"The Whole Village Will Know": Socio-cultural Beliefs and Values in Childbirth Decision-Making in the Mountain Region of Dolpa, Nepal

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Abstract

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Background: This exploratory qualitative study examined factors influencing women's decision-making during childbirth from personal experiences and stories. The study seeks to understand possible determinants of low utilization of formal biomedical maternal health services in the remote mountain community of Upper Dolpa, Nepal. The study's finding provides important insights to policymakers, program stakeholders, and implementers for planning and implementing programs that will have higher community buy-in, are relevant and feasible in remote mountain communities and others with similar characteristics with low utilization of formal biomedical maternal services.

Method: Twenty-one in-depth individual interviews were conducted using a semi-structured interview guide by phone in the local Dolpo language. The interviews were then translated and transcribed into English by the Principal Investigator (PI). The data were coded inductively and analyzed using the thematic analysis method in qualitative data analysis software Atlas.ti. The codes were arranged in categories and then into overarching themes.

Result: Socio-cultural values and beliefs emerged as core factors influencing women's decision-making around who, when, and where to seek help when there is a perceived need, while exploring broader questions around possible factors influencing women's decision-

making during childbirth. Four dominant beliefs and values, “secrecy and birth outcome”, “childbirth as an impure phenomenon”, “the role of heat and cold” and “lugta or luck” were observed to be valued and practiced by the women in this study. These beliefs and values are practiced as a safety measure to prevent undesirable outcomes from neglecting or refusing these beliefs and values.

Conclusion: Findings of this study highlight the importance of listening to women and understanding their beliefs and practices around childbirth. The study results inform that socio-cultural beliefs and values are deeply ingrained in day-to-day life and here to stay. It is unlikely that women will completely abandon these beliefs and utilize formal biomedical maternal health services unless the system finds a better way of addressing women’s needs for care that is also culturally relevant. Thus, the study calls for Nepal and others to design biomedical maternal health services that are culturally appropriate to improve maternal health. This can be achieved by centering policy, programs, and care around women and critically exploring ways to: 1. include women in planning maternal health programs and policies, 2. integrate cultural norms and practices into the maternal health services, and 3. bring service to where women are. These are crucial in providing women the agency to practice their socio-cultural norms and beliefs without depriving them of access to biomedical maternal health services and support from trained providers.

Keywords: Nepal, Dolpa, women, maternal and child health, decision-making, childbirth, socio-cultural, beliefs, values, mountains, South Asia

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Introduction

According to the World Health Organization (WHO) an estimated 810 women die every day from preventable pregnancy and childbirth related causes. The unacceptably high estimated global Maternal Mortality Ratio (MMR) is 211 maternal deaths per 100,000 live births.[46] Maternal deaths occur disproportionately higher in low-resource countries, as in 2017, 94% of an estimated 29,500 maternal deaths occurred in low-resource setting countries - with South Asia contributing about one-fifth of the total death. [20, 19] Formal maternal health service has been demonstrated to significantly reduce maternal mortality and morbidity. Thus, over the past decades, the emphasis has been to increase the use of formal maternal services as Antenatal Care (ANC) visits, institutional delivery, and birth assisted by skilled birth attendants (SBA). [45, 43, 46]

Nepal achieved a significant reduction in Maternal Mortality Ratio by 70%, from 543 in 1997 to 239 per 100,000 live births in 2016 which is attributed to the introduction of the safe motherhood program and improved access to formal maternal services. [29, 34, 3] Despite Nepal's improvements in maternal health and health service utilization, disparities remain across different regions, economic classes, and rural and urban settings. [28, 42, 32] According to the latest Nepal Demographic and Health Survey (NDHS), province 2 has the highest utilization of maternal services with 91% of four ANC completed, and 71% of institutional deliveries. In comparison, province 6 (Karnali) reported one of the lowest, with 71% of ANC, 36% of institutional delivery, 35% of births assisted by skilled care providers, and 4 in10 births assisted by relatives, families, and others untrained personals.[30,29,42]

Karnali Province also has some of the most remote communities in the country. Dolpo Buddha Rural Municipality is one of the three hard-to-reach mountain rural municipalities in Karnali. It

is inhabited by an indigenous Buddhist community identifying themselves as “Dolpo" at an elevation higher than 4000 meters above sea level. [1] There is a dearth of literature from the region on health in general and even less on maternal health. According to the Health Management Information System (HMIS) 2074/2075 B.S out of the 30 pregnant women who came for their first ANC in 2018/2019, only one woman completed their four ANC visits. All women delivered at home without trained help. [18]

