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Confronting maternal mortality, controlling birth in Nepal: The gendered politics of receiving biomedical care at birth☆

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ABSTRACT

One way of reducing maternal mortality in developing countries is to ensure that women have a referral system at the local level that includes access to emergency obstetric care. Using a 13-month ethnographic study from 2003 to 2005 of women's social positions and maternal health in a semi-urban community of Hindu-caste women in the Kathmandu Valley, this paper identifies impediments to receiving obstetric care in a context where the infrastructure and services are in place. As birth in Nepal predominantly takes place at home, this paper identifies the following areas for potential improvement in order to avoid the loss of women's lives during childbirth: the frequency of giving birth unaided, minimal planning for birth or obstetric complications, and delayed responses at the household level to obstetric emergencies. Focusing particularly on the last item, this study concludes that women do not have the power to demand biomedical services or emergency care, and men still viewed birth as the domain of women and remained mostly uninvolved in the process. As the cultural construction of birth shifts from a "natural" phenomenon that did not require human regulation toward one that is located within the domain of biomedical expertise and control, local acceptance of a biomedical model does not necessarily lead to the utilization of services if neither women nor men are in a culturally-defined position to act.

Introduction

In an effort to confront the high levels of maternal mortality in developing countries, the Safe Motherhood Initiative (now consolidated under the Partnership for Maternal, Newborn and Child Health) has promoted antenatal, delivery, and post-partum care while also acknowledging contextual challenges to implementing safe motherhood goals at the governmental or policy level, the community or cultural level, and at the household or individual level (Partnership for Maternal, Newborn and Child Health, 2009; cf. Freedman et al., 2007). For particularly poor or rural populations, for example, a standard practice of delivering at hospitals may be untenable for a number of reasons. At the governmental and policy level, the costs of providing adequate facilities and staff throughout a country can be onerous for governmental budgets (AbouZahr, 2003). Universal hospital delivery also may be inappropriate given the desires and/or economic limitations of community members (Berry, 2006). One way the limitations on health services in developing countries has been addressed is through the implementation of referral systems in which low-risk births are handled at the local level and difficult cases referred to a district or regional health center or hospital (Murray & Pearson, 2006). The success of this system, which utilizes a combination of home and hospital deliveries and a variety of skilled practitioners, is undermined if access to emergency obstetric care is not available to women giving birth at home (Koblinsky & Campbell, 2003; Rath et al., 2007). Affordable emergency obstetric care must be available at a health center, and means of transportation to reach the center must also exist. Experts have argued that the provision of emergency obstetric care is a crucial part of achieving maternal health in developing countries (Fortney, 2001; Maine & Rosenfield, 1999).

In Nepal, obstetric health care services are available through a governmental referral system (with the notable exception of remote areas), but they are not being fully utilized. Most women in Nepal give birth without the assistance of a trained professional. There is a tendency for families to delay seeking emergency care and, in the process, to bypass lower level facilities. Such behaviors

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would be understandable in locations where services were of poor quality (Barker, Bird, Pradhan, & Shakya, 2007), of substantial expense, or culturally inappropriate (Justice, 1986). The study described here, however, focuses on a location where hospital and local referral services were available in order to explore why families do not use biomedical options at birth despite governmental and non-governmental agencies' efforts to increase the prevalence of professional assistance at birth in order to confront persistently excessive maternal mortality rates (cf. Jeffery & Jeffery, 2010, in this issue).

Using an ethnographic study of women's social positions and maternal health in a semi-urban community of Hindu-caste women in the Kathmandu Valley, Nepal, this paper identifies impediments to receiving obstetric care in a context where the infrastructure and services were in place. This paper considers the household-level dynamics of giving birth at home in the Nepal context and what characteristics of the situation need to change in order to decrease the loss of women's lives in childbearing. The research is based on interviews and participant observation conducted with women; thus their birth complications obviously ended in receiving assistance and surviving. I present these particular narratives as "near misses" that offer us insight into what goes wrong during home birth that may lead to a woman's loss of life.

Background

Nepal's official reported maternal mortality ratio (MMR) of 281 (per 100,000 live births) for the period 1999–2005 (Ministry of Health and Population, New ERA, & Macro International Inc., 2007) makes maternal health a concern of the Ministry of Health and Population (MoHP) and non-governmental agencies alike. The World Health Organization (WHO) and UNICEF provide a more dire picture; they report an adjusted MMR of 830 for 2005 (UNICEF, 2009). While the MMR in Nepal and whether it is decreasing remain a topic of debate (cf. Pant et al., 2008), the Demographic and Health Survey (DHS) has documented the at least partially successful efforts of national and international players to combat maternal mortality through modest increases in the following: the percentage of births delivered at health facilities, the percentage of women making four antenatal care visits, the percentage of births assisted by a Skilled Birth Attendant (SBA), and the percentage of women receiving postnatal care (Ministry of Health et al., 2007). Since this paper focuses on emergencies during home births, I shall not address postnatal care visits in the following discussion.

The prevalence of skilled care received by Nepali women during pregnancy and birth has increased noticeably within the last decade. However, the experience of procreative processes for women in Nepal varies significantly along the lines of wealth and place of residence (we know little about the significance of caste or ethnicity since the Nepal Demographic and Health Surveys do not report on these variables). There are dramatic differences in the practices and experiences of procreation for women in rural versus urban areas and in wealthy versus poor families; as in many countries, reproduction is stratified (Rapp, 2001) in Nepal. Women in the most disadvantaged sectors of society receive the lowest levels of biomedical health care. The effects of wealth and the urban/rural divide can be observed in the tables that follow on delivery location, antenatal care, and assistance at birth by a skilled birth attendant.

