culture and Society, Oregon State University College of Liberal Arts, Corvallis, OR, USA

ABSTRACT

'Medical iatrogenesis' was first defined by Illich as injuries 'done to patients by ineffective, unsafe, and erroneous treatments'. Following Lokumage's original usage of the term, this paper explores 'obstetric iatrogenesis' along a spectrum ranging from unintentional harm (UH) to overt disrespect, violence, and abuse (DVA), employing the acronym 'UHDVA' for this spectrum. This paper draws attention to the systemic maltreatment rooted in the technocratic model of birth, which includes UH normalized forms of mistreatment that childbearers and providers may not recognize as abusive. Equally, this paper assesses how obstetric iatrogenesis disproportionately impacts Black, Indigenous, and People of Color (BIPOC), contributing to worse perinatal outcomes for BIPOC childbearers. Much of the work on 'obstetric violence' that documents the most detrimental end of the UHDVA spectrum has focused on low-to-middle income countries in Latin America and the Caribbean. Based on a dataset of 62 interviews and on our personal observations, this paper shows that significant UHDVA also occurs in the high-income U.S., provide concrete examples, and suggest humanistic solutions.

ARTICLE HISTORY



Received 15 April 2020
Accepted 1 June 2021

KEYWORDS

Birth; obstetrics;
obstetric violence;
disrespect; and abuse;
obstetricians; midwives;
obstetric iatrogenesis

Introduction: obstetric iatrogenesis

'Medical iatrogenesis' was first defined by Illich (1976) as injuries 'done to patients by ineffective, unsafe, and erroneous treatments'. Following Lokumage's (2011) original usage of the term, we explore 'obstetric iatrogenesis' along a spectrum ranging from unintentional harm (UH) to overt disrespect, violence, and abuse (DVA), employing the acronym UHDVA for this spectrum. We draw attention to systemic maltreatment rooted in the technocratic model of birth (Davis-Floyd 2001, [1992] 2003), which includes normalized forms of mistreatment that childbearers¹ and providers may not recognize as abusive (Elmir et al. 2010; Diaz-Tello 2016; Miller et al. 2016; Castro, Heimburger and Glass 2003; Vedam et al. 2019). Equally, we assess how obstetric iatrogenesis disproportionately impacts Black, Indigenous, and People of Color (BIPOC), contributing to worse perinatal experiences.

CONTACT Kylea L. Liese  kylea3@uic.edu  Department of Human Development Nursing Science, University of Illinois Chicago Chicago IL, USA.

© 2021 Informa UK Limited, trading as Taylor & Francis Group

Much of the work on ‘obstetric violence’ that documents the most detrimental end of the UHDVA spectrum has focused on low-to-middle income countries (LMICs) in Latin America and the Caribbean (see Dixon 2015; Sadler et al. 2016, Castro, Heimbürger and Glass 2003, 2019; Williamson, this issue). We show that significant UHDVA also occurs in the high-income U.S. Without a clear operational definition and reporting requirements, the prevalence of obstetric violence is difficult to estimate. However, one study (Roth et al. 2014) found more than half of birth workers in the U.S. and Canada, including midwives, doctors, nurses, doulas, had witnessed the forcible performance of a procedure against a woman’s will, and two-thirds had witnessed providers *routinely* performing procedures without informed consent (Declercq et al. 2014; Diaz-Tello 2016; Sadler et al. 2016; Vedam et al. 2019). Over social media such as birthmonopoly.com, women have shared experiences of coercive decision making and violence, such as unconsented vaginal exams, episiotomies, and cesareans.

Recent literature confirms how the obstetric iatrogenic UHDVA spectrum, which is syndemically structured into technocratic obstetric systems, is more likely to be perpetrated upon women who are poor, of color, immigrant, non-English speaking, or otherwise socially or politically marginalized (Vedam et al. 2019). Higher rates of cesareans, morbidity and mortality fall disproportionately to BIPOC childbearers, with Black women 3-4 times as likely as white women to die of pregnancy-related causes (Hoyert 2019). Such inequities occur regardless of income and education, and are often attributed to implicit and explicit provider bias and the failure to listen to women (Altman et al. 2020). Although white women with high social capital are more likely to receive humanistic, patient-centered care (Davis-Floyd 2001, 2018a), UHDVA cross-cuts racial identities (Vedam et al. 2019).

Obstetrics in the U.S. follows an interventive model wherein pregnancy, labor and birth are approached as inherently risky processes in need of surveillance, monitoring, and correction (Davis-Floyd 2001, [1992] 2003, 2018a). From the 1970s on, the hegemonic ‘technocratic paradigm’ (Davis-Floyd 2001, [1992] 2003, 2018a) that took over labor and birth also yielded higher risks of maternal morbidity (Plough et al. 2017), and increased the U.S. cesarean rate by 500% (Shah 2017).² These shifts also resulted from increased costs associated with interventions (the profit incentive), the ‘supervaluation’ of technology in medicine (Davis-Floyd [1992] 2003), the relative importance of training medical residents, and, given higher rates of litigation, increasingly defensive medical practices.

Our paper relies on two sources of data: (1) 62 interviews with American childbearers conducted and analyzed by Davis-Floyd, Cheyney, and Cheyney’s graduate students between 2016 and 2019; and (2) Liese’s, Stewart’s, and Cheyney’s 40-plus years of combined autoethnographic experience as practicing midwives working in multiple regions and settings across the U.S., including urban/rural hospitals, private/teaching hospitals, birth centers, and home births. Collectively, these datasets inform our analysis of the continuum of UHDVA associated with TMTS and TLTL forms of care. In global health, excessive interventions in labor and birth are captured by the acronym ‘TMTS’ (‘too much too soon’), while inadequate care is referred to as ‘too little too late’ (TLTL) (Miller et al. 2016).

In general, TLTL obstetric systems are more common in low-resource countries, yet due to inequality and social, ethnic, and racial stratification, TMTS and TLTL care provision can, and often do, exist in the same society, including the U.S. (Davis 2018, 2019). Since TMTS care is more prevalent in U.S. hospitals, our paper explores how TMTS interventions

can constitute obstetric iatrogenesis at individual and systemic levels. In understanding how U.S. obstetrics perpetuates obstetric iatrogenesis, we seek to contextualize providers' own reasons for engaging in UHDVA practices. While a full analysis of providers' intentions is beyond our scope, herein we closely examine a few of the most common examples of, and reasons for, TMTS-linked obstetric iatrogenesis during labor and birth.

In order to eliminate the kinds of obstetric iatrogenesis that disrupt the normal physiology of birth, and cause physical and psychological harm, we call for approaches that help—such as continuous labor support with a culturally matched doula (see Oparah et al. 2021; Rivera 2021). In this way, TMTS and TLTL can be replaced with care that offers the 'right amount at the right time in the right way' (RARTRW) (Cheyney and Davis-Floyd 2020a, 2020b)—where the 'right way' refers to care that is not only 'right-sized', but also culturally safe and respectful (Cheyney and Davis-Floyd 2020a, 2020b; Tuncalp et al. 2015; Cheyney and Peters 2019). Highly technical and intervention-oriented births that can save lives can also center birthing persons' rights and respect their autonomy.