Birth preparedness, level of awareness, women’s educational status, income level, age, perceived need, and other structural barriers like distance and workforce diversity are discussed as some of the determinants of low utilization of the formal maternal service seeking and utilization.[10,3,28,13,27] But generalization of these reasons becomes difficult in a country like Nepal with diverse geographical, socio-cultural, and economic makeup. [9] Moreover, even with efforts to address these structural barriers with programs like safe motherhood, studies observed stagnation in the reduction in MMR, and disparities in service seeking and utilization continue to persist in the country. [29, 40]

Therefore, it has become important to explore different possible factors influencing maternal service seeking and utilization, especially in understudied places like Dolpo Buddha Rural Municipality. This study hopes to contribute to understanding the possible reasons for the asymmetrical outcomes in MMR and institutional delivery in remote mountainous regions compared to other geographies in Nepal and the effectiveness of the existing programs to address low utilization of formal maternal service. It is also geared to provide insights in exploring alternatives to the existing programs approaches, for Nepal to achieve the aspirational Sustainable Development Goal (SDG) of 90% four ANC coverage and reduce maternal mortality ratio to 70 per 100,000. [34, 43] Thus, this qualitative study is conducted with the

general goal to ***explore factors influencing women's decision-making during pregnancy and childbirth from women's experiences and stories by looking into:***

- What factors do women consider while making decisions regarding who, where, what, and why certain practices are needed or important during their pregnancy and childbirth?
- What are the options women think they have to help them with their pregnancy and childbirth?

Theoretical Background

This research started with broad questions to explore factors influencing decision-making during pregnancy and childbirth. For this purpose, the study employed the socio-ecological model as the framework to guide research instruments and data analysis. However, as the analysis progressed, socio-cultural beliefs and values are observed to directly or indirectly influence women's decision-making in all levels of the socio-ecological model. Thus, the results of this study suggest that socio-cultural beliefs and values are not a separate factor, rather they are embedded within other factors and guide critical decisions. The influence of beliefs and values on human behavior and action are well explained in literature like the theory of reasoned action, later expanded as planned behavior theory by Fishbein and Ajzen. In the theory of planned behavior, Fishbein and Ajezen argued that beliefs are important determinants of human behavior as they influence human attitude toward behavior and eventually the intention and action. [2]

Similarly, the theory of conjunctural action posits that social structures and schemas including beliefs, values, norms, scripts, etc. determine cognition and behavior.[5] This is further supported by studies that demonstrated that ideational schemas: beliefs, values, norms, scripts, attitudes, etc. influence and determine different human behavior and action including migration, fertility, health-seeking behaviors, cross-culture and organizational decisions making.[41,11,17,39,31,48,15]

Socio-cultural values and beliefs' influence on maternal health service utilization and decision making is widely discussed and often as a barrier in literature both from Nepal and around the world. [26, 25,37,12,9,20] Cultural and spiritual beliefs are observed to encourage adolescent pregnant girls to seek care from spiritual leaders and traditional healers in Bangladesh, not to

seek postnatal care (PNC) in Nepal and limit independent decisions on seeking maternal healthcare in Nigeria.[38,37,4] In Eastern Nepal women who believed in traditional healers were found less likely to complete four ANC.[12] Similarly, a review of evidence on the prevalence and influence of traditional beliefs and practices in pregnancy, childbirth, and postpartum in Asian countries, including Nepal, concluded that these beliefs and practices are widespread and influence formal maternal service seeking and utilization. [45]

This study adds value to the existing literature by bringing forward stories of women from the mountain region of Dolpa, Nepal, home to Buddhist people of Tibeto-Burman ethnic origins. The results will have specific relevance to the mountain Dolpa and Buddhist communities and other places in Nepal with similar cultural beliefs systems. In a broader context, this study's finding not only informs about the influence of socio-cultural beliefs and values in women's biomedical maternal health seeking and utilization behavior. But also allow us to trace how exactly these particular beliefs translate into behavior changes.

Methods

Study design

The study employed an exploratory qualitative design where primary data was collected from in-depth interviews by phone, using a semi-structured interview guide.