The large majority of births by Nepali women occur at home (see Table 1). In the five years preceding the 2006 DHS, 81 percent of births took place at home. Only 18 percent of births were delivered in a government health facility, and less than 1 percent of births occurred in a private health facility. The majority of women who had given birth in the five years before the survey reported that they believed it was not necessary to give birth in a health facility (73 percent), 17 percent said that it was not customary, 10 percent said that it cost too much, and 9 percent that a health facility was too far or that there was no transportation available. In addition, 3 percent of women mentioned that they gave birth before they could get to a facility, even though they had planned to go to a health facility for delivery (MoHP et al., 2007). Since home births are so prevalent, other aspects of care become all the more important: antenatal care in order to identify high-risk births along with general preparations for birth, and delivery assistance in order to manage complications and advocate for hospitalization when necessary.

Table 1
Place of delivery. Percent distribution of births in the five years preceding the survey according to place of delivery (2006 Nepal DHS).

	Health facility	Home	Other	Number of births
Birth order				
1	31.7	66.8	1.5	1676
2–3	14.8	84.2	1.0	2342
4–5	6.9	91.9	1.3	946
6+	6.3	91.6	2.1	580
Residence				
Urban	47.8	51.5	0.7	677
Rural	13.5	85.1	1.4	4868
Mother's education				
No education	7.9	90.7	1.4	3343
Primary	18.9	80.2	1.0	1009
Some secondary	34.6	64.1	1.3	848
SLC and above	67.4	31.6	1.0	345
Wealth quintile				
Lowest	4.3	93.3	2.4	1412
Second	9.3	90.0	0.8	1180
Middle	11.9	87.1	1.0	1132
Fourth	21.7	77.0	1.3	983
Highest	55	44.3	0.8	838

In terms of antenatal care, national level statistics from the 2006 Nepal DHS show a markedly higher percentage of women in younger age groups who utilize antenatal care from a trained health professional. This higher percentage is the combined result of a historical change – an increase in availability of services and the development of a trend in going for antenatal check-ups – and the fact that a higher percentage of women seek antenatal care for their first birth but not for subsequent births. This difference in behavior for first birth versus subsequent births holds true for seeking a hospital (or other health facility) delivery for the first child and not for higher parity children (see Table 1). In the decade between 1996 and 2006, the proportion of women who received antenatal care from an SBA increased from 24 percent in 1996 to 28 percent in 2001 and 44 percent in 2006 (MoHP et al., 2007).

The concept of birth preparedness, like antenatal care, is a part of a biomedical model and risk framework; when birth is considered a natural event, it does not require planning. Birth preparedness in the context of Nepal and similar developing countries is of great relevance to a successful delivery (which most often begins outside a health facility). Ideally it ensures appropriate care and reduces delays in obtaining emergency care when necessary. In a rural setting in the Terai (southern plains of Nepal), McPherson, Khadka, Moore, and Sharma (2006) documented the effectiveness of a birth-preparedness program that encouraged preparation for normal birth through promoting the selection of an SBA and place of delivery, preparation of essential items for delivery such as a clean delivery kit, knowledge of danger signs for mother and newborn and when, whom, and where to seek help, and the

arrangement of access to funds and means for emergency transportation and medical care. While the improvements in essential newborn practices were noteworthy, the authors note that skilled birth attendance and use of emergency obstetric care did not change. However, a study on the effects of a participatory intervention with groups of women in a district that spans the middle hills and the Terai documented a lower maternal mortality ratio in the intervention clusters than the control clusters (Manandhar et al., 2004). National statistics report (MoHP et al., 2007) that overall few people made specific preparations before delivery (of the most recent birth in the five years before the survey): 46 percent of women made no preparations, 29 percent of men made no preparations. Women's efforts were concentrated on saving money and arranging for food and clothing for the newborn, whereas men focused primarily on saving money. These questions are new to the 2006 Nepal DHS, and this sort of breakdown by household members' roles is essential to understanding decisions regarding women's health.

During delivery, the assistance of a Skilled Birth Attendant (SBA) is seen as essential in reducing maternal mortality through safe and aseptic practices, the skills to manage certain complications, and the ability to stabilize a woman and infant with obstetric complications for referral to a health facility. In Nepal, the category SBA includes doctors, nurses, or nurse midwives who have received standard training in an internationally defined set of core midwifery skills (World Health Organization, 2009). Carlough and McCall (2005) suggest that Maternal Child Health Workers, on average, also have an acceptable level of knowledge and skill to serve as SBAs in Nepal, especially in remote areas with sub-health posts that do not have staff in the SBA category. Studies have demonstrated that the low utilization of SBAs in Nepal and India result from factors such as views that birth is a natural event that takes place at home, a view that modern health services are only used as a last resort in the event of an emergency, a lack of knowledge regarding available SBAs in the area, poorly trained SBAs who are unable or unwilling to attend births at home, and high costs associated with emergency transport and health services (Borghi, Ensor, Neupane, & Tiwari, 2006; Griffiths & Stephenson, 2001; McPherson et al., 2006). Urban residence, a higher level of education, and a higher level of wealth all corresponded with greater utilization of delivery care by health professionals in Nepal (see Table 2). Between the 1996 DHS and 2006 DHS, the percentage of births assisted by an SBA increased from 9 percent to 19 percent (MoHP et al., 2007).

