

## Food practices among postnatal mothers in a hilly township in Northeastern Nepal

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### ABSTRACT

A descriptive study on food practice among postnatal mothers in a hilly township in northeastern Nepal was carried out with 50 mothers (aged 20-39 years) of different ethnic groups (*Adibasi-Janajati*: 46.0%, *Bahun/Chhetri*: 34.0% and *Dalit* 20.0%). Findings show that this township was representative of a rural area in northeastern Nepal in terms of demographic characteristics like mixed ethnic composition, high illiteracy rate (especially among women), joint family structure in majority of the households (80% of the total participants) and agriculture as the more common occupation (44% of the total participants). It was seen that various factors are responsible for affecting food practices of mothers during the postnatal period in this region. Socio-cultural beliefs are contributory to the food practices followed, like the frequency of meals/day eaten by the mothers. Other factors that affected were: Lower economic status of the family (33% of *Dalit* women and 50% of women who work as laborers were only eating meals two times a day); Support from the family (75% of women living in joint families were eating meals four times a day while 80% of the women living in nuclear families were eating meals three times a day); It also showed more attention and care was given to younger, first-time mothers (younger mothers who were mostly first-time mothers were eating meals four times a day while experienced and older mothers were eating meals three times a day). The study also showed that there are food taboos surrounding specific food items, which were not consumed from 11 days to six months after delivery based on various socio-cultural beliefs and practices.

**Keywords:** Food practice, food taboos, postnatal mothers, hilly region, Nepal.

### INTRODUCTION

The postpartum period is a very special stage in a woman's life and her newborn. For a woman, the experience of first childbirth is probably the most significant and life-changing event.<sup>1</sup> It is not merely a physiological event, but also a social as well as a personal event.<sup>2</sup> It is marked by strong emotions, physical changes, and adjustment to the new role of a mother from that of a woman. Appropriate care is of utmost importance during this period both for the well-being of the mother and her newborn child. However, food taboos during this period can have a negative impact on the health of the mother and child.<sup>3</sup>

Food taboos are present in almost every society based on their beliefs and socio-cultural practices. Women during pregnancy and after child birth follow (or are made to follow) such practices with frequently prescribed and prohibited food items.<sup>3</sup> For instance, there is a strong belief that the postnatal period is a "cold stage" and therefore, mothers must take hot food/drinks.<sup>4,5</sup> Food practices (frequency of eating and the type of food) and food taboos (prohibition of some important food during postpartum phase) can affect the physical condition of mothers across all ethnic groups in Nepal. For example, *Newar* community prohibits salt in food during this period

due to a belief that it causes swelling of the body.<sup>6</sup> Several mothers are restricted from eating different food/drink items such as green vegetables, fruits and milk/curd during this period. This is attributed to illiteracy and lack of knowledge about nutrients present in different food items. In some cases, despite the awareness and knowledge of the importance of nutrition, postpartum women are unable to go against the socio-cultural practices. Food restrictions during postnatal phase have also been reported in other countries like India, Pakistan, Thailand, Vietnam, Malaysia, China, Brazil, Korea and Mexico.<sup>3-7</sup>

Chainpur, a small village in Sankhuwasabha district of Koshi Zone is situated in the Northeastern part of Nepal. According to the 1991 census, the population of Chainpur was 4,933 with 948 individual households. A primary health care center was the only health care service provider available in this hilly area. Like other parts of the country populated with diverse groups of people from various ethnicities, occupations and academic background, people in this village also have their own socio-cultural values, beliefs and practices regarding food for a mother during the postpartum period. This study aims to explore the food practices among postnatal mothers in this village.

## MATERIAL AND METHODS

A descriptive study was carried out in March, 2011 in a hilly township Chainpur, Sankhuwasabha district. Fifty postnatal mothers, aged between 20 and 39 were included in the study. Purposive sampling was done to include different ethnicities living in the area including Bahun/Chhetri, indigenous ethnicities, Adibasi-Janajati, and Dalit. The criteria used to select subjects for this study were mothers permanently residing in this township who had delivered a baby two months before the time of the interview and had either their first or second baby. A pre-designed semi-structured questionnaire was used to conduct individual interviews with all the participants. Prior to the interview, all the participants were informed about the purpose of the study. Apart from the semi-structured interview, a focus group discussion was done to gather further information. All the information collected through the interviews and group discussion was analyzed with Microsoft Excel and inferences were drawn.

## RESULTS

Findings showed that out of the fifty women interviewed 68% (n=34) were aged 20-29 years and 32% (n=16) were aged 30-39 years at the time of the interview. The women interviewed belonged to diverse ethnicities including the Hindu caste, Bahun/Chhetri (n=17, 34%), indigenous ethnicities, Adibasi-Janajati (n=23, 46%) and Dalit caste (n=10, 20%). Among the Adibasi-Janajati, women from the Newar community were the highest in number. Majority of the women (n=32, 64%) were illiterate. The participants were involved in different occupations such as agriculture (n= 22, 44%), business (shop keeping) or civil service (n=12, 24%) and manual labor (n=16, 32%).

