CHAPTER 1

Into Doctors' Hands: Obstetric Praxis in Anthropology

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Introduction

The history of obstetrics is also a history of power. As the field of obstetrics became more professionalized, specialized, and masculinized in the nineteenth century, midwifery was racialized and excised in the United States and denigrated abroad by early development efforts. Childbirth shifted into the hospital where obstetricians continue to develop medical and technological models of perinatal care.

In this chapter we address how anthropologists have examined obstetrics over the past half century, specifically obstetric perspectives on the birthing body and how technology, ritual, and authority are central to obstetrics. It is important to understand the culture of obstetricians given their central role in birth and women's health. Our chapter exemplifies and expands on core questions that anthropologists of reproduction have addressed. We begin by drawing on nineteenth-century medical writings to explain how the field of obstetrics emerged, including practitioners' concerns with female anatomy, development of surgical skills, and medical education (Hughes 1892). A significant interest in pelvic shape and its effect on childbirth became the focus of physicians and anthropologists in the mid-twentieth century (Caldwell and Moloy 1933; Krogman 1951; Washburn 1960).

Theoretical shifts in the mid- to late twentieth century brought on feminist anthropologists investigating birth in multiple subfields; scholars reconsidered obstetrics as grounded in culture, warranting anthropological inquiry (Montagu 1963; Atwood 1976). As the birth care landscape changed with a 1990s renewal of midwifery and consumer-oriented care options, anthropologists reevaluated relationships between obstetric culture and public health in areas of technocratic power, gendered violence, and medical

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racism (Jordan 1992; Davis-Floyd 2003; Bridges 2011; Davis 2019c; Scott 2021). As obstetrics was instituted as a solution for maternal–fetal death rates in the Global South, anthropologists also inquired about tensions between localized knowledge and global development efforts (Castro and Savage 2019; Smith-Oka and Marshalla 2019).

Emergence Of Anthropological Analyses Of Obstetrics

Much of the comprehensive analysis of obstetric culture, ritual, and space-making took place in the last three decades of the twentieth century, particularly by cultural anthropologists such as Jordan (1992), Davis-Floyd (1987a), Martin (2001), and Hahn (1987a). Guided by feminist anthropology in the 1970s, they focused their attention on the beliefs embedded in obstetric practices in hospital births. They posited that birth and the practices of obstetricians were cultural systems worthy of anthropological analysis.

The topic of how doctors should be trained and the tools and techniques of the trade were also of interest to earlier biological anthropologists and physicians. Few of these early studies focused on obstetrics exclusively, however. Physicians in the mid- to late nineteenth century in the United States were focused on systematizing the medical curriculum and determining the role of doctors, with some arguing that doctors were sentinels who should care for society's most vulnerable (Hughes 1892). Others focused on asepsis and antisepsis for surgical procedures, including proper techniques for scrubbing and disinfecting hands (Burrage 1899) and the use of new technology like "well-fitted rubber glove[s]," which were extolled as allowing obstetricians to accomplish anything (Davis 1900, p. 131). Still others argued for the need to balance didactic and laboratory training and to streamline the medical curriculum to identify required and elective courses, because there was no need for students to know physiological optics if they were pursuing obstetrics (Bowditch 1898). Surgery was increasingly seen as a solution to health problems associated with women's reproductive health issues, pelvic organs, or "insanity" (Carpenter 1900). Others, however, disagreed, arguing against the problematic violence and "needless mutilation" of the female body through hysterectomies, oophorectomies, or other surgical procedures (Hughes 1892, p. 5) and urging gynecologists to instead focus on the pathological (Davis 1900).

