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Ouch, That Hurts: Childbirth-Related Pain Management and the Inappropriate Replacement of Traditional Obstetrical Knowledge in Kumaon, Uttarakhand, India

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OUCH, THAT HURTS: CHILDBIRTH-RELATED PAIN MANAGEMENT AND THE
INAPPROPRIATE REPLACEMENT OF TRADITIONAL OBSTETRICAL KNOWLEDGE
IN KUMAON, UTTARAKHAND, INDIA

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India: Public Health, Policy Advocacy, and Community

Spring 2015

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Abstract

Throughout India, obstetrical knowledge and practice has been developed and passed down by generations of women. In many Indian societies, traditional birth attendants, or dais, remain the gatekeepers of childbirth-related knowledge. Yet with the push towards institutional delivery, traditional knowledge and practices are being increasingly replaced with modern and Western ones. While the trend of hospital deliveries has yielded positive health outcomes, its socio-cultural consequences remain unclear. Situated in Uttarakhand's Kumaon Himalayas, this study employs a bio-social framework and begins to reveal these consequences. Using labor pain management as an entry point, this study argues that the push towards institutional delivery replaces traditional and culturally appropriate obstetric practices with modern and culturally inappropriate ones. This study begins by articulating ideas about childbirth, pain, and pain management that are shared amongst Kumaoni women. It then documents traditional Kumaoni methods of labor pain management and compares them with methods used in area hospitals. Next, it discuses women's attitudes towards and experiences in government hospitals and suggests novel reasons for which Indian women fear childbirth. The paper then argues that, despite dais having been systematically disenfranchised by the Indian government, the traditional knowledge they possess remains pertinent. Ultimately, the study advocates for the preservation, institutionalization, and awareness of traditional and culturally appropriate methods of labor pain management as a means to promote institutional delivery while also preserving dai culture and allowing women to have healthful and fulfilling childbirth experiences.

"We have seen that, under stable conditions, birthing systems are conservative—that is, their parts are consistent and mutually dependent and justificational procedures are designed to maintain the status quo. Under the impact of modernization and development, however, massive modifications of the traditional way of life occur...Childbirth practices, by virtue of their articulation with the larger system, are bound to be affected in due time" (Brigitte Jordan, Birth in Four Cultures)

Introduction

The medicalization of childbirth in India began in the nineteenth century under British colonial rule. Appalled by traditional obstetrical practice and belief, Christian missionaries brought Western medical knowledge to north India and advocated for an alternative system of care that would later become mainstream (Guha 1998). Programs were soon established to provide monetary support and technical training for female nurses and midwives. These initiatives were intended to "restrict the practice of untrained birth attendants," or dais, "and create a category of trained midwives" (Guha 2005). Training programs had little success and the dai remained the primary caregiver during childbirth. Since Independence, and especially in the last few decades, various childbirth reforms have been enacted with the aims of achieving full immunization and reducing the Maternal Mortality Ratio (MMR) and Infant Mortality Rate (IMR). These reforms have involved a move away from the Traditional Birth Attendant (TBA) and home deliveries and towards the Skilled Birth Attendant (SBA) and institutional deliveries.

The shift towards institutional delivery is a result of several interrelated factors, including globalization, medical modernization, international pressure, and nation-wide National Rural Health Mission (NRHM) schemes, including Janani Suraksha Yojana (JSY) and Janani-Shishu Suraksha Karyakaram (JSSK). The shift has indeed yielded certain positive health outcomes; according to the Indian government, it is responsible for the significant decrease in the national MMR and IMR. It is not the aim of this study to undermine these findings, although they are

contested, but rather to challenge the extent to which they alone can determine the efficacy and value of obstetrical modernization in India.

Conducted in the Kumaon region of Uttarakhand, this study employs ethnographical approaches in order to understand the socio-cultural effects of the shift towards institutional delivery. The study specifically uses childbirth-related pain and pain management as an entry point in understanding how this shift is changing women's experiences of childbirth and challenging local definitions of birth altogether. The study began by reviewing traditional Kumaoni practices related to labor pain management and comparing them with practices used in local government institutions. The study found that while traditional practices are culturally relevant and therefore appropriate, institutional practices are inappropriate because they contradict local concepts of childbirth, pain, and pain management. The study also found that women are fearful of childbirth and hospitals due to lack of education and stories of women being abuse during institutional delivery. The findings ultimately suggest that through the documentation and institutionalization of traditional methods of labor pain management, institutional deliveries can be encouraged, women can have healthier and more fulfilling birth experiences, and dai knowledge and culture can be preserved. Importantly, it is not the intention of this study to romanticize or idealize traditional birthing practices, but rather to document and advocate for the continued usage of healthful methods.

Frame work

Childbirth

Childbirth is not merely a biological process. Rather, it is "a culturally grounded, biosocially mediated, and interactionally achieved event" (Jordan xi). Thus, although childbirth

is a universal occurrence, it is experienced differently by each woman based on her particular context. Understanding childbirth therefore requires careful consideration of social, political, cultural, and economic factors. The childbirth event is a particularly interesting subject for inquiry because it is both shaped by and serves as a reflection of a particular culture or community.

Pain and Pain Management

This study looks specifically at childbirth-related pain and pain management. Like childbirth, pain is not merely a physical phenomenon. Rather, it is one "continuously shaped and reshaped by a particular time, place, culture, and the individual psyche" (Anand 26). Indeed, the experience of pain is shaped by many factors, including an individual's perception of and attitude towards it. However, individuals' perceptions and attitudes do not exist in isolation; rather, they are constantly engaged with (i.e. affirmed or challenged by) those of other people. Thus, although pain is felt by an individual, it is experienced and mediated by a collective.