In addition to these increases in antenatal check-ups and assistance at birth by a skilled professional, Pant et al. (2008) also attributes the reduction in maternal mortality to a decrease in the total fertility rate, access to safe abortions (legalized in 2002), and national efforts toward becoming a more open-market economy. However, in a country where the vast majority of births still take place at home, the intrapartum period is considered to be a key site for intervention in maternal mortality in Nepal (Pant et al., 2008) and elsewhere (Campbell & Graham, 2006). This paper contributes to the discussion on strategies for intrapartum care by examining narratives of birth in a developing country where skilled birth attendants are underutilized. While Mullany (2006; Mullany, Hindin, & Becker, 2005) provides insight into the urban Nepali situation, and Thapa (1996; Thapa, Chongsuvivatwong, Geater, Ulstein, & Bechtel, 2000) outlines birth practices in rural Nepal, the research presented in this paper is based in a semi-urban context between the urban and rural extremes. And with little data gathered to date on the role of various household members on health-seeking behavior for pregnancy and birth in Nepal, this study's major contribution is a detailed description of the gendered and household (or lifecourse, cf. Das Gupta, 1995) politics that determine whether a woman receives biomedical care at birth.

Methods

The results presented here are part of a larger project conducted in the semi-urban village of Vishnumati (in compliance with IRB approval, place names and people's names are pseudonyms). The village sits just below the rim of the mountains that surround the Kathmandu Valley, at the end of a paved road from Kathmandu. Vishnumati's in-between status, neither a village nor a city, poised on the edge of the Kathmandu Valley with the urban metropolis below and the rural expanse beyond the ridge of mountains that encase the valley, made it an ideal location to study social change at the microlevel. It was middle ground between the extremes of Kathmandu and rural villages, both literally in terms of physical location on the outskirts of the valley, and in terms of its combination of urban and rural characteristics. One of the main questions

Table 2
Delivery assistance. Percent distribution of births in the five years preceding the survey by person providing assistance at time of delivery (2006 Nepal DHS).

	Doctor, nurse, or midwife	Health worker, FCHV[a]	Traditional Birth Attendant	Relative or other[b]	No one	Number of births
Mother's age at birth						
<20	22.1	7.0	22.4	46.1	2.5	1156
20–34	18.5	6.3	18.4	50.3	6.5	3957
35–49	11.3	5.1	12.7	53.2	17.8	433
Residence						
Urban	50.6	2.5	11.3	32.7	2.9	677
Rural	14.3	6.8	19.8	52.0	7.0	4768
Mother's education						
No education	8.2	5.3	21.9	55.8	8.8	3343
Primary	20.6	7.2	17.0	49.7	5.6	1009
Some secondary	36.6	8.5	15.2	38.7	1.1	848
SLC and above	71.1	8.1	2.8	17.1	1.0	345
Wealth quintile						
Lowest	4.8	4.5	8.8	68.2	13.7	1412
Second	10.1	7.5	26.2	52.0	4.1	1180
Middle	12.4	6.6	29.4	45.3	6.2	1132
Fourth	23.0	8.5	20.9	44.5	3.2	983
Highest	57.8	4.6	8.5	26.9	2.2	838

[a] FCHV = Female Community Health Volunteer.
[b] "Other" refers to any non-trained person, such as a neighbor.

regarding maternal health that remains unanswered in the Nepal context is why women give birth at home even in areas where health facilities are available. In order to address this question, I selected Vishnumati as a locale that would be fairly representative of semi-urban areas in Nepal in which families appeared to have access to health facilities.

The other reason for choosing this locale was the distribution of ethnic groups and castes represented in its population. For its small size, Nepal contains a surprising amount of ethnic and linguistic diversity. For this reason, limiting the present study to a cultural subgroup of the nation's population was necessary in order to limit cultural variation. I chose the group whose ideologies had been dominant both politically and socially since the consolidation of the country in 1768 until the overthrow of the Hindu monarchy in 2007: Parbatiya Hindus. This group includes the Bahun (or Brahman), Chhettri, Thakuri, and Dalit. The Parbatiya group is based on linguistic and historical distinctions; but ultimately it is a loose approximation of a cultural group that is heterogeneous because of the subgroups (often glossed as "castes") that comprise it and the increasingly porous boundaries that demarcate it. In order to avoid the reification of the name "Parbatiya", I prefer to use the more accessible term "Hindu-caste."

After obtaining census records from the Central Bureau of Statistics in Thapathali in 2003 and charting the ethnic breakdown of a couple of potential research sites, Vishnumati emerged as an ideal site because of its large percentage of Hindu-caste residents (unlike many of the predominantly Newar towns around the edges of the Kathmandu Valley). According to the data in the 2002 Nepali census (Central Bureau of Statistics, 2002), Hindu-caste groups comprised almost 44 percent of the total population in this location. It also turned out that this location was not directly affected by recruiting or violence by the ongoing Maosist insurgency, which locals attributed to the presence of a large army barracks nearby.

During the 13 months of research carried out between 2003 and 2005, I used a mixed method approach that incorporated the following: ongoing participant observation, the enumeration of households and a survey of a random sample of households, the selection of 30 case studies representing a range of important cultural and economic factors, interviews and observations at the local sub-health post and the two hospitals used by locals, and immersing myself in the community in general by becoming the paying guest of a local Newari family and participating in daily life and rituals. My status as an adopted "daughter" of a local family was also a prerequisite to gaining credibility in the eyes of families in the community and the ability to conduct in-depth research there.

