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Tibetan women's perspectives and satisfaction with delivery care in a rural birth center

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Abstract

Objective—To identify sociodemographic characteristics and factors involved in Tibetan women's decisions to deliver at the Tibetan Birth and Training Center (TBTC) in rural western China.

Methods—In the present mixed-methods study, a random sample of married women who delivered at the TBTC between June 2011 and June 2012 were surveyed. Additionally, four focus group discussions were conducted among married women living in the TBTC catchment area. Descriptive analyses were conducted, and dominant themes were identified.

Results—In focus group discussions, women (n=33) reported that improved roads and transportation meant that access to health facilities was easier than in the past. Although some of the 114 survey participants voiced negative perceptions of healthcare facilities and providers, 99 (86.8%) indicated that they chose to deliver at the TBTC because they preferred to have a doctor present. Most women (75 [65.8%]) said their mother/mother-in-law made the final decision about

Conflict of interest

T.K. is employed by the TBTC. Collection of data and compilation of findings were conducted independently by the other authors.

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delivery location. Women valued logistic and cultural aspects of the TBTC, and 108 (94.7%) said that they would recommend the TBTC to a friend.

Conclusion—Study participants preferred delivery care that combines safety and comfort. The findings highlight avenues for further promotion of facility delivery among populations with lower rates of skilled deliveries.

Keywords

Delivery care; Ethnic minority populations; Facility delivery; Health facility; Tibet

1. Introduction

Worldwide, approximately 800 women die every day as a result of preventable causes related to pregnancy and childbearing. Skilled birth attendance is critical in the reduction of maternal mortality, yet the widespread adoption of facility delivery has been hampered in some populations owing to logistic constraints and cultural preferences.

China has achieved significant reductions in maternal mortality through the successful rollout of a national policy to promote facility deliveries. However, challenges remain among rural and ethnic minority populations, such as rural Tibetans, for whom higher maternal mortality rates have persisted [1-4]. Prior studies demonstrate the need to attend to important logistic, religious, and cultural aspects in the provision of pregnancy and delivery care to promote the use of healthcare facilities and to ensure satisfaction and quality of care among rural Tibetan populations [5,6].

Rebkong (Tongren) County in Tso-ngon (Qinghai) Province in China lies 170 km southeast of Xining. Qinghai Province is in western China on the Tibetan plateau and is part of the traditional Tibetan region of Amdo. Qinghai Province has experienced rapid growth and urbanization over the past decade—from a per capita gross domestic product (GDP) of US \$1814 urban and \$483 rural in 2003 [6], to a combined (urban and rural) per capita GDP of \$3540 in 2013 [7]—yet it remains one of the poorest provinces in China. Rebkong County is located in Malho (Huangnan) Tibetan Autonomous Prefecture, one of five prefectures in Qinghai. Most residents of Rebkong are Tibetan; the other residents are Han, Hui, or members of other ethnic groups. Most Tibetans in this area are farmers or nomadic herders; however, the area is also known for bauxite mining for aluminum.

Available healthcare facilities include small village clinics attended by village doctors (typically with little or no obstetric training), and county and provincial hospitals predominantly staffed by Han Chinese physicians and nurses. In Tibetan areas, there are also a few Tibetan medicine hospitals in addition to Chinese (traditional) medicine hospitals. Tibetan medicine hospitals do not provide maternity care and there are few trained birth attendants available outside the county and provincial hospitals. Access to health care for Tibetan populations is further complicated by long and difficult travel, costs for the stay and medicine, lack of hospital accommodation for accompanying family members, and linguistic and cultural barriers between Tibetan women and non-Tibetan healthcare providers and facilities.

In 2010, the Tibetan Birth and Training Center (TBTC) was opened in Tso-ngon (Qinghai) province to address these concerns and other persistent barriers to accessing skilled delivery care among rural Tibetan women. The TBTC provides culturally appropriate, high-quality gynecologic and obstetric care in a home-like environment to a predominantly Tibetan population. Key components of the TBTC include an all-female staff of Tibetan obstetricians and midwives, modern clinical facilities and equipment, and home-like suites for women and their families that include heated beds, cooking facilities, and en-suite bathrooms [8].

The aim of the present study was to assess, on the basis of survey data, sociodemographic and decision-making factors among women who used the TBTC, as well as to obtain indepth information from similar women in the community to provide greater insight into the beliefs and practices surrounding childbirth and delivery among Tibetan women in this area.

