

## **Women Empowerment and Maternal Health Care Utilisation in North-East India**

Mousumi Gogoi

Maternal health care services have always been concerned in reproductive health studies and women empowerment plays a great role in receiving health services in developing countries. The main focus of the present study is to find out the association between women's empowerment and utilisation of maternal health care (MHC) services in North-East India using third round of National Family Health Survey (2005-06). Descriptive statistics, bivariate and multivariate techniques are used to justify the objectives and different indices have created to show women empowerment in the region. Result shows that women were highly empowered in terms of decision making, whereas having own money and mobility is still lacking behind in the studied region. The proportion of using any ANC is quite high but utilisation of full ANC is very low among women in the region. Empowerment status is not directly hindered in use of health care services but lack of own money and mobility is a disadvantageous aspect. The region as a whole, proportion of institutional delivery and delivery by health professional is fairly uncommon.

**Keywords:** Empowerment, North-East India, Maternal Health care, Full ANC

### **Introduction**

Near about 500,000 women die every year because of pregnancy related complications and child birth, and maximum number of deaths occur in developing countries (WHO, 1999). The maternal mortality ratio is still high in India which is 212 per one lakh live births (SRS, 2007-09) and the levels of maternal mortality varies among the regions because of the variation in providing emergency obstetrical care, prenatal care, anemia rates among women, education levels of women and other factors within the country. Maternal health care has a major concern in demographic and other health outcomes and which also reflects the status of women in the society and empowerment level and also appalling the basic health care facilities in a particular region. As fundamental human rights women have right to take all the decisions according to her needs and purpose. According to National Population Policy (2000), maternal mortality is not a health dis-

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Mousumi Gogoi is Senior Research Fellow at the International Institute for Population Sciences, Mumbai.

-advantage, it is a matter of social justice. Low social and economic status of girls and women limits their access to education, good nutrition, as well as money to pay for health care and family planning services. The extent of maternal mortality is an indicator of disparity and inequality in access to appropriate health care and nutrition services throughout a lifetime, and particularly during pregnancy and child birth and is a crucial factor contributing to high maternal mortality.

The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. Empowerment also leads in utilising maternal health care because of the fact that if women are empowered in the sense of decision making and aware about the health care facilities then they will visit the health facilities more than that of those who are not aware about all those facilities. Glaring shortcomings in the health care services like poor coverage and quality of antenatal care, unsafe deliveries, lack of emergency obstetric care and poor referral services also contribute to high rates of maternal deaths (WHO, 1998).

In spite of the Government's effort to reach out to pregnant women in all parts of the country to provide all components of maternal health care free or with nominal charges, still the utilisation of maternal health care remains low in the country. According to National family health survey 2005-06 (NFHS-III) less than 40 percent of births in India take place in health facilities. In the case of institutional delivery only 22.4 percent delivery takes place in health care institution in Assam.

Utilisation of maternal health care depends not only the availability of services but also on different other factors such as distance of health care facility, perception of women and their families regarding the need for care, social restrictions on freedom to movement, the opportunity cost of accessing health care, and the interaction between the client and the provider of formal health care system (World Population Monitoring, 1998, IIPS, 2000). As well as the status of women in society shows the utilisation of maternal health care facilities. Education of mother is also an important reason that has performing the positive attitude on utilisation of maternal health care.

On the other hand empowerment is a process of development of status of women in society and also influence in maternal health care. Education, work participation, exposure to mass media and the living standard also develops the decision making power of women as an integral part of empowerment. It seems that female work participation in non-agricultural sector and level of wage are also considered as a determinant of empowerment (Srinivasan, 1990 and Kulkarni, et al, 1990).

### **Defining Women Empowerment**

Empowerment is a process, by which women gain greater control over material and intellectual resources which will assist them to increase their self-reliance and enhance them to assist independent rights and challenge the ideology of patriarchy and the gender based discrimination against women. This will also enable them to organise themselves to assert their autonomy to make decision and choices, and ultimately eliminate their own subordination in all the institutions and structures of society (Batiwala, 1995, Malhotra, 2002). Empowerment factors such as education, exposure to media and standard of living should positive relationship towards maternal health care utilisation as

well as full autonomy and decision makings such as staying with siblings or parents, self-health care and buying important household items had significant impact on maternal health care utilisation.