By the early twentieth century, the link between obstetrics and the surgical practice of gynecology was well established, with one American doctor (Davis 1900) arguing that gynecology provided significant advances in abdominal and pelvic work that was impossible for general surgeons. That is, he argued, it takes a long time to gain *tactus eruditus* (a sensitivity of touch acquired through lots of practice) of the female pelvis. The shift of birth from the home into the hospital not only shifted the power over childbirth from the mother to the physician (Leavitt 1987), leaving the woman as a passive participant in her childbirth (Martin 2001; Stone and Walrath 2006), but also made possible new obstetric technologies and interventions (Walrath 2003). Many of these interventions stripped women of autonomy in birth: scopolamine, general anesthesia, Pitocin, episiotomies, and forceps (Wolf 2018).[1] The use of models, images,

[1] Wolf (2018) stated that Pitocin was so common in the 1950s that *McCall's* ran an article denouncing "Tuesday-Thursday-and-Saturday obstetricians" who primarily attended scheduled births, which women described as inhumane and cruel.

and mannequins also began to be more common for training purposes (Dickinson 1940), which in later years were standardized as simulators for medical training.

The medicalization of childbirth fostered a discourse among obstetricians and anthropologists alike about the inadequacy of female morphology (particularly the pelvis) for childbirth (Stone and Walrath 2006). Caldwell and Moloy (1933, 1938) used X-rays to typologize maternal pelvises, partially to provide practical information to obstetricians for better technical approaches to birth. They argued that, when obstetricians used their typology, cesarean sections, difficult forceps deliveries, and fetal mortality would decrease.

As biomedical interest in maternal mortality arose in the mid-twentieth century, biological anthropologists responded by attributing obstetric issues to the evolutionary tension between the development of hominin bipedalism and encephalization (increasing head size), which caused a "tight fit" in parturition (Krogman 1951). Washburn (1960) hypothesized that complex hominin tool use created a growing feedback loop with bipedalism and encephalization, partially resolved by altricial offspring and higher maternal responsibility, supporting popular notions of obstetric assistance in parturition. This "obstetric dilemma" (Washburn 1960) would become the focus of biocultural reproductive anthropologists in the 1990s and 2000s who continue to refute or reify its validity in assessing the maternal body and models of care (Stone 2016; Dunsworth 2018; Rutherford et al. 2019; Rosenberg and Trevathan 2021).

Around the same time, cultural anthropologists began paying attention to biomedicine (Montagu 1963), birth, and obstetrics (McClain 1975) as cultural systems. Newton and Mead's contributions of extensive childbirth data, cross-cultural approach, and systematization of birth practices deeply influenced how reproductive anthropology developed into an applied practice (Newton and Mead 1967). In reflecting on the emergence of the anthropology of reproduction, Jordan (1980) iconized Mead as its "mother." Jordan (1980) framed reproductive anthropology's rise in conjunction with troubling statistics surrounding medical obstetric practices in the United States, referring to reproductive anthropology as a "reorganization" of American obstetrics and setting the tone for anthropologists' critiques of medicalized birth worldwide from the 1980s onwards. Anthropologists began to see the specialty of obstetrics as a *culture* because "the learned behavior patterns become accepted practice and universally used" and transmitted to the next generation of obstetric trainees (Atwood 1976, p. 7). This initial research created an avalanche of anthropological interest in questions of birth and reproduction, including the study of obstetricians and obstetrics wards.

Foundational Analyses Of Obstetricians And Obstetrics Wards

Examinations of Obstetrics Texts

As a feminist anthropology of reproduction emerged in the 1980s, obstetric texts came under scrutiny by scholars such as Martin (2001) and Hahn (1987b). Martin's Marxist feminist exegesis of Johns Hopkins' obstetric texts illuminated the function of capitalist metaphors in medicine. In her account of medical training materials, the woman is constructed as a laborer wielding a uterine machine during birth and an obstetrician is hierarchically positioned as an "active manager" of the birth process.

Texts such as *Williams Obstetrics* characterized women as passive participants or instruments of childbearing, while describing obstetricians as responsible for decision-making and "delivering" babies (Hahn 1987b). The implication of this metaphor lies in the value of efficiency in birth, where higher rates of cesareans are then justified by the successful production of a baby. These medical texts, actively used by medical students in the United States, reinforced the prevailing idea that labor difficulties were attributed to a problematization of women's bodies manifest as small pelvises, fetal malpositioning, or distended uterus. Martin's analysis contributed to an anthropological understanding of doctor–patient relationships mediated by capitalist-informed obstetric training that encourages "productivity" in birth.