It is also important to distinguish between pain and pain perception. Writes Patricia A. McGrath in "Psychological Aspects of Pain Perception," "The strength and unpleasantness of pain is neither simply nor directly related to the nature and extent of tissue damage" and "psychological factors, such as the situational and emotional factors that exist when we experience pain, can profoundly alter the strength of these perceptions. Attention, understanding, control, expectations, and the aversive significance can affect pain perceptions." These factors have important implications for the perception of pain in home versus in institutional deliveries.

Pain management, like pain itself, is culturally specific and socially mediated. It is shaped by many factors, including economics; medical knowledge, resources, and infrastructure; and societal perceptions of and attitudes towards pain and pain relief. Childbirth-related pain and pain management is further mediated by gender roles; it is a pain felt only by women but expressed and managed by male-dictated norms and understandings. This study purposefully engages with broad definitions of pain management because "in documenting traditional birth practices, not much emphasis is given to...support which is both nurturing and welcome" (Capila 176). By recording and validating traditional methods of pain relief, which include emotional support, this study challenges and transcends dominant and medicalized notions of pain relief.

Pain vs. Suffering

It is important here to distinguish between pain and suffering. Though often used interchangeably, there is a significant difference between these terms, especially in the context of childbirth. Childbirth is a naturally painful process as it involves recurrent uterine contractions and vaginal stretching. With the proliferation of pain management, the absoluteness of painful childbirth is being challenged, but, nonetheless, most women still experience significant pain during labor and delivery. This pain can, but does not necessarily, result in suffering. In her book Healing Narratives of Women, Jyoti Anand distinguishes between the phenomena of pain and suffering. She writes, "The greater the physical pain, the more it is believed to result in suffering. Although this may not be necessarily so. Some kinds of pain, such as the pangs of childbirth...can be extremely severe and yet considered uplifting, because of which the suffering is resolved although the pain may remain" (5). The experience of pain is shaped by its perceived meaning. All physical pain serves a certain physiological purpose, but this purpose is not necessarily meaningful to or even understood by the person experiencing it. In the case of childbirth, however, the pain will result in something tangible and, for most women, much

anticipated. For many women, the meaningfulness of labor pain allows them to tolerate or even welcome it; they may feel great pain, but they do not suffer. Under certain conditions, however, the experience of pain can become one of suffering. These conditions include, for example, "when the pain is so severe that it is virtually overwhelming" and "when the patient believes she has no control over the onset and/or intensity of the pain" (Anand 25). This study attempts to identify and advocate for a type of care during delivery that allows women to experience pain without experiencing suffering.

Global Context

Obstetrical Modernization

The modernization of childbirth is a derivative of the general process of medical modernization and westernization. Writes Jordan:

Once adopted, the standards of the [Western] medical model become the prevailing standards for judging adequate prevention, diagnosis and treatment of *all* health problems, leading to an automatic devaluation of indigenous practices. We note that scientific medicine claims parturition as one of its legitimate domains. It is no surprise, therefore, that wherever scientific medicine is instituted, childbearing becomes absorbed into the medical domain. This absorption amounts to a redefinition of birth as a medical event (130)

The process of obstetrical modernization has manifested itself differently in each country, but has in most cases involved a move towards institutional and physician-attended deliveries. In many countries, it has also meant a move towards greater intervention during labor and delivery. Interventions vary by locale, but might include labor induction and labor hastening techniques,

episiotomy, forceps and vacuum delivery, Caesarean section (C-section), and pain relief. In certain developed countries, "the appropriateness of the medical model for the entire conception of birth" has been called into question and there have been trends towards more "natural" childbirths. However, for developing countries like India, the "high-prestige medical model" of the West remains "the standard template for change" (Jordan 5).

Pharmacological vs. Non-pharmacological Pain Relief

Pain relief can be used during the labor and delivery stages of childbirth and after delivery should further intervention, such as vaginal or perineal suturing, be required. Pain relief measures can broadly be categorized as pharmacological and non-pharmacological. Non-pharmacological pain relief measures have been used for many centuries. They include relaxation, positioning and movement, breathing techniques, emotional support, hot/cold therapy, and water therapy. "Included among the benefits of using nonpharmacologic pain techniques in labor are their attributes of being nonintrusive, noninvasive, low-cost, simple, effective, and without adverse effects" (Brown, Douglas, and Flood). Furthermore, many non-pharmacological techniques can be taught and administered by laypeople, including the mother herself, whereas pharmacological methods require professional supervision.

Pharmacological pain relief during childbirth first became available during the 1880s.

Measures available today include epidural block, spinal block, narcotics, local anesthetic injection, and nitrous oxide. These measures are often more effective than non-pharmacological measures, but tend to be more invasive and expensive. They may also cause adverse side effects, including nausea, itchiness, and decreased mobility, which further medication is sometimes needed to counteract.

Local Context

Setting

This study was conducted in the Almora and Nainital districts of the Kumaon region of Uttarakhand, India. The location was selected based on its relatively small and traditional population and its long-term NGO presence. The population of Uttarakhand is roughly ten million (2011 Census). Its total literacy rate is 78.82% and the female literacy rate is 70.01% (2011 Census). The MMR in Kumaon is 183 per 100,000, which is significantly higher than the Millennium Development Goal (MDG) of 109 (AHS 2011). The institutional delivery rate in Nainital and Almora is 61.5% and 45.1% respectively, and the safe delivery rate, defined as "institutional deliveries and home deliveries conducted by doctor/ nurse / ANM / LHV and [not including] those attended by trained dai," is 81.4% and 63.4% (AHS 2011).

