## Husband's Participation in Pregnancy Care: the Voices of Nepalese Men


#### Abstract

Using the data drawn from Nepal Demographic health Survey (2006), this paper examines the determinants associated with husband's participation in pregnancy care in Nepal. Analyses reveal that a majority of husbands (more than 40.0 percent) accompany partners at ANC and involve in various components of birth preparedness. Multivariate analyses indicate that education and socioeconomic status are positively associated. For example, men with above secondary education are 2.3 times more likely to involve in birth preparedness than their uneducated counterparts. Similarly, partner's autonomy is negatively associated, while joint decision is positively associated with husband's involvement in pregnancy care. Therefore, formal and informal education may have positive influence on husband's participation. Likewise, one of the immediate steps is to develop strategy that encourages couples in joint decision making in reproductive health., which not only promotes husbands to be more involved in pregnancy care but also other aspects of healthy practices.


## Introduction

Like family planning, pregnancy care is a key component of reproductive health, which comprises different stages of pregnancy outcomes: antenatal, delivery and postnatal care. Pregnancy health is physical, mental and social wellbeing of women immediately before (antenatal), during pregnancy/delivery (natal) and after childbirth (post natal) (WHO, 2000). Thus pregnancy care means the provision of essential care of pregnant women to ensure safe delivery including postnatal care and treatment of complications of mother and newborns. Complications during pregnancy and childbirth are leading causes of death and disability among women of reproductive age in developing countries. These complications, which can occur at any time during pregnancy and childbirth without signs, require prompt access to proper obstetric services. Most of the deaths and disabilities due to childbirth are avoidable because the medical interventions are well known and inexpensive. Immediate and effective care before, during and after delivery can make the difference between life and death for women. Therefore, pregnancy care can prevent adverse outcomes when it is sought in time. The well being of mother and baby depends on the pregnancy care that a mother receives during her pregnancy.

Men's ${ }^{1}$ participation in pregnancy care should not be interpreted in terms of physical involvement during antenatal, delivery and postnatal check up but they can also help partner ${ }^{2}$ indirectly. For example, men can help in domestic work, advice for immunization and consumption of iron and folic acid tablets, advice on appropriate nutrition and rest during the time of pregnancy. In addition, they can support their partners to buy vitamins and special foods (especially food rich in iron and fortified with vitamin A). Oropesa et al. (2000) in their study among Puerto Ricans on US have shown that husband's psychological support is positively associated with good pregnancy output. Likewise, husbands not only support their partners by accompanying and providing financial resources during medical check up when they seek care but also play important role in decision making in various stages of pregnancy health. Although Varkey et al. (2004) have not examined the casual relationship between demographic, socioeconomic and spatial factors and men's involvement in maternity care in India, men with better education and high exposure to mass media are more likely to participate in maternity care. Likewise, Sharma (2003) has not also attempted to study a casual relationship between information, education and communication and husband's participation in pregnancy care; he argues that IEC is one of the influential factors encouraging men to participate in partner's pregnancy care in India. In the same way, an African study on "Men's role in emergency obstetric care in Nigeria" concludes that age, education, religion and mass media exposure (especially television) and number of wives show a statistically significant association with husband's involvement in obstetric care. It further generalizes that the older and educated men are more likely to know the danger signs than the younger and uneducated ones (Odimegwu et al. 2005).

Although the health policy in Nepal is for men and women to share an equal responsibility, men's participation in pregnancy care is still low due to social and cultural taboos and inhibition. Husband's support for women during pregnancy, which is a critical time for them have not yet been promoted effectively in Nepal. Existing Nepalese literatures document a little information about husband participation in pregnancy care. KC (2007) has shown that about 60.0 percent of husbands suggest their partners for

[^0]antenatal check up, while more than 62.0 percent accompany during antennal check up. Likewise, one in three husbands followed by nine in ten husbands advice institutional delivery and accompany at the time of delivery respectively. In addition, more than half of the husbands help their wives in household's and other activities during postpartum period.

From the above overview, it is clear that a large number of factors (demographic, social, economic, religious and cultural) are significantly associated with husband's participation in pregnancy care. Therefore, it is essential to recognize the determinants influencing husband's participation in pregnancy care. Thus, this paper aims to investigate the factors associated with husband's participation in partner's pregnancy care. Most of previous studies on men's participation in reproductive health utilize the information obtained from female. But this study utilizes the information obtained from men's response from Demographic and Health Survey (2006). As far my knowledge, none of the previous study has worked out to study the determinants associated with husband's participation in partner's pregnancy care by utilizing a nationally representative data in Nepalese context.