Authoritative Knowledge and Technology

Authoritative knowledge emerged as one of the central perspectives for analyzing the dynamics in medical training and between doctors and patients. Though it can be applied to medicine as a whole, the concept of authoritative knowledge explicitly arose from Jordan's (1992) work on comparative ethno-obstetrics. In their examination of court-ordered cesareans in the United States, Irwin and Jordan (1987) defined authoritative knowledge as constituted through power relations, which give obstetric experts authority and legitimacy while discrediting the embodied knowledge of the birthing women as nonscientific and illegitimate. Authoritative knowledge factualizes power relations (Rapp, cited in Jordan 1997). Pedagogy becomes a handmaiden of authoritative knowledge, used to teach and educate people – whether obstetricians or patients – into accepting "the social world as inevitable" (Irwin and Jordan 1987, p. 320). Patients are systematically objectified by being excluded from participation frameworks (Jordan 1997). Thus, "the power of authoritative knowledge is not that it is correct but that it counts" (Irwin and Jordan 1987, p. 330).

Technology reinforces the power of authoritative knowledge, whereby the artifacts of birth (e.g. beds, hammocks, ropes) in "low technology" contexts such as Jordan's (1987) field site in Mexico, are known by everyone, but in "high technology" contexts, such as US hospitals, they are the domain of experts and carry significant symbolic value. Obstetric practices are based upon myths about the power of technology that are accepted by doctors, medical trainees, and patients (Lazarus 1994). The fetal monitor, Jordan (1987) argued, was transformed into an essential component of medicalized birth, providing crucial information to obstetricians and allowing them to ignore the embodied expertise of the birthing woman. Obstetricians developed an almost religious belief in this technology (Wendland 2007), even though it replaced human fallibility with the fallibility of a machine (Wolf 2018).

Anthropologists employed these perspectives about technology and authoritative knowledge to specifically study the training of obstetricians (see Chapter 4). Some of them (Lazarus 1988) showed how obstetric training in the United States emphasizes the essential focus on pathology, surgical skills, the technology of birth (e.g. fetal monitoring), and time. In other contexts, such as Smith-Oka's (2021) research in hospitals in Mexico, obstetric trainees emphasize the importance of hands-on clinical and diagnostic skills. The timing of labor was standardized in the mid-twentieth century through the use of Friedman's curve (Friedman 1954), a graph defining the "normal" length and pace of labor that, until recently, was considered the gold

standard of obstetrics labor care. Thus, obstetric trainees learn to conceptualize birth as pathological and needing medical and technological intervention (Scully 1980). The refocusing of attention to the pathological also linguistically refocuses the interaction between doctors and their patients, whereby they speak of delivering neonates instead of birthing babies (Rothman 1982).

Technocratic Model of Birth

Davis-Floyd (2003) proposed the powerful perspective of obstetric training as a rite of passage. Rites of passage allow individuals to shift from one life stage to another (e.g. single to married, child to adult); they are ritual transformations, consisting of the separation from one's "usual" society, transformed into a new identity during the liminal period where there is a "ritual death" of the old self, and reincorporated after the ritual back into society to inhabit a new identity (van Gennep 1960; Turner 1967). Davis-Floyd suggested that obstetricians are embedded within a "technological model of birth" (1987a, p. 291; see also Chapter 2) that emphasizes a mechanistic view of the process; they learn to see the female body as defective and unable to produce a perfect baby without help from machines or doctors. Davis-Floyd (1987a) described the rituals of biomedical birth (separating, prepping, tagging, depersonalizing, and touching the patient in specific ways) and how routine obstetrical procedures (lithotomy position, cesarean section) emerge as rational techniques in this system (Davis-Floyd 1990). Because these practices are seen as routine, obstetric trainees accept them not only as standard care but as essential to attending birth. Rituals give doctors structure and they accept them as "just the way it's done" (Davis-Floyd 1987a, p. 295). The lithotomy position was established for greater obstetric access and exposure, where obstetricians conceptualize it unquestioningly as the only position for birth; it strips a woman of power and autonomy, placing these in the hands of obstetricians (Atwood 1976; Davis-Floyd 1987a). This system convinced women that vaginal birth was dangerous (Wolf 2018). This perspective is male centric, homogenizing all practitioners (including female obstetricians) to embrace the normalcy "of an institutionalized system of childbirth" (Zambrana et al. 1987, p. 23). Davis-Floyd (1987b, p. 491) argued that the system in the United States is maintained through external pressures (e.g. from the legal field) to "keep obstetricians in line" by emphasizing the increased need of technology (e.g. fetal monitors) and interventions (e.g. cesareans) for self-protection.