Kumaoni Women

Kumaoni women work particularly hard and are often "overburdened with work-load" (Capila 50). Women's husbands often live and work in large cities in order to make money to send home to their families. Besides their children, women are left to care for their land, livestock, home, and parents-in-law. On the winding road from Nainital to Almora, one can find women carrying bundles of fodder so large that it obscures her face, and ostensibly her vision. Pregnant women, too, work long and hard hours, often up until their water breaks or their contractions begin. Women have even been known to deliver their children in the field. Women might commiserate with one another, but they do not complain. Writes Anand, "In the Indian tradition, suffering is held as an essential condition of human existence; each one of us has to partake of it in greater or lesser measure" (20). Kumaoni women certainly partake of it in a

greater measure. Women's daily suffering has interesting implications for their perceptions of and attitudes towards pain relief, a point that will be expanded upon later.

Ideas about Childbirth, Pain, and Pain Management

The predominant understanding in the Kumaon Himalayas and throughout India is that childbirth is natural and that women's bodies are equipped to handle the process, pain included. As one midwife explained, God has made women especially for birthing children. With the understanding that pain causes bonding, this midwife also expressed concern over what the relationship might be like between a mother and child if the mother does not feel pain during childbirth. Both health care providers and mothers explained that when women experience pain during childbirth, it lets them know that birth is progressing normally; if there is pain, the baby will come. Furthermore, there is an association between labor pain intensity and labor speed; the greater the pains, the sooner the child will be born. This belief has important implications for the management of pain during childbirth.

In Kumaon, as in most of India, the concept of relieving childbirth-related pain is not one with which many people are familiar. In fact, a study conducted at a medical college hospital in the southern region of Rajasthan, India found that only 9.5% of women were aware of the availability of pain relief during labor (Naithani et al.). Nonetheless, throughout the region, *dais* practice techniques during labor and childbirth that constitute non-pharmacological, or natural, pain relief. Throughout rural India, the concept of pharmacological pain relief during childbirth is particularly foreign to women and health care providers alike. While such measures are becoming increasingly available, their usage remains limited to urban and private settings. The study conducted in Rajasthan found that even when women were offered pain relief, only 23%

chose to accept it. Perhaps because childbirth is considered natural, intervening with its process through pain relief seems unnatural. Furthermore, women who associate labor pain intensity with labor speed might worry that lessening pain would also slow labor.

Government Influence

The NRHM schemes are largely responsible for the push towards and increase in institutional delivery in Kumaon and throughout India. Enacted in 2005, JSY involves the provision of monetary incentives for institutional deliveries. It is one of the largest Conditional Cash Transfer (CCT) programs in the world. Uttarakhand is considered a Low Performing State (LPS) because at the time of JSY's enactment, it had an institutional delivery rate of less than 25%. Women in LPS like Uttarakhand who deliver in a government or accredited private health institution receive 1,400 rupees per birth. Women who deliver at home receive 500 rupees for up to two births.

Realizing that "out-of-pocket payments are...a major barrier for pregnant women and children so far as access to institutional healthcare is concerned," the NRHM devised a new complementary scheme. Enacted in 2011, JSSK is designed to "motivate those who still choose to deliver at their homes to opt for institutional deliveries" (NRHM). Under this scheme, pregnant women and sick infants are provided with free entitlements. Entitlements for pregnant women include free and cashless delivery, free C-section, free drugs and consumables, and free transport to and from health institutions.

Fieldwork Methods

The fieldwork took place over a period of one month. During this time, the author lived with a local family in order to better understand Kumaoni culture and lifestyle. The study was conducted with the support of Aarohi, a Non-Governmental Organization (NGO) based in the village Satoli in Nainital that promotes the holistic development of mountain communities through health, education, and livelihood initiatives. Aarohi is well connected with and highly regarded by local populations and was therefore critical in arranging logistical details and establishing important connections. The interviews were specifically conducted in areas in which Aarohi has active health projects.

A total of 18 semi-structured interviews were conducted with pregnant women, recent mothers, mothers-in-law, *dais*, and other health professionals. The interviews took place in the interviewees' home or workplace. Female family and community members were allowed and were present during many of the interviews. Adult males were not allowed, however, as their presence might have skewed the interviewee's responses and/or made her feel embarrassed. The interviews were conducted in English, Hindi, and Kumaoni and a translator was used when necessary. Observations were also made at Primary Health Center (PHC) Bhaisiachhana in the village Supai in Almora.

The mothers' ages range from 18 to 31 with the average being 22.7. Their education ranges from none to Bachelor's degree, with all but two having completed 9th standard. The mothers' age at marriage ranges from 16 to 23 with the average being 18.7. The mothers have between one and four children. Only one mother delivered at a private institution; the rest delivered at government institutions or at home.

The mothers-in-law, rather than the mothers, of pregnant and recent mothers were interviewed because Indian women typically live with their mothers-in-law. No mother-in-law has any education. Their age at marriage ranges from 13 to 16 with the average being 14.3 and they have between three and seven children.

This study was approved by the School of International Training (SIT) New Delhi Local Review Board and complies with SIT's Human Subjects Policy. The informed consent of all interviewees was obtained and confidentiality and anonymity are maintained throughout the paper.

Results

Childbirth and Pain Relief Knowledge

The interviews indicate that while some forms of antenatal education exist, formal education about childbirth itself does not. Any knowledge that women have of the childbirth event is anecdotal in nature, based on stories told to them by female family or community members. One mother reported that no one talked to her about childbirth and that it would have been helpful if someone did. All but one woman reported feeling fearful of childbirth. Reasons for fear include general uncertainty about the birth process, unknown duration of labor, and pain.