During postnatal period, out of all the women interviewed, 29 (58%) of them were eating rice, meat and ghee (clarified butter), 12 (24%) of them were eating rice, ghee and *Juwanoko jhol* (soup prepared from thyme seeds), 6 (12%) of them were eating rice, ghee, vegetable, and meat, only 3 (6%) of them were eating rice, ghee, lentil, meat and vegetables. Over three-fourth of the participants (n=38; 76%) were eating three times a day while the remaining 8 (16%) and 4 (8%) were eating four times a day, and two times a day respectively.

**Table-1:** Frequency of meals/day by post-natal mothers of different age-groups

Variables Age groups	Frequency of meals/day		
	4 times	3 times	2 times
20-29 years (n=34)	19 (55.9%)	12 (35.3%)	3(8.8%)
30-39 years (n=16)	5(31.2%)	8(50%)	3 (18.7%)

Table 1. shows that younger mothers (aged 20-29 years) were found to be eating more frequently (four times a day) compared with older mothers (aged 30-39 years).

**Table-2:** Frequency of meals/day by postnatal mothers of three different ethnic groups (n=50)

Variables Ethnicity	Frequency of meals/day		
	4 times	3 times	2 times
Adibasi-Janajati (n=23)	2 (91.3%)	1 (4.3%)	1 (4.3%)
Bahun/Chhetri (n=17)	2 (11.8%)	13 (76.5%)	2 (11.8%)
Dalits (n=10)	1 (10%)	6 (60.0%)	3 (30.0%)

Findings showed that 91% (n=21) of the Adibasi-Janajati mothers were eating four times a day whereas most of the Bahun/Chhetri, (n=13, 76.5%) and Dalit (n=6, 60%) mothers were eating three times a day.

**Table-3:** Frequency of meals/day by postnatal mothers in different family structure

Variables Family Structure	Frequency of meals/day		
	4 times	3 times	2 times
Joint family (n=40)	30 (75%)	9 (22.5%)	1 (2.5%)
Nuclear family (n=10)	1 (10%)	8 (80%)	1 (10%)

Most of the mothers (75.0%) living in a joint family were eating four times a day while most of the mothers (80.0%) living in a nuclear family were eating three times a day (Table-3).

**Table-4:** Frequency of meals/day by postnatal mothers of different occupations

Variables Occupation	Frequency of meals/day		
	4 times	3 times	2 times
Agriculture (n=22)	11(50%)	10 (45.4%)	1 (4.5%)
Business (Shopkeeper) or civil service (2=12)	4 (33.3%)	7 (58.3%)	2 (8.3%)
Labours (n=16)	3 (18.7%)	5 (31.2%)	8 (50%)

Mothers involved in agriculture occupation were found to be eating four times a day and nearly another half were eating three times a day (Table-3). Only one third of the mothers engaged in business (shop keeping) or civil service were eating four times a day and nearly 60% of them were eating three times a day. On the contrary, only 18.7% of the mothers working as laborers were eating four times a day and half of them were eating only twice a day.

The different types of food taboos among postnatal mothers gathered from the focus group discussions are shown in Table-5. The duration of food taboo ranges from 11 days to six months after delivery depending on the food item. This was associated with the prevalent socio-cultural beliefs.

Table-5: Food Taboos practiced in Postnatal Period

Food items	Beliefs	Duration of food avoiding
Garlic, Black paper and Chilli	Causes abdominal pain, burning urine and bleeding.	1 month
Banana, Papaya and Mango	Develops common cold-like manifestations in both mother and child.	3~6 months
Green vegetable, Cauliflower. Potato, Pumpkin, Green bean, Gourd, Tomato etc.	Believed to be "cold" food; therefore, Causes diarrhea and cough in both mother and child.	1month
Arum ( <i>Pindaloo</i> )	Causes itching in private parts of mother.	1 month
Goat meat and egg	Believed to be too hot " <i>Garmi</i> " food; Causes bleeding.	15 days
Fish	Causes breast engorgement	1 month
Milk and <i>Dahi</i> (yogurt)	Cow's milk is not allowed due to religious reasons <i>Dahi</i> (yogurt) is believed to be cold food.	11 days 1-6 month
Cold water and salt	Causes mother's body to swell.	15 days
Soya bean, bean and peas	Causes gas formation and abdominal distension.	3 months
<i>Dal</i> (lentil) (specially black lentil)	Believed to cause wound infection.	1 month