Obstetricians are trained to have surgical skills, knowledge of anatomy, physiology, and pathology, as well as knowledge about reproductive tract diseases (Scully 1980). In addition to these formal skills, the hidden curriculum (Hafferty and O'Donnell 2015) ensures that obstetricians also learn to see their patients as teaching material (Scully 1980; Smith-Oka 2021), to distance themselves from their patients, to be in control and professional at all costs, and to consider the worst outcomes and how technology can fix them (Graham 1991). During training, medical students "become neutral physicians drawing on universal medical knowledge," which they apply to the "unmarked patient body," erasing it in the process (Wendland 2007, p. 226). They are not taught to cope with the human problem of what happens when technology fails and they harm or lose a patient; in such a situation, obstetric residents' emotions might range from guilt to inadequacy to fear of a lawsuit (Graham 1991) and they

might not know how to cope with tragedies effectively (Winkel et al. 2021). Rather than being taught that these are unfortunate tragedies, obstetricians learn to fault a lack of technology and thus respond by increasing interventions (e.g. cesareans) to reassert control over birth (Lazarus 1994).

Obstetricians and the Fetal Ultrasound

Several anthropologists have focused on technology, especially the fetal ultrasound, as an integral part of obstetricians' ethos, training, and practice. In some analyses, the ultrasound is seen to replace careful physical examinations and touch in diagnosis (Gaskin 1996; Gammeltoft and Nguyên 2007) as well as reduce obstetricians' competence with manual skills, such as in identifying baby size or position, in attending to breech or twin births (Gaskin 1996), or in performing external cephalic versions (Jordan 1984). Gaskin (1996) argued that the reliance of imaging technology creates a system of virtual reality that erases the female patient. Anthropologists have pointed out that, despite these problems with the overuse of fetal imaging technology, many patients across the world, such as in Greece, Vietnam, or the United States, tend to request it as it has the power to create the reality, personhood, and health of their fetus (Georges 1996; Gammeltoft and Nguyên 2007; Han 2009).

Vital Foundations To A Vibrant Present

Embodied and Sensorial Skills

Scholars in science and technology studies (STS), who contextualize and examine how knowledge and technology are made, used, contested, or legitimized (Rajagopalan et al. 2017), have also influenced anthropology's perspectives on obstetrics. One of the first feminist critics of science was Fox Keller (1985), who helped establish the legitimacy of analyses of gender and science. Other scholars soon followed, providing a critical view about how science has been politicized (Fausto-Sterling 2000), how reproductive sciences and processes have been disciplined (Clarke 1998), how seemingly neutral scientific texts contain gendered and stereotyped language for reproductive processes (Martin 1991), or why deeply injuring racial biases exist within the medical system (Nelson 2011). Building on this legacy, recent scholars (Prentice 2007; Johnson 2008; Harris 2021) focus on analyzing the sensorial, technological, and embodied components within medical training, especially how doctors learn both technical and social skills.