2. Materials and methods

The present mixed-methods study consisted of an exploratory survey of married women who had delivered at the TBTC between June 1, 2011, and June 30, 2012, and four focus group discussions (FGDs) conducted with married women from the TBTC catchment area. Approval to conduct the study was obtained from the Institutional Review Board of the University of California, Los Angeles, USA, and informed oral consent was obtained from all participants.

For the survey, a random sample of married Tibetan women who delivered at the TBTC during the selected study period was interviewed between September 1 and October 31, 2012. Via a random number generator in Stata 13 (StataCorp, College Station, TX, USA), women's names were first selected from the electronic patient registers of all women who had delivered during the study period, and the sample was then further narrowed to communities in closer proximity to the TBTC.

The survey was administered by trained Tibetan interviewers in the participants' homes and took approximately 45–60 minutes to complete. The survey modules included sociodemographic information and pregnancy history, perceptions of maternal health care and barriers (based on the three delays model [9]), and experiences at the TBTC. Items regarding the perceived quality and satisfaction with services were developed for this project on the basis of previous work with this population [10].

The survey was developed in English, translated into Tibetan, and then checked for comprehension by Tibetan team members. Before obtaining oral consent, the interviewer read a description of the project and answered any questions. As compensation for their time, women were given a small Tibetan-style scarf.

For the FGDs, women were selected and screened with the help of village healthcare workers and leaders from four agricultural communities located in the catchment area of the TBTC. Married women of reproductive age living in the same communities as the survey participants were recruited to participate. Concurrent with survey data collection, four FGDs were conducted in private locations (e.g. village clinics) and lasted approximately 60–90 minutes.

Descriptive analyses were conducted with the quantitative data to describe the distributions of responses. For the qualitative data, the transcripts were transcribed and translated into English. Transcripts were reviewed and compiled in to a grid to compare responses within and across the FGDs.

3. Results

Overall, 33 married women of reproductive age were recruited to participate in four FGDs (seven to 10 participants per group). Women who participated in the FGDs indicated that perceptions and behaviors regarding delivery care are in flux. They noted that more women are delivering at health facilities now than in the past. Similarly, women indicated that delivery practices vary, depending on whether women are from agricultural or nomadic villages. It was perceived that women in nomadic villages are more likely to deliver at home owing to difficulties with transportation and cost. However, better access to roads, better forms of transportation (e.g. motorcycles and taxis), and the provision of health insurance subsidies to offset facility delivery costs were thought to be lessening the barriers over time.

Nomadic women were perceived to be less likely to rest before and after delivery, and less likely to seek prenatal care, than were women from agricultural villages. Women generally reported working up to the day of delivery and, in some cases, even delivering while working in the fields. Continuing to work hard throughout the pregnancy was also related to the perception that women would have a smaller baby, and thus an easier delivery. There also appeared to be a widely held notion that the more people who know about the delivery, the more pain that the woman will have. This belief also included the husband of the laboring woman, and was cited as a reason why husbands are often not present at the time of delivery.

Convenience, comfort, and low cost were cited as the most common reasons why women preferred to deliver at home. Women indicated that having a warm bed, home-cooked food, and the freedom to move around during delivery were highly valued. They also appreciated having their female family members nearby to assist and support them. The women often acknowledged, however, that problems might arise at home and might not be resolved without the care provided by a physician in a hospital. Some women indicated that delivering at the hospital was less worrisome because providers would be present in case of emergency and could administer medications to speed the delivery or to manage pain during delivery.

On the other hand, women generally had negative perceptions of the treatment and care provided at the hospital, although a couple of women spoke positively of their experiences. Women cited cold beds, rough treatment, and inability to communicate with hospital staff, in addition to a lack of privacy. Several women described being chastised by healthcare providers, feeling at times that young doctors or interns were performing what were perceived to be unnecessary repeated vaginal examinations or cesarean deliveries.

The patient registers showed that 619 women had delivered during the study period, of whom 114 were selected and agreed to take part in the survey. The characteristics of the 114

survey participants are shown in Table 1. In general, women had lower levels of education as compared with their husbands: 47 (41.2%) women and 30 (26.3%) husbands had never attended school. Yearly income was similar to the national average (\$3540), with women reporting the equivalent of \$3468 (21 516 RMB). Most women lived in extended households. Women reported a range of access to media outlets, including nearly universal availability of televisions and mobile phones in households. Overall, 57 (50.0%) women reported that a family member or friend had delivered at least one newborn at home, and 14 (12.3%) reported that a family member or friend had experienced a complication during childbirth.