Study Setting

The study was conducted in Dolpo Buddha Rural Municipality of Dolpa district in Karnali Province, Nepal. It is situated at an elevation of 4100m above sea level and inhabited by 2,385 indigenous people who identify themselves as "Dolpo", speak a local dialect of the Tibetan language, and share similar culture and tradition with the bordering Tibet Autonomous Region. Of the total population, 712 were women of reproductive age. [18] The rural municipality can be accessed only by traversing primitive trails across rugged terrain by foot. Healthcare is primarily supported by two health posts staffed with nurses, auxiliary nurse midwives, health assistants, and community medical assistants among which one is registered as a birthing center since 2011. [18]

Study Population

The study population consists of women of reproductive age (15-49) who gave birth to a child, irrespective of the birth outcome, in the past three years before the study from the Dolpo Buddha rural municipality. Of the 6 villages (ward) in the Rural Municipality, only two village (ward) Dho and Tokyo have access to a health center registered as birthing centers, thus the participants were purposefully recruited from those two wards with similar options if they were to choose. Participants were recruited by purposive sampling approach with the help of Female Community Health Volunteers (FCHVs) and local healthcare providers as well as snowball

sampling method. Total of 21 women met the inclusion criteria and all voluntarily agreed to participate in the study leading to a complete sample.

Data Collection

The interviews were conducted using a semi-structured interview guide. The interview guide was pre-tested among five women in two stages that are not included in the final sample, reviewed and modified. The final data collection tool was translated in both Tibetan and Nepali language. All the interviews were conducted remotely with phone by the Principal Investigator (PI) in local Dolpo dialect of the Tibetan language and recorded. The recordings and transcript were stored with unique code identifier. Interviews lasted 40 to 90 minutes depending on the details of the information narrated by the participant.

Data Analysis

The in-depth individual interviews were analyzed using the thematic analysis method of qualitative data analysis in qualitative data analysis software Atlas.ti. The interviews were translated and transcribed in English by the PI. The translated transcripts were read and re-read simultaneously with the audio recording to ensure the closest possible meaning giving translation before coding. Five transcripts were then coded inductively with an open coding approach by the PI and another coder, and a basic codebook drafted. A second round of another 5 transcripts was coded using the draft codebook. The codebook was modified as analysis progressed in an iterative process. The codes were eventually arranged into categories and then into overarching themes guided by Centers for Disease Control and Prevention's (CDC) adaptation of Socio-Ecological Model and presented in four nested circles.

Ethical Consideration

The study received permission from the Rural Municipality Office of Dolpo Buddha Rural Municipality on 11/18/2021, ethical approval from the University of Washington's Institutional Review Board (IRB) on 11/24/2021 and the Nepal Health and Research Council (NHRC) on 01/04/2022 (Reference no. 1738). Participants received a detailed explanation of the study, their role, confidentiality measures, risks, and benefits of their participation in the study before they were requested to make a voluntary choice of participation. All 21 participants provided verbal consent by phone to participate in the study and audio record the interview before the interview proceeded.

Results

A total of 21 women who gave birth to a child in the past three years before the study were interviewed for this study. Table one shows that the mean age of the women who participated in this study was 29 years old. On average, women gave birth to two children and lost one before the age of one. Majority 33% (seven of 21) women had only one ANC visit and only four completed four or more ANC visits. It is important to mention that none of the women can give an exact month about their ANC visit. All women, except one who delivered in hospital in the capital city, Kathmandu to avoid complication after undergoing surgery on her uterus a year before the last pregnancy, gave birth either at home or in nomads camps. A majority (42.9%) of the births were supported by mothers- in-laws. Twelve women sought help from people outside their immediate family after perceived complications. And the majority (23.8%) called local health care providers at home, two sought helps from *Amchi*,[1] and three called their relatives who were identified by the women as their aunt living within their neighborhood, two of whom are also female healthcare volunteers.

[1] Amchi also often known as "Menpa" is a Tibetan term for doctor or "the one who gives medicine", are the people who practice Tibetan medicine.

Table 1: Demographic Characteristics and utilization of maternal health services among the study participants

	Overall (N=21)
Age	
Mean (SD)	28.5 (3.82)
Median [Min, Max]	28.0 [22.0, 38.0]
Age at marriage	
Mean (SD)	20.7 (2.16)
Median [Min, Max]	21.0 [16.0, 25.0]
Age at first pregnnacy	
Mean (SD)	22.1 (2.76)
Median [Min, Max]	22.0 [17.0, 28.0]
Number of pregancies	
Mean (SD)	2.48 (1.08)
Median [Min, Max]	2.00 [1.00, 5.00]
Number of children lost before the age of one (year)	
Mean (SD)	1.14 (0.378)
Median [Min, Max]	1.00 [1.00, 2.00]
Number of ANC Visits	
1	7 (33.3%)
2	6 (28.6%)
3	4 (19.0%)
4 or more	4 (19.0%)
Place of last birth	
Animal Shed	1 (4.8%)
Home	17 (81.0%)
Hospital in Ktm	1 (4.8%)
Nomad Camp	2 (9.5%)
Key person supporting last birth	
Mother	8 (38.1%)
Mother in law	9 (42.9%)
Others	2 (9.5%)
Sought help from person other than family after perceived complication	
Amchi	2 (9.5%)
Amchi and Healthcare Provider	2 (9.5%)
Health care provider	5 (23.8%)
Relative	3 (14.3%)