Though Prentice (2007) focused on surgeons (in the United States) in her analysis of medical training and apprenticeship, her work also contributes to an understanding of obstetric training, particularly its surgical components. Surgical training is slow, requiring countless hours of observation, guided training, and practice for novice doctors to increase their autonomy as they become professional surgeons (Prentice 2007). Trainees are enculturated by the process of "defamiliarizing" them with their body and by inculcating new perceptual schemas (Prentice 2007, p. 550). Thus, these scholars argue, the body – whether of patient or practitioner – is produced as a relational phenomenon (Johnson 2008) as doctors learn to measure with (Harris 2021) or "feel with" their bodies as a form of embodied practice (Underman 2020). Obstetric

trainees become attuned to the sensations in their own bodies to examine the body of another (Underman 2020). Technical skills are only a small part of what surgeons need to understand about surgical practice, as most of the knowledge is hard to quantify and includes qualities like wisdom, judgment, and experience (Prentice 2007) as well as inculcating them in sayings and practices so they can be "stirred into practice" (Jensen et al. 2018, p. 863). In the process, trainees *become* surgeons rather than just being skilled at surgery (Jensen et al. 2018).

A significant part of medical training is learning hands-on skills (Smith-Oka and Marshalla 2019). For instance, in learning to perform a pelvic exam, novice doctors might develop these skills through the use of a simulator (Johnson 2008), a paid gynecological teaching associate (Underman 2020), or an actual patient (Smith-Oka 2013). As Underman (2020) argued in her examination of gynecological training, the cervix is something that needs to be felt, which matters diagnostically. A nineteenth-century US doctor (Davenport 1888, p. 172) stated that the tactus eruditus allowed gynecologists to identify not only the basic pelvic and uterine structures, but also the "more remote and insignificant structures" that were "trying in vain to elude the searching finger of the specialist." Medical students historically and across the world have overwhelmingly gained knowledge and learned these techniques on patients who rarely had opportunities to refuse the touch, whose feelings about the touch were generally ignored, and whose reactions to these examinations were possibly pathologized (Underman 2020). In Mexico, for instance, the patients who serve as teaching objects are usually in low-income and public hospitals and have little agency about who touches them (Smith-Oka 2021). Obstetricians in some US hospitals are trained in pelvic examinations with a gynecological teaching associate; there the students' feelings of anxiety of squeamishness are taken seriously, as the aim is for them to not only learn skills but also empathy and to produce caring ties between doctors and their patients (Underman 2020). In yet other contexts, gynecological simulators (also known as obstetric phantoms) allow students to train to perform a pelvic exam without the use of an actual patient body. Simulators, such as mannequins or knitted uteri in contexts such as Sweden, the United States, the Netherlands, or Ghana, have been important for obstetric students to understand the complexity of childbirth (Johnson 2008; Nott and Harris 2020). Johnson (2008) argued these simulator technologies only represents the anatomy for a pelvic exam and are not the same as an actual pelvis. Her study showed the flexibility and mutability of the same technology across cultural contexts, whereby in the United States the gynecological simulator was used to train students about the pelvic exam, whereas in Sweden doctors additionally used it to educate the patients about what to expect.

Obstetric Racism and Obstetric Violence: Race and Reproduction

Anthropologists have elaborated on widely accepted concepts of authoritative knowledge and the medicalization of birth by incorporating questions of race and class as impactful factors in birth experiences and obstetric praxis. Earlier studies discussed how doctors withheld information and discouraged women of color from vaginal births after cesarean (McClain 1990), and performed hysterectomies on Black women at higher rates to train obstetric residents in the technique (Roberts 1999).

More recent studies recount how obstetrical techniques were developed by doctors practicing on enslaved Black women (Cooper Owens 2017). Current scholarship centers these factors as important analytical lenses to understand women's experiences in obstetrics and how obstetricians are not trained to understand experiences of race and class in patients' lives or their own racist assumptions in their practice.

