Draft Copy

Women's Autonomy and Utilization of Maternal and Child Health Care Services in India

Kaushlendra Kumar[1] and Mukesh Tiwari[2]

Introduction

In recent times, women's autonomy and its association with reproductive health and behavior have appeared as a central point of investigations and interventions around the world. Particularly, Since the Cairo International Conference on Population and Development (ICPD) in 1994, women's role has been a priority area not only for sustainable development, but also in reproductive health (United Nations, 1994). At the ICPD, a general harmony was reached to revolutionize women's status, along with the related goals of improving women's reproductive health and securing their reproductive rights, which represents a paradigm shift that emphasizes the reproductive autonomy of individuals. Following the ICPD, there have been a number of recent studies that examine women's autonomy and its relationship with reproductive health and health outcomes (Bloom et. al, 2001,).

Woldemicael (2007) in his study by using different dimensions of women decision-making autonomy and their relation to maternal and child health care utilization are investigated using data from Demographic Health Survey of Eritrea and Ethiopia. Further, he found that the most autonomy indicators are important predictors of maternal and child health care utilization. He concluded that strong positive effect of women sole decision making, investing family or relatives on use of antenatal care and child immunization is particularly impressive and also most of the socio-economic indicators have strong influence on both women's decision making autonomy on maternal and child health care utilization.

Bloom, Wypij, and Das Gupta (2001) in their study on women autonomy and their relationship with maternal health care utilization were investigated in a probability sample of 300 women in Varanasi. They found that women with greater freedom of movement obtained higher levels of antenatal care and were more likely to use safe delivery. Lastly, they concluded that the

[1]Ph. D. Candidate, International Institute for Population Sciences, Mumbai-400088, Email - kkd.iips@gmail.com

[2]M&E Officer, Strategic Planning Team Support Unit. KSAPS, India Health Action Trust (IHAT) Email- mkshtwr@yahoo.com

influence of women autonomy on the use of health care appears to be as important as other known determinants such as education.

Das Gupta (1996) in her study tried to examine different patterns of kinship and inheritance affects intergenerational relationship and ramifications of gender equality. Further, she revealed that more conflict-ridden relationship between the generations and a stronger conjugal bond in Northern Europe, while in South Asia intergenerational ties are strong and conjugal bond is weak. Lastly, she concluded that the convergence of low autonomy due to youth as well as sex amongst young married women in South Asia means that women are at the lowest point in their life cycle in terms autonomy during their peak child bearing period.

Eswaran (2000) in his study examined one avenue through which female autonomy impinges on fertility and child mortality in developing countries. An increase in female autonomy translating into an increase in the relative bargaining power or the threat point utility of mothers is shown to reduce fertility and also to reduce child mortality rates. Lastly, he concluded that the increase in female autonomy within a household may increase the disadvantage suffered by female children in that household with respect to survival.

In recent decades, a great deal has been written in the social sciences on the subject of female status and autonomy in both developed and developing country settings. A subset of this literature has specifically pointed out some of the negative demographic consequences of low female autonomy. In particular, low levels of female education and autonomy have been perceived to be barriers to improving child survival and reducing fertility (Das Gupta 1995).

It is clear from the literature that the relationship between different attributes of women's autonomy and reproductive behavior has not always been consistent across or within populations. Several factors may account for contradictory relationships between women's autonomy and health or fertility outcomes. One fundamental problem that underlies the study of women's status and reproductive behavior is how to adequately conceptualize women's autonomy. Women's autonomy is a complex and general term with many connotations that is influenced both by women's personal attributes and by the cultural norms of different groups (Makinwa and Jensen, 1995 quoted in Woldemicael, 2007).

Such problems raise concerns about the definition and measurement of autonomy and have led many researchers to use indirect women's status indicators, such as educational attainment, employment, spousal age-difference, family type, etc. for women's decision-making autonomy

in the analysis of reproductive behavior (Jejeebhoy, 1991). For instance a young woman is handicapped in coping with the stresses caused by childbearing. She lacks the autonomy to avert the consequences of reproductive stress through improved nutrition and health care, as well as a reduction in workloads. This aggravates problems of reproductive health. The substantial physical stress during the early reproductive years is reflected in poor reproductive health and high maternal mortality.

Concept of Women's Autonomy

Autonomy defined as the control women have over their own lives, the extent to which they have an equal voice with their husbands in matters affecting themselves and their families, control over material and other resources, access to knowledge and information, the authority to make independent decisions, freedom from constrains on physical mobility and the ability to forge equitable power relationships within families (Jejeebhy and Sathar, 2001).