The spectrum of obstetric iatrogenesis

The UHDVA obstetric iatrogenic spectrum begins with the routine performance of TMTS, non-evidenced based procedures not intended to cause harm, yet do. These interfere with the normal physiology of birth, constituting what Cheyney and Davis-Floyd (2019, 8) have called the *obstetric paradox*—intervene in birth to make it safer, and yet, causing harm. These 'standard of care procedures' are confirmed by thousands of hospital births witnessed by all four authors, and by a vast medical (see Thacker et al. 2001; Declercq 2013; Declercq et al. 2014; Miller et al. 2016; Mullins, Lees, and Brocklehurst 2017) and social science (see Castro and Glass 2003; Davis-Floyd [1992] 2003, 2018a, 2018b; Davis 2018, 2019; Cheyney and Davis-Floyd 2020a, 2020b) literature. They include, among others: artificial rupture of membranes to speed labor, thereby introducing an avenue for infection; denying laboring people food, resulting in maternal weakness; performing unnecessary, cervical exams to assess dilation; unnecessarily inducing or augmenting labor; and utilizing continuous electronic fetal monitoring (EFM), which inhibits freedom of movement, and thus, fetal descent.

Standard procedures also include coached pushing (as in 'push, push!') instead of allowing the laborer to follow the physiologic urge to push; birthing in a supine or semi-sitting position that compresses the pelvic outlet, making birth more difficult; and cesarean delivery, which carries multiple harms and risks, especially when overused. (In the U.S., the national cesarean rate is around 32% [Martin et al. 2019] when, according to WHO, it should not exceed 10-15% [Betran et al. 2015; WHO Statement and ranges from 6–69% (Kozhimannil, Law and Virnig 2013) on caesarean section rates 2015].) While UHDVA includes subtle forms of coercion, such as coaxing a laboring person to have an epidural against their intention (May 2017), all authors have also witnessed more intentional forms of harm, such as verbal condescension, demeaning, insulting and yelling, as well as rough and unconsented vaginal exams and unnecessary episiotomies. We place the physiologic damage such interventions cause at the 'unintentional harm' end of the spectrum, where they are largely invisible as iatrogenesis because they are grounded in the normative practice standards for U.S. hospital-based obstetric care (Declercq et al. 2007; Diaz-Tello 2016).

Protocols and universal management plans: generating iatrogenesis

Rigid technocratic protocols that establish universal care plans for all laboring people are highly valued as tools to streamline management across various providers, guide the teaching of residents, and protect institutions in case of adverse outcomes. Many of these protocols are refuted by medical evidence or professional organization recommendations, yet are established to limit institutional and individual provider liability. For example, against the American College of Obstetricians and Gynecologists' recommendations (American College of Obstetricians and Gynecologists 2017), and despite patients' preferences and evidence of the risks of repeated cesareans, in 2018 only 13.3% of women gave birth vaginally after a previous cesarean (VBAC) (Osterman 2020). Obstetricians' concerns over liability have had 'a major impact on the willingness of physicians and healthcare institutions to offer trial of labor [after cesarean]' (National Institutes of Health Consensus Development 2010). There are also bureaucratic barriers to VBAC embedded in hospital policies and protocols, and include use of a 'VBAC calculator', which estimates a patient's likelihood of 'success' or 'failure' (Thornton et al. 2020). The calculator has well-documented limitations. It inaccurately predicts the likelihood of a repeat cesarean and deducts points if a pregnant mother identifies as Black or Latinx (Harris et al. 2019), reflecting how institutional racism and implicit bias impact the quantification and delivery of maternity care.

Other non-evidence based protocols limit how long a patient is 'allowed' to remain in a stage of labor before interventions such as amniotomy (breaking of the bag of waters) or initiation of Pitocin labor augmentation—interventions designed to speed labor—are enacted (Fraser et al. 2000). Patients are usually unaware of such protocols and their limitations. The standard of care in all hospitals where Liese and Stewart practice exclude patients from key decision-making processes. Providers confer about treatment plans and protocols remotely with protocols and colleagues, then enter the patient's room with a plan in place. The goal of 'patient communication' is to provide an illusion of shared decision making while establishing consent for the predetermined plan. Burcher et al. (2016) similarly found that pregnant people experience communication around interventions as unidirectional—physicians explain the need for a procedure and the expected response from the patient is simply consent to proceed. Asking questions or expressing hesitancy can be interpreted as challenges to medical authority and can result in provider frustration being projected back onto the patient (Cheyney, Everson, and Burcher 2014).

In one such form of routine but subtle coercion, a provider decides the laboring person should be administered Pitocin to speed labor but agrees to 'allow' the reluctant patient to go for a walk, so long as she agrees to start Pitocin if her cervix hasn't dilated sufficiently in an hour (see Declercq 2013). The provider knows that one hour of walking is unlikely to produce significant cervical change; the intent is to make the patient believe that she was given options. The routine language of 'allowing' or 'not allowing' basic facets of patient autonomy, including eating, walking, and going to the bathroom at will, establishes a context of control.

In what follows, we focus on six primary practices of obstetric iatrogenesis that fall along the UHDVA spectrum: (1) cervical exams and medical education; (2) fetal monitoring and liability; (3) birth position and the centering of the provider; (4) verbal threats and the narrative of mother-blame; (5) informed consent (or the lack thereof); and (6) obstetric racism and racial disparities. It merits note that providers and patients often share the notion that the interventions we describe—whether medically warranted or not—constitute 'good

care.' These deeply held cultural beliefs about the efficacy of biomedical interventions render much obstetric iatrogenesis invisible, helping to explain why many women are inclined to comply.

Cervical exams and medical education

The majority of births U.S. births (69%) take place in teaching hospitals that train resident physicians (Fingar et al. 2018). Thus, much of the obstetric system is organized to facilitate physician education. Since cervical exams are a learned manual skill crucial to obstetrics, medical students and residents are encouraged to practice on patients (Goldberg 2020).³ Cervical exams, which should be performed only when knowing the cervical dilation can impact care, such as before administering medications or at the patient's request—range from uncomfortable to excruciating (Declercq 2013). The pain is exacerbated when performed during contractions and/or on women with histories of sexual abuse; some people experience or equate them to a form of rape (see Kitzinger 2006 and below). The practice moves from unnecessary to aggressive when exams are performed without provider introduction, consent, explanation or heeding a patient's direct instruction to stop. Those who try to push the provider's hand away or say 'STOP!' may be responded to in ways disturbingly akin to the language used by rape perpetrators: 'You're okay' and 'I'm almost done.'

Although patients may be aware that they are giving birth at a teaching hospital, both Liese and Stewart routinely observe laboring people are not informed of the resident's relative (in)experience in performing procedures or that more experienced physicians are available. However, the medical education system encourages residents to learn procedures by 'see one, do one, teach one,' which does not account for medical necessity, patient autonomy or patient comfort.

Surveillance and liability: the electronic fetal monitor

The electronic fetal monitor (EFM) records the fetal heart rate (FHR) and contraction patterns, and has been shown to increase cesarean rates births without reducing neonatal or maternal mortality (Devane et al. 2010; Alfirevic, Devane, and Gyte 2013; Alfirevic et al. 2017). It shows every single fetal heart rate deceleration, most of which are normal, yet may be interpreted as fetal distress, leading to an 'emergency' cesarean. Despite an estimated 99.9% false positive rate for fetal distress as a primary indication for cesarean (Devane et al. 2010; Alfirevic, Devane, and Gyte 2013; Alfirevic et al. 2017), and even though FHR tracings hold no clear predictive value (American College of Obstetricians and Gynecologists 2010, Nagoette 2015), nearly 90% of U.S. births are electronically monitored for at least some time during labor, and often continuously (Declercq et al. 2014). Alternatively, intermittent auscultation of the fetal heartbeat via a fetoscope or Doppler at regular intervals provides more useful information in low-risk pregnancies than the EFM (Vintzileos et al. 1995; Sholapurkar 2010; Blix et al. 2019)—but requires more hands-on care.

