Domicile or Hospice? Choices for the Site of Delivery

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Abstract

**Background:** Besides expert attention, it is essential that mothers deliver their babies in a suitable location so as to lessen the risk of complications that may be problematic to mother and child. Since then and even now the place of delivery and its determinants have been on the research agenda.

**Objective:** To explore the linkage between socio-demographic variables and place of delivery and to look at the reasons for delivering at home.

**Methodology:** This cross-sectional study applies systematic random sampling method. Semi-structured questionnaire was used to collect information and analyzed by SPSS-16.0. Results were obtained by frequency distribution and cross-tabulation of the variables. Chi-square test was also performed.

**Results:** Result shows that 34% delivered their baby at institute and 66% at home. Trend of home delivery slowly goes up higher with their age. Most women (73%), having higher educational level had practiced institutional delivery. The preference for delivery place was influenced by husband occupation, ANC visit and household income; lower the income higher the percentage of home delivery (80%). More than 72% delivery was conducted by non-health personnel.

**Conclusion:** Although the government of Nepal has initiated new strategies, through safe delivery incentive programme, to promote hospital delivery this is not followed substantially even in the semi-urban area. In order to bring about behavioral changes and to improve the situation of maternal morbidity and mortality socio-demographic and socio-cultural factors needs to be addressed in public health intervention programs.

Keywords: Site of delivery; Home delivery; Domicile; Hospice

Background

Reducing maternal mortality depends on a functioning health system that provides skilled delivery services and essential obstetric care. Besides expert attention, it is essential that mothers deliver their babies in a suitable location so as to lessen the risk of complications that may be problematic to mother and child. Although the government of Nepal has initiated new strategies, i.e., through safe delivery incentive programme, to promote hospital delivery this is not followed substantially even in the semi-urban area. Since then and even now the place of delivery and its determinants have been on the research agenda. Furthermore it was observed that a number of socio-demographic characteristics of the individual affect the underlying tendency to seek care.

Objective

To explore the linkage between socio-demographic variables and place of delivery and to look at the reasons for delivering at home.

Methodology

**Study design:** A cross-sectional descriptive study

**Study area:** Makwanpur district, East Nepal

**Study sample:** Women aged between 15-49 years who visited screening camp

**Sampling procedure:** Initially, each screening camps was identified as a cluster. Then, all the women of cluster were listed and given number to those women who had delivered their babies within 1 year. Ten sample has been chosen from each cluster (random systematic). To begin with the sampling ratio, K/n (K=total population size/n=size of desired sample) and the random start was identified. Then each sample was extracted by choosing every kth entry. After taking an informed verbal consent, an interview was taken with the help of semi-structured questionnaire to collect information.

Statistical tools and software used:** The collected data were coded, entered into SPSS database and analyzed with the computer software SPSS version 16. Results were obtained by the frequency distribution and cross tabulation of the variables. Chi-square tests were performed to determine whether there were statistically significant associations between the place of delivery and socio-demographic variables.

Results

**Demographic characteristics:** Hundred respondents were interviewed using the questionnaire during the study period (Table 1). The majority i.e., 57% of respondent were from the age group 21-30. The mean age of respondents was 25.48 years with range varying from 17 to 42 years. The representation of ethnic group was comparatively higher (i.e. 46%) than the Brahmin and Chhetri (i.e., 35%). Majority (48%) of the respondents follow Hindu religion. More than half i.e., 57% of the family was joint type. Out of 100 respondents, only 27% are illiterate and the rest 73% were literate. Agriculture is the basis for the subsistence of the people of Nepal, out of 100 respondents 53% involved in agriculture and the rest 22% of the respondents are engaged in other non-agricultural pursuits like services (7%), wage labour (15%) and rest 25% were housewife. Household income was measured to access income because it was believe that the household income was measured more accurately than individual income and serves as an indicator of household resources that could be applied to healthcare. Sixty (60%) households are lower class by Nepalese standards with...
an average monthly income up to 5000 Nepalese rupees. Twenty five (25%) households are middle class with an average monthly income between 5,001 – 10,000 rupees and 15 (15%) households are upper class with an average monthly income above 10,000 rupees.

**Place of delivery:** Out of the sample population, 34% delivered their baby at institute and 66% at home (Figure 1). It was found that delivery place varies among the respondents, who deliver at home. Out of 66 home deliveries, 79% occurred inside the home and 21% outside the home i.e., in the yard. However, still 6% women give birth in shed or near the shed (Figure 2).

Result shows that the trend of home delivery was slowly goes up as higher their age. Within age group, among the respondents, 54.2% women of low age group, i.e., below 20, deliver their baby at home while all the women of higher age group i.e., above 40, deliver at home. Looking at the data from (table 2), it can be concluded that lower the age group lower the chance of home delivery, higher the age groups higher the chance of home delivery. However the association between age and place of delivery is found to be statistically insignificant (p = .091).