A study by Kishor and Gupta (2004) revealed that average woman in India were disempowered absolutely relative to men, and there had been little change in her empowerment over time. The authors viewed that there were several cogent and pressing reasons for evaluating, promoting and monitoring the level of women's empowerment in India, not the least of which was that household health and nutrition was generally in the hands of women and their empowerment was necessary for ensuring not just their own welfare, but the well being of households. They also asserted that empowerment was critical for the very development of India, as it enhanced the quality and quantity of human resources available for development.

The impact of women empowerment in utilisation of maternal health care is the main aim of this paper. The proper utilisation of maternal care depends on the knowledge and decision making power of women. Educated, employed and independent women are more concerned about their health mainly at the time of pregnancy. They also visit antenatal checkups, doctors etc. They also prefer to go for institutional delivery. North-eastern states of India, where the empowerment level (decision making power) is in a good position, but the utilisation of maternal health care is still less and percent of institutional delivery is also less. Instead of higher empowerment among women utilisation of maternal health care is less. So the study is needed to see the relationship between the level of women empowerment and utilisation of maternal and child health care in this particular states. The paper is prepared to fulfill two main broad objectives which are related to different level of empowerment among women and to find out the association between empowerment and utilisation of maternal health care services in north-eastern states of India.

### **Need for the study**

The proper utilisation of maternal care also depends on the knowledge and decision making power of women. Educated, employed and independent women are more concerned about their health mainly in the time of pregnancy. They also visit antenatal checkups, doctors, etc. They also prefer to go for institutional delivery. In North eastern part of India where the empowerment level (decision making power) is in a good position, but the utilisation of maternal health care is still less and very few percent of institutional delivery taking place in the region. So the study is very much needed to understand the relationship between the empowerment level and utilisation maternal health care and to see the state variation within the region and to understand how empowerment helps in motivate the utilisation of maternal health care.

### **Data Source and Methodology**

This paper is based on 2005-06 National Family Health Survey (NFHS-3), vol. 1 conducted by the International Institute for Population Sciences (IIPS) under the support of the government of India. Data is mainly related with the currently married women who have at least one live birth in the five years preceding the survey. Data related to women

empowerment has also been used in this study. For empowerment related questions NFHS-3 asked the married women that who makes decisions on their health care, on making large household purchase, making purchases for daily household needs and on visiting their family or relatives. Questions were also asked about access to money and credit, freedom of movement etc. In this paper data has also been taken related with any antenatal care visit, received Tetanus Toxoid injection, consuming 100 iron and folic acid tablets or equivalent syrup and place of delivery with good health facility etc.

### **Methodology**

To study the objectives, only the currently married women who had given birth during the last five years preceding the survey and those who are empowered and taking the maternal health care were selected. For this purpose the empowerment indicators such as decision making power for own health care, household purchase, household needs and visit family or relatives, access of own money and freedom to move alone where three distinct places such as market, health facility, outside village or community are included. In this paper the combination of these three indicators are termed as Full Empowerment Index. On the other hand in maternal health care indicators like antenatal care visit indicators such as any antenatal care visit, more than three antenatal care visits, receive 100 IFA tablets, at least two TT injection received and delivery in health facility under health personal were included. Cross tabulation has done to show the variation of empowerment index and maternal health care index by women's socio-demographic characteristics in the selected states. Then logistic regression has done for showing the relationship between the set of independent variable with the dependent variable. In regression instead of wealth index, standard of living variable is taken because of the size of sample.

Full Empowerment Index (1=yes, 0=no) has taken as a dependent variable for the study whereas age of women, residence, number of living children, household structure, education, employment, religion, wealth index, exposure to mass media, partner's education and marital duration, institutional delivery, delivery by health professional, ANC visit, received TT injection, having IFA tablets/syrup etc. were taken as independent variable.