Despite the overwhelming body of evidence against the routine use of EFM, EFM data are supervalued in US obstetrics because they represent 'objective' information on the baby's condition while enacting cultural values on information gained from the use of high

technologies (Davis-Floyd 2001, [1992] 2003, 2018a). Additionally, they allow several patients to be tracked remotely by one practitioner, reducing patient/provider ratios and limiting patient/practitioner interaction. Perhaps most importantly, EFM tracings serve as evidence in litigation. Thus, providers have strong motivation to intervene when something potentially concerning is recorded by the monitor, lest their lack of response be called into question later.

Lying down for birth, centering the provider

A reclining position compresses the pelvic outlet by one-third and makes it harder to push (Reid and Harris 1988; Deliktas and Kukulcu 2018), yet this position is routinely used in the U.S. Obstetric beds are designed so that the bottom of the bed ‘breaks’ or detaches, placing the birthing person on her back with her legs up in stirrups, unable to change positions, with the provider at her perineum. ‘Breaking the bed’ conflicts with evidence in favor of upright positions for birth, including the hands-and-knees position, which opens the pelvic outlet to its maximum capacity (see Walker et al. 2012; Gupta et al. 2017; Moraloglu et al. 2017; Berta et al. 2019). ‘Breaking the bed’ is primarily for the physician’s comfort, convenience and status—the doctor is able to sit upright between the birthing person’s knees, while the birthing person is lying down in a position of vulnerability (Davis-Floyd [1992] 2003). Upright positions and keeping the bed intact reverse polarities, as the provider must accommodate to the lower position, often sitting at an angle on the bottom of the bed or kneeling on the floor, giving central stage to the laboring person. Even laborers with epidurals can deliver in upright positions. Yet the option of adopting such positions is rarely explained or offered. The aforementioned invasive procedures force the endogenous physiologic processes of labor to submit to the control of exogenous practices that are convenient for practitioners, yet de-center the birthing person and interfere with normal physiologic birth (see Alfirevic, Kelly, and Dowswell 2009; Devane et al. 2010; Alfirevic et al. 2017; Anim-Somuah et al. 2018; Berta et al. 2019).

Verbal threats and mother blame

In our experiences, the language used by physicians to convince/coerce consent from patients ranges from subtly to overtly abusive, with BIPOC and gender non-binary child-bearers being especially affected. Verbal threats occur most often when interventions or outcomes are posed as ‘inevitable’. Most egregiously, pregnant mothers can be threatened with endangering the lives of their unborn children if they do not accept the doctor’s advice. This tactic is observed in both in emergency and non-emergency situations, and pits the mother against her unborn baby, supporting a narrative of ‘good’ motherhood in which the mother’s needs are subservient to the child’s (see note 2). And despite evidence that vaginal breech birth can be safe when attended by skilled practitioners (see Daviss and Bisits 2021), such pregnancies are considered medically high-risk, and women are often told that attempting a vaginal birth risks their child’s life. Because today’s obstetricians and residents have little experience with vaginal breech delivery techniques, which constitute a special skillset, U.S. mothers with breech pregnancies often have no option besides a cesarean birth.

On several occasions in urban teaching hospitals, Liese and Stewart have had to transfer to obstetric providers patients who have been pushing for two hours, where they were told ‘the baby can’t fit’—or that continued pushing will increase the risk of fetal death—to encourage consent for a cesarean. In one case, Liese witnessed a physician telling a mother, who was struggling to move from a gurney across to the operating table during a contraction, that if she didn’t hurry up and move, her baby would die and it would be her fault. In this scenario, the provider may be concerned about the baby dying before the cesarean can be performed, as well as about the risk of lawsuit if the baby dies—given that obstetrics is the most litigated medical specialty in the U.S. In these lawsuits, the amount of time from ‘decision to incision’ is used as evidence of whether the provider reacted quickly enough in proceeding to a cesarean. Neither of these explanations helped the mother to move more quickly during the throes of a contraction, nor do they excuse the verbal abuse. Should the baby be born with any complications, the physician’s threat may be internalized by the mother as evidence that she was responsible for harming her baby.

Women who resist providers’ threats can face significant consequences. Cate (a pseudonym), a white, heterosexual, cis-gendered middle-class woman, described how:

About six days past my due date, my water broke, and when I went into the hospital, I was only a fingertip dilated and my doctor was not on call—the other doctor came in and checked me—he didn’t tell me his name—and he turned to the nurse and said, “Prep her, we’re going to cut it out.” I said, “Hold it, hold it—you’re not doing anything until you tell me what is going on here.” He said, “You’re not dilating, you need a C-section.” I said, “That will be fine as long as you can write down a medical reason why I need a section.”

Knowing that, according to that hospital’s protocols, she had 24 hours to deliver after her waters had broken, Cate ‘laid there all day’ with the doctor repeatedly coming in to demand that she have a cesarean ‘because you need one’. Just as repeatedly, Cate’s response was the same. Once her labor picked up, she had the support of helpful nurses—who kept saying ‘You’re doing fine, the baby’s fine, everything’s fine’—and her Lamaze teacher Fran, and enjoyed her labor process when the obstetrician wasn’t present. She said, ‘As long as I knew everything was fine, I could last forever’. But:

[The obstetrician] was very nasty. He would come in, send my husband out, check me, yell at me because I wasn’t doing what he told me to do. He made my husband sign a paper saying that we would take full responsibility for the death of my child. “You know,” he said, “you’re killing this baby because you won’t have a section.” I said, “I’ll have one if you tell me why.” He said, “Just because I say you need one,” and I said, “That’s not good enough.”

...when she was born [at 5:36 am], he cut a radical [unnecessarily large] episiotomy when her head was only 13 inches...and he didn’t even say, “It’s a girl or it’s a boy, it’s a dog, it’s a cat”... And he stitched me up with nothing. I kept telling him I could feel everything he was doing, and he kept saying “No you can’t feel that, you’re crazy.” I knew he did it just for spite. It was very enjoyable when he wasn’t there, but he would come in and check me during a contraction and scare me to death...as soon as he would leave the room, my body would involuntarily tremble all over.

Cate’s story illustrates many forms of UHDVA, including laboring in the supine position, verbal coercion and abuse, and physical violence via the unnecessary extensive episiotomy and stitching without local anesthetic (Kozhimannil et al. 2017) (see note 3). Cate stated

that she was empowered to achieve a vaginal birth despite that doctor's demands because Fran was at her side, squeezing her hand while the doctor yelled at her, and her nurses were kind and supportive. Her positionality and social capital likely also facilitated her ability to resist. *The psychological cost to childbearers of overt DVA is high* (Grekin and O'Hara 2014; Yildiz, Ayers, and Phillips 2017; Beck and Casavant 2019). Our data confirms that the more overt forms of DVA on our spectrum are not wanted by *any* childbearers, Interlocutors who had been subjected to such forms of DVA described themselves as traumatized by their birth experiences. Like Cate, many suffered from postpartum depression and/or PTSD.

Intentionality and informed consent

Violence and injury resulting from obstetric iatrogenesis are grounded in attempts to *treat* or *manage* a patient. The intent driving providers' treatment and management practices, and their knowledge (or lack thereof) of the harms that may result, are therefore of central importance. More ethnographic work is needed to understand provider intentionality and subjectivity in relation to UHDVA (see Castro 2019; Castro and Savage 2019). When Liese was in her first year of independent practice, a patient presented to the obstetric triage unit bearing down. While assessing the patient to be completely dilated, Liese palpated the bag of waters. Without removing her hand and without thinking it through, she maneuvered her fingers to release the waters, which released the fetal head into the vagina; the baby was born almost immediately. Because patient consent was neither requested nor received, this was an act of UHDVA. Liese's intent was benign; she had assumed that removing her hand, offering this option, and, if the woman consented, reinserting her fingers, would be 'worse' for the woman. She did not *intend* to cause harm, yet took away the woman's right to be informed and give consent. Iatrogenic actions that disregard patient autonomy in the name of urgency must be questioned. When providers insist they were unable to take the time to obtain consent because 'the baby was crashing', we should ask how much time it takes to inform a patient of what is happening, and request consent.