As anthropologists of reproduction began to view obstetrics as a reflection of Western society, racial dynamics garnered attention in anthropology, law, and biology (Ehrenreich 1993). Calls for reflexive ethnographies of hospital births increased (Morton 2009). General feminist critiques of power dynamics in obstetrics and discrepancies between community-based care and hospital systems expanded to consider gendered violence in the context of obstetric care, and later included race and class as mediating factors (Scully 1980; Rothman 1982; Lazarus 1994; Roberts 1999; Schulz and Mullings 2006; Wendland 2007). Drawing on studies from the 1960s, Martin (2001) connected race and class as socioeconomic determinants of health in pregnancy and birth, theorizing a medical profiling of incompetency and risk in Black women's bodies leading to higher rates of cesareans.

Obstetric violence, as an analytical framework, predates obstetric racism and continues to be a prevalent term used by anthropologists and birth practitioners across the world to examine problematic obstetric practices, such as physical and verbal violence (Zacher Dixon 2015; Liese et al. 2021). Obstetric violence contributes to reproductive governance, the synergy of institutional forces in managing birth, which underscores stratified reproduction as the support/denial of reproduction for different populations. It has been witnessed in obstetric practices in Mexico that dehumanize and objectify birthing people based on gender, ethnicity, and class (Smith-Oka and Marshalla 2019).

In the United States, historical anthropologists documented violence enacted on enslaved Black people for the benefit of medicine (Scully 1980; Hoberman 2012; Cooper Owens 2017). Racism is built into the foundations of obstetrics and gynecology through the exploitation and experimentation on Black women's "superbodies" (Cooper Owens 2017, p. 44). Anthropologists across subfields have long debunked the biological basis of race, postulating that race is a social construction with biologically salient effects (Montagu 1963; Valdez and Deomampo 2019). This theoretical shift has led to a focus on racialization: the production and attribution of race toward groups of people that is "continually reworked and reclassified" (Valdez and Deomampo 2019, p. 552).

Racialization and reproductive justice underpin reproductive anthropologies of the 2010s that utilized Black feminist praxis and Critical Race Theory, centering lived experiences of racialization in obstetric care (see Chapter 14). In cross-examining biosocial constructions of race among clinical staff and pregnant people in a New York City hospital, Bridges (2011) illuminated processes of racialization in obstetric settings that affected quality of care. Davis (2019c) established the term obstetric racism, which mitigates the shortcomings of the obstetric violence framework; it focuses on relationships between medical racism and obstetric violence. While reproductive anthropology has historically invested in advocacy work (e.g. Mead, Jordan, Martin), scholars addressing medical racism are now integrating reproductive justice, opening crucial new domains for advocacy (Davis 2019c). Biocultural anthropologists have connected racist biomedicine and the obstetric dilemma (discussed

previously) as cofactors in contemporary problematizations of Black birthing bodies (Rutherford et al. 2019). In reaction to scientifically and socially misinformed obstetrics that leads to harmful interventions, biocultural anthropologists promote midwifery and birthing-person-centered models of care (Stone 2016; Dunsworth 2018; Rutherford et al. 2019; Rosenberg and Trevathan 2021). Scholar-obstetrician Scott (2021) describes perinatal quality improvement efforts that conceptualize Black women as hypervisible victims, yet stifle their agency and expertise as participants in improving structures of obstetric care. These issues in obstetric practices exemplify anthropological critiques of pedagogical gaps in racially informed obstetric training that not only reduce the efficacy of obstetric systems of care, but actively cause harm to birthing persons, fetuses, and neonates globally (Valdez and Deomampo 2019; Davis 2019c; Tsai et al. 2021).

This critical work on race has shaped anthropological studies of obstetric violence within Indigenous communities globally (see Chapter 3). A study from Aotearoa New Zealand found that Māori birthing persons were more likely to experience significant and persistent stressful life events during their reproductive lives than non-Māori birthing persons; these events were structured by historic colonial processes that continue to shape Indigenous peoples' lives and health outcomes (Paine et al. 2022). Similar conclusions were reached by scholars in Mexico (El Kotni 2018) and India (Chattopadhyay et al. 2018), who argued that though government policies have been designed to make childbirth safer and reduce maternal mortality, Indigenous and marginalized birthing persons continue to experience harm and abuse in medical spaces.