Regardless their occupation the practice of home delivery was highly prevalent in the study area. There is no clear relationship emerged between place of delivery and occupation of the respondents. Moreover, within occupation, the practice of home delivery ratio seems high among those who involves in wages labour. However, the association between occupation and the place of delivery was found statistically significant (p = < 0.001). Furthermore, the home delivery ratio is also influenced by the husband’s occupation. The home delivery ratio also seems high whose husbands involves in wages labour (83%). The association between husband’s occupation and the place of delivery was also found to be statistically significant (p = < 0.017).

In the study area, percentage of home delivery was found high among schedule caste (73.7%) and ethnic group like Tamang and Praja (Chepang) (71.7%). On the other hand the percentage of home delivery was found relatively low among Brahmin and Chhetri (54.3%). But, the association between the caste and place of delivery was found to be statistically insignificant (p = .191).

It was found that income has great effect on choosing delivery place and decision making. Results from this study reports practice of

![Figure 1: Distribution of respondents by place of delivery.](image1)

![Figure 2: Distribution of respondent by place of home delivery.](image2)
home delivery was significantly higher among families with an average monthly income less than 5,000 rupees (p = .001). It was found that type of family has no effect on choosing the place of delivery.

Type of delivery was influenced to some extent by ANC visit. Of the total 100, 42% respondents had visited health institution for antenatal checkups up to 4 times and rest 58% visited less than 3 times. Among the women who visited hospital for ante-natal checkups (ANC) up to 4 times, 76.2% delivered their baby at health institution and 23.8% at home. Similarly, 58.6% had practiced home delivery and 41.4% practiced institutional delivery among the women who go for ANC visit less than 3 times. Increase in ANC visit decreases the chances of home delivery. From the data it could be said that ANC visit promote to have institutional delivery.

Causes of home delivery: In Nepal, still more mother prefer to deliver their baby at home than in the hospital due to various reasons as presented in the table 3.

Out of 100 delivery 66 percent of women were delivered at home. Out of total 66% respondents, who delivered their baby at home, 35% of them said they delivered their baby at home because of normal condition during delivery. Similarly 26 percent feel easy to deliver at home, 12% pointed out lack of money and 9% said lack of transportation was the main cause of delivering their baby at home. The socio cultural factor such as shame too seems as a major hindrance.

Support during delivery at home: Out of 66 home deliveries, 72 percent of the delivery is conducted by non health personal like family member, relatives and neighbour where as only 12% of delivery conducted by female community health volunteer (FCHV) and traditional birth attendant (TBA) in community. Trained health personal has conducted only 8 percent of delivery. Other 8 percent women have delivered baby without any assistance (Table 4).

Among the 66 delivery only 5 women delivered their baby without any assistance. Among them 60% of women said that they need no help while delivery. Similarly 40 percent of women said because of the shame or Laaz they didn’t call anyone for help.

| Demographic Characteristics of the respondents | Institutional | Home delivery |
|-----------------------------------------------|--------------|--------------|
|                  | Frequency | Percentage | Frequency | Percentage |
| **Age group**   |           |            |           |            |
| Up to 20        | 11        | 45.8       | 13        | 54.2       |
| 21- 30          | 21        | 36.8       | 36        | 63.2       |
| 31-40           | 2         | 11.8       | 15        | 88.2       |
| Above 40        | 0         | 0          | 2         | 100        |
| **Education**   |           |            |           |            |
| Illiterate      | 2         | 7.4        | 25        | 92.6       |
| Primary level   | 10        | 32.3       | 21        | 67.7       |
| Secondary level | 11        | 40.7       | 16        | 59.3       |
| SLC and above level | 11   | 73.3       | 4         | 26.7       |
| **Occupation**  |           |            |           |            |
| Agriculture     | 13        | 24.5       | 40        | 75.5       |
| Housewife       | 10        | 40         | 15        | 60         |
| Wages labour    | 4         | 26.7       | 11        | 73.3       |
| Services        | 7         | 100        | 0         | 0          |
| **Husband occupation** |       |            |           |            |
| Agriculture     | 9         | 28.1       | 23        | 71.9       |
| Services        | 17        | 58.6       | 12        | 41.4       |
| Business        | 1         | 20         | 4         | 80         |
| Wages labour    | 4         | 16.7       | 20        | 83.3       |
| Foreign employment | 3      | 30         | 7         | 70         |
| **Religion**    |           |            |           |            |
| Hindu           | 17        | 35.4       | 31        | 64.6       |
| Buddhist        | 11        | 28.9       | 27        | 71.1       |
| Christian       | 6         | 42.9       | 8         | 57.1       |
| **Ethnicity**   |           |            |           |            |
| Brahmin & Chhetri | 16     | 45.7       | 19        | 54.3       |
| Ethnic group    | 13        | 28.3       | 33        | 71.7       |
| Schedule cast   | 5         | 26.3       | 14        | 73.7       |
| **Household Income** |       |            |           |            |
| Up to 5000      | 12        | 20         | 48        | 80         |
| 5001 to 10000   | 12        | 48         | 13        | 52         |
| Above 10000     | 10        | 66.7       | 5         | 33.3       |
| **Type of family** |       |            |           |            |
| Nuclear         | 14        | 32.6       | 29        | 67.4       |
| Joint           | 20        | 35.1       | 37        | 64.9       |
| **Number of ANC visit** |       |            |           |            |
| Up to 4 times   | 32        | 76.2       | 10        | 23.8       |
| Less than 3 times | 24      | 41.4       | 34        | 58.6       |