### **Results and Discussion**

#### ***Indicators of women's empowerment***

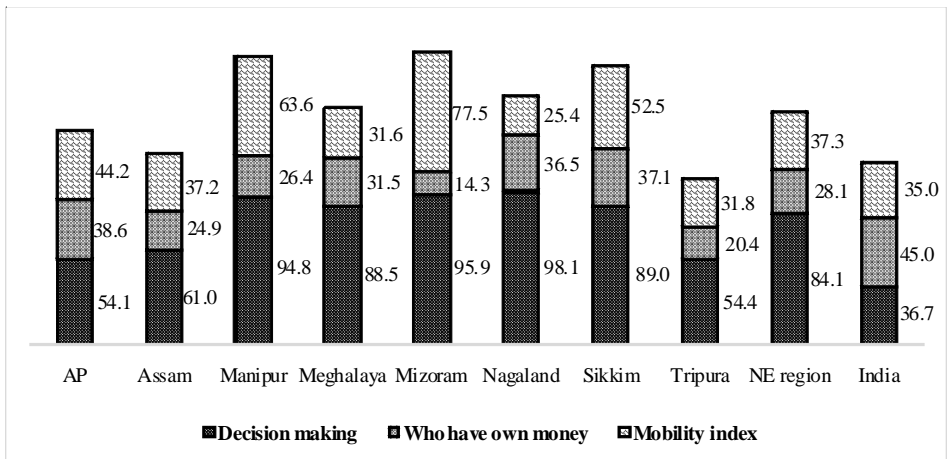
Figure 1 represents different empowerment indices for the north-eastern states of India and level of empowerment has shown in three broad categories to measure the status of women empowerment. Decision making power of women has made of different indicators like taking decision of own health care, household purchases, household needs, visit family or relatives, etc. The state of Nagaland has shown the highest proportion of women having the decision making power of their own which is about 98 percent and Arunachal Pradesh is the low performing state in case of decision making power (54 percent). Although women from north-east region has a better position in their decision making power a meagre number of women has this empowerment in national average and which

is only 37 percent. When it comes to the economic empowerment means that women have a right to decide how to spend her money the proportion of women has been declining in the study region. In case of spending own money, women from Arunachal Pradesh shows the highest percentage (39 percent) but lower than the national average of 45 percent. Mobility index comprises of the indicators of empowerment like move freely, go to the market, to the health facility and to the places outside the village/community. In this case women from Mizoram show the higher percentage which is about 78 percent followed by Manipur (64 percent) and Sikkim (53 percent). Women from Nagaland reports less mobility power (25 percent) as compared to other north eastern states, which is also less than the national average (35 percent). It shows that women were only empowered in the sense of decision making for basic household needs but not empowered enough to use own money and free to move.

**Use of maternal health care**

Table 1 represents women’s empowerment as well as use of different maternal health care services in the study region. From analysis it is found that Meghalaya has the highest percentage of women empowerment (77 percent), followed by Nagaland (73 percent) and Mizoram (71 percent) which is high as compare to regional average (59 percent). About 90 percent of women visit any ANC during their reproductive time period in Sikkim and 93 percent of them received TT injection, 80 percent received Iron Folic Acid tablets, 83 percent of women visits full ANC. In use of full ANC Nagaland has shown the lowest percentage which is only 8 percent. Assam has the highest percentage of delivery at health facilities than other north-eastern states (67 percent). But in case of delivery assisted by health professional is found highest in Mizoram (68 percent) and lowest in Nagaland (28 percent). Overall from this table we can summarise that there is a gap in use of health care services within the states which need more focus in terms of health care facilities.

Figure 1: Percentage of currently married women with different empowerment indices in NE states of India, 2005-06.



Note: AP- Arunachal Pradesh

### **Socio-demographic differential in women Empowerment**

Table 2 represents the differentials of socio-demographic aspects of women empowerment in states of north-east India. It shows with increasing in age of women the level of empowerment is increasing but again declines in the later ages in almost all the states. Place of residence has and great impact on empowerment level of women. It is found that urban women are more empowered in terms of decision making, use of own money and free movement which is defined as full empowerment as compared to rural women. But rural women in Meghalaya and Arunachal Pradesh are more empowered than their urban counterparts. Education plays an important role in empowering women in the states. Women with no education were less likely to be empowered than middle and higher educated women in north-eastern states of India. At the regional level the status of empowerment is increasing 57 percent to 70 percent according the increasing level of education. Employed women are also more empowered than unemployed women in almost all the states except Sikkim. Wealth index or standard living of women shows that women belong to higher wealth group are more empowered than women belongs to low and medium wealth quintile. Exposure of mass media, partner's education and increased marital duration has also an impact on women empowerment in north-east India. Where women who are exposure of mass media, her partner were well educated and those whose marital duration is more than five years were more empowered than their counterparts.

### **Access of maternal health care by Empowerment status**

The association of empowerment and maternal health care services in north eastern states has a variation in between them. The use of at least one ANC visit is very less in all the studied states among empowered women. Almost more than half of fully empowered women went for ANC visit in first trimester except in Arunachal Pradesh. Sikkim shows the highest percentage (82 percent) followed by Tripura (81 percent) and Manipur (80 percent) in receiving required TT injection where Mizoram has the lowest percentage (9 percent). Most of the fully empowered women received IFA tablets/syrup in almost all the states except Arunachal Pradesh and Nagaland. When it comes to use of full ANC 86 percent of services used by fully empowered women in Sikkim and which is highest among the region. But it is seen that the use of full ANC is not that satisfactory where empowerment of women does not help much to utilise these services. Institutional delivery is found to be high in Meghalaya (65 percent) followed by Arunachal Pradesh (63 percent) and Assam (62 percent). In case of deliveries assisted by the health professionals are less than half of women in the north eastern states of India. Nagaland shows the lowest percentage of women who delivered their babies under skilled health professional (29 percent) (Table 3).

