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Exploring Biomedical, Temporal, and Embodied Perspectives on the Timing of Birth in Central Nepal

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Research Report | **Exploring Biomedical, Temporal, and Embodied Perspectives on the Timing of Birth in Central Nepal**

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As an ANHS Senior Fellow, I began to explore the standardization of time in obstetrics and its translation into everyday practice in Nepal by analyzing the various perspectives involved in determining a woman's ideal time of delivery and a successful pregnancy: those of laypeople, doctors, and the scholars setting the guidelines. I observed Nepali biomedical practitioners' negotiation of multiple understandings of parturition and their strategies for overcoming the challenges of pre- and post-term births.

Keywords: medical anthropology, maternal health, birth, Nepal.

Recent debates in obstetrics (American College of Obstetricians and Gynecologists 2013; Spong 2013) on redefining "term"—meaning the time at which a baby is fully developed and ready to be born—created an opportunity to examine the significance of the constructed and evolving nature of medical standards. Something commonly accepted as a fact, a pregnant woman's estimated date of delivery, is in practice shaped by multiple understandings and assumptions about the timing of birth. These multiple understandings include a health practitioner's estimation of a due date based on a patient's approximation of last menstrual period or date of conception, fundal height measurement, and sometimes ultrasound technology to estimate gestational age. They also include ongoing research and its impact on guidelines for the date at which a cesarean section is considered safe, or the point at which an induction must be performed. And lastly, there is the layperson's understanding of whether it is time to give birth, informed by any combination of embodied or authoritative knowledge (Davis-Floyd & Sargent 1997) and local diagnostics and etiologies. "Full term" is a calculation of a window of time that is based on averages. What can be lost in such a standardization of time is the possibility for individual variation, not to mention miscalculation of expected date of delivery due to differences in perspectives on pregnancy, accurately remembering the start date of one's last menstrual period, or even discrepancies between the Nepali and Gregorian calendars (Nirola et al. 2016).

Clinical encounters between physicians and laypeople, and discord between etiology and explanatory models, have

long been topics of interest and sources of theorizing in medical anthropology (Kleinman 1981; Kaufert and O'Neil 1993; Craig et al. 2010), and this project furthers these lines of inquiry through its engagement with more recent theorizing on women's encounters with medical technologies and metrics (Taylor 1998; Thompson 2005; Gammeltoft 2007; Davis-Floyd et al. 2009; Erikson 2015; Adams 2016). As a medical anthropologist, my long-term goal is to analyze these multiple perspectives of a pregnancy being "full term" and to uncover in what ways they overlap, conflict, or coexist. Precise and orderly biomedical guidelines and standards can appear incongruent with the messy details of the everyday practice of medicine on patients who may not share doctors' knowledge of pregnancy and birth, and whose actions are constrained by economics. In the long term, I aim to uncover findings that will assist practitioners and laypeople to communicate across differing perspectives and economic realities as they work towards successful pregnancies and births.

As the 2017 recipient of the Association for Nepal and Himalayan Studies Senior Fellowship Award, I had the opportunity to begin to explore the standardization of time in obstetrics and its translation into everyday practice in Nepal by analyzing the various perspectives involved in determining a woman's ideal time of delivery and a successful pregnancy: those of laypeople, doctors, and the professional medical associations setting the guidelines. The focus of my project was the two boundaries, or edges, of full term: pre-term and post-term birth. My goals for this initial exploratory phase were to consult with local experts, to accomplish the groundwork necessary for a future collaborative project with a rural hospital, and to perform observations at multiple hospitals in central Nepal with neonatal intensive care units to gain a better appreciation of the differences among them. This involved 1) consulting with Professor Madhusudan Subedi and his colleagues at Patan Academy of Health Sciences, 2) observing the neonatal intensive care units (NICU) at three reputable hospitals, Patan Hospital, Siddhi Memorial Hospital, and Dhulikhel Hospital, 3) establishing a collaboration with Dr. Suman Raj Tamrakar, obstetrician and Associate Professor at Kathmandu University School of Medical Sciences, Dhulikhel, and 4) observing at an outreach clinic located approximately three hours' drive east of Dhulikhel Hospital. At Dhulikhel Hospital, I engaged in more extensive observations in the obstetrics department and NICU, for I needed to determine the appropriateness of that site for conducting future research.