Indeed, women anticipate childbirth being painful, but generally do not know details about the pain. Certainly, women do not do anything to prepare themselves for the pain; they just accept that it will be. Writes Jordan of prenatal storytelling in Yucatan, Mexico, "no attempt is made not to 'frighten' the woman during labor by withholding from her what is in store for her. Pain appears in the stories women tell about their own birth experiences, but the very telling also

makes clear that the laboring woman's distress is normal and that her suffering will pass, as it did for the other women' (53-54). The scenario in Kumaon is comparable.

Neither mothers nor health educators were knowledgeable about pain relief. In fact, interviewees seemed amused by the concept because it so foreign to them. Upon being given an explanation, many mothers reported that they would use pharmacological pain relief methods were they made available and an even greater number would use non-pharmacological methods. Only one mother said she would not use pain relief with the reason that if the pain is there, it means that the delivery is okay.

Home Delivery

During homebirths, dais provide emotional and physical support. These techniques are not necessarily conceptualized or labeled as pain relief, but nonetheless provide comfort and support to the laboring woman. Most of these methods are physiologically helpful and all are harmless. During labor, women may sit near a warmth-providing coal stove and drink warm milk with ghee, believed to provide energy and lubrication, between contractions. Dais or other support people may also massage the woman's back to ease her discomfort. Women are encouraged to walk around to "increase the pains" before delivering. This practice is particularly helpful because it prevents the woman from pushing prematurely and becoming exhausted. Traditionally, women delivered while squatting over bricks and holding onto a rope hung from the ceiling. Today, women deliver in a variety of positions, including on their knees and lying horizontally. During delivery, the dai might support the woman's perineum so that it does not tear. As mentioned, Kumaoni women associate pain intensity with labor speed. Pain management techniques are consistent with this understanding in that they do not necessarily try

to decrease the pain, as doing so would slow the labor, but rather make it tolerable. Importantly, although relieving pain is not the *dai*'s primary focus, pain remains a significant factor in her work because it is used as an indicator of obstructed labor, an often-serious situation that requires intervention and/or transport to another facility.

Institutional Delivery

Unlike in homebirths, women who have institutional deliveries do not know which provider will deliver her baby until she arrives at the hospital. All mothers reported being treated well at the institution. No mother who had a vaginal delivery was offered pain relief with the exception of being given a routine enema, which may or may not reduce pain. All women gave birth lying horizontally on a delivery table. As at many government institutions, the PHC Bhaisiachhana maternity ward consists of one room with multiple delivery tables. The tables are made of metal and are covered with a thin white sheet. The PHC Bhaisiachhana maternity ward has one separate bed for examinations on which, according to the ANM, women sometimes deliver if there is not enough time to transfer her to a bed. Mothers associated institutional delivery with safety and proper care and home deliveries with risk and improper care.

Institutional Mistreatment and Abuse

Despite all mothers reporting being treated well at the hospital, anecdotal evidence suggests that in certain Indian hospitals, not only is pain relief not offered, but the expression of pain is also condemned and censured. Several health care providers noted that while NGO and private hospitals tend to take good care of laboring women, government hospitals might ridicule, slap, and hold down women who express pain. An 18-year-old new mother from Dhauladevi in

Almora explained that during her un-medicated vaginal breech delivery, she avoided screaming or crying like other women having normal/non-breech deliveries. She was praised for this.

Another mother reported that the doctors did not react to her screaming at all, and they just wanted her to deliver. Furthermore, the one mother who delivered at a private hospital said that she chose to do so because she had heard stories of abuse occurring at government institutions.

Women are mistreated in other ways, too. An Aarohi health educator noted that hospitals sometimes preemptively put women's legs in stirrups so that by the time she needs to push, she is too exhausted to do so. This practice, she said, can lead to unnecessary C-sections. One mother who had a C-section reported that the hospital did not explain the procedure to her. At many Indian hospitals, including the PHC Bhaisiachhana, giving enemas during the first stage of labor is standard practice. According to the village ASHA, the doctors do not ask the women if they want enemas—they just give them.

Mothers-in-law

All mothers-in-law delivered at home, with the exception of one who delivered two of her six children at a hospital when she was living in a city. All home births were attended by dais, besides one that was unassisted. Two mothers-in-law reported birthing on their knees.

Interestingly, in their interviews, both women explained the position in the same way by putting their fists, which represented their knees, to the ground. Mothers-in-law were not necessarily opposed to institutional delivery, but when asked where they would delivery today, most still chose home. One mother-in-law was particularly conflicted and said that she thinks hospital births are better than home births, but, having never been in a hospital, cannot imagine giving

birth there. Another commented on the comfort and convenience of homebirths and noted proudly that she delivered a child at noon and went to work in the field that same evening.

Discussion

Contextualizing Responses

It is important to contextualize women's responses regarding the acceptance both of institutional delivery and of pain. Women's choice of where to birth is not necessarily an informed and autonomous one. As mentioned, the JSY scheme gives women in LPS like Uttarakhand 1,400 rupees each time she delivers in a health center, and gives women who deliver at home just 500 rupees and for up to only two births. The rationale behind this provision is that the "beneficiary would be able to use the cash assistance for her care during delivery or to meet incidental expenses of delivery" (MOHFW). So, JSY merely helps cover the cost of a homebirth, but pays women 1,400 rupees who deliver in institutions and whose births are already free and cashless under JSSK. For many Indians, especially women, 1,400 rupees is a significant amount of money. On paper, women have a choice of where to birth, but to what extent is it really a choice if they need the 1,400 rupees?