The use of postnatal care is very less in north-east India. From the study it is found that less than 5 percent of fully empowered women had gone through postnatal checkup within two months of delivery. This shows lack of availability and knowledge regarding postnatal care services in north-eastern part of India. Overall we can say that there is no association between women empowerment and use of maternal health care facilities because very few empowered women ever use of full ANC, delivery and natal care

facilities.

### **Results of logistic regression**

Table 4 represents the results of logistic regression which show the impact of women's full empowerment status on different socio-demographic as well as use of maternal health care services in north-eastern states of India. Result shows that in Assam older aged women (30-40 years) are almost three times more likely to be empowered as compared to younger aged (less than 20 years) women. In Manipur and Nagaland also show a significant relationship between increasing age of women and empowerment status of them. As already mentioned, education and empowerment has a positive interrelationship in between where it shows that with the increase in education level women empowerment increases. Results from the regression analysis show a significant relation between education and empowerment. In case of employment status women of Assam, Meghalaya and Nagaland were two, three and again two times more likely to be empowered than not employed women respectively. Rest of the states the results is not showing any significant relationship.

### **Conclusion**

The results reveal that more than half of women have utilised any one of the recommended ANC services in north-eastern states of India. When it comes to use all the recommended ANC services (full ANC) it is only about 18 percent. It is also clear from the results that very few percent of women visited any health facility for delivery purpose and health professionals. As the empowerment level is high among women in the study area but the use of health care facilities is still lacking behind. There is a vast difference in the maternal healthcare utilisation pattern in rural and urban settings. Empowerment factors such as education and exposure to mass media show positive relationship towards maternal health care utilisation. Women involvement in work participation has a negative impact in use of health care utilisation. In north-eastern region of India, women were empowered but they have not adequate knowledge and facility available for health care because of what prevalence of utilisation is low.

The study clearly brings out the association between social determinants that impact the utilisation of maternal and perinatal healthcare. Women's employment did not show much impact on maternal care utilisation because in the Indian setting women often go to work out of economic urge and employment does not necessarily mean that women could use the money that they have earned. The government is making excellent efforts to make maternal health services accessible to women by giving them financial incentives for institutional deliveries and bringing antenatal care to their door step. There is a growing need to plan and implement programmes that are tailored to the needs and realities of the national and sub-national settings and to scale up known or new cost-effective (social and economic) interventions. However, all these efforts will not yield results unless there is perceptible change in the social context, where decisions are taken to utilise healthcare. Therefore it is very urgent needs for the government to evolve policies to improve the social milieu of women, which will in turn be conducive for them to utilise maternal healthcare as well as to improve empowerment level.

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Table 1: Percentage of currently married women reporting of empowerment status and use of maternal health care services in NE states of India, 2005-06.

States	Full Empowerment*	Any ANC visit	Receive TT injection	Taking 100 IFA tablets	Full ANC visit	Delivery at health facility	Delivery by health professional
Arunachal Pradesh	54.1	55.2	53.1	48.7	37.6	64.9	33.6
Assam	60.8	75.6	79.6	67.5	58.1	66.6	40.1
Manipur	67.0	86.7	89.4	65.8	62.7	49.6	63.3
Meghalaya	76.5	67.2	63.8	55.4	49.0	64.6	34.9
Mizoram	70.8	73.6	82.2	61.1	48.1	35.5	67.8
Nagaland	73.1	57.8	62.4	25.7	8.4	31.2	27.9
Sikkim	55.3	89.5	92.5	86.8	82.7	47.1	56.1
Tripura	25.7	79.7	81.7	69.9	61.5	45.5	52.2
<b>NE Region</b>	<b>59.1</b>	<b>72.2</b>	<b>75.3</b>	<b>62.5</b>	<b>17.6</b>	<b>21.6</b>	<b>38.3</b>

Note: \* Own decision making, who have own money and mobility index

Table 2: Percentage of fully empowered\* women by background characteristics in NE states of India, 2005-06.