## Data and Methods

The analyses presented in this paper are based on Nepal Demographic and Health Survey (NDHS), which was conducted between February and August 2006. It is a nationally representative sample survey covering both rural and urban households. The area sampling frame for the survey was based on enumeration areas (EAs) maps prepared by Central Bureau of Statistics (CBS) for the conduct of population Census 2001. The primary sampling unit (PSU) for the 2006 NDHS is a ward or groups of wards in rural areas and sub-ward in urban areas. Sample selection were done in two stages: First 260 PSUs (82 in urban areas and 178 in rural areas) were selected using systematic sampling with probability proportional to size (PPS); second, systematic samples of about 30 households per PSU on average in urban areas and about 36 households per PSU in rural areas were selected. A total of 10793 women aged 15-49 and 4397 men aged 15-59 were interviewed from 8707 households. Although, DHS data set provides information about
men's role in maternal health in both individual recode and male recode, this paper utilizes the information obtained from male recode due to nature and scope of this paper.

Both bivariate and multivariate analyses have been used to investigate the determinants associated with husband's participation in partner's pregnancy care. Bivariate analysis has only been conducted to find the significant predictors that are used as predictors in multivariate analysis. Therefore, the tables of bivariate analyses have not shown in the article. Logistic regression models have been used to assess the relationship between husband's involvement and socio-demographic, cultural, religious, partner's autonomy and other spatial factors. Only the associations, which are statistically significant up to 10.0 percent level of significant, will be discussed. A statistical Package for Social Sciences (SPSS) version 13.0 has been used to analyze the data.

## Measurement of Variables

## Response Variable

It is difficult to measure husband's participation in partner's pregnancy care by using a single indicator. Although it is multidimensional concepts, this paper utilizes, husband's attendance at the time of antenatal check up and husband's participation in birth preparedness as the measure of husband's participation in pregnancy care. All these involvement behaviors have been measured based on the men's reports. To measure husband's presence at ANC, they were asked whether they were present at the time of partner's ANC. Likewise, to measure husband's participation in birth preparedness, they were inquired if they had made some arrangements like: saved money for delivery, arranged for transport, managed blood donor if required, contacted health worker to help with delivery and bought safe delivery kit. Based on these responses, a single variable (husband's participation in birth preparedness) has been constructed having two responses: no (involved in none of the activity) and yes (involved in at least one activity). In addition, a summary measure of husband involvement has also been created. Husband's involvement is high if they involve in both activities (ANC and birth preparedness) and low if they either do not participate in any activities or at least one activity.

## Independent variables

Among the independent variables, age is measured by the man's completed age in years at the time of the survey. Age is classified into three groups: 15-24, 25-39 and 40 years and above. Educational attainment of the respondent refers to whether he is literate. The last level of education attained successfully by the respondent decides respondent's level of education. According to education, men have been classified into three groups: No education, primary and secondary and above. Mass media exposure and partner's autonomy are composite indices and their measurement is explained in construction of indices. Wealth index is summary measure of socio-economic status of the respondent. The survey data categorizes it into five categories (poorest, poor, middle, rich and richest), but for the analytical purpose, it is categorized into three categories: poor (combining poorest and poor), moderate and rich (combining rich and richest). In this article, occupation refers whether the respondent is currently working or not. It encompasses three groups: not working, working in agriculture and non agriculture sectors. Religion is quantified by means of respondents' possession of particular religious belief. Although they survey has collected information on various religious groups (Hindu, Buddhist, Christian and Muslim), it is grouped as Hindu and others for analytical purpose. Place of residence is a usual place of living at the time of survey and has been grouped as rural and urban. Children ever born refers the total number of children born.

## Construction of indices

## A. Mass Media exposure

Mass media exposure is a composite measure, which has been computed based on the information whether respondent listens to radio daily, watches television at least once in a week and reads newspapers at least once in a week. It comprises four categories: not exposed to any media, at least one, any two and all three media but for the analytical purpose, it has been further categorized into three groups; low (those who have either not exposed or exposed to any one), moderate (exposed to any two) and high (exposed to all three media).
B. Partner's autonomy

It is difficult to choose a suitable indicator for measuring women's empowerment. However, women's autonomy is measured based on the decision variables related to
households and their health care activities. For the construction of partner's autonomy, it utilizes six questions, which give an information on final say about large household purchases, household purchase for daily needs, final say on visits to family or relatives, deciding what to do with money wife earns, final say on the number of children to have and deciding how to spend money. On the basis of this information, three decision making index variables ranging from 0-6 have been created representing: (a) the number of decisions in which the partner alone final say (b) the number of decision in which husband and partner final say and (c) the number of decisions in which the husband alone final say. Variable (a) represents more empowered (in which the final say totally rests on partner). Likewise, variable (b) represents more gender equal couples in which both (husband and partner) have equal responsibilities of giving final decision. In contrast, variable (c) represents disempowered (in which husband dominates on final say).