The government's backing of institutional delivery normalizes it while marginalizing home delivery. In an interview, a first-time expectant mother said she would like to have her child at home, but that everyone goes to the hospital these days, so she will too. This woman's delivery will contribute to the state and national institutional delivery rate, which will be used by the government to demonstrate the efficacy and popularity of institutional delivery initiatives despite this woman not actually wanting to deliver at an institution.

The interviews also suggest that although Indian women might not cognize or vocalize their desire for pain relief, many would make use of and it were it made available. Kumaoni women endure long and difficult work every day, so it is reasonable that they have adapted to have a higher pain tolerance. Indeed, "the experience of pain varies depending on the psychological state of a person" (Anand 25), so a woman who has been hardened by daily pain and/or suffering might be relatively unfazed by the pangs of labor. However, it is important to remember that pain, though felt by an individual, is mediated by a collective. It is therefore necessary to consider larger social factors that might influence women's ideas about pain relief. Like most Indian women, Kumaoni women "have minimum participation in their pregnancy and healthcare decisions" (Naithani et. al). Furthermore, "Over-occupied with breeding and nursing, the rural [Kumaoni] mothers have no time even to think about their own comforts" (Capila 45-46). Given these gendered social norms, women are not provided with an environment or platform conducive to expressing, or even cognizing, a desire for pain relief. Importantly, as the interviews reveal, a lack of knowledge, expression, or thought about pain relief does not mean a lack of desire for it. A woman unknowled geable about pain relief and/or how to ask for it very well might want it if she was educated about and could avail of it.

Finally, it is necessary to contextualize women's feedback regarding their institutional delivery experience. All mothers reported being treated well at the hospital, and indeed they might have been. But some women also reported being ignored when they were in great pain and undergoing intervention without explanation. It is not the intention of this section to undermine the women's classification of their experience as "good," but rather to understand why they might report it as good when it was in fact unsatisfactory. Women who "have minimum participation in their pregnancy and healthcare decisions" and who "have no time to think about

their own comforts" might accept a lower standard of care than other women. That she and her baby survived might be enough to satisfy a Kumaoni woman. That said, as in the case of pain relief, women may also lack an environment or platform conducive to expressing their desire for a more participatory, painless, or otherwise fulfilling childbirth experiences. Given India's social and political climate, most Indian women, especially rural and undereducated ones, are unlikely to voice dissent or even express dissatisfaction. Women are neither taught nor provided with an appropriate setting in which to advocate for their own desires. Therefore, that Indian women seemingly accept a low standard of care during delivery should not be used as justification for the continuation of a low standard of care.

Childbirth Education

The interviews indicate a lack of education about the childbirth event. They also indicate that having information about childbirth makes women less fearful of it. When interviewed, a 19-year-old woman pregnant with her first child became visibly nervous and uncomfortable, admitting that she knew very little about childbirth and that she was afraid of hospitals because she had heard bad stories about doctors. She remained in the room when her 23-year-old neighbor pregnant with her fourth child was interviewed. Afterwards, the 19-year-old said she felt better having heard about her neighbor's experiences with childbirth. This anecdote supports the hypothesis that being knowledgeable about childbirth lessens women's fear of it.

The interviews also suggest that pain contributes to women's fear of childbirth. Not all expectant mothers are fearful, and not all fearful expectant mothers are fearful because of pain, but pain remains a significant contributing factor. A Turkish study found that having knowledge about pain-relief measures not only reduces women's fear, but also reduces their request for

intervention measures (Askoy et al.). The study reported that women with fear of childbirth were more likely to have an elective C-section and that most did so because of fear of labor pain. It also found that women who had knowledge about pain-relief measures were less likely to request a C-section. This study has important implications for India where C-sections are on the rise. During an interview, one health educator reported that, like in the Turkish study, Indian women who opt for C-sections tend to do so because of the labor pain. However, they are uninformed about the pain that will follow the procedure. Women also choose to have C-sections in order to save time and return to work, but are similarly uninformed about the lengthy recovery period. This information suggests that making available and informing women about pain relief measures would reduce their fears and their likelihood of electing for C-sections that typically involve a lengthy and painful recovery.

Delivery Settings and Positions

The most visible differences between home and institutional deliveries are the setting and position in which women give birth. During a homebirth, the woman engages with a setting with which she is already comfortable and familiar. She is also likely to be surrounded by people with whom she is comfortable and familiar. During an institutional deliver, women are placed in a sterile, unfamiliar, and frankly uncomfortable maternity room, and are most often left alone, with the exception of other women in labor. Although comfort and familiarity do not decrease pain, they might decrease the perception of pain, whereas discomfort and unfamiliarity might have negative consequences. "Indeed, animal studies have shown again and again that all sorts of environmental disturbances," including transfer to a different location, "tend to be fairly disastrous during pregnancy and labor" (Jordan 68). Furthermore, in a home delivery, the woman

is the host, so her input and participation is probably valued more so than in the hospital where she is the guest.

A woman's position during birth can significantly shape her birth experience and, more specifically, her experience of pain. During homebirths, women may birth in a variety of positions but in the hospital must birth lying horizontally on a delivery table. On the difference between these scenarios, Jordan writes:

In general, women in developing countries, at least until Western medicine dictates otherwise, labor and give birth in upright or semi-upright positions...Where women give birth sitting on a bed of mosses or ferns, or kneeling on a mat on the floor of their huts, they have the opportunity to listen to their bodies and take appropriate action. On a delivery table such messages cannot be followed. The woman is no longer able to move. Lying on her back on a narrow platform, with her feet in stirrups, she is effectively immobilized (205-206)

Despite being the standard in many hospitals, the horizontal position might not serve the best interests of mother and child. Women who birth in upright positions "experience more ease in pushing, less pain during pushing, fewer backaches, shorter second stages, fewer forceps deliveries, and fewer perineal tears" than woman who lie supine (Jordan 85). Furthermore, a woman lying on a delivery table cannot be provided with the same full-body support as a mother who delivers while squatting.