Socio-Cultural Beliefs and Values

Socio-cultural values and beliefs are often discussed as an independent variable that influences women's decisions. However, in this study these values and beliefs are discussed by the majority of women as the anchor of their decisions about who, when, and where to seek help when there is a perceived need. Of all the beliefs and values four dominant beliefs and values,

"secrecy and birth outcome", "childbirth as an impure phenomenon", "the role of heat and cold" and "lugta or luck" are highly valued and practiced by the women in this study. It is important to acknowledge that these beliefs and values are practiced as a safety measure, to prevent undesirable outcomes from neglecting or refusing these beliefs and values.

Secrecy and birth outcome: Culturally, labor pain has to be kept secret unless it is unavoidable, which is mostly defined as a situation that cannot be solved at home. The failure to keep the labor a secret is believed to increase duration of labor and invite more complications. All except for one participant who gave birth in hospital spontaneously brought up the role of this belief in their decision about who, when, and where to seek help when they perceived the need, irrespective of their preference.

One participant while explained her reason for choosing a local traditional *Amchi* over a government health care provider, even though she preferred a local health care provider stated:

> *"My husband and mother were saying we should call eji[2]..[name]. But I said we just call Amchi first and then maybe her later. If we call her, he will have to go to Dho [far distance wise and have to pass a few small villages] and people will know that I am going through labor pain. Amchi lives right there, he can come from his village alone and people will assume he is going for another purpose. When I gave birth to my first baby it took a very long time and people say it was because many people came to know about the pain before she was born."* -SDMI6

The belief is a major factor to decide when to seek help both within and outside the family as one participant noted:

> *"I had the pain [labor] whole night. That day we had some guests in the house, so I didn't tell anyone and kept to myself. The next morning the guest left, and my mother-in-law was starting the fire. It was so painful that I couldn't get out of bed. My mother-in-*

[2]. Eji: in the local language is sister. In the study context, the majority of the women refer to the female local health care provider as Eji.

law was saying that she is getting ready to go to do the community work that day. So, I told her not to go and that I am in pain. And she stayed home." -TDMI3

Some participants admitted they chose to be on their own during labor pain or give birth on their own in order to maintain secrecy, which reflects the importance of this belief for the women and the family.

"That morning, I started having pain. My aunt's husband went to work. So I told my aunt, "today you go to study, I do not want to go. I am having pain. You should go, if you also stay home, people will know that I am having pain. So you go". And then she went. I stayed at home the whole day. I just thought I will call her when it is very painful. ..She came back once the sun was down."-MDMI15

Another participant stated:

"This time the day I gave birth to him, during the daytime, I wanted to cut grass in the mountains. ..As I was cutting the grass and doing some, I felt the pain, so I came back carrying the one I have collected with the pain. Then when I got home, my mother-in-law was not at home... So, I just gave birth on my own in the greenhouse….Then I couldn't go to call her, she was in the field and everyone was around the field. And then again people say that if everyone comes to know that you are in labor, the delivery will be difficult. That is the perception here you know". -MDMI20

Similarly, the belief is one of the most cited reasons for not considering the birthing center as a place for delivery.

"You know they say not to let other people. You know how, we say "don't tell people about the labor pain, lock the door, and all". So if we go to the clinic the whole village will know. So maybe I will not go unless it becomes very complicated and the only option." -TDMI17

At one point I did think about, "maybe I should go to the clinic, but then our people say like "ja shyorkyo tik"[3] that if many people know about labor pain the secrecy will be broken and the delivery will be complicated" -MDMI19

[3]. Ja shyorkyo tik: Local phrase meaning the secrecy will be broken so people will know about the labor pain.

The significance of keeping the labor a secret is practice as a means to ensure better outcome, as the woman put it as "easy and fast" delivery. Thus, women in this study did not hesitate to attribute the failure to keep a secret as a cause of what they refer to as a "long labor".