Background Characteristics	North-Eastern States of India								
	AP	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region
<b>Age</b>									
Less than 20 years	47.9	45.5	47.4	71.4	52.9	63.9	45.0	20.7	41.59
20-29 years	54.6	59.4	60.5	75.2	62.1	68.0	57.2	23.0	54.87
30-39 years	56.4	66.9	75.1	78.7	82.0	76.4	56.2	34.7	64.78
More than 40 years	40.0	64.3	69.1	77.1	83.9	77.6	35.3	30.0	62.70
<b>No of living Children</b>									
No children	54.5	55.6	100.0	88.9	0.0	72.2	83.3	25.0	47.22
Living children	53.9	60.8	66.9	76.3	70.7	73.2	55.1	25.8	60.45
<b>Residence</b>									
Urban	49.7	67.1	67.5	70.4	72.3	70.4	64.4	31.6	65.19
Rural	55.7	59.6	66.9	77.8	69.3	74.1	53.6	24.6	57.62
<b>Household Structure</b>									
Nuclear	52.1	66.8	78.9	76.9	79.3	75.1	56.5	30.6	63.81
Other	55.5	52.3	54.6	75.9	59.7	68.6	54.3	19.1	51.84
<b>Education</b>									
No education	57.0	57.6	75.7	71.6	70.8	65.2	40.0	18.9	57.21
Primary	45.8	56.6	65.0	83.3	76.3	74.2	54.1	29.1	55.62
Secondary	53.3	64.1	64.5	76.7	67.5	76.5	64.0	25.0	61.18
Higher	57.9	70.0	62.6	81.8	86.1	83.0	76.9	47.8	69.68

Background Characteristics	North-Eastern States of India								
	AP	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region
<b>Employment</b>									
Not employed	50.0	59.4	65.4	71.4	67.0	70.4	56.3	24.6	56.25
Employed	55.2	65.3	68.3	83.8	77.1	76.0	52.8	28.8	65.23
<b>Religion</b>									
Hindu	49.2	64.7	68.0	64.2	72.7	58.0	54.1	26.2	59.86
Muslim	38.1	51.4	64.4	42.9	100.0	51.1	28.6	20.0	49.48
Christian	55.6	65.5	67.6	80.8	70.7	77.0	59.3	66.7	71.74
Other	59.1	20.0	63.6	75.9	66.7	42.9	58.6	26.7	61.54
<b>Caste</b>									
Scheduled Caste	43.9	68.8	63.4	83.3	50.0	52.6	53.6	25.0	58.91
Scheduled Tribe	56.3	67.3	68.2	79.5	71.0	77.7	58.0	25.5	66.29
Other Backward Class	50.0	62.0	59.3	56.3	40.0	71.1	56.8	23.2	58.91
Other	52.7	57.6	69.8	34.9	66.7	56.2	42.9	27.7	57.14
<b>Wealth Index</b>									
Low	52.7	57.8	74.8	73.1	75.7	70.9	30.4	24.1	54.32
Medium	48.8	60.9	67.9	78.9	79.5	71.5	52.4	25.1	58.13
High	60.2	68.0	62.4	79.1	66.8	75.8	62.7	30.0	66.73
<b>Exposure to Media</b>									
Non-Exposure	48.2	56.7	75.0	73.9	67.6	76.2	41.6	22.9	53.52
Exposure	59.1	64.8	65.5	75.4	70.5	70.8	60.7	22.8	63.39
<b>Partner's education level</b>									
No education	51.2	52.5	70.8	73.6	72.2	69.8	44.3	25.3	53.68
Literate	54.9	64.0	66.9	78.2	70.6	74.0	57.4	25.5	61.06
<b>Marital Duration</b>									
Less than 5 years	47.4	56.2	50.7	75.3	59.3	71.1	58.7	23.6	49.39
More than 5 years	56.2	62.8	73.7	76.8	76.3	73.5	53.7	26.9	61.60
<b>TOTAL</b>	<b>541</b>	<b>60.8</b>	<b>67.0</b>	<b>76.5</b>	<b>70.8</b>	<b>73.1</b>	<b>55.3</b>	<b>25.7</b>	<b>59.1</b>

Note: AP- Arunachal Pradesh

Table 3: Percentage of fully empowered\* women and use of maternal health care services in NE states of India, 2005-06.