In the initial months of research, I mapped and enumerated households ($N = 794$) of the two most populous political sections ("wards") of the village, and surveyed a random sample of 248 households for basic demographic, household history, and birth information. I excluded households in which one or more spouses were not Nepalese citizens. The number 250 was selected as a number that would result in statistically significant descriptive statistics for the population of households in the two wards, and there were two refusals. The data gathered in the survey provided information for choosing families for in-depth case studies according to a sampling matrix of the following characteristics: caste, socioeconomic status, education, and age. This was necessary to capture and account for variation created by each of these categories. I had to select additional low-caste (or Dalit) families from the two wards for the case studies to compensate for the small number of them in the population. In addition, there were no low-caste families in my sample that were in the category of moderate or high socioeconomic status.

Ultimately I selected 30 case studies (with two dropouts) that represented de facto joint and nuclear families of each caste and, other than the low-caste families, of middle or low socioeconomic status. Wealthy Nepali families were few and anomalous in the area, so I excluded them from the case studies. I limited my case study households to Hindu-caste Nepalis – a substantial and influential group, yet only one of many diverse cultural groups found in Nepal. I excluded Newars from the case studies because although many are Hindu, they are culturally and linguistically distinct from the Parbatiya Hindu castes. I interviewed the married women of reproductive age at each household using a semi-structured, open-ended format an average of five times over the final seven months of my research, and I also had many informal conversations with them along the way (Originally I intended to interview husbands as well, but after discovering a few women were experiencing marital violence I abandoned interviewing husbands. The nature of my interviews could have placed women at further risk. Not having interviews with men is a limitation to this study). Each interview ranged from 30 min to 3 h. The topics of interviews were marriage, work, pregnancy, birth and postpartum experiences, and the role of women. The interviews took place alone in the privacy of the women's homes, however some of the most fruitful sessions occurred spontaneously with multiple household members or neighbors present. The first two introductory rounds of household interviews were not taped, but after building rapport I used an audio tape recorder for the remaining three interviews in the series. Thus all quotes in the article are direct translations of women's recorded statements. I analyzed themes in the transcripts using a combination of concept-driven (or open) and data-driven coding (Emerson, Fretz, & Shaw, 1995; Kvale, 2009; Strauss & Corbin, 1990) using the qualitative software package NVivo.

Results

As described previously, the majority of Nepali women give birth at home. When considering the socio-historical conditions of the 1980s and 1990s, the reasons for this are clear. Vishnumati, for example, was still a rural village at that time and lacked paved roads and electricity. Women had always given birth at home prior to that point, for there were no other options. One woman's (# 103) experience of giving birth around 1992 illustrates the context at that time. She described how when the placenta would not come out, she and her newborn had to be carried on a man's back in a *dhoko* (a large basket used to haul things like fodder or bricks) filled with straw down the mountainside until they reached a taxi stand. Another woman (#106) told how after being in labor for three days, her father-in-law walked down to call for a vehicle to take her to the hospital. During the time he was gone, she gave birth successfully. She explained how at that time, around 1985, there was no tradition of going for antenatal check-ups. She said, "And at that time, just barely, the practice of taking women to the hospital for birth had started. As much as they could, women would give birth at home – but rich people could take the woman to the hospital if the birth became difficult." In her time, taxis were not available at all – one had to walk to a nearby boarding school in order to access a phone. Then one could call the hospital to send a vehicle.

Although these stories of the past struck these women's teenage daughters as strange, such scenarios would not be uncommon in rural, remote areas of contemporary Nepal. Emergency transport schemes in the rural areas of Nepal still utilize bicycle ambulances or *dhoko* (Barker et al., 2007). Infrastructure is poor in the mountainous regions, and progress in this realm was damaged by the Maoist insurgency between 1996 and 2006. That the majority of Nepali women give birth at home, then, can be partly explained by the fact that almost 80 percent of Nepal's population lives in rural

areas where the availability of delivery services is unlikely. In the semi-urban village of Vishnumati, however, some other factors were causing women to give birth neither in hospitals nor with the assistance of an SBA.

Available health facilities for antenatal and delivery care varied in terms of distance and quality. Some women utilized the teaching hospital, which was approximately 20 min away by public bus and accessible much more quickly by taxi, motorcycle, or ambulance. Opinions about the teaching hospital were mixed, although most complaints related to long lines and few women had complaints about delivering there. A couple of women even reported going to the maternity hospital located in Thapathali, Kathmandu, more commonly for antenatal care but also for obstetric emergencies. It took anywhere from 30 min to over an hour to reach there from Vishnumati by taxi or motorcycle, depending on traffic. Traveling there by bus included at least two changes in vehicles and substantially more time. The Thapathali maternity hospital had a better reputation among Vishnumati families than the teaching hospital. There was also a government sub-health post just downhill from the village, about a fifteen minute walk from the bazaar. Going to a private hospital was out of reach economically for the middle and lower class families in my research, but wealthy families in or near urban centers like Kathmandu have that option.