Birthing position might also affect the dynamic between patient and provider. When a woman squats to deliver, she is above or at eye-level with the person catching the baby. When a woman lies horizontally, she is below that person. This height differential affects the exchange of information to and from patient and provider. A provider situated above his patient literally talks

down to her. From this position, the patient might have difficulty making eye contact or establishing a connection with the provider. This situation tends to create a one-way flow of information from provider to patient and is not particularly conducive to providing support. A provider situated at or below the patient's eye-level is more suited to talk with her, rather than at her. This situation lends itself to a more equitable two-way flow of information in which the asking for and giving of support can better communicated. Again, emotional support does not reduce pain, but it might reduce the perception of pain.

Abuse and Mistreatment

The alleged abuse and mistreatment of mothers during institutional delivery is particularly troublesome. The interviews suggest that there exists a certain unwritten code of conduct is institutional delivery that women are expected to follow and for which they are punished if they disobey. Writes Jordan of the code in an American hospital:

As long as [the woman] produces the magic incantation 'he he he hoo,' no matter how desperate—insofar as these are the officially sanctioned sounds and not an idiosyncratic outcry—she is seen by herself and those around her as 'not out of control,' 'collaborating,' 'a good patient.' And by holding on to those sounds and not giving in to uncontrolled breathing, writhing, and screaming, the woman expresses her desire to be a good patient while, in the modulating of the 'he he he hoo' through clenched teeth or with sobbing outbreath, she can nevertheless express her pain and misery without being censured for losing control' (161)

While in American hospitals the "magic" sound is the patterned Lamaze "he he hoo" breathing, in Indian hospitals it is silence. By shouting out, a woman disobeys the "officially

sanctioned sound" of silence and is therefore "censured for losing control." It is reasonable that hospitals want to maintain order and control, but it is unreasonable that some do so through mistreating their patients.

Reports of abuse and mistreatment suggest that a serious discrepancy exists between Indian health care policy and practice. The National Health Policy 2015 Draft states, "Health Care services would be effective, safe, and convenient, provided with dignity and confidentiality with all facilities across all sectors being assessed, certified and incentivized to maintain quality of care" (13). When a woman is slapped or held down during childbirth, she is not being "provided with dignity." Writes Anand, "Other aspects of pain that cause suffering are, for example, when the physician does not validate a patient's pain" (27). A physician who reprimands a patient for expressing pain not only invalidates the patient's pain, but also forces her to censor her pain expression. Such mistreatment is certainly enough to turn a woman's experience of pain into one of suffering.

Indeed, "analgesia is not necessary in every case of labour and sympathetic explanation may be all that is required" (Atkinson, Rushman, Lee 440). Therefore, also problematic is that women undergo interventions with being asked permission or given explanation. During childbirth, women are particularly vulnerable to coercion. A woman in great pain is liable to accept any intervention offered to her. Yet to administer interventions without proper explanation is to exploit the woman's vulnerability. Furthermore, the enema practice standard in many Indian hospitals is itself questionable and might actually increase women's pain and discomfort (Reveiz, Gaitán, and Cuervo).

Women's Changing Experiences

Speaking with mothers-in-law revealed the extent to which birth has changed in just one generation. So different is the present situation that it challenges local definitions of childbirth. Once "a community managed social event," childbirth in India is quickly becoming "a professionally managed medical event" (Sharma et al. 7). Perhaps the most critical change is in the birth attendant. A push away from home delivery and towards institutional delivery is also a push away from dais and towards ANMs, nurses, and doctors. There are a few fundamental differences between dais and hospital-based professionals. Most importantly, "the Dai belongs to the community and owns responsibility for the well-being and health of them women in the community. As a care giver and provider she has a natural affection while the ANM who is appointed by the government to perform a task is an outsider" (Capila 151). Hospital-based professionals, too, have responsibility for the wellbeing and health of women, but their responsibility is professional and legal in nature while the dais' is personal and social. Furthermore, dais are from and therefore belong to the community, whereas ANMs, nurses, and doctors might have been transplanted from an altogether different place. Nonetheless, despite their unfamiliarity, today's childbearing women are far more likely to seek care from hospitalbased professionals than were their mothers-in-law.

Although equally unknowledgeable about it, younger women—both mothers and healthcare providers—tend to be more receptive to the idea of pain management. The reason for the younger generation's acceptance remains uncertain, but it is consistent with their general acceptance of medicalization. Perhaps, too, the younger generation has experienced more modern comforts than the older generation and is therefore fine with taking advantage of comfort measures.

Disenfranchisement of Dais

The shift towards institutional delivery also has significant consequences for *dais* and the traditional knowledge they maintain. Whereas a *dai* used to attend every delivery in her village, she now only attends those of the fewer and fewer women who opt for or require, due to issues of time or accessibility, home deliveries. Furthermore, with changing norms, younger generations are becoming increasingly disinterested in the *dai* profession. According to Janet Chawla and Renuka Ramanujam of New Delhi-based organization MATRIKA (Motherhood and Traditional Resources Information Knowledge and Action), "Dai knowledge is endangered. It is not being passed on, as the younger generation has higher aspirations" (58).