Women endorsed the importance of having a health professional assist with delivery, yet expressed only moderate quality of care at the prefecture hospital (Table 2). Women also reported some concern about reaching a health facility in case of emergency (Table 2).

When asked about their choice to deliver at the TBTC, most women indicated that the most important factor was having a doctor present at delivery (Table 3). Cost was mentioned, although less frequently. Most women (70; 61.4%) had heard about the TBTC through a friend, although some women reported hearing about it from a family member (Table 3).

Two-fifths said that they talked with their mother or mother-in-law about where they would deliver, but nearly as many women responded that they did not talk to anyone (Table 3). Nearly two-thirds indicated that their mother or mother-in-law made the final decision about where to deliver (Table 3).

A travel time of less than 30 minutes was reported by 84 (73.7%) women; however, 5 (4.4%) women traveled more than 2 hours to reach the TBTC. Motorcycle and car were the most common forms of transport (Table 3). Among the 80 (70.2%) women who paid for transportation, the average cost was 59 RMB (\$9). Nearly all the women traveled with someone to the TBTC, mostly their husband, mother, and/or mother-in-law. On average, women reported that their visit to the TBTC cost 740 RMB (\$119).

The reported levels of satisfaction on 16 items were relatively high, with an overall mean score of 4.76 out of 5. Women reported highest satisfaction scores for the Tibetan-style heated beds (4.86) and the emotional support provided by TBTC staff (4.80), and the lowest score for the provision of follow-up care instructions (4.41). In addition, most women indicated that they would deliver at the TBTC again and that they would recommend the TBTC to a friend (Table 3). In the open-ended responses, women indicated that, in addition to the TBTC facilities, they appreciated that they were supported in following their traditional cultural practices, including displaying amulets or *tangkas* on the wall, burning incense, chanting during labor and delivery, and placing musk or butter on the tongue of the newborn.

4. Discussion

The present findings provide preliminary support for using alternative models of care to reduce maternal mortality in rural and ethnic minority populations in poorer regions of China and other countries. Although women generally voiced a desire to deliver in a safe

environment and perceived fewer logistic constraints in accessing delivery care than in the past, negative perceptions of healthcare facilities and cultural preferences for home-like delivery environments remained common.

A substantial proportion of women (39.5%) indicated that they did not talk to anyone about where to give birth before delivery. This finding raises concerns about the degree to which women and their families are aware of delivery options and have developed a birth plan, especially in the case of an emergency. For women who reported that they were influenced by others, mothers and mothers-in-law appeared to have a prominent role in delivery decision making. Reports that they accompanied women to the TBTC were nearly universal, thus highlighting an important opportunity to communicate with family members (mothers, sisters, mothers-in-law, and husbands) about prenatal and postnatal care of the woman and newborn.

Reliance on personal and public transport and better roads in this area suggest that women might be able to access care more easily than in past years; however, the cost of transportation and services was still mentioned as a concern by women. Although delivery costs are less expensive at the TBTC than at the hospital, continued efforts are needed to reduce costs further through the national health insurance system and to facilitate health facility access among rural families with low incomes. Voucher programs used in other settings [11,12] might be appropriate in this setting to offset the costs of facility delivery and transport.

In addition to evidence indicating the increased uptake of the TBTC services as part of a multilevel approach to maternal health care [8], the present findings point to possibilities for continued efforts toward the promotion of TBTC services, and possibly for other facilities in this and other areas of China and Tibet that serve similar populations. First, the perception that facility deliveries are safer provides a leverage point for future intervention efforts to encourage women to deliver in a hospital or birth center. Second, the high proportion of households with televisions and mobile phones highlights opportunities for continued outreach efforts to promote the TBTC. In addition, women appreciated that the TBTC supported them in following their traditional cultural practices surrounding labor and delivery. This finding suggests that other delivery care settings, such as hospitals, could increase their coverage by permitting these practices in their facilities.

The present study provides information on a population with relatively high maternal mortality rates in a country where maternal mortality rates have fallen considerably. It is also useful because it contributes to a population about which little is known. However, the study has a few limitations. It was conducted as an exploratory study and, as such, provides solely descriptive, self-reported data on a small sample of women. Moreover, owing to continuing political unrest in the area and logistic constraints, women living in closer proximity to the TBTC were sampled; thus, there are no data from the outlying, nomadic populations for whom maternal health and delivery care are even more of a challenge.

Despite these limitations, the present findings highlight possible avenues for further promotion of facility delivery among populations with lower rates of skilled deliveries in China and other low- and middle-income countries.