> *"I was on the roof during the day. ..... As we went to the house, one and two people started coming into our house. And all our family, my mother's family was there and my husband also came. Then I don't know maybe, because it was no more a secret, or I don't know why when there was pain I had the urge to push but then it would go and stay like that till the next morning" -GDMI5*

Childbirth and purity: Childbirth is viewed as an impure phenomenon within the socio-cultural context resulting in *"drib"* that can be translated nearest to the meaning of "pollutes" or "polluting". This belief is mentioned mostly by the women when they discussed where they gave birth and who they sought or would consider seeking help from when there is a need. The belief has significant implications to women from households that are called "labrang" meaning the house of a spiritual leader or houses that are in a place labeled as sacred or within the territory of a monastery. As one participant stated:

> *"I gave birth in our main house so I went to the Ra[4].We cannot give birth in the main house because we are the "labrang"[5] [,] and in the area of the monastery. All the houses in this village don't deliver in the main home if that is possible, except the two houses which are across the stream of the monastery. If we give birth at home, I don't know, they say it causes drib (impurity/pollutes) to the monastery. Then it must be true." -SDMI2*

This belief influences their decisions regarding who to call when there is a perceived need. Men are treated as a superior in the community and thus someone to be protected from being polluted. One participant stated:

> *"If I had to call someone, or there were any complications, I think I would call..[female local healthcare provider], or Amchi. But Amchi, if there is a choice is uncomfortable to*

[4]. Ra: The place which is mostly used for the purpose of sheltering animals but not always. Most of the old houses are two-storied and Ra are the rooms on the ground floor.
[5]. Labrang :In the local dialect is the house of spiritual leader of a certain monastery or the family that carries the lineage of the spiritual leader even though there is no current individual who is leading monasteries

call…they are man and there is drib (impurity) nyingjah[6] so if I can I feel like it's good not to call them."-TDMI1

There was a point where me and my mother discussed calling the amchi. But then the Amchi were also very busy so we decided not to call. Later my mother suggested that we should call the doctor. So we called her and she came. My mother said that the doctor will know more and might give medicine. And also it feels easier to have a female doctor to be around when giving birth. If we have the option, calling amchi in delivery is very uncomfortable and then they will have to be around it, you know if we can it is good to not call them. Nyinjha all the drib (impurities.)-TDMI13

Sometime this belief is not mentioned explicitly but expressed in implicit statements relating to their preference and reason for not choosing a certain place like the clinic as a place for birth as one participant stated her reason for not preferring clinic delivery as:

"People also say that the place where the clinic is built is very Tsuppo[7] so I am afraid something might happen to me."- RDMI14

The birth is followed by a ritual called "Sang" where incense are burned to cleanse the outer surface and family members are given a blessed water called "thyru" which is belief to wash the "drib" and purify the body.

"My father performed sang (the purifying ceremony) in nomad after the delivery." - SDMI8

Perception on the role of heat and cold on pregnancy outcome: Heat and cold have an important role in the well-being of pregnancy as well as the birthing process in the community. Exposure to any form of cold, mostly environmental like rain, cold air, wearing fewer clothes has a negative impact on the health, and wellbeing of pregnant women as well as in the birthing

[6]. Nyinja: The word Nyinje is compassion. But in the local language, the expression "Nyinja" is used for sympathy

[7]. Tssuppo: literal meaning is aggressive. In the context of this study, women describe a place as Tsuppo meaning that the place is protected by land protectors and holds the capacity to harm if provoked. And since birth is perceived as an impure or polluting phenomenon, there is a higher chance of upsetting the land protectors. Thus, higher risk for negative outcomes for the mother and the baby.

process and identification of labor pain. The exposure can be both in the past and during the birth.

> *"This time the labor was very long..they were saying that I must have been cold that summer. I weed in the field and don't wear enough warm clothes and the cold accumulated. Or I don't know..maybe I was cold during the time of collecting bu[8] (a fungus). And then also I had to herd the cattle almost to the day I went into labor pain." -SDMI7*

> *"Maybe from the very beginning, whenever I felt like I needed to pee, I went outside to pee, and maybe I must have been cold moving in and out of the house. So, even when it was starting to become bright there was no sign of baby to be delivered."-LDMI11*

The negative impact of the cold on the wellbeing also is discussed as interfering with their identification of labor pain.

> *"Before the childbirth, I had pain around my waist for two - three days. But I didn't think it was pain for childbirth. I thought it was because of the drangmo (cold) around my waist. The pain would come and go and I had to pee a lot, and the pain subsided after the pee. I didn't realize that it was the pain of childbirth."-SDMI2*

> *"Once the sun was going down, then the pain was more and I felt the need to push. I had to go outside (meaning to bathroom) a lot and when I went to do that there were some discharges. I thought that was because of the cold. Maybe because I didn't wear enough warm clothes when I was pregnant, and my body got cold" -GDMI5*

Whereas heat is mostly described in the form of warm food, drinks, wearing more cloth as being beneficial for the well-being and also having an additive role in labor progression. Especially warm black tea or soup is mentioned by all the participants as being beneficial to increase the intensity of the labor pain. Thus, all the women mentioned they either made an effort on their own to drink or are given by the caregiver as one of the first routine care.