Obstetric racism, disparities, and DVA

The intentional DVA that we describe, and have witnessed and participated in, is deeply embedded in racial and socio-economic structures disproportionately impacting BIPOC pregnant people. Syndemic (systematic and endemic) racial discrimination has long produced worse maternity and health outcomes overall for pregnant people of color and other minoritized groups (see Bridges 2011; Cooper Owens 2017). Intersectional identities mark certain pregnancies as 'high-risk', leading to increased rates of intervention, harmful treatment, and poor outcomes (Dressler, Oths, and Gravlee 2005; Philibert, Deneux-Tharoux, and Bouvier-Colle 2008; Viruell-Fuentes, Miranda, and Abdulrahim 2012; Creanga et al. 2015). For example, higher rates of adverse perinatal outcomes among BIPOC patients are rooted in structural and 'obstetric racism', which Davis defines as the convergence of obstetric violence and medical racism (2018, 2019, 2020). Black women suffer the highest rates of maternal morbidity and mortality, premature birth, and low-birth weight newborns. These outcomes are intricately tied to the wear and tear of chronic stress (e.g. allostatic load) associated with racism and sexism (Rich-Edwards et al. 2001; Giurgescu

et al. 2011) including birthing people's experiences of racist violence (Bridges 2011; Cooper Owens 2017).

Most of the Black interlocutors in Davis-Floyd and Cheyney's dataset experienced some form of racial discrimination in their hospitals, which was compounded if they were overweight and/or on Medicaid, as Shawna Lee (a pseudonym), demonstrates:

When I first got to the hospital, security wouldn't let me upstairs because he thought I was there to steal a baby. He kept asking me why are you here—are you really pregnant? Because, since I was already overweight, the pregnancy didn't really show. And I said “Yes, I promise I am pregnant [and in premature labor] right now.” The OB on call was a little Hispanic lady and she was really nasty to me ... [She] said “We are going to drug test you because usually that is what causes preterm labor.” I was like well that was really nasty—is she saying that because I am Black and I am young?

Shawna continued, ‘I feel like there was a lot of preconceived notions and bias as soon as I walked in the door ... So, it was just very frustrating, and I felt like no one was listening to me.’

The COVID-19 pandemic has served to dramatically exacerbate maternal health disparities in the U.S. (Obinna 2021; Santos et al. 2020; Cunningham et al. 2021). With BIPOC disproportionately impacted by COVID, it follows that the restrictions imposed on COVID-19 positive mothers disproportionately impact BIPOC people. Against the American Academy of Pediatrics' evidence-based recommendations, many hospitals prohibit support people for COVID + laborers, with the effect that the women most vulnerable to overt forms of DVA were made more so by their institutional isolation and lack of a witness or advocate during labor (Castañeda and Searcy 2021; Claudio et al. 2020; Profit et al. 2020; Davis-Floyd, Gutschow, and Schwartz 2020). Hospitals also separated COVID + mothers from their newborns at birth, and prevented contact until discharge (Gutschow and Davis-Floyd 2021; Oparah et al. 2021; Rivera 2021). This disruption in bonding and breastfeeding not only defies medical logic, since the baby is discharged to the mother 48 hours after birth, but reinforces a cycle of syndemic racism underlying health disparities.

Conclusion: obstetrics' shadowside

For this collection on medicine's 'shadowside', we illustrate the shadowside of U.S. obstetrics. Galtung (1990, 291) spoke of *structural violence* as forms of violence embedded in a social structure that perpetuate inequity, thereby causing preventable suffering, and noted that ‘a violent structure leaves marks not only on the human body but also on the mind and the spirit’ (1990, 294). Certainly, on our obstetric iatrogenic spectrum, the more overt forms of DVA leave such marks, ranging from physical to emotional and psychological scars. Here we reiterate that along the entirety of the UHDVA spectrum, *the performance of unnecessary, non-evidence-based procedures, and most especially unnecessary cesareans (unless they are a pregnant person's choice), constitutes obstetric violence and iatrogenesis* and exemplifies the obstetric paradox—causing harm by intervening in birth, supposedly to keep it safe.

According to our data, the most common forms of obstetric iatrogenesis in the U.S. are the invisible ones of non-evidence-based routine procedures experienced by all birthing people. By ‘invisible’, we mean that they may not be perceived as iatrogenic by most of those who perform and receive them. Due to technocratic norms, to supervaluation of high

technologies such as EFM, and to the common belief that such interventions do make birth safer, the majority of Davis-Floyd and Cheyney's 62 interlocutors reported relative satisfaction with their births. Such findings reiterate how TMTS routine procedures make *cultural, not scientific*, sense.

The hegemonic nature of U.S. obstetric care and the structural nature of obstetric racism discourage pregnant people from questioning providers and normalize interventions as *necessary* components of safe birth. This additional paradox of patient satisfaction amidst unnecessary and harmful procedures is a significant obstacle to addressing obstetric iatrogenesis in a profit-driven capitalist health care system that benefits from interventions and only responds to financial threats from dissatisfied patients. Importantly, the highest levels of birth satisfaction were expressed by those who had doulas and midwives supporting them, demonstrating the positive effects of labor companionship and midwifery care.

It will take an epic paradigm shift to ensure that the care all laboring people supports the normal physiology of birth and women's emotional and psychological needs. UHDVA and obstetric racism especially re-confirm the absolute need for RARTRW care—the right amount at the right time and in the right way (Cheyney and Davis-Floyd 2020a), where the 'right way' refers to care that explicitly respects the rights and dignity of all birthing people (Cheyney and Davis-Floyd 2020a; Cheyney and Peters 2019). Racism underlies BIPOC pregnant people's vulnerability to UHDVA and also helps to explain health systems' failures to enact necessary reforms. An important first step to address the interpersonal structural racism underlying UHDVA is to *center the voices of BIPOC clients as experts on their own experiences* (see Altman et al. 2020). Innovative interdisciplinary studies to measure and describe experiences of obstetric racism open more possibilities to address the issue (Scott, Britton, and McLemore 2019). Facilitating concordant care with providers of color has been well documented as a strategy for facilitating respectful care for BIPOC patients (Abbyad and Robertson 2011; Altman et al. 2020).

Tenable strategies to mitigate iatrogenesis also include increasing access to midwifery care and doula support/advocacy and to gender-inclusive care for all pregnant people. Although obstetric iatrogenesis is perpetuated by providers of all kinds, the care provided by midwives and doulas is generally grounded in minimizing interventions and supporting physiologic birth (International Confederation of Midwives 2005; ten Hoope-Bender et al. 2014; ICM, WHO, and WRA 2016; Davis-Floyd 2018c). However, only 10.2% of U.S. births are attended by midwives—including certified nurse-midwives (CNMs), certified midwives (CMs), and certified professional midwives (CPMs) (Martin et al. 2019).

We conclude by suggesting that *obstetric care providers be made aware during their education of what constitutes the full spectrum of UHDVA and of obstetric racism and of how to avoid perpetuating them*. Provider awareness of implicit bias in clinical care—the practices and the structures that perpetuate UHDVA—is key; if you do not recognize a phenomenon, you cannot address it. Providers should be actively enlisted to help dismantle structures that facilitate UHDVA, such as rigid protocols and prioritizing teaching and technology over patient experience. The evidence-based protocols and individualized, patient-centered care prioritized by diverse midwives and doulas are two strategies for limiting UHDVA, even in the litigious context of U.S. obstetrics. The obstetric iatrogenic spectrum, from unintentional harm to overt disrespect, discrimination, violence, and abuse, will have no role in a fully humanized U.S. maternity care system in which all care is

compassionate, fully explained, and responsive to pregnant people's wishes, voices, and desires—even during pandemics.