## Results

Table 1 shows the percent distribution of dependent variables. As revealed by the table, more than 40.0 percent of men accompany partners at ANC. Regarding their involvements in birth preparedness, 48.5 percent save money for delivery, while more than 5.0 percent arrange for transport. Likewise, 7.9 percent contact health workers for delivery and 8.9 percent bring safe delivery kit (table is not shown). On overall, about 55.0 percent of men participate in birth preparedness. Likewise, about one third of husbands participate in both activities (antenatal check up and birth preparedness).

Table1: Percent distribution of dependent variable (husband's participation)

| Husband presence at ANC | 40.5 |
| :--- | :---: |
| Husband's involvement in Birth Preparedness* | 54.9 |
| Husband's Participation in Pregnancy care | 32.6 |

*Includes the percentage of husband who involve at least one of any 5 activities Source: NDHS 2006

Table 2 shows the percent distribution of independent variables selected for analysis. A less proportion of men (about 14.0 percent) are married at age 15-24 as compared with other age groups. Among men, 27.1 percent have no education, while more than 40.0 percent of men have secondary and above education. In terms of mass media exposure, 12.0 percent have low exposure, while more than 57.0 percent have high exposure to mass media. Regarding wealth index, more than 39.0 percent of men are
from poor socioeconomic background, while 43.2 percent are from rich socioeconomic background. As reported by men, 43.3 percent partner's are more empowered (have autonomy), while 55.2 percent are disempowered. Likewise, 9.0 percent of men do not have any child, whereas more than 62.0 percent have three or more children. The sample comprises a higher proportion of respondents from rural and Terai region.

Table 2: Percent of ever married men by selected background characteristics, Nepal, 2006

| Characteristic | Percent | Characteristic | Percent |
| :--- | :---: | :--- | :---: |
| Age |  | Hindu | 86.5 |
| $15-24$ | 14.2 | Other | 13.5 |
| $25-39$ | 42.9 | Partner's autonomy* |  |
| $40+$ | 42.9 | More empowered | 43.3 |
| Education |  | More gender equal | 64.2 |
| No education | 27.1 | Not empowered | 55.2 |
| Primary | 32.2 | CEB |  |
| Secondary and above | 40.7 | No birth | 9.0 |
| Mass Media Exposure |  | Up to two | 28.8 |
| Low | 12.0 | Three or more | 62.2 |
| Moderate | 30.6 | Place of residence |  |
| High | 57.4 | urban | 26.9 |
| Wealth Index |  | rural | 73.1 |
| Poor | 39.9 | Eco-regions |  |
| Middle | 16.9 | Mountain | 13.8 |
| Rich | 43.2 | Hill | 36.8 |
| Religion |  | Terai | 49.4 |

* Partner's autonomy comprises three variables

Source: NDHS

## Husband's presence at the time of antenatal check up

Table 3 presents the odds ratios from logistic regression models of husband's presence at the time of antenatal check up. Age, education, wealth index, partner's autonomy and children ever born (three or more) are significantly associated with husband's presence at the time of antenatal check up. Age, education and wealth index are positively associated with husband's presence at the time of antenatal check up. For example, men with secondary and above education are 2.3 times more likely to accompany partner at antenatal check up than their uneducated counterparts. Likewise, men from rich household are more than 2.0 times likely to accompany partners at antenatal check up than men from the poor household. It is interesting to note that that there is a negative association between partner's autonomy and husband's involvement at
the time of antenatal check up. Likewise, children ever born and husband presence at the time of antenatal check up are also negatively associated.