Views of birth among the women in the case studies varied mostly along the lines of age and education. Amongst women in their 30s and 40s, birth was predominantly viewed as a natural process about which one does not make a fuss. By using the term "natural" I do not intend to invoke a romanticized vision of low-tech, "traditional" birth as the ideal form (cf. Van Hollen, 2003). Nor do I mean to equate a "natural" view of birth with a purely biological view of it; for "birth everywhere is socially marked and shaped" (Jordan, 1993: 1). Rather I am referring to a worldview involving a cosmic order in which many aspects of life are seen as beyond human control (although efforts or propitiations may be made in an attempt to influence outcomes) as opposed to the mechanistic materialism of modern science that rejects an ordered cosmic totality and instead articulates the world in terms of cause and effect. Birth is also a product of cultural and political-economic processes, however the extent to which women in the study identified it as such was limited. Thus by claiming that birth was viewed as a natural process I mean that birth had not become medicalized for women in this older age group; it was a process that did not require the expertise or assistance of a trained medical professional. Nor did they utilize any type of local or traditional birth attendants.

Going to the hospital for antenatal check-ups was unheard of in this age group (and in some cases, not possible – the teaching hospital was established in 1983), but they freely acknowledged that contemporary young mothers would often go. Moreover, these middle-aged women often told stories of giving birth alone. One Brahman mother of 5 (#686), in her 40s at the time of research, described how she did not know what to expect when she went into labor with her first child. She went outside to the garden to walk around and to avoid disturbing the others in the house. She gave birth there, outside in the dark. Another brusque woman in her 40s (#402), also high-caste, relayed in a matter-of-fact way that she had given birth to her eldest child in the fields on the way home after her labor pains began. While the first woman resented her experience in retrospect and compared herself to a stray dog giving birth in the street, the second woman seemed eager to dismiss any potential pity or negative judgment of her experience and presented herself as strong and capable. An extreme example of this latter sort of attitude is embodied in the humorous representation of birth by a mother-in-law in her 50s (#71 *Saasu*). She claimed that other than at the time of her first son's birth, she was in labor for only one hour each time. Trying to make us laugh, she boasted dryly, "I gave birth like defecating." The first woman was engaged in a cultural critique of the status and treatment of young married women during her day, while the latter two were reinforcing the predominant cultural dictate that birth was not a big deal.

In contrast, younger and more educated women in the case studies had a "habit" or "custom" of utilizing one of the two hospitals mentioned for series of antenatal appointments. And a few reported attempting to deliver at the hospital, usually for the first birth. Amongst the 28 women, a total of five births occurred at a hospital without complications being the cause of going to the hospital.

Birth complications amongst young women and delays in reaching the hospital

Women were socialized to keep quiet about their suffering, and it was usually men who made decisions such as determining at what point situations were dangerous or life-threatening enough to warrant taking them to the hospital. The first narrative contextualizes this statement. The way in which a young mother in her 20s (#71) told the story of the complications that occurred after she went into labor and the actions that were taken provide insight into the different roles family members act out in such scenarios.

This young mother and her joint family stood out from the other case studies in a number of ways. First, her marriage was a "love marriage" by her own admission. Often couples and their families would attempt to cover up pre-marital relationships that resulted in marriage by going through the motions deemed more proper by the community. This typically involved the young man requesting his relatives to go to the young woman's house to ask for her and arrange their marriage, and then later all would agree that it had been an "arranged" marriage. But this family was open about calling it a love marriage. Anjala was also of a different ethnic group than her husband's high-caste Hindu family. Furthermore, she married into the joint family prior to the marriage of the eldest son. At the time of this interview in 2004, any one of these characteristics could have prevented such a union in other families.

This joint family was also notable for its lack of strong hierarchical relationships and division of labor within the household. Whereas most women joked about the tension between mothers-in-law and daughters-in-law in joint family households, Anjala described the ways that her mother-in-law and husband helped her with her tasks during pregnancy. When she went to cut fodder in the forest to feed the livestock, her mother-in-law or husband went with her to carry the load on the return trip to the house. Her husband cleaned the kitchen for her when it became difficult to bend over to sweep the floor with a handheld broom. She explained, "Everybody does work. Mother-in-law, Father-in-law, whoever… If Mother-in-law has gone somewhere and I am alone, Father-in-law does everything. Father-in-law cuts fodder, bathes the water buffalo, cares for livestock and cooks food. There is no separation of work." She made these statements during private conversations on her rooftop patio, and her mother-in-law told similar stories in interviews on separate occasions when the daughter-in-law was not present.

Like many of the women in their 20s, Anjala went to antenatal check-ups at the teaching hospital during her pregnancy. Her husband went with her the first two times, and after that her mother-in-law accompanied her. She said, "Mother-in-law also went with me as a friend". She went for a total of five check-ups, and she reported that she received tetanus injections and prescriptions for iron pills and vitamins. She was able to get the vitamins at no cost because a relative of the family worked in the

hospital. Her sister was a nurse in another hospital in a nearby city, and from time to time she gave her advice such as eating beans, green leafy vegetables, yogurt, milk, fruit, and lentils. Her father-in-law instructed her to eat yogurt, milk, and fruit. In the latter months of her pregnancy, her father traveled from her natal home to bring her presents of fruit and ghee. From all accounts, she received much support during her pregnancy.

Also like other case study women in their 20s, she did not go to the hospital when her labor pains began.