The description of the stages of the women life cycle in Rampur and in other studies of Northern India varies over the life cycle. Briefly stated, it is low in early childhood, rises during adolescence drops sharply upon marriage and remains low during early reproductive years; and rises during the later reproductive years to a high in older ages when women becomes a mother-in-law and grandmother, followed by a small drop at extremely old ages **(**Vatuk 1987; Jeffery, and Lyon 1989; Wadley 1994 Quoted in Das Gupta 1996).

Objectives

The specific objectives of the study are…

- To examine the level and differential in the women's autonomy and utilization of maternal and child health care services.
- To examine the association between women autonomy and utilization of maternal and child health care services in India.

Hypothesis

- The core hypothesis behind the paper is that, women with low autonomy and status will be less likely to use maternal and child health care services.

Data and Methods

National Family Health Survey-3 (NFHS-3), which has been conducted by International Institute for Population Sciences in 2005-06, is the main data source for this study. NFHS-3 has collected information from a nationally representative sample of 124,385 women aged 15-49 years. For analysis purpose kids file has been used, the present study is based on the sample of currently married women who have at least one birth in the preceding five years of the date of survey. This analysis is based on latest birth and also to imprison the child health care children age 12-23 months have been taken for analysis. The study variables can be grouped into four categories, utilization of antenatal and delivery care, indicators of women decision making autonomy, child immunization and social and demographic characteristics.

Use of Maternal and Child Health care

Utilization of antenatal care services (at least once during the pregnancy), institutional delivery, women autonomy and child immunization 12-23 months children are considered as dependent variables in this study.

Women Decision Making Autonomy

The National Family Health survey, 2005-06 posed several questions to women regarding decision making and control over resources. To capture two dimension of women autonomy (Decision Making and Economic Security) a composite index of women autonomy (CIWA) has been constructed (Singh, et al 2005) in their study of child mortality and women autonomy have also been constructed CIWA in similar way. Two categories of CIWA viz. lower and higher have been made on the basis of average value of index taking all states together. The women receiving less than the average score are put in the lower autonomy category. The remaining women are treated as having relatively higher autonomy. The indicators of the two dimensions of women autonomy along with questions that were posed to women in the survey are:

1. **Involvement in decision making**

"Who makes the decision about health care for yourself?"

"Who makes the decision on purchasing household daily needs?"

"Who makes the decision on purchasing household?"

"Who makes the decision on visits to your family or relatives?"

2. Economic Security

"Who decides how the money you earn will be used?"

"Who decides how your husband's earning will be used?"

Statistical Analysis

The bi-variate relationship of women's social and demographic variables with the composite index of women autonomy, antenatal care, institutional delivery and child immunization are examined using X^2 test. Binary logistic regression models are used to identify the association between different social and demographic variables with maternal health care services. Further multinomial logistic regression model has been applied to examine the effect of selected socio-economic variables on child immunization.

Description of Dependent Variables

1) Antenatal Care (ANC) Visit is categorized as follows:
   (i) No ANC visit (ii) At least one
2) Place of Delivery is also categorized into two categories:
   (i) Home (ii) Institutional
3) Child Immunization
   (i) **Full Immunization:** Received all 6 doses of immunization (BCG + 3 doses of DPT + 3 doses of Polio + Measles)
   (ii) **Partial Immunization:** Received at least any one of the vaccination
   (iii) **No Immunization:** did not receive any immunization

Social and Demographic Characteristics

A number of social and demographic characteristics are considered in the analysis including Place of residence, women age, children ever born, Caste, Religion, Wealth index, Sex of the child, Children ever born and to capture the regional variation in terms of health outcomes and autonomy region variable has also been used.

Results

Section-I: Women Autonomy

Section-1 presents percentage of currently married women 15-49 by the status of women autonomy according to background characteristics. Table-1 shows in all (59 percent) women are having higher autonomy. Autonomy is much higher in urban areas as compare to rural areas,

whereas according to religion Non-Hindu women (60.0 percent) are having more autonomy as compare to Hindu women. The relationship between women age and autonomy is consistently positive as the age of women is increasing autonomy is also increasing. According to education accept some marginal decrease in below middle level as the women education is increasing women autonomy is also increasing and same pattern we can seen in husband education ,women who are having more than one schildren they are having more autonomy as compare to women who have only one child, whereas there is wide regional variation we can observe from table that accept North-east, West and South other region women are having lower autonomy. Caste and wealth index is not showing much variation towards women autonomy.