Table 3: Odds ratios from logistic regression models of husband's presence at the time of antenatal check up by selected background characteristics, Nepal, 2006

| Characteristic | Odds ratio | Characteristic | Odds ratio |
| :---: | :---: | :---: | :---: |
| Age |  | Partner's autonomy |  |
| 15-24 ( r) | 1 | More empowered | 0.7** |
| 25-39 | 1.3* | More gender equal | 1.2 |
| 40+ | 1.5* | Not empowered | 0.8 |
| Education |  | CEB |  |
| No education (r) | 1 | No birth ( r ) | 1 |
| Primary | 1.6* | Up to two | 0.8 |
| Secondary and above | $2.3 * *$ | Three or more | $0.5 * * *$ |
| Mass Media Exposure |  | Place of residence |  |
| Low ( r ) | 1 | urban (r) | 1 |
| Moderate | 0.7 | rural | 0.8 |
| High | 0.6 | Eco-regions |  |
| Wealth Index |  | Mountain (r) | 1 |
| Poor (r) | 1 | Hill | 1.2 |
| Middle | 1.5* | Terai | 1.3 |
| Rich | 2.6 *** | -2LL | 705.6 |
|  |  | N | 570 |

Note: $* * *=\mathrm{p}<0.001, * *=\mathrm{p}<0.05$ and $*=\mathrm{p}<0.10$
$r=$ refers to reference category
Source: NDHS

## Husband participation in birth preparedness

Table 4 shows the odds ratio from logistic regression models of husband's participation in birth preparedness. Education (secondary and above), mass media exposure (high), wealth index, partner's autonomy and children ever born (up to two) are significantly associated with birth preparedness. For example; husband with secondary and above education are 1.5 times more likely to involve in birth preparedness as compared with men with no education. Likewise, mass media exposure is also positively associated with husband's participation in birth preparedness. For instance, men with high exposure to mass media are 1.5 times likely to participate than their low exposed counterparts. As in mass media exposure, there is a strong positive association between wealth index and husband's participation in birth preparedness. Men from rich households are about 3.0 times likely to involve in birth preparedness than men from the poor households. In contrast, partner's autonomy is inversely associated with husband's involvement in birth preparedness.

Table 4: Odds ratios from logistic regression models of husband's participation

| Characteristic | Odds ratio | Characteristic | Odds ratio |
| :---: | :---: | :---: | :---: |
| Age |  | Rich | 2.6-*** |
| 15-24 ( r) | 1 | Partner's autonomy |  |
| 25-39 | 1.1 | More empowered ( r) | $0.9 * * *$ |
| 40+ | 0.8 | More gender equal | 1.6 |
| Education |  | Not empowered | 0.7 |
| No education (r) | 1 | CEB |  |
| Primary | 0.7 | No birth (r) | 1 |
| Secondary and above | 1.5* | Up to two | 1.2* |
| Mass media exposure |  | Three or more | 0.7 |
| Low (r) | 1 | Place of residence |  |
| Moderate | 1.2 | urban ( r ) | 1 |
| High | 1.5* | rural | 1.2 |
| Wealth Index |  | -2LL | 934.5 |
| Poor (r) | 1 | N | 782 |
| Middle | 1.7** |  |  |
| Note: $* * *=\mathrm{p}<0.001, * *=\mathrm{p}<0.05$ and $*=\mathrm{p}<0.10$ $\mathrm{r}=$ refers to reference category <br> Source: NDHS |  |  |  |

## Husband participation in pregnancy care

Table 5 presents the odds ratios from logistic regression models of husband's involvement in pregnancy care by selected characteristics. Education (secondary and above) and wealth index (rich) have a strong association, while age ( 40 and above), partner's autonomy and children ever born are moderately associated with husband's involvement in pregnancy care. Education and wealth index have more or less same association with husband's participation in pregnancy care as described previously. In this model, religion and children ever born has also been added because these variables reveal a significant influence in bivariate analysis. Men from other than Hindu religion have higher likelihood to participate in pregnancy care than men from Hindu religion. Similarly, children ever born is negatively associated with men's participation in pregnancy care. For example, the odds of men's participation is likely to be lower as the number children increases. As discussed previously, the odds of men's participation in pregnancy care is likely to be lowered if the partners are more empowered but the likelihood of men's participation increases (odds ratio 3.7) when there is more gender equal relation between husband and wife.