> Q: How long did you have labor pains?
> A: I had labor pains from Friday evening, and I gave birth on Sunday at 11:00 a.m.
> Q: When did you go to the hospital?
> A: I went on Sunday. I did not agree to go, but later *dhai* (refers here to husband's elder brother - HeB) and others scolded me saying, "Go to the hospital." They said that they would take the baby out by operating or something good. And I said I wouldn't go. *Dhai* (HeB) kept scolding, saying that I had to go. *Dhai* (HeB), mother-in-law, husband, the three of them, and one neighbor, four of them, took me to the teaching hospital. I was checked at the teaching hospital, and then I was taken to the maternity hospital in Thapathali in order to give birth.
> Q: Why?
> A: *Dhai* (HeB) said that it is better at Thapathali than at Teaching. So I was taken down there.

Anjala refused to go to the hospital initially, even after being in labor for a full day. She made a point of saying that twice she refused, and then finally she gave in to the reprimands of her husband's family. She minimized her role and her agency in this situation in order to follow her understanding of the social script of being a good woman and daughter-in-law. She did not want to appear to be demanding, even in her telling of the story with only me and my research assistant present. Despite the reported ethos in this household of there being "no separation of work," her description of her resistance to being taken to the hospital is suggestive of the low status of young wives in patrilineal, patrilocal societies living in joint families who must be self-effacing and not make demands (Bennett, 1982; Croll, 2000; Das Gupta, 1995; Jeffery, Jeffery, & Lyon, 1989; for differences between low- and high-caste Nepali cf. Cameron, 1998). Moreover, she reported that she was not in much pain or distress; as a result she might have underestimated the direness of her circumstances and did not wish to cause an unwarranted commotion – because *emergencies* warrant hospital visits.

Another potential factor also deserves consideration: Anjala might have wanted to avoid the hospital. She commented, for example, on how the "nurses used to scold me and say, 'Why is such a small girl going to give birth so early?'" Then she laughed, explaining that they must have thought that she was young – when really she was 22 at the time of her first birth – because she happens to be very petite and looks younger than her age. This (misguided) admonishment by the nurses hints at the possibility of mistreatment by hospital staff, however in this particular case she reported that her experiences at the hospitals were good. In addition, although in this case the husband's elder brother (the eldest son in the joint family) suggested that a cesarean section could be a good solution to the problem, in many low-income Nepali families the costs of cesareans could be a deterrent for seeking hospital care (Borghi et al., 2006; for India cf. Jeffery & Jeffery, 2008, 2010, in this issue). Most of the women in the case studies who gave birth in hospitals did not speak poorly of the facility or treatment received there, but more research needs to be done on possible factors that discourage families from delivering in hospitals, in particular the obstacles for impoverished families such as intimidation or cost (for an assessment of quality of care in rural Nepal cf. Clapham, Basnett, Pathak, & McCall, 2004; for attitudes of service providers cf. Carlough, Pokharel, Bird, & Basnett, 2008). In the end, Anjala did not require a cesarean and the doctor delivered the baby using vacuum extraction. After she gave birth at the hospital she lost much blood and fluids, and she remained there for four days on an intravenous solution.

Two other women directly attributed the delay in being taken to the hospital during prolonged labor as resulting from their innocence and lack of knowledge. One young Dalit (#523), the mother of one son who lived in a rented room with her husband, explained that she did not have very much experience at that point in her life (she was nineteen during her first pregnancy and had only two years of formal schooling) and did not go for antenatal check-ups out of shyness. When it came time for her to give birth at home, she remained in labor for four days. She said, "On the fifth day, I could not tolerate it any more and I went to the hospital. For four days I had been in labor, and on the fifth day everyone scolded me and I went to the hospital for admission". She used the same kind of language as Anjala in describing the ultimate event that led to hospitalization: others "scolded" her (*gaali garnubhayo*) and insisted that she go.

Another young Chhetri woman (#335) described how with her first pregnancy she had gone to multiple antenatal check-ups at the teaching hospital and even to a private clinic for an ultra-sound at the suggestion of the doctor. It sounded like her joint family intended for her to give birth at the hospital, but through a series of somewhat unclear events she gave birth at home after being in labor for three to four days. When her "stomach pain" began around the ninth month of pregnancy, she did not realize that she had gone into labor. After several days of feeling no movement in her womb, only pain, she went to the hospital for a check-up. The doctor reassured her that the baby was fine, and so she returned home. Somewhat dissatisfied, she went to a traditional healer (*jaanne*) for treatment. He told her she was in labor and she should go to the hospital. She went home and gave birth immediately after arriving there. She never "got the chance" to go to the hospital to give birth.

The next narrative emphasizes how women are often not in the proper physical condition to demand to be taken to the hospital – they may be barely conscious during an obstetric emergency. Shanta (#303) delivered her first child in the hospital, but she gave birth to her second child at home. There was "a lack of money" at that time, and since she started to have labor pains around midnight she thought, "Why give trouble to others in the night. I called to my mother-in-law just before she was born". She figured that there was no one to take her to the hospital in the middle of the night anyway, so why should she wake the other family members. The labor pain was not as bad as it was with her first birth, her son, and she gave birth "easily" to her daughter around five in the morning. Shanta said,

> She was born easily, but the placenta did not fall easily. It did not come out for 2–3 hours, so it became difficult to cut it. My daughter became so 'serious' and so did I. Different people were saying different things. Whom should I believe? I was 'serious' because of bleeding, I was in a dilemma… what to do? I fell unconscious for about twenty minutes. All the family members were weeping. They thought I was dying.