Cesarean Sections

Since the 1960s, anthropologists writing about obstetricians and obstetrics have also been concerned with the increased rate of cesarean sections. In the 1960s, when anthropologists were just starting to pay attention to obstetrics, the cesarean rate in the United States was 4.5%, rising steadily over the next decades to 32% (Wendland 2007; Rutherford et al. 2019). When the laboring and birthing body is defined as pathological, it follows that obstetric trainees learn to see technological intervention (i.e. cesareans) as a solution.

Cesareans went from being extraordinarily dangerous procedures that were used as a last resort before the late nineteenth century, to being largely safe (because of an improvement of surgical techniques, suturing, anesthesia, and asepsis) in the early to mid-twentieth century, to becoming one of the most common surgeries across the world in the twenty-first century (Wendland 2007; Wolf 2018; Kuan 2020). Until the 1870s, cesarean section resulted in almost 100% mortality rate for mothers and was primarily used to save the fetus after the mother's death (Sherrod 2017). In the 1880s, the classical incision (vertical) was developed, though it was replaced in 1906 with the transverse incision, which heals better and carries less risk of a subsequent uterine rupture (Drife 2002).

The introduction of electronic fetal monitoring in 1968 (which replaced the fetoscope almost entirely) (Wolf 2018), combined with an increase in malpractice litigation (Wendland 2007) and a change in the way physicians obtained consent for the surgery (Wolf 2018) rapidly increased cesarean rates. In the nineteenth century,

doctors placed the onus of consent on patients, given the dangers of the cesarean procedure (which kept rates low). Under the "perpetual gaze" of the fetal monitor there was an increase in the frequency of diagnosis of fetal distress, whereby doctors shifted to presenting patients with the choice to either receive a cesarean or to vaginally birth a damaged or dead baby (Wolf 2018, p. 19), a nonchoice that drove up rates. This process allowed obstetricians to skirt consent, as the ultimate aim was to protect them from blame (Wolf 2018).

Obstetricians are trained to embrace evidence-based medicine, which they consider to be value neutral, though critiques suggest that evidence-based practice contributes to a rise in cesareans (Wendland 2007). Doctors learn to routinely race against a "faulty clock" (Rutherford et al. 2019, p. 4) based on Friedman's curve of how labor is meant to unfold, even though physiological evidence shows that labors are highly variable and cannot be standardized timewise (Morris 2016; Rutherford et al. 2019). Obstetric trainees learn that when laboring bodies do not follow these artificial timings, they are "failing to progress" (a label without an empirical basis that includes duration of labor, efficacy and strength of contractions even after administration of Pitocin, length of the pushing phase) (Rutherford et al. 2019). This perspective defines the woman's body as a site of risk from which fetuses must be rescued and the doctors and their surgical abilities as sites of safety (Wendland 2007). Thus, the threshold for performing a cesarean is very low (Litorp et al. 2015; Morris 2016). In the United States, 35% of cesareans are performed because they have "failed" to progress (Rutherford et al. 2019) and are justified as a way to protect maternity health providers from liability (Morris 2016; see also Chapter 2).

Obstetricians learn to strictly follow safety protocols, even though not following the protocols might at times result in a better outcome; in those situations, they blame the outcome on maloccurrence instead of improper protocols (Morris 2016). In Tanzania, obstetricians performed high numbers of cesareans "on doubtful indications" out of fear of being blamed for poor outcomes (Litorp et al 2015, p. 234). Malpractice suits reinforce doctors' fears that if they did not do everything possible, they would be liable (Lazarus 1994; Wolf 2018). These situations teach obstetric trainees to see cesareans as normal, in the process vanishing (Wendland 2007) or harming (Williamson 2021) the patient's body and experiences. Kuan (2020) described the high rates of intervention (cesareans, episiotomies, fetal monitoring, intravenous use) in Taiwan as a regime of medicalization that are a concern for policy makers; but obstetricians did not consider interventionism to be a problem, instead viewing it as good care. Recent research in the United States (Singh 2021) suggests that in high-stress situations obstetricians use simple heuristics in their decision-making process regarding mode of birth, whereby if they have a complication in one mode of delivery, they are more likely to shift to the other mode for the next patient.