Notes

1. Transgender and gender non-binary people have reproductive health needs and experiences that can be similar to, but also unique from, those of cisgender women. To reflect this inclusivity, we employ a mix of words: “women,” “people,” “persons,” “childbearers,” and “mothers”.
2. The technocratic model is also associated with substantially higher costs (e.g., \$12,516 for an uncomplicated vaginal birth in the U.S. and between \$14,099 and \$28,617 for a cesarean birth, depending on the state [Childbirth Connection 2013]), and worse outcomes. Studies have suggested that, if only 10% more U.S. births took place in homes and freestanding birth centers, nearly \$11 billion could be saved annually (Daviss, Anderson, and Johnson 2021).
3. There are no documented data on how many cervical exams have been performed without consent, but one survey found that a majority of medical students had performed such exams on unconscious patients, and in nearly 3 of 4 instances, they believed that informed consent had not been obtained. These examples of iatrogenesis highlight how technocratic birth and the educational interests of residents often supercede the autonomy of the laboring person.

Ethical approval

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all patients for being included in the study. The study was approved by the Oregon State University IRB protocol #6645.

Acknowledgments

We thank Ashish Premkumar, Elizabeth Nalepa, and our editors and anonymous reviewers for their helpful edits and comments on this paper. We also thank Maria Dana, Emily Garcia, Victoria Keenan and Susanna Snyder for their help.

Disclosure statement

We confirm the authors have no financial or personal relationships that might bias the work being submitted.

ORCID

Melissa Cheyney  <http://orcid.org/0000-0001-5672-3353>

References

- Abbyad, C., and T. R. Robertson. 2011. “African American Women’s Preparation for Childbirth from the Perspective of African American Health-Care Providers.” *The Journal of Perinatal Education* 20 (1): 45–53. doi:10.1891/1058-1243.20.1.45.
- Alfirevic, Z., G. M. L. Gyte, A. Cuthbert, D. Devane, 2017. “Continuous Cardiotocography (CTG) as a Form of Electronic Fetal Monitoring (EFM) for Fetal Assessment during Labour.” *Cochrane Database of Systematic Reviews* 2. doi:10.1002/14651858.CD006066.pub3.

- Alfirevic, Z., Kelly, A. J. and Dowswell, T., 2009. "Intravenous Oxytocin alone for Cervical Ripening and Induction of Labour. *Cochrane Database of Systematic Reviews* (4). doi:0.1002/14651858.CD003246.pub2.
- Altman, M. R., M. R. McLemore, T. Oseguera, A. Lyndon, and L. S. Franck. 2020. "Listening to Women: Recommendations from Women of Color to Improve Experiences in Pregnancy and Birth Care." *Journal of Midwifery & Women's Health*. 65: 466–473 doi:10.1111/jmwh.13102.
- American College of Obstetricians and Gynecologists. 2017. "Vaginal Birth after Cesarean Delivery. Practice Bulletin No. 184. American College of Obstetricians and Gynecologists." *Obstetrics & Gynecology* 130: e217–e233.
- American College of Obstetricians and Gynecologists. 2010. "Practice Bulletin no. 116: Management of Intrapartum Fetal Heart Rate Tracings." *Obstetrics and Gynecology* 116 (5): 1232–1240.
- Anim-Somuah, M., R. M. D. Smyth, A. M. Cyna, Cuthbert, A. 2018. "Epidural versus Non-Epidural or No Analgesia for Pain Management in Labour." *Cochrane Database of Systematic Reviews* 5. doi:10.1002/14651858.CD000331.pub4.
- Beck, C. T., and S. Casavant. 2019. "Synthesis of Mixed Research on Posttraumatic Stress Related to Traumatic Birth." *Journal of Obstetric, Gynecologic & Neonatal Nursing* 48 (4): 385–397. doi:10.1016/j.jogn.2019.02.004.
- Berta, M., H. Lindgren, K. Christensson, S. Mekonnen, and M. Adefris. 2019. "Effect of Maternal Birth Positions on Duration of Second Stage of Labor: Systematic Review and Meta-Analysis." *BMC Pregnancy and Childbirth* 19 (1): 466. doi:10.1186/s12884-019-2620-0.
- Betran, A. P., M. R. Torloni, J. Zhang, J. Ye, R. Mikolajczyk, C. Deneux-Tharoux, O. T. Oladapo, J. P. Souza, Ö. Tunçalp, J. P. Vogel, and A. M. Gülmezoglu. 2015. "What Is the Optimal Rate of Caesarean Section at Population Level? A Systematic Review of Ecologic Studies." *Reproductive Health* 12 (1): 57. doi:10.1186/s12978-015-0043-6.
- Blix, E., R. Maude, E. Hals, S. Kisa, E. Karlsen, E. A. Nohr, A. de Jonge, Lindgren, H., Downe, S., Reinar, L. M., Foureur, M., Pay, A. S. D., Kaasen, A. 2019. "Intermittent Auscultation Fetal Monitoring during Labour: A Systematic Scoping Review to Identify Methods, Effects, and Accuracy." *PLoS One* 14 (7): e0219573. doi:10.1371/journal.pone.0219573.
- Bridges, K. M. 2011. *Reproducing Race: An Ethnography of Pregnancy as a Site of Racialization*. Berkeley, CA: University of California Press.
- Burcher, P., M. J. Cheyney, K. N. Li, S. Hushmendy, and K. C. Kiley. 2016. "Cesarean Birth Regret and Dissatisfaction: A Qualitative Approach." *Birth* 43 (4): 346–352. doi:10.1111/birt.12240.
- Castañeda, A. N., and J. J. Searcy. 2021. "On the Outside Looking In: A Global Doula Response to COVID-19." *Frontier Sociology* 6:613978. doi:10.3389/fsoc.2021.613978.
- Castro, A. 2019. "Witnessing Obstetric Violence during Fieldwork: Notes from Latin America." *Health and Human Rights* 21 (1): 103–113.
- Castro, A., A. Heimbürger, and A. L. Glass. 2003. *Iatrogenic Epidemic: How Health Care Professionals Contribute to the High Proportion of Cesarean Sections in Mexico*. Princeton NJ, Harvard University: David Rockefeller Center for Latin American Studies.
- Castro, A., and V. Savage. 2019. "Obstetric Violence as Reproductive Governance in the Dominican Republic." *Medical Anthropology* 38 (2): 123–136. doi:10.1080/01459740.2018.1512984.
- Cheyney, M., C. Everson, and P. Burcher. 2014. "Homebirth Transfers in the United States: Narratives of Risk, Fear, and Mutual Accommodation." *Qualitative Health Research* 24 (4): 443–456. doi:10.1177/1049732314524028.
- Cheyney, M., and L. Peters. 2019. "Precision Maternity Care: Using Big Data to Understand Trends and to Make Change Happen." In *Squaring the Circle: Researching Normal Childbirth in a Technological World*, edited by S. M. Downe and S. Byrom, 204. London: Pinter and Martin.
- Cheyney, M., and R. Davis-Floyd. 2019. "Birth as Culturally Marked and Shaped." In *Birth in Eight Cultures*, edited by R. Davis-Floyd and M. Cheyney, 1–16. Long Grove, IL: Waveland Press.
- Cheyney, M., and R. Davis-Floyd. 2020a. "Birth and the Big Bad Wolf: A Biocultural, Co-Evolutionary Perspective." *International Journal of Childbirth* 9 (4): 177–192. doi:10.1891/IJCBIRTH-D-19-00030.