The interviews indicate that a huge disparity exists between Indian policy and practice in terms of traditional health care. The National Health Policy 2015 Draft declares "pluralism" as one of its key policy principles. It states, "India has a legacy of pluralism in health care, with many indigenous and alternative approaches to health and medical care also contributing to the health and well-being of its population" and that this legacy is one "that the nation is proud of, and which it will continue to build on and maintain" (12). While the government might support certain health traditions, it does not traditional obstetrical care. The government has in fact undermined the *dai*'s legitimacy and livelihood in several ways, rendering her obsolete in the name of modern medicine. First, the distinction between "Skilled Birth Attendant" (SBA) and Traditional Birth Attendants (TBAs), or *dais*, construes the latter as unskilled. Certainly there are cases that fall outside *dais* sphere of competence, but to depict them as wholly unskilled, when they are in fact capable of handling most normal deliveries, is misleading and unfair. Furthermore, by explicitly promoting and incentivizing one type of birth, the NRHM schemes undermine another. JSY presently subsidizes home deliveries, but its explicit intention is to

achieve one hundred percent institutional deliveries. This scheme, along with other government initiatives, threatens to erase *dais* and their traditional knowledge.

Importance of Pain Management

In a country with many pressing health needs, the issue of elective pain management may seem like a non-issue. However, for several reasons, it is highly important that pain relief be made available. First, unmanaged labor pain may have physical ramifications for mothers and/or infants. In their study of pain and pain relief in a private antenatal clinic in Chennai, India, authors Joyce Nilima James, Kunder Samuel Prakash, and Manickam Ponniah write, "Labour pain results in the stimulation of the sympathetic nervous system leading to maternal hypertension and reduced uteroplacental blood flow. During labour, the woman may also hyperventilate, leading to... a consequential reduction in the foetal arterial oxygen tension." They add, "Relief of pain and anxiety during labour may benefit the mother and foetus by decreasing maternal hyperventilation and catecholamine secretion." In an interview, a midwife also acknowledged that when women are in great pain, they sometimes hurry, or push prematurely, causing them to become exhausted and/or their perineum to split. The Indian government has iterated its commitment to developing safer birthing techniques, yet has ignored the issue of pain management. The use of appropriate pain management could help prevent episiotomies and C-sections—interventions that come with increased health risks—and ultimately improve maternal health outcomes. Furthermore, allowing women to make healthful, satisfying, informed, and autonomous decisions about their own bodies is consistent with the United Nations MDG of promoting gender equity and empowering women. Finally, protecting

and promoting traditional health practices is itself a valuable initiative that is consistent with the National Health Policy's affirmation of and commitment to pluralism.

Conclusions

Numbers alone cannot determine the efficacy or value of the push towards institutional delivery in India. It is problematic that "the success of the [JSY] scheme" is alone "determined by the increase in institutional delivery" (NRHM), when closer sociocultural analysis in fact reveals the shift having great consequences for childbearing women and *dais*.

Childbearing women are indeed becoming more accepting of institutional delivery due to health education, monetary incentives, and changing norms. However, women's experiences in government hospitals are necessarily positive. In some hospitals, the expression of pain is censured and women are subject to abuse if they disobey the institution's expected code of conduct. Doctors also perform certain interventions on women without asking and without explanation. Furthermore, support people who might be present at a homebirth are not allowed in the delivery room. Finally, some women who would prefer to have home deliveries instead have institutional ones because of monetary and social pressures.

The interviews and secondary sources suggest that when women are knowledgeable about childbirth, including about pain management techniques, they are less fearful of it.

Reducing fear is important because it can help women have healthier and more satisfying childbirth experiences. While an educated woman in an urban area might seek and successfully access childbirth-related health information, a rural and undereducated woman is unlikely to. The latter woman therefore needs alternate channels through which to access such information.

Dais have also been affected by the push towards institutional delivery. Once integral and well-respected community members, dais and their services have been rendered obsolete through government action and changing norms. Nonetheless, dai knowledge remains relevant because it reflects longstanding and deeply embedded ideas about childbirth.

Childbirth necessarily involves a certain degree of pain, but it need not involve suffering. That women are capable of enduring pain does not necessarily mean that they should. Women in developing countries may have a higher tolerance for pain, but this should not prohibit them from enjoying the painless childbirth techniques available to women elsewhere. That said, they should not be forced or coerced into undergoing pain relief or other interventions. Offering pain relief that is compatible with women's beliefs about childbirth and pain would simultaneously promote institutional delivery and preserve important cultural knowledge. By educating women about and making available traditional methods of pain relief, hospitals can help women have healthful and satisfying birth experiences while also affirming the relevance of dai culture. The next section outlines three steps needed to make available traditional childbirth-related pain relief measures. While the conclusions and recommendations of this study are based on Kumaoni society, they might be applied to other similarly rural and traditional areas of India.

Recommendations

The first step towards offering culturally appropriate pain relief to is to document existing knowledge about traditional measures. The second step is to institutionalize these measures. The third step is to educate community health workers and childbearing women about these measures.