Shanta did not indicate how much time passed in this way, but she said that the family members eventually called the SBA. She was able to pull out the placenta, but there was excessive bleeding. The SBA recommended that she be taken to the hospital. Someone fetched a taxi, and they took her to the teaching hospital. She regained consciousness on the way to the hospital.

Shanta remarked that many women had died when the placenta did not come out. Some old people, she reported, had said that cow dung should be thrust in her mouth – others said hair – so that she would vomit. Some recommended using a small hoe to catch the placenta and forcefully pull it out, and Shanta winced in telling this, citing the possibility of tetanus. She had received some training as a volunteer village health worker, and she knew what should have been done in her situation according to a biomedical model – but she said she was unable to speak at that time. She concluded, "Nowadays I advise women to go to the hospital for delivery cases. Problems will be solved easily there. We should get treatment immediately".

Desire for support from husband during childbirth

Added to the fact that historically birth was considered a natural event that does not warrant much special attention is another significant contextual factor: birth was the domain and responsibility of women. According to my case studies, in the past a female relative – usually the mother-in-law – would help a woman during delivery or the woman would deliver alone. Birth and the fluids involved were considered ritually polluting by the majority of Hindu-caste families in this study (cf. Cameron, 1998; Jeffery & Jeffery, 1993; Lamb, 2000), and historically men were protected from the potential for pollution by the removal of the events and aftermath of birth from the home to a nearby shed. At the time of this study, Vishnumati women were usually secluded in one room of the house. There was evidence that the significance of such beliefs about pollution was fading, and low-caste and poor women were quick to dismiss the practice of post-partum seclusion for pragmatic reasons.

None of the younger women in the study framed the lack of male involvement in birth as being related to beliefs about pollution. Instead, several women who had experienced complications while delivering at home expressed frustration with the lack of support or understanding of husbands during birth. One woman (#433 neighbor) told her story of going into labor during the time of year when Hindu Nepali women traditionally read a holy book called the *Swastaani*. After giving birth, the woman and her entire household would have been in a state of ritual pollution (*sutkeri*), and so her husband was rushing to read more of the holy book before she gave birth; the state of pollution afterwards would preclude any further reading. She described the situation with a sense of indignation and disbelief, saying,

> Yes, it is extremely difficult (for women). When one has that much of a stomach (meaning a large pregnant belly), how long will it take to die?! And also my husband is such a half-wit (literally half-done). During the reading of Swasthaani, my husband called the neighbors to read aloud together from the Swasthaani thinking, "Oh, she's about to become *sutkeri*; there will be no reading of Swasthaani from tomorrow." And I was about to die downstairs. And from upstairs, (came the sound of) them reading aloud together the Swasthaani. That is so shoddy (*ajkalTo*)! They should have been worried, no? But there was not (any worry). After that happened, I discovered how hard it was. When a person who should understand that it had become difficult (for me) does not, it is extremely hard.

Culturally there is no tradition of men being involved directly with birth, but women are voicing the desire for such support from their husbands. And the role of men in birth is amplified as families in this context embrace the medical model of managing risks during and after birth.

With the advent of hospital deliveries and availability of trained health professionals to assist with birth, obtaining such care began to involve the decision-making power and the initiative to act that was in the hands of the men in the family (cf. Sargent, 1989). But men have not been knowledgeable about birth in the past, and may not even be alerted that it is happening. In one of the few urban and developed settings in Nepal, Mullany's recent research with couples delivering in the major public hospital in Kathmandu revealed that a key obstacle to Nepali husbands' involvement in antenatal care and deliveries was their lack of knowledge, along with social stigma and shyness or embarrassment, regarding women's maternal health. Mullany (2006: 2808) concluded, "Appealing to men as 'responsible partners' whose help is needed to reach the endpoint of 'healthy families' may, for example, provide an effective approach for targeting men in the Nepal setting". In her study, young men and health providers alike stated that young men (in this urban setting) were ready to be more involved with maternal health, but they needed education and either the will to ignore the social stigma attached to helping one's wife or programs aimed at changing such stigma.

Discussion

This ethnographic research suggests that the cultural construction of birth in Nepal is moving away from being a "natural" phenomenon toward one that requires professional skills, at least in the case of emergencies. This transition is hardly straightforward or linear (Lock, 2001). In semi-urban places like Vishnumati, a gap (both conceptually and in practice) lies between the risk for female bodies during birth and male involvement in mitigating that risk. Young married women on the whole may have had more knowledge of biomedical approaches to birth and proximity to biomedical care than their mothers-in-law, but they did not have the social power to demand biomedical services or emergency care. And men still viewed birth as the domain of women and remained mostly uninvolved.

As the cultural construction of birth shifts from a "natural" phenomenon thought to be outside of human regulation toward one that is located within the domain of biomedical expertise and control, local acceptance of a biomedical system of knowledge does not necessarily lead to the utilization of services in a timely manner if neither women nor men are in culturally-defined positions to act. Men remained uninvolved in labor *until* the situation became so critical that it warranted a husband or father-in-law stepping in, taking control, and seeking biomedical intervention. This creates ample opportunity for life-threatening delays in transporting women to a hospital. Added to this is men's general lack of knowledge regarding matters of birth; they find themselves in the awkward position of evaluating situations and making decisions to act regarding matters (according to women) about which they know little.