Table 5: Odds ratios from logistic regression models of husband's participation in pregnancy care by selected characteristics, Nepal, 2006

| Characteristic | Odds ratio | Characteristic | Odds ratio |
| :---: | :---: | :---: | :---: |
| Age |  | Other | 1.9** |
| 15-24 (r) | 1 | Partner's autonomy |  |
| 25-39 | 1.1 | More empowered | 0.9** |
| 40+ | 1.3* | More gender equal | 3.7* |
| Education |  | Not empowered | 0.9 |
| No education | 1 | CEB |  |
| Primary | 2.1* | No birth | 1 |
| Secondary and above | 3.3 *** | Up to two | 0.6* |
| Mass media exposure |  | Three or more | 0.2* |
| Low | 1 | Place of residence |  |
| Moderate | 0.5 | urban | 1 |
| High | 0.8 | rural | 0.8 |
| Wealth index |  | Eco-regions |  |
| Poor | 1 | Mountain | 1 |
| Middle | 1.3 | Hill | 1.3 |
| Rich | 3.1 *** | Terai | 1.2 |
| Religion |  | -2LL | 663.7 |
| Hindu | 1 | N | 803 |
| Note: $* * *=\mathrm{p}<0.001, * *=\mathrm{p}<0.05$ and $*=\mathrm{p}<0.10$ $\mathrm{r}=$ refers to reference category <br> Source: NDHS |  |  |  |

## Discussion and Conclusion

In patriarchal society, men are considered to be superior to women and most of the decisions are relied on them. Men not only influence partner's health outcomes but also other aspects of life. On the other hand, the social construction of masculinity also helps men to be more powerful than their female counterparts. In spite of traditional beliefs about gender roles and norms, the Nepalese society has been transforming that an increasing number of men are taking responsibility to their partners' health and other household activities. It is evident that a majority of husbands (40.0 percent) accompany partners at the time of ANC, while more than 54.0 percent actively participate in birth preparedness in Nepal as suggested by the analysis. Mullany et al. (2005) have also shown that about 40.0 percent of husbands accompany partners at the time of ANC, while 75.0 percent of husbands discuss with partners about partner's health in urban Nepal.

From the analyses, it is obvious that the likelihood of husband's involvement is likely to be higher at older ages than at younger ages. One of the possible explanations of this reason may be due to the fact that men at adult stage may have better understanding about the gravity of partner's health during the pregnancy. As described previously in
other studies, the analyses show that there is positive association between husband's involvement and education. This is because of the reason that education makes men more responsible to their partner's health as well as wellbeing of the familial life.

Although mass media exposure is an important determinant that encourages and creates awareness towards partner's health among husbands, the present analyses reflect no association between mass media exposure and husband's involvement. Further research is needed to draw a firm conclusion. On the other hand, socioeconomic condition (wealth index) appears as a strong predictor of husband's involvement in pregnancy as shown by the analysis. For example; men with better economic condition are more likely to involve in partner's care than their poor counterparts. This may be due to the fact that men from poorer economic background have to spend more time in search for job to fulfill their daily needs than their richer counterparts. Likewise, after controlling for other variables, the associations between various husband's involvements and partner's autonomy is significant. For instance, the odds of husband's involvement is likely to be lower among partners who have sole authority to decide alone. In Nepalese context, the probable justification for this reason may be due to the fact that husbands feel more confidence that partners (who are educated and decision makers) can utilize pregnancy care themselves without husband's presence. This argument is more or less supported by a qualitative and quantitative study on men's participation in women's reproductive health in Nepal (KC, 2007). However, the likelihood of husband's involvement is likely to be higher among the couples who decide jointly. One of the possible explanations of this reason may be because of the reason that when couple decides jointly, they not only have better communication about antenatal check up, birth preparedness but also other healthy practices, which ultimately encourages them for better utilization of pregnancy care.

There are many limitations in this study. First, the Husband's involvement is a very complex topic of discussion, which can not be measured by a single indicator. This paper assesses husband's involvement in pregnancy care by considering husband's presence at ANC and involvement in various aspects of birth preparedness. But the combination of other variables such as; spousal communication about partner's health, husband's assistance in households and other activities could improve the accuracy of the
measure of husband's participation. Secondly, the measure of autonomy could be more representative if it included other aspects of partner's decision in their daily lives.

Finally, the analyses presented in this paper highlight two major concerns about husband's participation in partner's pregnancy care. First, education is one of the important determinants, which encourages them to be more involved in various aspects of pregnancy care. So, the priority should be given to formal and informal education for the people living in the interior and remote parts of the country. Secondly, one of the immediate steps is to develop strategy and program that encourages husbands in joint decision making in reproductive health. In fact, joint decision making not only promotes husband's involvement in partner's reproductive health care but also helps to improve women's empowerment in Nepalese context.

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[^0]:    12 Unless and otherwise stated "men" throughout this study refers husband and "partner" refers wife