## DISCUSSION

This descriptive study was done in a hilly township with demographic characteristics that are representative of this region. The participants included in this study represented the mixed ethnic composition of Nepalese society residing in the northeastern region, and were broadly divided into three groups i.e. *Adhibasi-Janjati*, *Bahun/Chhetri* and *Dalit*.<sup>19</sup> We found that 80% of the participants were living in joint families, which is a common family structure in Nepali households. We also found that majority of the participants were involved in agriculture which is the most common occupation in Nepal. Similarly, two-third of the women interviewed were illiterate. This reflected on the high illiteracy rate in Nepal where about 40% of the people in rural areas are illiterate and women make up the majority of it.<sup>20</sup> Thus, in terms of demographics, this study focused on a township that was representative of the northeastern region of Nepal, which helped us learn about the food practices and taboos among postnatal mothers in this region.

One of the major findings of this study is that among the three broadly categorized ethnic groups, the *Adibasi-Janajati* group has the highest frequency of meals/day by mothers during the postnatal period. 91.3% of the *Adibasi-Janajati* were eating four times a day whereas most of the *Bahun/Chhetri* (76.5%) and *Dalit* (60%) were eating three times a day. Less frequent meals by *Bahun/Chhetri* and *Dalit* mothers might be due to the socio-cultural practices and beliefs in their respective communities. In our sample, most of the *Adibasi-Janajati* group included participants from the *Newari* community. It may be the case that in the *Newari* community, the number of meals per day for mothers in postnatal period is valued more than other communities. Thus, socio-cultural beliefs in different ethnic groups and communities may have an impact on the food practices and taboos followed by mothers during postnatal period.

Interestingly, nearly one-third *Dalit* mothers were eating only two times a day. In Nepal, *Dalit* communities have

low human development index compared to other ethnic groups.<sup>24</sup> Thus, the lower frequency of meals/day by mothers during postnatal period among *Dalits* may be attributed to their overall disadvantaged and lower economic status. Similarly, 50% of the mothers working as labourers were also eating only twice a day. On the contrary, most of the women engaged in occupations like agriculture or business (shop keeping) or civil service were either eating four or at least three times a day. This may be due to the availability of food in households with mothers engaged in agriculture and also sufficient time to prepare meals. Thus, we may conclude that women engaged in agriculture or business occupations may be at a slightly better economic standing compared to women working as labourers. Thus, the economic background of the family may be one of the factors that contribute to the frequency of meals/day by mothers during postnatal period.

Present study also revealed that younger mothers (aged 20-29 years) were found to be eating more frequently (four times a day) compared with older mothers (aged 30-39 years). Since in most cases of the younger mothers interviewed, they had just had their first child, the higher frequency of meals/day among the younger mothers may have been a sign of care given to the first-time mother and her child by the family.<sup>18</sup> On the contrary, older mothers had to share food with their first born as well as other family members. They are assumed to have experienced motherhood in the past so they would know how to care for themselves and their newborn while also managing her other household responsibilities.

During the postnatal period family plays a very crucial role in providing care and support to the mother and her newborn child.<sup>3</sup> Mothers who were living in joint families were found to be eating meal four times a day whereas mothers living in nuclear families were eating meals three times a day. In joint families, the several members share responsibilities, so there are more caregivers and responsibility bearers to support new mothers. In nuclear families where one woman has to manage all her household chores in addition to caring for her newborn

and herself, she may not have enough time for preparation of meals as opposed to women in joint families who have more help available. This may be the case why most mothers in nuclear families only managed to have three meals a day while their counterparts in joint families had four per day.

The duration of food taboo ranged from 11 days to six months after delivery depending on the type of food item<sup>18</sup>. This was associated with socio-cultural beliefs and practices prevalent in the community.<sup>19</sup> Illiteracy and unawareness may also have caused food taboos, which further led to nutritional deficiencies, particularly vitamin and iron deficiencies in both postnatal mothers and their babies.<sup>20,21</sup> This, in turn, might be contributing to high maternal and child morbidity and mortality in Nepal.<sup>20,22</sup> However, findings showed that postnatal mothers were fed high calorie food items such as rice, meat and ghee (clarified butter), *Juwanoko jhol* (soup prepared from thyme seeds), which help in maintaining her physical condition.<sup>18</sup>

This paper identifies several factors that contribute to the food practices of mothers during postnatal period in northeastern region of Nepal. Socio-cultural values and beliefs seem to contribute highly in determining food practices like the frequency of meals/day for mothers. Apart from that, the economic background of the family which directly relates to how much food is available to the mother and the occupation she is engaged in which relates to how much time she has to prepare the meal also seems to contribute to the frequency of meals/day for mothers. Other factor that may also affect is support from the family in providing more meals to the mother or sharing her responsibilities to free her up to prepare more meals (like in the case of joint families as opposed to nuclear families). First-time mothers also seem to be given more care and more number of meals/day during postnatal period than second-time (experienced) mothers.