As I shadowed doctors in the obstetrics and gynecology department (labor and outpatient), neonatal intensive care units, and the rural outreach clinic, I observed doctors' negotiation of multiple understandings of parturition and their strategies for overcoming the challenges of pre- and post-term births. I gained a deep appreciation and sympathy for the multiple sides of the hospital encounter: patients, families, and the medical staff. Doctors walked notoriously quickly; there was always more work that needed to be done than one could accomplish, including particularly physically and mentally taxing tasks, such as surgeries that take an hour or longer. There were too many patients who needed to be seen; doctors knew and felt this predicament every day. They developed ways to expedite their daily exams and activities with the goal of efficiency. The patients and their families, on the other hand, were unfamiliar with the multiple locations in the hospital they had to navigate, such as exam rooms, labs, and pharmacies, and their confusion slowed their progress in the hospital encounter.[1] Often there was a vast difference in social, economic, and education status between doctor and patient, as well, especially at rural hospitals. Such conditions lead to patients feeling rushed in their meeting and communications with medical staff, and sometimes disrespected as their bodies are examined in ways deemed highly inappropriate according to the norms that govern everyday life. All the while, the patient and family may be in the middle of a medical crisis, trying to manage pain, shock, or grief. Overall, the terms that define such hospital encounters are structural, and the perspective of an anthropologist can be useful in analyzing how and why the encounters are systematically characterized this way. I also observed a team of NICU doctors who recognized and agentively countered this problem. Twice a day they created a makeshift couch in the empty, quiet hallway space adjacent to the scrub sink for NICU patient families to receive updates directly from the team of doctors. With each consultation, the lead doctor invited the family members to sit next to him on the couch and spoke to them in a gentle tone, adjusting the formality of his language according to his assessment of the family members' education and socioeconomic levels. It was an exceptional example of doctors prioritizing the act of communication with patients and families.

As it is often intellectually productive to examine the extremes of a phenomenon in the same frame, I also considered the over-medicalization of birth in private hospitals of urban Kathmandu as a point of contrast to the lack of accessible obstetric care in rural areas several hours outside of the capital. In conversations with obstetricians and professors in the field of public health, I learned that in the private hospitals of Kathmandu, the rate of cesarean sections is significantly higher than the World Health

Organization's recommended 10-15% of all deliveries. They speculated that doctors in private hospitals were motivated to conduct C-sections because they receive around five times higher income and subsidies for C-sections over vaginal birth. Despite being national leaders in obstetrics and maternal health, the obstetricians and professors I interviewed felt unable to challenge these ethically questionable practices directly, stating that they could only apply indirect pressure on private institutions with such high rates of C-sections. Contrast this over-use of C-sections in an urban metropolis with the situation in rural hospitals and remote outreach centers, in which accessing emergency obstetric care was the main challenge rather than over-medicalization. In cases of premature labor, preeclampsia, obstructed labor, or risk of fetal death due to post-term pregnancy, emergency transport from a woman's rural village to a hospital with emergency obstetric care could take three slow, bumpy hours or more, and only if transportation could be arranged and afforded. Delays in accessing emergency obstetric care continue to pose a significant challenge (Thaddeus and Maine 1994; Brunson 2018).

While female community health volunteers and outreach clinics have proven to be integral in addressing maternal health needs in Nepal (e.g., Sharma 2016; Maru et al. 2018), in instances of obstetric emergencies, geography continues to play an important and complex role in determining how pre- and post-term births receive biomedical care. Not only in terms of access to care, but also in the treatment strategies that physicians selected in response to the degree of remoteness of an inpatient's *ghār* (home). I found that in Dhulikhel Hospital, obstetricians included remoteness in their calculations when considering the appropriate timing of inductions and when determining the appropriate date of discharge from inpatient care. Women were often anxious to return home after birth, loss, or other gynecological procedures, but doctors gave those who lived far away a more conservative discharge date. They did so due to their understanding of the long, jarring ride, but also the work that awaited women once they returned home.

While remoteness emerged as a reoccurring theme in this project, the role of geography in maternal health—or more specifically in this case, steep terrain, landslides, poor roads, and lack of sufficient infrastructure in general—should never be considered in isolation of multifaceted systems of structural inequality at work (Craig 2011) that include political will, wealth, gender, and ethnicity, to name a few. Remoteness impacts women's birth experiences differentially. A case in point: Dhulikhel Hospital is equipped with a helipad, and not long ago a wealthy family that lives in a remote location had chartered a private helicopter to transport a woman undergoing an obstetric emergency to the hospital. As I plan the next stages of research, I will have to navigate what I learned about the differential ways in which remoteness impacts pre- and post-term birth in consideration of the critiques of simplistic constructs of the village (Pigg 1992) and being remote (Harms et al. 2014) or "out-of-the-way" (Tsing 1993; McCullough et al. 2014).

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Endnotes

1. Raut and Thapa et al. (2015) offer recommendations for ameliorating this problem.

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