> *"She [mother in law] gave me Thukpa (barley soup) and a strong black tea that she said will help to speed up the delivery. She said that helps to increase the pain."-TDMI3*

8. Bu: Widely known as "Yartsa-Gunbu", meaning "grass" in summer and a "caterpillar" or insect in winter. It is a caterpillar fungus (Cordyceps Sinensis). Most of the villagers from in the study site spent the month of June and July in higher mountain camps to pick the fungus which is the only source of cash income for majority of the family.

"When she [aunt] came, she warmed my body with steam. She put jimbu (chives) in the boiling water and let it steam around me. And gave me warm drinks and food. And the pain started getting stronger. Before that the pain was on and off the whole day. She also applies warm oil around the back. And the pain got stronger and stronger."- MDMI15

These perceptions are then translated in their decision to gauge whether the clinic or other options are favorable for birthing or not.

"There is no place to make fire in the clinic,it is very cold as well. It would be nice to have a place to make a fire or a gas so we can have warm food easily."-CDMI21

"Some people say it is very cold there. And then there is no way to give warm food to the women there and that might bring problems to both mother and baby." -TDMI4

It is relevant even with women who had previous experience of hospital services, as one participant stated:

"I went to the hospital to deliver my first baby. I was thinking of going to Kathmandu for the winter to give birth. Then later my husband no, my mother-in-law, and aunt told me that it will be warm at home here with fire, and the food and care will be better at home than in Kathmandu. So, I didn't go there. Also, it will be cold in Kathmandu without fire , so I ended up staying here. I decided not to go. If I said I really wanted to go, my husband will send me. I can live with my parents in Kathmandu in their house. So living there is not a problem. So when I had the pain,in the morning I woke up, drank thukpa (barley soup), also warm black tea and it was very fast." -MDMI9

Beliefs in "lungta" as a determinant of the outcome and rituals as measures to prevent and mitigate complications: Beliefs rooted in religion are expressed as a strong determinant of the women's decisions during childbirth. One such belief is the concept of "lungta". The Buddhist literal meaning of "lungta" is "wind horse" which has different meanings at various levels. In the context where the participant in the study refers to, 'lungta' is the one in Buddhist text defined as an inner quality associated with "positive energy" or "life force" and "good luck".

"if it was like my daughters, the pain even though it lasts for days, the pain is for several days, other than that the feet do not come first. But with him, maybe he doesn't

have lungta and is destined to die, or what. The foot came first and Ajo[9]…(local male health care provider) and the amchi had to pull him out. So, the footling, he died, soon after the birth, there was shallow breathing, but as soon as he came out he died."- MDMI19

"The biggest thing is our lungta. If you have lungta things will go well but if not then everything will work to make it not work. So even if people know and you have lungta everything will be fine."-SDMI8

The belief also acts as a gatekeeper for activities that the woman and the family view as being dangerous if you don't possess enough luck or lungta. As one participant described her reason for not considering the clinic as a place for her delivery as:

"At the beginning since her child died there, I thought if I don't have lungta (not lucky enough) something might go wrong with my baby and all. You know people will know about my labor." -GDMI5

Similarly, religious beliefs especially in ritual influences the decisions on who to call and also what practices the family performs first. Many of the women admitted they have some ritual done or after reaching out to healthcare providers. As one participant noted:

"The nurse gave injections. But still the baby was not coming out. So we all decided to call the amchi, even the nurse said it would be good to have him there. So we called him, he did Kako (a ritual believed to block the harm or whatever is causing the harm) and finally the baby was born." -SDMI16
"That time it was like three days and the baby was not still coming. So, all the family said we better call the doctor and amchi. The doctor might have medicine or maybe pull the baby. And maybe we might need to do some kurim[10] (rituals). So we all thought it is good to call both of them." -KDMI12

The belief is not only taken as a reference for seeking service but also as a guidance to make more complicated decisions as stated by one participant:

[9] Ajo: Older brother, is used to address someone who is male and older then self. In this context is used for the male local health care provider.
[10] Kurim: Any Buddhist rituals performed as a preventive, promotive and often as a treatment of illnesses and diseases.