Table 2: Place of delivery by respondents’ demographic characteristics.
Discussion

Nepal has a unique kaleidoscopic diversity in its racial, ethnic and cultural features. This is the source of cultural and ethnic identity and socio-cultural practices. Indeed different delivery practices were performed as per the social and cultural norms and values. Giving birth to baby is perceived as natural phenomena. In addition, institutional delivery is looked-for only in the problematic situation. Due to this cause home delivery practice is still high in the study area.

This study shows that home deliveries are not only common in rural areas but also in semi-urban areas where maternity services are relatively easily accessible. Alike this study earlier study [1,2] also reported that the proportion of home deliveries increased the farther one gets from urban areas. The report by Nepal demography and health survey (NDHS) also reveals the trend of home delivery is higher than institutional delivery in Nepal. The figure 1 depicts that out of 100 deliveries two-third (66%) of women delivered at home while only 34 percent delivered at hospital. This trend of home delivery i.e., 66% is far less than the national figure i.e., 81% [3]. Most deliveries took place either in a separate room or some place inside the house which is similar to the report from a Nepal study [4].

Results show that trend of home delivery was slowly goes up as higher their age. Higher age group wishes to deliver at home because of past experience and shame. It was also noted that education has greater effect on behavior of seeking delivery places. Results show that trend of home delivery was slowly goes up as number of ANC visit. ANC visit can also help the people to access a trained health personnel or a midwife during delivery and this kind of information can be sought at the time of ANC visit. For this reason the type of delivery was also influenced, to some extent, by ANC visit. Furthermore, various studies show that ANC visit can also help to go for institutional delivery. Previous studies [8,9,10] have shown that ANC promotes institutional delivery, similar finding was observed in this study area as well.

Similar findings have been reported by the study from NDHS [3] that most of the births are assisted by family members and neighbours, with only one-fifth of deliveries attended by health workers. Birth attended by skilled birth attendants (doctors, nurses and auxiliary nurse midwives) are as low as 11%. Another 10% birth were attended by traditional birth attendants (TBAs), who may be trained or untrained, however they do not qualify as skilled birth attendants [3]. Various studies [1,2,6] conducted in rural Nigeria confirmed the extremely low presence of skilled birth attendants, like doctors, nurses and auxiliary nurse midwife during delivery, who were not found present at delivery in our study result either.

From the finding it can be said that majority of women deliver their baby at home because of normal condition during delivery. Women think that institutional delivery is not necessary if there is no problem during child birth. If there is bleeding, retained placenta, urine retention or high blood pressures they perceive as problem if such problems happen during child birth only then they go health institution for delivery. Besides this, they think home is the easiest place for them to deliver baby. The socio cultural factor such as shame too seems as a major hindrance. As in the earlier studies [4,7] in this study the reasons for home deliveries were related to perception of home deliveries as easy, convenient, shame and fear as well as lack of money and transport.

As specified in previous studies [1,3,4] findings from this study also reveal that 8% of birth had delivered without any type of assistance at all. Not only the shyness and lack of knowledge about reproductive health was the cause of alone delivery. Instead, in the village context, people has to go for farming in their cultivated land and also due to geographical reason one house is situated far from another house and sometimes it was difficult for family member and neighbour to reach in time that’s why percentage of alone delivery is remarkable.

Pregnant women need to know about how to access a trained health personnel or a midwife during delivery and this kind of information can be sought at the time of ANC visit. For this reason the type of delivery was also influenced, to some extent, by ANC visit. Furthermore, various studies show that ANC visit can also helps to go for institutional delivery. Previous studies [8,9,10] have shown that ANC promotes institutional delivery, similar finding was observed in this study area as well.

Conclusion

Despite the continuous effort made by the government, to promote institutional delivery, home delivery is still prevalent even in the semi-urban area of the Nepal. It was found that socio-demographic and socio-cultural factors are somehow associated with preference for delivering at home. Since these semi-urban women perceived home delivery as easy and convenient, increasing skilled birth attendance during delivery could be an important issue. This study provides information about the determinants of home and institutional delivery and the reason for delivering the baby at home. This information will assist in planning public health intervention programs aimed to bring about changes in behavior so as to promote institutional delivery in order to improve the situation of maternal morbidity and mortality.

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