- Cheyney, M., and R. Davis-Floyd. 2020b. "Birth and the Big Bad Wolf: A Biocultural, Co-Evolutionary Perspective." *International Journal of Childbirth* 10 (2): 66–78. doi:10.1891/IJCBIRTH-D-19-00029.
- Childbirth Connection. 2013. Average Facility Labor and Birth Charge by Site and Method of Birth, United States 2009–2011. Accessed August 31, 2019. <http://transform.childbirthconnection.org/wp-content/uploads/2013/06/uscharges-chart-20092011.pdf>.
- Claudio, E., J. Donahue, P. M. Niles, A. Pirsch, P. Ramos, I. Neely, R. Conceição, M.-P. Thomas, T. St Vil, and D. Kaplan. 2020. "Mobilizing a Public Health Response: Supporting the Perinatal Needs of New Yorkers during the COVID-19 Pandemic." *Maternal and Child Health Journal* 24 (9): 1083–1088. doi:10.1007/s10995-020-02984-6.
- Cooper Owens, D. 2017. *Medical Bondage: Race, Gender, and the Origins of American Gynecology*. Athens, GA: University of Georgia Press.
- Creanga, A. A., C. J. Berg, C. Syverson, K. Seed, F. C. Bruce, and W. M. Callaghan. 2015. "Pregnancy-Related Mortality in the United States, 2006–2010." *Obstetrics and Gynecology* 125 (1): 5–12. doi:10.1097/AOG.0000000000000564.
- Cunningham, J. W., M. Vaduganathan, B. L. Claggett, K. S. Jering, A. S. Bhatt, N. Rosenthal, and S. D. Solomon. 2021. "Clinical Outcomes in Young U.S. adults Hospitalized with COVID-19." *JAMA Internal Medicine* 181 (3): 379. doi:10.1001/jamainternmed.2020.5313.
- Davis, D. A. 2018. *The Labor of Racism*. Anthro{Dendum}. Accessed February 13, 2020. <https://anthrodendum.org/2018/05/07/the-labor-of-racism/>
- Davis, D. A. 2019. "Obstetric Racism: The Racial Politics of Pregnancy, Labor, and Birthing." *Medical Anthropology* 38 (7): 560–573. doi:10.1080/01459740.2018.1549389.
- Davis, D. A., 2020. "Reproducing while Black: The Crisis of Black Maternal Health, Obstetric Racism and Assisted Reproductive Technology." *Reproductive Biomedicine & Society Online* 11: 56–64. doi:10.1016/j.rbms.2020.10.001.
- Davis-Floyd, R. 2001. "The Technocratic, Humanistic, and Holistic Models of Birth." *International Journal of Gynecology & Obstetrics* 75 (Suppl. 1): S5–S23. doi:10.1016/S0020-7292(01)00510-0.
- Davis-Floyd, R. (1992) 2003. *Birth as an American Rite of Passage*. 2nd ed. Berkeley: University of California Press.
- Davis-Floyd, R. 2018a. "The Technocratic, Humanistic, and Holistic Paradigms of Birth and Health Care." In *Ways of Knowing about Birth: Mothers, Midwives, Medicine, and Birth Activism*, by Robbie Davis-Floyd and Colleagues, 3–44. Long Grove, IL: Waveland Press.
- Davis-Floyd, R. 2018b. "The Rituals of Hospital Birth: Enacting and Transmitting the Technocratic Model." In *Ways of Knowing about Birth: Mothers, Midwives, Medicine, and Birth Activism*, edited by Robbie Davis-Floyd, 45–70. Long Grove, IL: Waveland Press.
- Davis-Floyd, R. 2018c. "The Midwifery Model of Care: Anthropological Perspectives." In *Ways of Knowing about Birth: Mothers, Midwives, Medicine, and Birth Activism*, edited by Robbie Davis-Floyd, 323–338. Long Grove, IL: Waveland Press.
- Davis-Floyd, R., K. Gutschow, and D. A. Schwartz. 2020. "Pregnancy, Birth, and the COVID-19 Pandemic in the United States." *Medical Anthropology* 39 (5): 413–427. doi:10.1080/01459740.2020.1761804.
- Daviss, B. A., D. Anderson, and K. C. Johnson. 2021. "Pivoting to Homebirth in the Time of COVID-19: Safety and Economics of Community Birth." In *Frontiers in Sociology Special Issue on the Global Impacts of COVID-19 on Maternity Care Practices and Childbearing Women*, edited by R. Davis-Floyd and K. Gutschow. In press.
- Daviss, B. A., and A. Bisits. 2021. "Bringing Back Breech: Dismantling Hierarchies and Re-Skilling Practitioners." In *Birthing Models on the Human Rights Frontier: Speaking Truth to Power*, edited by B.-A. Daviss and R. Davis-Floyd. London: Routledge. In press.
- Daviss, B.A., Bisits, A. 2021. "Bringing Back Breech: Dismantling Hierarchies and Reskilling Practitioners." In *Birthing Models on the Human Rights Frontier: Speaking Truth to Power*, edited by Betty-Anne Daviss and Robbie Davis-Floyd, 145–183. Abigdon, Oxon: Routledge.
- Daviss, B. A., D. A. Anderson, and K. C. Johnson. 2021. "Pivoting to Childbirth at Home or in Freestanding Birth Centers in the US during COVID-19: Safety, Economics and Logistics." *Frontier Sociology* 6: 618210. doi:10.3389/fsoc.2021.618210.