"I had pain for 4 or 5 days. And the baby would not come but I kept bleeding so it was very difficult. In the beginning it was only me and my husband, then on the second day I told him to call my in-laws. On the third day..My father-in-law is called amchi. I don't know about it, otherwise, it would have been better to call the doctor, what amchi would do, you know. The doctor told me that I will not be able to deliver here at home. And if I can, I should go to hospital in Kathmandu or to Dunai that summer. After that I was more scared. Then we did some kurim (rituals), and requested the Gen (spiritual teacher) to do prayers for long life. Consulted with the amchi as well, but both amchi and my family said..will be a better decision to stay here in the village. Then me and my husband decided to request Gen (monk teacher) for Chyagmo (astrology). He also said that it is better to stay in the village than going to hospital. So, felt better and decided to stay here."-RDMI14

Discussion

This study highlights the importance of socio-cultural beliefs and values in decision-making during childbirth by bringing forward the stories and experiences of women living in one of the most remote mountain and highest elevation villages in Nepal. Especially in communities like Dolpo Buddha Rural Municipality (DBRM) with collectivist culture, women see themselves as a part of the greater whole rooted in their beliefs and values. [48]

It is known that women's attitude towards their pregnancy, risk perception, past experiences and perceived need forms at least the foundation of their practice or even intention of seeking care. However, it is equally important to recognize that attitudes are shaped by their beliefs and values. [45, 7]

The significance of culture, tradition, and spirituality is discussed in many studies as an important factor for maternal service seeking and utilization.[45,24,36,35,47] In some studies socio-cultural beliefs and values are observed to influence maternal service seeking decision making rather than reaching the facilities. [14] But the scope of the socio-cultural influence on decision making is wider and deeper in this study. The socio-cultural beliefs and values are not discussed as a separate factor, but rather as a core driver of their perception, behavior and eventually practices including utilization of formal maternal health services during childbirth. This study shed light on four major themes of beliefs: "keeping the labor a secret", "lungta or luck", "childbirth as impure" and the "the role of heat and cold" that are observed to influence most of the decisions regarding who, where and how to seek services. The stronger their beliefs are the lower the chances of seeking care, primarily, with the belief around "keeping labor as secret". This is consistent with other studies which found higher home deliveries in communities where cultural and religious beliefs are associated with the choices. [16, 21]

Often lack of awareness about the benefits of the biomedical approach is cited as the reason for treasuring and practicing cultural norms and belief especially in the rural communities with low literacy. [49] But this is not the case in this study. All the women in this study admitted they were informed and aware of the services in the birthing center. The majority see healthcare providers and the clinic as being better equipped to deal with complications. This is reflected in the fact that out of nine women who sought help outside their family and relatives, seven sought help from the healthcare provider when they perceived risk of complication. But they did so by adhering to their beliefs and values by inviting the healthcare providers in home rather than going to the birthing center or clinic. All participants mention unsolicited that going to the health care provider will increase their exposure and risk breaking the secrecy. This informs the importance of cultural safety, even when seeking help from trained personnel, to ensure better outcomes for both the mother and the child, consistent with other studies exploring the role of socio-cultural beliefs. [24] This also brings essential insight into how women's knowledge and acceptance of formal maternal health service benefits does not necessarily translate to utilization as prescribed by the system, also highlighted by other ethnographic studies in Nepal.[9] And further helps to re-think about the effectiveness and buy-ins of approaches like awareness programs to increase the utilization of the biomedical maternal services that are considered to be the gold standard, especially in marginalized and remote communities.

Structural barriers such as distance and location of the birthing center are discussed in relation to the socio-cultural beliefs and values. Women are more concerned about the long distance exposing them to greater risk of "breaking the secrecy" than the miles they need to cover to get to the birthing center. Hence, it is unlikely that women will come to the clinic even when there is better transportation access unless these beliefs and values are incorporated.

The location of the birthing center is built matters to the community. This is because in the community childbirth is viewed as impure and certain places including the place where the birthing center is located, to be protected by land protractors or deities that are more aggressive than others and the location of the birthing center is one of them. As childbirth is impure, there is a greater risk of upsetting the land protector by polluting the place and thus risk the safety of the child and the women. [1, 3324] Most of the women in this study showed hesitancy in giving birth in the birthing center because of its location.

Similarly, some beliefs such as “lungta” or “good luck” greatly influence women’s acceptance of the outcome as something to be predetermined. This has both positive and negative influence on maternal service seeking. Women don't blame the institution or individual for the negative outcome if there are any rather, they accept it as inevitable. However, it also undermines the importance of using formal biomedical maternal services.