Section II: Antenatal Visit and Place of Delivery

This section present's percentage of currently married women 15-49 by ANC visit and place of delivery according to background characteristics. Table-2 shows in all 79 percent women visited for at least one antenatal care and 48 percent women had institution delivery. antenatal care and institutional delivery much found to be higher in urban areas as compare to rural areas, whereas according to religion Hindu women are more going for antenatal care and institution delivery 82.2 percent and 48.3 percent respectively as compare to Non-Hindu women. The relationship between women age and antenatal care and institutional delivery is consistently found to be negative. As the age of women is increases percentage of antenatal care and institutional delivery decreases. According to education as the women education is increasing women are more going for antenatal care and institution delivery and same pattern we can perceive in husband education or we can say husband education is also playing very pivotal role towards antenatal care and institutional delivery. According to children ever born those women who are having more children they are less going for antenatal care and institution delivery whereas women autonomy and wealth index is also playing positive role towards antenatal care and institution delivery, those women who are having higher autonomy they are more going for antenatal care and institution delivery as compare to having lower autonomy whereas those women who are richer they are more going for antenatal care and institutional delivery as compare to poor women. There is a regional variation we can make out from table that south and west region women are more going for antenatal care and institutional delivery as compare to other region particularly central region where only 72 percent and 22 percent women are going for antenatal care and instructional delivery.

Table-3

The above results raveled that Antenatal visit and institutional delivery by various socio-economic and demographic characteristics. Therefore it becomes necessary to statistically control the socio-economic and demographic factors to see the net effect of antenatal visit. Table-4 shows that the women education, husband education, wealth index are positively related to with women who went for antenatal care visit. As the age of women increases she is more likely to go for antenatal care as compare to younger women but there is no significant effect on women age on antenatal care visit and as the women education level increases she is more likely to go for antenatal care as compare to less educated women, whereas husband education is also playing significant effect on antenatal care visit as the husband education level is increasing she is more likely to go for antenatal care as compare less educated husband. Those women who are from affluent household or more economically sound they are more likely to go for antenatal care as compare to women who are having poor economic status. Caste, place of residence; children ever born, religion and women autonomy are negatively related with antenatal care visit, among caste SC&ST women are more likely to go for antenatal care as compare to OBC and other, and among religion Hindu women are more likely to go for antenatal care as compare to Non-Hindu women. According to place of residence urban women are more likely to go for antenatal care as compare to rural women. Another interesting findings revealed that there is not much significant effect of women autonomy on antenatal care visit those women who are having higher autonomy they are less likely to go for antenatal care as compare to women who are having lower autonomy but there is not much significant effect of women autonomy on antenatal care visit. West, south region women are more likely to go for antenatal care as compare to other region, especially northeast, east women.

Table-4:

Table-4 shows that the women age, education, husband education, caste, wealth index, women autonomy, and antenatal visit are significant and positively related to place of delivery as the age of women increases she is more likely to go for institution delivery as compare to younger women and as the women education level increases she is more likely to go for institution delivery as compare to less educated women, whereas husband education is also playing significant effect on place of delivery as the husband education level is increasing she is more likely to go for institution delivery as compare less educated husband. Women autonomy is also

playing significant role towards place of delivery those women who are having higher autonomy they are more likely to go for institutional delivery as compare to women who are having lower autonomy. Those women who are from affluent household or more economically sound they are more likely to go for institutional delivery as compare to women who are having poor economic status. Those women who went for antenatal care they are more likely to have institution delivery as compare to women who did not go for antenatal visit. Place of residence; children ever born, religion are negatively related with place of delivery among religion Hindu women are more likely to go for institutional delivery as compare to Non-Hindu women. According to place of residence urban women are more likely to go for institutional delivery as compare to rural women and those women who are having only one child they are more likely to go for institutional delivery as compare to women who are having more than one child. Another interesting finding revealed that there is significant regional variation regarding place of delivery accept northeast other regions are playing very significant role towards place of delivery.

Section-III: Child Immunization

This section presents adjusted and unadjusted percentage of child immunization status of children 12-23 months by women autonomy and different background characteristics. Table-5 shows higher percent of children who received all vaccination in rural areas are higher as compare to in urban areas, according to religion there is variation in immunization coverage we can perceive that as compare to Hindu (51 percent) only 40 percent Non-Hindus children's are fully immunized and according to age of mother those mother who are in age group 35-49 their children's are more getting immunization as compare to younger women. Education is playing very important role towards child immunization as the women education level is increasing their child immunization is also increasing those women are high educated their children are more vaccinated (63 percent) as compare to illiterate women(35 percent) and more or quite less pattern we can perceive in husband education. According to wealth index those women who are from affluent household or more economically sound their children are more vaccinated as compare to women who are having poor economic status. According to children ever born those women who have only one child their child are more vaccinated as compare to women who have more than one child. There is regional variation we can perceive in child immunization accept central and northeast region other regions are showing more than national average vaccination coverage. Women autonomy, caste and sex of child is not showing much variation in child immunization.