It can be concluded that postnatal mothers must be made aware of food habits (frequency of food eating and food taboos) to avoid nutritional deficiencies during a very crucial phase of her life as well as her child.<sup>22,23</sup> Further studies should be done on a large scale to find out food practices of different ethnic groups and communities on our society so that effective ways to raise awareness among new mothers can be devised.

#### REFERENCES

1. WHO (World Health Organization). Report of WHO consultation on the needs of women and their newborn during postpartum period. WHO, Geneva 1998.
2. Helman C. Culture, health and illness. 4th edition. Butter Worth Heineman 2001: 156-169.
3. Sundararaj R, Pereira SM. Dietary intakes and food taboos of lactating women in a South Indian community. *Trop Geogr Med*1975; 27:189-93.

4. Ludman EK, Kapil U, Sood AK, Gaur DR. Nutritional beliefs among *Anganwadi* workers. *Indian Pediatr*1992; 29:67-71.
5. Parmar A, Khanpara H, Kartha G. A study on taboos and misconceptions associated with pregnancy among rural women of surendranagar district. *Healthline*2013; 4 : 40-43.
6. <http://web.comhem.se/~u18515267/CHAPTERIII.htm>.; FOOD IN NEWARI CULTURE
7. Mahmood S, Atif MF, Muejeb SSA, Bano N, Mubasher H. Assessment of nutritional beliefs and practices in pregnant and lactating mothers in an urban and rural area of Pakistan. *J Pakistan Med Assoc*1997;47:60-2
8. Ali NS, Azam SI, Noor R. Women beliefs and practices regarding food restrictions during pregnancy and lactation: a hospital based study. *J Ayub Med Coll* 2004; 16 (3):29-31
9. Kaewsarn P, Moley W, Creedy D. Traditional practices among Thai women. *J Adv Nursing* 2003; 41: 358- 366.
10. Thi LM, Pasandartorn W, Rauyajin O. Traditional postpartum practices among Vietnamese mothers. 2004 <http://www.researchgate.net/publication/255601001>
11. Koon PB, Peng WY, Karim NA. Postpartum Dietary Intakes and Food Taboos Among Chinese, *Malasian J Nutr*2005;11: 1-21.
12. Hishamshah M, Ramzan M bin, Rashid A. Belief and practices of traditional post-partum care among a rural community in Penang, *Malaysia J Third World Med* 2010: 9: <https://ispub.com/ITWM/9/2/4210>
13. Liu N, Mao L, Sun X, Liu L, Chen B, Ding Q. Postpartum practices of puerperal women and their influencing factors in three regions of Hubei, China. *BMC Public Health* 2006; 6: 274 doi:10.1186/1471-2458-6-274
14. Raven H J, Chen Q, Tolhurst J R, Garner P. Tradition beliefs and practices in the postpartum period in Fujian Province, China. *BMC Pregnancy and Childbirth* 2007; 7:8 doi:10.1186/1471-2393-7-8
15. Fishman C, Evans R, Jenks E. Warm bodies, cool milk: conflicts in postpartum food choice for Indo-Chinese women in California. *SocSci Med*1988; 26:1125-32.
16. Trigo M, Roncada MJ, Stewien GT, Pereira IM. Food taboos in the northern region of Brazil. *Rev Saude Publica*1989; 23: 455-64.
17. Kang KJ, Lynn LL. Food beliefs and diets of pregnant Korean-American women. *J Amer Diet Assoc* 1992;92: 1519-20
18. Santos-Torres MI, Vásquez-Garibay E. Food taboos among nursing mothers of Mexico. *J Health Nutr*2003; 21:142-9.
19. Shakya BK. Cultural practices during postnatal period in Tamang community in Bhaktapur District of Nepal. *J Nepal Health Research Council*2005; 4 (2): 1-6.
20. Nepal Human Development Report 2014. Government of Nepal/UNDP 2014.
21. Nepal Demographic and Health Survey 2011.
22. MOHP DOHS (Ministry of Health and Population, Department of Health Services). Health Sector Strategy for Addressing Maternal Under Nutrition 2013-17, 2013.
23. Bhandari TR. Maternal health issues of Nepal - Ways Forward. *J Health Allied Sci* 2012; 2 (1): 64-69
24. Kim-Godwin YS. Postpartum Beliefs and Practices among Non-Western Cultures. *Amer J Maternal/Child Nursing* 2003; 28: 74-78
25. Rana G. Postpartum care practice among postnatal mothers in Tharu community, Kailali District. *J Chitawan Med Coll*2013; 3: 24-26