- Declercq, E. R., C. Sakala, M. P. Corry, and S. Applebaum. 2007. "Listening to Mothers II: Report of the Second National U.S. Survey of Women's Childbearing Experiences." *Journal of Perinatal Education* 16 (4): 9–14. doi:10.1624/105812407X244769.
- Declercq, E. R. 2013. *Listening to Mothers III: New Mothers Speak Out*, 85. New York: Childbirth Connection.
- Declercq, E., C. Sakala, M. Corry, S. Applebaum, and A. Herrlich. 2014. "Major Survey Findings of Listening to MothersSM III: Pregnancy and Birth." *The Journal of Perinatal Education* 23 (1): 9–16. doi:10.1891/1058-1243.23.1.9.
- Deliktas, A., and K. Kuku. 2018. "A Meta-Analysis of the Effect on Maternal Health of Upright Positions during the Second Stage of Labour, without Routine Epidural Analgesia." *Journal of Advanced Nursing* 74 (2): 263–278. doi:10.1111/jan.13447.
- Devane, D., J. G. Lalor, S. Daly, et al. 2010. "Cardiotocography versus Intermittent Auscultation of Fetal Heart on Admission to Labour Ward for Assessment of Fetal Wellbeing." *Cochrane Database of Systematic Reviews* 1.
- Diaz-Tello, F. 2016. "Invisible Wounds: Obstetric Violence in the United States." *Reproductive Health Matters* 24 (47): 56–64. doi:10.1016/j.rhm.2016.04.004.
- Dixon, L. Z. 2015. "Obstetrics in a Time of Violence: Mexican Midwives Critique Routine Hospital Practices." *Medical Anthropology Quarterly* 29 (4): 437–454.
- Dressler, W. W., K. S. Oths, and C. C. Gravlee. 2005. "Race and Ethnicity in Public Health Research: Models to Explain Health Disparities." *Annual Review of Anthropology* 34 (1): 231–252. doi:10.1146/annurev.anthro.34.081804.120505.
- Elmir, R., V. Schmied, L. Wilkes, and D. Jackson. 2010. "Women's Perceptions and Experiences of a Traumatic Birth: A Meta-Ethnography." *Journal of Advanced Nursing* 66 (10): 2142–2153. doi:10.1111/j.1365-2648.2010.05391.
- Fingar, K. F., Hambrick, M. M., Heslin, K. C., and Moore, J. E. 2018. Trends and Disparities in Delivery Hospitalizations Involving Severe Maternal Morbidity, 2006–2015. HCUP Statistical Brief #243. September 2018. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/reports/statbriefs/sb243-Severe-Maternal-Morbidity-Delivery-Trends-Disparities.pdf.
- Fraser, W. D., Turcot, L. I. Krauss, G. Brisson-Carrol, and R. Smyth. 2000. "Amniotomy for Shortening Spontaneous Labour." *Cochrane Database of Systematic Reviews* 1.
- Galtung, J. 1990. "Cultural Violence." *Journal of Peace Research* 27 (3): 291–305. doi:10.1177/0022343390027003005.
- Gimovsky, A. C., and V. Berghella. 2016. "Randomized Controlled Trial of Prolonged Second Stage: Extending the Time Limit vs Usual Guidelines." *American Journal of Obstetrics and Gynecology* 214 (3): 361.e1–6. doi:10.1016/j.ajog.2015.12.042.
- Giurgescu, C., B. L. McFarlin, J. Lomax, C. Craddock, and A. Albrecht. 2011. "Racial Discrimination and the Black-White Gap in Adverse Birth Outcomes: A Review." *Journal of Midwifery & Women's Health* 56 (4): 362–370. doi:10.1111/j.1542-2011.2011.00034.x.
- Grekin, R., and M. W. O'Hara. 2014. "Prevalence and Risk Factors of Postpartum Posttraumatic Stress Disorder: A Meta-Analysis." *Clinical Psychology Review* 34 (5): 389–401. doi:10.1016/j.cpr.2014.05.003.
- Gupta, J. K., A. Sood, G. J. Hofmeyr, and J. P. Vogel. 2017. "Position in the Second Stage of Labour for Women without Epidural Anaesthesia." *The Cochrane Database of Systematic Reviews* 5. doi:10.1002/14651858.CD002006.pub4
- Gutschow, K., and R. Davis-Floyd. 2021. "The Impacts of COVID-19 on U.S. Maternity Care Practitioners: A Follow-Up Study." *Frontiers in Sociology*, In press.
- Gutschow, K., R. Davis-Floyd, and B. A. Daviss, eds. 2021. *Sustainable Birth in Disruptive Times*. New York: Springer Nature.
- Harris, B. S., R. P. Heine, J. Park, K. R. Faurot, M. K. Hopkins, A. J. Rivara, H. R. Kemeny, C. A. Grotegut, and J. E. Jelovsek. 2019. "Are Prediction Models for Vaginal Birth after Cesarean Accurate?" *American Journal of Obstetrics and Gynecology* 220 (5): 492.e1–492.e7. doi:10.1016/j.ajog.2019.01.232.

- Hoyert, D. L. 2019. Maternal Mortality Rates in the United States, 2019. *NCHS Health E-Stats*. 2021. doi:10.15620/cdc:103855external.icon.
- Illich, I. 1976. *Medical Nemesis: The Expropriation of Health*. New York: Bantam Books.
- International Confederation of Midwives. 2005. *Core Document: Philosophy and Model of Midwifery Care*. The Hague, the Netherlands: International Confederation of Midwives. Accessed November 25, 2020. <https://www.internationalmidwives.org/assets/files/definitions-files/2018/06/eng-philosophy-and-model-of-midwifery-care.pdf>
- International Confederation of Midwives; World Health Organization; White Ribbon Alliance. 2016. *Midwives' Voices, Midwives' Realities: Findings from a Global Consultation on Providing Quality Midwifery Care*. Geneva, Switzerland: WHO.
- Kitzinger, S. 2006. "Birth as Rape: There Must Be an End to 'Just in Case' Obstetrics." *British Journal of Midwifery* 14 (9): 544–545. doi:10.12968/bjom.2006.14.9.21799.
- Kozhimannil, K.B., Law, M.R., Virnig, B.A. 2013. "Cesarean Delivery Rates Vary tenfold among US Hospitals; Reducing Variation may Address Quality and Cost Issues." *Health Affairs* (Millwood) 32: 527–535. doi:10.1377/hlthaff.2012.1030.
- Kozhimannil, K. B., P. Karaca-Mandic, C. J. Blauer-Peterson, N. T. Shah, and J. M. Snowden. 2017. "Uptake and Utilization of Practice Guidelines in Hospitals in the United States: The Case of Routine Episiotomy." *Joint Commission Journal on Quality and Patient Safety* 43 (1): 41–48. doi:10.1016/j.jcjq.2016.10.002.
- Lokumage, A. 2011. "Fear of Home Birth in Doctors and Obstetric Iatrogenesis." *International Journal of Childbirth* 1 (4): 263–272.
- Martin, J. A., B. E. Hamilton, M. J. K. Osterman, and A. K. Driscoll. 2019. "Births: Final Data for 2019." In *National Vital Statistics Report*, Vol. 70 2, 1–47. Hyattsville, MD: National Center for Health Statistics. doi:10.15620/cdc:100472.
- May, M. 2017. *Epiduralized Birth and Nurse-Midwifery: Childbirth in the United States, a Medical Ethnography*. Sampson Book Publishing.
- Miller, S., E. Abalos, M. Chamillard, A. Ciapponi, D. Colaci, D. Comandé, V. Diaz, et al. 2016. "Beyond Too Little, Too Late and Too Much, Too Soon: A Pathway towards Evidence-Based, Respectful Maternity Care Worldwide." *The Lancet* 388 (10056): 2176–2192. Review. doi:10.1016/S0140-6736(16)31472-6.
- Moraloglu, O., H. Kansu-Celik, Y. Tasci, B. K. Karakaya, Y. Yilmaz, E. Cakir, H. I. Yakut, et al. 2017. "The Influence of Different Maternal Pushing Positions on Birth Outcomes at the Second Stage of Labor in Nulliparous Women." *The Journal of Maternal-Fetal & Neonatal Medicine* 30 (2): 245–249. doi:10.3109/14767058.2016.1169525.
- Mullins, E., C. Lees, and P. Brocklehurst. 2017. "Is Continuous Electronic Fetal Monitoring Useful for All Women in Labour?" *BMJ* 359:j5423:1–3.
- Nageotte, Michael P. 2015. "Fetal Heart Rate Monitoring." *Seminars in Fetal and Neonatal Medicine* 20 (3): 144–148. doi:10.1016/j.siny.2015.02.002.
- National Institutes of Health (NIH) Consensus Development Conference Statement: Vaginal Birth after Cesarean: New Insights. 2010. *Obstetrics & Gynecology* 115: 1279–1295. Level III.
- National Institutes of Health Consensus Development Conference Statement: Vaginal Birth after Cesarean: New Insights. 2010. *Obstetrics & Gynecology* 115: 1279–1295. Level III.
- Obinna, D. N. 2021. "Essential and Undervalued: Health Disparities of African American Women in the COVID-19 Era." *Ethnicity & Health* 26 (1): 68–12. doi:10.1080/13557858.2020.1843604.
- Oparah, J. C., J. E. James, D. Barnett, L. M. Jones, D. Melbourne, S. Peprah, and J. A. Walker. 2021. "Creativity, Resilience and Resistance: Black Birthworkers' Responses to the COVID-19 Pandemic." In *Frontiers in Sociology* 6: 636029. doi:10.3389/fsoc.2021.636029.
- Osterman, M. J. K. 2020. "Recent Trends in Vaginal Birth after Cesarean Delivery: United States, 2016–2018." *NCHS Data Brief* 359. Hyattsville, MD: National Center for Health Statistics.
- Philibert, M., C. Deneux-Tharaux, and M.-H. Bouvier-Colle. 2008. "Can Excess Maternal Mortality among Women of Foreign Nationality Be Explained by Suboptimal Obstetric Care?" *BJOG: An International Journal of Obstetrics & Gynaecology* 115 (11): 1411–1418. doi:10.1111/j.1471-0528.2008.01860.x.