Conclusion and Discussion

In this study, women's autonomy, as measured by the extent of women's sole final say in decisions on making large and daily household purchases and of visiting families or relatives and their association with maternal health care utilization are examined. The primary aim is to determine whether there is a link between women's autonomy and utilization of maternal and child health care and if so how such relationships depend on socio-economic factors such as educational attainment of women and husband, women' age, wealth quintile, children ever born and place of residence. After describing the concept of autonomy indicated above, we explored the evidence regarding the level of women's autonomy and we then looked at the relationship between socio-economic characteristics and autonomy indices of women. Finally, we examined our hypothesis on whether women's autonomy increases maternal care seeking behavior.

The results of our study show that most of our specified socio-economic factors and impact of women autonomy on antenatal care and institutional delivery have significant influence which shows the impact of women autonomy on maternal and child health care in which women's rural-urban residence, women education, region factor being the most important predictors for autonomy.

The most important result from our analyses on health-seeking behavior during pregnancy, childbirth, and child immunization is that several socio-economic characteristics, particularly women's and husband's education and place of residence, wealth index, women autonomy, regional variation have strong positive association with health-care utilization, implying that these variables have direct effects on the use of health care facilities. For instance, the impact of women autonomy is not much on antenatal visit but very much effect on institution delivery and child immunization. Finally it may be concluded that women with higher autonomy are more likely to use maternal and child health care services as compare to women with lower autonomy.

Bibliography

Basu, Alka. 1996. "Female Education, Autonomy and Fertility: What do these words mean in South Asia?", in A. Basu and R. Jeffery (eds), Girls' Schooling, Female Autonomy and Fertility Change in South Asia, New Delhi, Sage Publications, 1996.

Basu, Alka. 1999. "Fertility Decline and Increasing Gender Imbalance in India: Including a possible South Indian Turnaround", Development and Change, 1999

Basu, Alka. 2000. "Gender in population research: Confusing implications for health policy", Population Studies, 2000.

Basu, Alka. 2000. "Women, poverty and demographic change: Some possible interrelationships over time and space", in B. Garcia (ed), Women, Poverty and Demographic Change in Developing Countries, Oxford, Clarendon Press, 2000.

Bloom S.S., Wypij D. and Das Gupta M. (2001). Dimensions of women's autonomy and the influence on maternal health care utilization in a north Indian city. Demography 28(1): 67-78.

Das Gupta M. (1996). "Life Course Perspectives on Women's autonomy and Health Outcomes Health Transition Review 6: 213-32.

Dyson T. and Moore T. (1983). On kinship structure, female autonomy, and demographic behavior in India. Population and Development Review, 9(1): 35-54.

Evidence from Ethiopia and Eritrea. Stockholm Research Report in Demography 2007:3

IUSSP (1997). Report of Seminar on Female Empowerment and Demographic Processes: Moving Beyond Cairo. 21-24 April 1997, Lund, Sweden.

Jejeebhoy S.J. (1991). Women's status and fertility: Successive cross-sectional evidence from Tamil Nadu, India. Studies in Family Planning, 22(4): 217-30.

Jejeebhoy S.J. (1995). Women's Education, Autonomy and Reproductive Behavior: Experience from Developing Countries, Clarendon Press, Oxford

Ravindran Sundari. T.K. (1999). Female Autonomy in Tamil Nadu: Unraveling the Complexities Economic and Political Weekly, Vol 34 No. 16/17 PP WS34-WS44.

Singh, Hazra and Ram, 2007. " Women autonomy and Sex Differential in Child Mortality in India". Genus LXIII (3-4): 55-75.

United Nations (1994). Summary Report of the Program of Action of the International Conference on Population and Development. New York: United Nations.

Woldemicael, G (2007). Do Women with Higher Autonomy seek More Maternal and Child Care?