As anthropologists have argued, structural factors constrain obstetricians' choices. Litorp et al. (2015) state that policies such as transparency and auditing in hospitals can have the unintended effect of making obstetricians reactive, which increases the overuse of cesareans. If these structures are ignored, blame is placed on obstetricians for the cesarean epidemic when they may not be entirely responsible for "the social processes that set the trend in motion" (Morris 2016, p. 22). Kuan (2020) argued that if these constraints are not addressed, then the expectation that obstetricians can reduce unnecessary interventions is almost impossible to achieve.

New Directions

Medical anthropology provides an important lens to examine the history of obstetric training and how conceptualizations of technology, birth, and maternal bodies have emerged historically and continue to unfold. Recent scholarship, grounded in detailed ethnography, has encouraged a solution-oriented reproductive anthropology that aims to produce racially informed models of care that center the voice and well-being of the birthing person (Bridges 2011; Rutherford et al. 2019; Davis 2019a). These concerns continue to gain prevalence and urgency as maternal and fetal mortality rates of historically marginalized groups persist and increase globally (Bridges 2011; Valdez and Deomampo 2019; Davis 2019a). Broad feminist critiques of high cesarean rates and invasive pelvic examinations now focus on localized manifestations of inequities to more accurately reflect birth care landscapes shaped by specific spatiotemporalities, sociopolitical economies, and demographic elements that affect obstetric training and birth experiences in places such as Taiwan, Mexico, and the United States (Bridges 2011; Kuan 2020; Smith-Oka 2021). Recent research has focused on the iatrogenesis (harm) caused by the conversion of obstetric racism, medical care, racial inequities, and discriminatory medical systems (Williamson 2021), uncovering the scales and temporalities of iatrogenesis–both regarding the duration of harms and the deeper histories that shape these harms for individuals and their communities. Prioritization of lived experiences of birthing persons shows feminist and Black feminist frameworks at work (Dunsworth 2018; Scott 2021). Race, racism, and racialization in obstetric praxis is at the vanguard of research across anthropological subfields in response to the sociopolitical climates that influence efforts to subvert the propagation of reproductive injustice (Valdez and Deomampo 2019; Davis 2019b; Scott 2021)

As anthropologists continue to identify and respond to reproductive inequities at large, new threads of inquiry emerge. Scholars such as Davis (2019a) and Rutherford et al. (2019) recognize the complex constructions of accessibility and choice in the US birth care landscape, while others such as Castro and Savage (2019) note the power of reproductive governance framing obstetric encounters globally. Davis (2019c) suggests a model of obstetric birth care that moves away from authoritarian technocratic practices toward a birth landscape that values Black women by imbuing their voices into the way care is conceived, particularly through the presence and promotion of community-based Black birth workers such as doulas. Other scholars call for the integration of Critical Race Theory with medical training in order to educate physicians about root causes of health inequities and equip them to challenge injustice (Tsai et al. 2021). This exemplifies a reflexive, goal-oriented reproductive anthropology that advocates for the desires of its constituents, which can be applied to obstetric systems worldwide.

Anthropology of reproduction should continue to pay attention to ethnography of obstetric training and praxis. To holistically study obstetric training and its effects on birthing persons requires an intersubjective approach to the lived experiences of both birthing persons and obstetricians as co-constructors of the birth landscape. Additionally, health development across the world would benefit from anthropology that prioritizes types of knowledge that have been systematically diminished, especially those bodies of knowledge that interact with globalizing forces of medicalized birth. We hope that more anthropologists will seek out first-hand training in birth

work (midwifery, nursing, obstetrics, doula) and collaborate closely with birth workers to more fully understand obstetric training across cultures and promote maternal well-being in tangible ways (Rutherford et al. 2019; Cheyney et al. 2021; Scott 2021). These scholars can approach examinations of obstetric training with an expanded toolkit of robust practices that include feminist ethnography, human biology, and birth work itself.

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