- Plough, A. C., G. Galvin, Z. Li, S. R. Lipsitz, S. Alidina, N. J. Henrich, L. R. Hirschhorn, et al. 2017. "Relationship between Labor and Delivery Unit Management Practices and Maternal Outcomes." *Obstetrics and Gynecology* 130 (2): 358–365. doi:10.1097/AOG.0000000000002128.
- Profit, J., Edmonds, B.T., Shah, N., Cheyney, M. 2020. "The COVID-19 Pandemic as a Catalyst for More Integrated Maternity Care." *American Journal of Public Health* 110 (11): 1663–1665. doi:10.2105/AJPH.2020.305935.
- Profit, J., B. T. Edmonds, N. Shah, and M. Cheyney. 2020. The COVID-19 Pandemic as a Catalyst for More Integrated Maternity Care.
- Reid, A. J., and N. L. Harris. 1988. "Alternative Birth Positions." *Canadian Family Physician* 34 (1993–1998).
- Rich-Edwards, J., N. Krieger, J. Majzoub, S. Zierler, E. Lieberman, and M. Gillman. 2001. "Maternal Experiences of Racism and Violence as Predictors of Preterm Birth: rationale and Study Design." *Paediatric and Perinatal Epidemiology* 15 (s2): 124–135. doi:10.1046/j.1365-3016.2001.00013.x.
- Rivera, M. 2021. "Transitions in Community-Based Doula Work during COVID-19." *Frontiers in Sociology* 6: 611350. doi:10.3389/fsoc.2021.611350.
- Rivera, M. 2021. "Transitions in Community-Based Doula Work for Minority Groups during COVID-19." In *Frontiers in Sociology, Special Issue on the Global Impact of COVID-19 on Maternity Care Practices and Childbearing Experiences*, edited by R. Davis-Floyd and K. Gutschow. In press.
- Roth, L., N. Heidbreder, M. Henley, et al. 2014. Maternity Support Survey: A Report on the Cross-National Survey of Doulas, Childbirth Educators and Labor and Delivery Nurses in the United States and Canada. <https://maternitysuryey.files.wordpress.com/2014/07/mss-report-5-1-14-final.pdf>
- Sadler, M., M. J. Santos, D. Ruiz-Berdún, G. L. Rojas, E. Skoko, P. Gillen, and J. A. Clausen. 2016. "Moving beyond Disrespect and Abuse: Addressing the Structural Dimensions of Obstetric Violence." *Reproductive Health Matters* 24 (47): 47–55. doi:10.1016/j.rhm.2016.04.002.
- Santos, D. D. S., M. D. O. Menezes, C. B. Andreucci, M. Nakamura-Pereira, R. Knobel, L. Katz, ... M. L. Takemoto. 2020. "Disproportionate Impact of COVID-19 among Pregnant and Postpartum Black Women in Brazil through Structural Racism Lens." *Clinical Infectious Diseases*.
- Scott, K. A., L. Britton, and M. R. McLemore. 2019. "The Ethics of Perinatal Care for Black Women: Dismantling the Structural Racism in "Mother Blame" Narratives." *The Journal of Perinatal & Neonatal Nursing* 33 (2): 108–115. doi:10.1097/JPN.0000000000000394.
- Shah, N. 2017. "The Surprising Factor Behind a Spike in C-Sections." *Harvard Chan: This Week in Health*. July 27. https://www.hsph.harvard.edu/news/multimedia-paper/csections-delivery-risk-podcast/?utm_source=Twitter&utm_medium=Social&utm_campaign=Chan-Twitter-General
- Sholapurkar, S. L. 2010. "Intermittent Auscultation of Fetal Heart Rate during Labour—a Widely Accepted Technique for Low Risk Pregnancies: But Are the Current National Guidelines Robust and Practical?" *Journal of Obstetrics and Gynaecology: Gynaecology* 30 (6): 537–540. doi:10.3109/01443615.2010.484108.
- ten Hoop-Bender, P., L. de Bernis, J. Campbell, S. Downe, V. Fauveau, H. Fogstad, C. S. E. Homer, et al. 2014. "Improvement of Maternal and Newborn Health through Midwifery." *Lancet* (London, England) 384 (9949): 1226–1236. doi:10.1016/S0140-6736(14)60930-2.
- Thacker, S. B., D. Stroup, M. H. Chang, and S. L. Henderson. 2001. "Continuous Electronic Heart Rate Monitoring for Fetal Assessment during Labor." *Cochrane Database of Systematic Reviews* 2.
- Thornton, P. D., K. Liese, K. Adlam, K. Erbe, and B. L. McFarlin. 2001. "Calculators Estimating the Likelihood of Vaginal Birth after Cesarean: Uses and Perceptions." *Journal of Midwifery & Women's Health* 65 (5): 621–626. doi:10.1111/jmwh.13141.
- Tuncalp, W. W. M., C. MacLennan, O. T. Oladapo, A. M. Gulmezoglu, R. Bahl, B. Daelmans, M. Mathai, et al. 2015. "Quality of Care for Pregnant Women and Newborns—the WHO Vision." *BJOG: An International Journal of Obstetrics & Gynaecology* 122 (8): 1045–1049. doi:10.1111/s1471-0528.13451.
- Vedam, S., Stoll, K., Taiwo, T. K., Rubashkin, N., Cheyney, M., Strauss, N., McLemore, M., Cadena, M., Nethery, E., Rushton, E., Schummers, L. 2019. "The Giving Voice to Mothers Study: Inequity and Mistreatment during Pregnancy and Childbirth in the United States." *Reproductive Health* 16 (1): 1–8. doi:10.1186/s12978-019-0729-2.

- Vintzileos, A. M., D. J. Nochimson, E. R. Guzman, R. A. Knuppel, M. Lake, and B. S. Schifrin. 1995. "Intrapartum Electronic Fetal Heart Rate Monitoring versus Intermittent Auscultation: A Meta-Analysis." *Obstetrics and Gynecology* 85 (1): 149–155. doi:[10.1016/0029-7844\(94\)00320-D](https://doi.org/10.1016/0029-7844(94)00320-D).
- Viruell-Fuentes, E. A., Miranda, P. Y. and Abdulrahim, S., 2012. "More than Culture: Structural Racism, Intersectionality Theory, and Immigrant Health." *Social Science & Medicine* 75 (12): 2099–2106. doi:[10.1016/j.socscimed.2011.12.037](https://doi.org/10.1016/j.socscimed.2011.12.037).
- Walker, C., T. Rodríguez, A. Herranz, J. A. Espinosa, E. Sánchez, and M. Espuña-Pons. 2012. "Alternative Model of Birth to Reduce the Risk of Assisted Vaginal Delivery and Perineal Trauma." *International Urogynecology Journal* 23 (9): 1249–1256. doi:[10.1007/s00192-012-1675-5](https://doi.org/10.1007/s00192-012-1675-5).
- WHO Statement on Caesarean Section Rates. 2015. *Reprod Health Matters* 23 (45): 149–150. doi:[10.1016/j.rhm.2015.07.007](https://doi.org/10.1016/j.rhm.2015.07.007).
- Yildiz, P. D., S. Ayers, and L. Phillips. 2017. "The Prevalence of Posttraumatic Stress Disorder in Pregnancy and after Birth: A Systematic Review and Meta-Analysis." *Journal of Affective Disorders* 208: 634–645. doi:[10.1016/j.jad.2016.10.009](https://doi.org/10.1016/j.jad.2016.10.009).