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Table 1

Sociodemographic characteristics.^a

Characteristic	TBTC users (n=114)
Age, y	25.6 (16–43)
Number of children	1.5 (1–3)
Woman's education	
Did not attend school	47 (41.2)
Attended elementary	39 (34.2)
Attended secondary or higher	28 (24.6)
Husband's age, y	27.9 (20–42)
Husband's education	
Did not attend school	30 (26.3)
Attended elementary	55 (48.3)
Attended secondary or higher	29 (25.4)
Total yearly income, RMB	21 516 (0–201 000)
Living in two-generation household	90 (78.9)
Household media	
Household owns a radio	24 (21.1)
Household owns a television	108 (94.7)
Household owns a computer	15 (13.2)
Household owns a mobile phone	109 (95.6)

Abbreviation: TBTC, Tibetan Birth and Training Center.

 $^{^{}a}$ Values are given as mean (range) or number (percentage).

Table 2

Pregnancy and childbirth perceptions.^a

Experiences and perceptions	TBTC users (n=114)
Delivery experiences of friends and family	
Women who reported a friend or family member delivering child at home	57 (50.0)
Women who reported a friend or family member having complications with childbirth	14 (12.3)
Perceptions of maternity health care and healthcare-seeking b	
One does not need a doctor or nurse present during delivery/childbirth	1.46
I would not be treated well if I went to the prefecture hospital to deliver my baby	2.81
My family knows where to take me in case there is an emergency with my pregnancy or delivery	3.99
I would get care quickly if I went to the prefecture hospital for an emergency	3.75
I would be treated respectfully if I went to the prefecture hospital for pregnancy or delivery care	3.29
If I had an emergency with my pregnancy or delivery, I would be able to get to a healthcare facility quickly	2.52
I worry that if I have a complication with my pregnancy or delivery, my family will not know where to get help	2.65
It is better to deliver at home, than at the hospital	1.58
It is important to have a healthcare professional to assist with my delivery	4.79

Abbreviation: TBTC, Tibetan birth and training center.

 $^{^{}a}$ Values are given as number (percentage) or mean score on a scale of 1 to 5, with 5 indicating strong agreement.

 $b_{\mbox{Responses}}$ were obtained from 112 women.

Table 3

Experiences of TBTC users.a

Experience	TBTC users (n=114)
Decision to deliver at the TBTC	
What factors contributed in choosing the TBTC?	
Having a doctor present at delivery	99 (86.8)
Costs less than hospital	9 (7.9)
Distance to facility	3 (2.6)
Ability for family to stay with you	3 (2.6)
How did you hear about the TBTC?	
Friend	70 (61.4)
Family member	35 (30.7)
Village health worker	4 (3.5)
Taxi driver	2 (1.8)
Township/county hospital doctor	1 (0.9)
Who did you talk to about where to have your baby? L	,
Mother/mother-in-law	46 (40.3)
No one	45 (39.5)
Sister	16 (14.0)
Friend	14 (12.3)
Husband	4 (3.5)
Previous TBTC patients	3 (2.6)
Other (neighbors, taxi, village health worker)	7 (3.5)
Who made the final decision on where to deliver? b	
Mother/mother-in-law	75 (65.8)
Woman herself	30 (26.3)
Husband	16 (14.0)
Father/father-in-law	16(14.0)
Sister	7 (6.1)
Doctor	3 (2.6)
Other (aunt, village lama, neighbor, etc.)	7 (6.1)
Transportation and cost	
Transportation to the TBTC	
Motorcycle or car	57 (50.0)
Taxi/public transportation	41 (36.0)
By foot	5 (4.4)
Transportation time to the TBTC, min	48 (5–600)
Paid for transportation to the TBTC	80 (70.2)
Cost of transportation, RMB	59 (4–960)
Traveled to the birth center with someone ^C	111 (99.1)
Cost of stay at the TBTC, RMB	740 (0–5000)
Satisfaction with TBTC experience	
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Experience	TBTC users (n=114)
Overall satisfaction d	4.76 (1–5)
Would deliver at the TBTC again $^{\it e}$	102 (90.3)
Would recommend the TBTC to a friend $^{\mathcal{C}}$	108 (96.4)

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Abbreviation: TBTC, Tibetan Birth and Training Center.

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 $^{{}^{}a}$ Values are given as number (percentage) or mean (range).

 $b_{\mbox{Woman}}$ could report more than one person.

c_{n=112.}

 $d_{\mbox{\footnotesize{Measured}}}$ on a scale of 1 to 5, with 5 indicating high satisfaction.

e_{n=113}.