Similar mind set can be observed in the community's perception about the role of heat and cold. Keeping the body warm throughout the pregnancy to have an “easy” birth and having a constant source of heat during the childbirth to ease the process in the form of fire, enough clothes and food are taken as routine care. On the contrary, exposure to any form of cold throughout the pregnancy like wearing less clothing or exposure to cold weather is perceived to cause “difficult” labor. Thus, women preferred a birthing room that has access to warm food and a source of heat. This is not particular to the women of upper Dolpo as there are other cultures with similar cultural values. [36, 45]

This study allows tracing exactly how beliefs and values determine behavior from the stories of women participants. The findings of this study highlights the needs for listening, studying, understanding and incorporating women’s needs that are beyond structural and physical in

order to promote acceptability and utilization of maternal health programs to meet local, regional and national maternal health goals.

It is essential to acknowledge that this study has certain limitations. The particular findings from this study are specifically applicable to mountain areas within Nepal. Because the study is one of the few qualitative studies from remote mountain Buddhist communities of Nepal, it will add significant value to the body of literature around socio-cultural beliefs and values' and serve as a great resource for individuals and organizations interested in learning and serving the upper Dolpa and other mountain communities of Nepal.

However, it should be noted that this study did not look primarily for socio-cultural beliefs and values; instead, they materialized as a core factor influencing other factors determining formal biomedical maternal service seeking and utilization decisions and practices. This informs the need of understanding socio-cultural values and beliefs, which might be different but will exist in communities across the globe. Accordingly, these beliefs and values determine women's behavior including biomedical maternal health care seeking and utilization. So, the key findings and conclusion of this study is equally applicable to other settings that aspire to improve maternal health with culturally relevant biomedical maternal healthcare.

The data were translated from the local language to English, which might have led to certain distortion in the depth of the content as some words and nuances cannot be translated into English. To mitigate this issue, local people who speak both English and the local language were consulted and simultaneous coding of translated and audio recordings was employed. The study brings forward the stories of women's pregnancy and childbirth, which might be different from other key informants such as health care providers, female healthcare volunteers, and traditional medicine practitioners.

As a researcher, I acknowledge that being born, raised, lived and worked in the community as a woman, nurse and skilled birth attendant; the whole process of data generation, analysis, and interpretation will not be free from my personal biases. On the contrary, I believe that I am better positioned to interpret the findings, expressions and identify subtle nuances with my understanding of the culture, language, and familiarity with the circumstances. Having a prior relationship with the entire participant as a community member, healthcare provider and even having been there with many of the participants during their pregnancy and childbirth before the research allowed me to have easy access to the participant that can otherwise be challenging.

Conclusion and Recommendations

If the goal is to increase utilization of biomedical maternal health services and to improve maternal health, this study suggests the significance of listening to women and understanding existing socio-cultural beliefs and values. This is essential in providing women the agency to practice their socio-cultural norms and beliefs without depriving them of access to maternal health services and support from trained providers. This can be accomplished by designing programs and policies for biomedical cares that are culturally appropriate and acceptable to the women and community. This study suggests three best practices to create culturally appropriate biomedical maternal care services.

Include women in planning maternal health programs and policies: Consulting women in program design is critical in places with distinct geographical and cultural characteristics including location, and structure of the service site to the service delivery system. The fact that

women in this study hesitate to go to the birthing center because of its location is one example of the importance of making women the center of programs.

Integrate cultural norms and practices into the maternal health services: The importance of aligning maternal services with the cultural needs and safety aspect is discussed by other studies. [45, 22, 44] This will help to bridge the gap rather than having a parallel system and prioritizing institutionalization of the maternal services and looking to the socio-cultural safety nets as a barrier. The stories of women in this study re-emphasize the significance of integrating social and cultural norms into biomedical maternal health services rather than looking at it as a barrier and something to fight against discussed in other studies. [35] It is important to provide women with a space where they can feel both culturally and bio-medically safe.

Bring service to women: Has been suggested in other studies to address the geographical inaccessibility of maternal services, but it can also be the answer to address the cultural and traditional needs of the women and the family.[23] This will include incorporation of the Female Community Health Volunteers (FCHVs) who are already an existing part of the health system in maternal health care with compensation. Home visits from trained healthcare personnel and FCHVs which were found effective in reducing neonatal mortality and increasing service seeking behaviors.[19, 8, 6] This can be a good approach in communities like mountain Dolpa where culturally home is taken as a safe space, clinics are far away and women only get little spare time out of work.

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