Document Existing Knowledge

In an age of rapid obstetrical modernization and westernization, the dai profession is becoming increasingly irrelevant. Dai knowledge, however, remains highly pertinent because, unlike the standard "textbook" knowledge of doctors, it remains culturally grounded and consistent with local definitions of birth. This study found that there exist a variety of helpful and harmless support measures offered to women during homebirths. It is important that knowledge like this be documented so that today and in the future, care providers can best offer culturally relevant care. Documenting existing pain relief measures can be done through various research techniques, including survey, observation, or interview. The organization MATRIKA works "to preserve traditional Indian childbirth knowledge and to promote the elderly dais who hold these traditions" (matrika-india.org). The organization documents dais "good practices," or those that "promote the well-being and safety of mothers and children-practices which are consistent with Indian cultural ideas about the body, health and the place of the human body in the cosmos" (Capila 142). The Indian government already collects vast and varied health information about its population. If the government is to uphold its "key principle" of pluralism, it should also collect information on traditional birth practices. This documentation process could ultimately help lower the MMR and IMR by distinguishing between healthful and harmful practices and by discouraging the use of harmful ones while promoting the use of healthful ones.

Institutionalize Traditional Methods of Childbirth-Related Pain Management

Methods of pain management practiced in homebirths make use of local resources and are inexpensive and simple to perform. Therefore, hospitals could plausibly adopt and offer these measures at their institution. The Aarohi Arogya Kendra (AAK) hospital has already done so: it

offers chai to women in labor, providing them warmth, comfort, and familiarity. Certain measures could be adjusted for practical and sanitary reasons. For example, instead of providing warmth from coal stoves, hospitals could use space heaters and hot water bottles. Hospitals should also allow women to walk around during labor. This practice tends to hasten labor, which hospitals presently try to do through questionable methods such as enemas. Hospitals could also allow women to bring safe and sanitary comfort items, such as photographs or idols of gods, to simulate the comfort of home

Perhaps most critical is that hospitals allow support people in the maternity ward. *Dais* should be allowed as labor attendants, as they presently are in the state of Madhya Pradesh. This support service would be particularly useful for women who began their labor at home with a *dai* and were then transferred to the hospital. Accredited Social Health Activists (ASHAs), too, could serve as support people, as they might have already developed a trusting relationship with the woman. The one mother who reported having no fear of childbirth attributed it to the fact that her sister and ASHA accompanied her to the hospital. This anecdote illustrates the importance of having consistent and familiar support people partake in the childbirth process.

In terms of maternity ward reform, it is also necessary that, per the National Health Policy, hospitals are "assessed" and "certified...to maintain quality of care" and to ensure that woman are not being mistreated during childbirth. Importantly, providers who slap or hold down women during labor are not necessarily acting out of malice. Their behavior merely reflects the culture of the system in which they work that values order, efficiency, and safety and which disvalues choice, comfort, and patient participation. Therefore, more important than penalizing individual providers is changing institutional culture. This might be done by gathering patient feedback; providing cultural competency and sensitivity trainings; and by recognizing those

providers who demonstrate exceptional patient care. Finally, patients must be made aware of institutional grievance procedures should they need to report abuse or mistreatment.

Implement Comprehensive Childbirth Education

Evidence suggests that when women are knowledgeable about childbirth, including about pain relief measures available to them, they are less likely to be fearful of it. Again, most Indian women are unlikely to seek or access this information on their own, so the learning must be facilitated. In the aforementioned study in Chennai, authors James, Prakash, and Ponniah suggest ways to communicate information regarding pain relief:

Antenatal women should be educated about the need for labour pain relief and the available options. This may be done at an appropriate time during the antenatal visits by the obstetrician or Anaesthetist. The pregnant women's knowledge may also be improved by the provision of information leaflets, labour pain websites and childbirth preparation classes.

Healthcare infrastructure in Kumaon and throughout India already offers many channels through which childbirth education information could be disseminated, including through ASHAs and other community health workers. The role of the ASHA or other health worker associated with the JSY scheme involves at least three antenatal visits in which she counsels and prepares the mother for institutional delivery. During these same visits, the health worker could also make women aware of their pain relief options and answer other questions related to childbirth. However, "It has been highlighted that healthcare providers in developing countries are either ignorant or consider educating women on pain relief methods during labor as a low priority issue. This apparent neglect is emphasized further by the observation that even women who had prior

antenatal visits with obstetric healthcare providers did not have increased awareness [of pain relief methods]" (Naithani et al. 17). Therefore, to provide accurate and comprehensive information, the ASHA would need additional training and informational resources, both of which the government should provide if it indeed wants to increase institutional delivery and empower women.

Preserving Knowledge, Protecting Women

As India implements a new system of care during delivery, it is critical to preserve the healthful aspects of other, older systems. To dismiss generations-worth of carefully collected knowledge is not merely irresponsible—it is tantamount to violence. The Indian government has already systematically disenfranchised *dais*, discrediting them and endangering their livelihoods. By also neglecting —that is, doing anything less than carefully documenting and promoting— *dai* knowledge, the government threatens to destroy an entire culture. Erasure of *dai* knowledge and culture harms not only *dais*, but also the women and communities with which they work. On changing systems of childbirth, Jordan writes:

It is probably unfortunate that the Western medicalized model of birth has, by and large, provided the only legitimate blueprint for change agents. At the same time, one needs to be realistic about the future of indigenous birthing systems. The question is not whether they will or should change—this is a foregone conclusion—but rather what shape this change should take in the best interests of the populations involved (128)

Documenting, institutionalizing, and educating about healthful and traditional methods of pain relief is one way to ensure that the change takes a shape which best meets the population's interests.

Recommendations for Further Study

Further research is needed to understand the socio-cultural effects of the move towards institutional delivery in India. This study might be expanded upon in several ways. Pain management is just one point of entry into understanding the childbirth event. It might also be investigated through, for example, pre- or post-natal care practices. A similar study could also be conducted in a different locale, such as in an urban area. Or, the methods and biosocial approach could be employed to study another traditional Indian practice that too has been medicalized and westernized.

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