Now that birth is increasingly viewed as something to be controlled in this context, who will control it? One obvious potential answer is the Skilled Birth Attendants available at the sub-health post only a few kilometers down the road. They are trained to handle minor complications during and after delivery, and the cost to families is negligible. However all of my case studies agreed that they neither utilized nor knew of others utilizing the SBAs, and I was perplexed by their inability to explain why. My interviews with the two SBAs at the local sub-health post confirmed this finding; they agreed that very few women called them and expressed uncertainty as to why this was the case. Women skipped over this level of health care and went directly to the hospital for antenatal checkups and delivery or for emergencies after attempting birth at home. Despite my repeated attempts to find an explanation, including posing the question using different wording and in the context of different types of conversations, this

behavior remained unclear (a study that suggests this could be related to service provider attitudes, but not specifically SBAs, is Carlough et al., 2008). SBAs seemed to have the skills but not the necessary social capital. Additional research focusing on this specific aspect would be helpful, along with independent research on quality of care issues. Likewise, no other form of a local or traditional practitioner specializing in birth was used. In fact, the expectation for a traditional, holistic midwife to exist in South Asian societies has been criticized as merely an idea constructed and imposed by development planners (Pigg, 1997; Pinto, 2008).

Another answer – one supported by anthropological literature – is that birthing women ought to control birth. However, in this research context I did not discover a system of passing down knowledge about labor and delivery from one generation to the next. As several young women in the previous narratives noted in retrospect, they did not have adequate knowledge about the process in order to act in ways that they thought were most beneficial. In some settings in Nepal, low-caste women with delivery experience often attend births, especially if it had become difficult (Cameron, 1998); in other settings a women is called to do the polluting work of cutting the cord. But in many Nepalese contexts, women labor and deliver with assistance from female members of the husband's family or neighbors (Pigg, 1997). Pigg (1997: 241) concludes, "Care of pregnant women and infants is embedded in myriad customary practices and unspoken assumptions, not entrusted to specialists". I would add to this that in Vishnumati, although experienced family members may be present, young women were not taught what to expect during birth; rather the knowledge they gained was through the experience of their own first births. Although a solution is needed that honors women's experiences and knowledge of their bodies, it ought not leave them entirely dependent on themselves or uniformed.

And last, it is notable that men in this study *do* control the situation in a birth emergency – either the husband, the father-in-law, or in rare cases where the woman lives near or is visiting him, her father. Having husbands be more involved and informed from the start, i.e. throughout labor and delivery, is a possible way to avoid delays. And a recent study on antenatal education conducted in a Kathmandu hospital found that educating a woman and her partner together results in the woman retaining more maternal health knowledge than if she attended alone or not at all (Mullany, Lakhey, Shrestha, Hindin, & Becker, 2009). Persuading husbands to become better informed and involved in the birth process seems positive since they hold a powerful role of decision-maker within the household; but at the same time there is a risk of men simply taking control away from the women giving birth (cf. Sargent, 1989), particularly because this remains a patrilocal, patrilineal society.

In this discussion, the focus on household-level decisions can inadvertently lead to a myopic perspective from which one momentarily overlooks the structural causes of high rates of maternal loss around the world, such as poverty. At the close of this paper, I reiterate that this study was designed to focus on cultural influences at the microlevel. The participants of reproductive age in this study had a staffed sub-health post within walking distance, a referral system, and the financial means to utilize a taxi to reach the nearby teaching hospital. They claimed that the minimal charges at the hospital were not an economic barrier. The challenges this study population faces differ from those faced by the most severely disenfranchised segments of Nepali society, whether squatters in urban areas or laborers living in remote rural areas. Thus the findings presented here are one piece in the much broader picture of maternal health, rather than an attempt to privilege a "cultural" explanation for morbidity or mortality (for a seminal piece on the failures of such an approach, cf. Farmer, 1999). Furthermore, in addition to socioeconomic variation, the ethnic and caste diversity in this small country makes it difficult to generalize. It is so great that Pigg (1997), in her analysis of attempts to create a national program for training "traditional birth attendants," argued that Nepal's cultural variation is at odds with the institutional need for such a unified program. Thus my findings do not suggest that cultural factors are somehow more important than issues of access and quality of care, nor can they generalize beyond contexts similar to the one described.

Conclusion

Confronting maternal mortality, according to dominant development and biomedical ideologies, involves controlling birth – through family planning and through the active management of birth. Reducing death is part of the project of modernity, and adopting the tools and perspective of reproductive epidemiology is tied to the state management of citizens and the governance of self (Foucault, 1978; Pigg & Adams, 2005). For those who adopt a biomedical perspective, bodies, actions, and various domains of reproduction become viewed through the technical language of health and the lens of risk. It is assumed that such surveillance of citizens and bodies, and the resulting social and biomedical interventions, will serve to alleviate suffering and mortality related to procreation; however it is beneficial to strike a balance between a "technomedical" (Davis-Floyd & Sargent, 1997) appropriation of birth and one that relies solely on the capabilities of the birthing mother. This study presents a case in which Nepali women's partial embrace of the biomedical system is rendered ineffective by the gendered politics of decision-making and initiating action at the household level.

In conclusion, women in such a context need an advocate present from the early stages of labor who has training to handle minor complications and knowledge of danger signs – as well as enough social capital and power – to decide when a home birth should turn into a hospital birth. Who should fill the role of advocate in this particular social context is worthy of further discussion. In order to confront maternal mortality and decrease the loss of women's lives in childbearing, the issues surrounding timely response and action in the face of complications during home birth need to be taken back to this community and other similar ones and discussed with couples of childbearing age.

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