Maternal Health care indicators	North-Eastern States of India								
	AP	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region
No ANC at all <sup>1</sup>	39.8	22.7	13.9	30.4	27.3	40.8	8.7	16.3	25.0
<b>Components of Antenatal care</b>									
Atleast one ANC check-up	6.8	7.4	5.0	5.0	4.8	12.3	5.4	3.9	7.7
ANC at first trimester	45.9	63.0	75.2	51.4	61.8	54.0	67.6	67.6	60.6
Two or more Tetanus Toxoid injections	43.8	19.6	80.0	52.6	9.4	51.7	82.3	81.1	67.3
Iron and folic acid tablets or syrup	48.4	68.8	64.5	56.9	61.9	26.4	89.0	71.5	63.6
Full Antenatal care <sup>2</sup>	38.5	58.2	61.2	50.3	48.4	13.2	86.0	63.1	25.2
<b>Natal care</b>									
Institutional deli very	63.2	62.4	52.1	65.2	36.1	48.4	40.3	41.5	29.6
Delivery with assistance from health professionals <sup>3</sup>	35.0	43.5	61.5	34.4	66.0	28.6	63.4	57.7	40.5
<b>Postnatal care</b>									
Postnatal checkup within two months	4.1	0.6	1.1	0.6	0.6	0.8	2.6	1.1	0.5

**Note:** \* Own decision making, own money and mobility index

<sup>1</sup> No antenatal checkup, no intake of iron folic acid/syrup and no tetanus injection

<sup>2</sup> Utilization of three or more antenatal checkups (with the first check up within the first trimester of pregnancy) & two or more tetanus toxoid injections, an & Iron and folic acid tablets or syrup

<sup>3</sup> Women's delivery assisted by doctors, nurse/midwives and other health professionals

Table 4: Regression analysis for women empowerment by use of maternal health care services and by background variables in NE states of India, 2005-06.

Background Characteristics	North-Eastern States of India							
	AP	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
<b>Age</b>								
<20								
20-29	1.64	1.83*	4.40**	1.18	0.38	1.70	2.91**	0.36*
30-39	1.93	2.48**	6.123***	1.33	0.46	2.55**	2.59*	0.97
>40	0.72	3.44**	3.01	1.43	1.15	2.96**	1.40	0.36
<b>Residence</b>								
Urban								
Rural	2.63***	0.83	0.64**	1.35	0.91	1.10	0.98	0.77
<b>Education</b>								
Noeducation								
Primary	0.52*	0.98	0.75	1.89*	1.73	1.66***	1.06	3.77***
Secondary	0.40**	1.29**	0.57	1.16	1.81*	2.47***	0.98	3.33*
Higher	0.39	0.63	1.02*	-	-	16.12***	1.62**	73.02***
<b>Employment</b>								
Not employed								
Employed	1.57	1.50*	0.79	2.80***	1.18	1.44**	0.72	0.88
<b>Wealth Index</b>								
Low								
Medium	0.93	0.82	0.86	1.69*	1.01	1.27	2.78***	1.20
High	1.29	0.73	0.77	1.13	0.42	0.92	1.93*	1.60
<b>Exposure to Media</b>								
Not exposed								
Exposed	1.96**	1.15	0.88	0.82	1.03	0.49***	2.06**	0.60
<b>Partner's education level</b>								
Noeducation								
Literate	2.03***	1.79***	0.78	1.09	1.33	1.00	1.10	0.47*
<b>Marital Duration</b>								
Less than 5 years								
More than 5 years	1.19	0.71	2.05***	0.95	1.51	0.80	0.78	1.47
<b>Maternal health care</b>								
<b>Any ANC visit</b>								
No								
Yes	1.64	1.00	1.58	1.93	0.67	0.90	0.11*	0.57
<b>Received TT injection</b>								
No								
Yes	2.55	0.24***	1.33	0.94	0.42	1.03	0.08*	0.82
<b>Received IFA tablets/syrup</b>								
No								
Yes	0.40	0.70	3.46	1.58	1.13	0.42*	0.17	0.92
<b>Full ANC visit</b>								
No								
Partial	0.86	5.57**	0.41	0.72	4.32	1.90	43.80*	3.40
Full	0.74	5.82	0.11	0.46	4.60	3.82	52.99*	2.67
<b>Institutional delivery</b>								
No								
Yes	0.65	0.55	0.88	1.22**	0.72	1.62*	0.80	1.12
<b>Delivered by assisted health personal</b>								
No								
Yes	0.65	0.80	0.93	0.87	0.58	1.15	1.03**	1.32

Note: \*\*\*<0.01, \*\*<0.05, \*<0.10 <sup>⑥</sup>Reference Category