Table-1: Percentage of currently married women aged 15-49 by women autonomy according to background characteristics, 2005-06, India

Background Characteristics	Women Autonomy	
	Lower	**Higher**
Place of Residence* **		
Urban	32.4	67.6
Rural	44.8	55.2
Religion*		
Hindu	41.5	58.5
Non-Hindu	40.0	60.0
Caste* **		
SC&ST	39.5	60.5
OBC	43.0	57.0
Others	40.0	60.0
Respondent Age* **		
Less than 25	54.3	45.7
25-34	34.0	66.0
35-49	27.3	72.7
Respondent Education* **		
Illiterate	42.4	57.6
Literate but below Middle	44.6	55.4
Middle but below High school	41.9	58.1
High school and above	24.9	75.1
Partner Education* **		
Illiterate	40.0	60.0
Literate but below Middle	39.6	60.4
Middle but below High school	43.8	56.2
High school and above	36.1	63.9
Wealth Index* **		
Poorest	40.0	60.0
Poorer	44.6	55.4
Middle	46.0	54.0
Richer	41.4	58.6
Richest	34.0	66.0
Children Ever Born* **		
One	50.8	49.2
Two to Three	36.3	63.7
Four to five	32.7	67.3
Six and above	28.1	71.9
Region* **		
North	48.1	51.9
Central	43.6	56.4
East	46.3	53.7
Northeast	22.4	77.6
West	33.4	66.6
South	36.4	63.6
Total	41.2	58.8

*Shows significant at 10% level of Significance ** Shows significant at 5% level of Significance, *** shows 1% level of significance

Table-2: Percentage of currently married women aged 15-49 going for antenatal care and institutional delivery according to background characteristics, 2005-06, India

	Antenatal Visit		Place of Delivery	
Background Characteristics	**No**	**At least one**	**Home**	**Institution**
Place of Residence* **				
Urban	8.2	91.8	24.9	75.1
Rural	25.3	74.7	63.6	36.4
Religion**				
Hindu	19.8	80.2	51.7	48.3
Non-Hindu	22.0	78.0	54.0	46.0
Caste* **				
SC&ST	25.2	74.8	65.0	35.0
OBC	22.9	77.1	54.3	45.7
Others	12.6	87.4	36.4	63.6
Respondent Age* **				
Less than 25	16.1	83.9	49.7	50.3
25-34	19.6	80.4	50.7	49.3
35-49	37.7	62.3	67.0	33.0
Respondent Education* **				
Illiterate	36.3	63.7	77.4	22.6
Literate but below Middle	15.9	84.1	57.3	42.7
Middle but below High school	6.6	93.4	30.3	69.7
High school and above	2.1	97.9	5.1	94.9
Partner Education* **				
Illiterate	38.1	61.9	77.6	22.4
Literate but below Middle	21.9	78.1	63.3	36.7
Middle but below High school	14.6	85.4	44.5	55.5
High school and above	5.9	94.1	21.8	78.2
Wealth Index* **				
Poorest	39.9	60.1	84.3	15.7
Poorer	29.1	70.9	72.3	27.7
Middle	17.8	82.2	54.2	45.8
Richer	9.3	90.7	35.0	65.0
Richest	3.0	97.0	11.5	88.5
Children Ever Born* **				
One	12.3	87.7	38.5	61.5
Two to Three	16.0	84.0	50.3	49.7
Four to five	35.4	64.6	76.5	23.5
Six and above	52.7	47.3	87.0	13.0
Region* **				
North	16.8	83.2	53.1	46.9
Central	27.5	72.5	72.4	27.6
East	30.8	69.2	63.3	36.7
Northeast	24.9	75.1	65.0	35.0
West	9.0	91.0	29.8	70.2
South	5.6	94.4	22.1	77.9
Women autonomy* **				
Lower	20.4	s79.6	55.0	45.0
Higher	20.1	79.9	50.2	49.8
Total	20.3	79.7	52.2	47.8

** Shows significant at 5% level of Significance,*** shows 1% level of significance

Table-3: Odds ratio from Multivariate regression analysis assessing the association between women autonomy and other background characteristics and their utilization of antenatal Care, 2005-06, India

Independent Variables	Significance	Exp(B)	95.0% C.I.for EXP(B)	
			Lower	Upper
Place of Residence				
Urban@				
Rural	0.000	0.76	0.68	0.85
Religion@				
Hindu				
Non-Hindu	0.008	0.87	0.79	0.96
Caste@				
SC&ST				
OBC	0.000	0.78	0.72	0.85
Others	0.065	1.11	1.00	1.24
Respondent Age				
Less than 25@				
25-34	0.010	1.15	1.03	1.29
35-49	0.607	1.04	0.89	1.21
Respondent Education				
Illiterate@				
Literate but below Middle	0.000	1.87	1.67	2.09
Middle but below High school	0.000	2.79	2.49	3.14
High school and above	0.000	3.40	2.35	4.92
Partner Education				
Illiterate@				
Literate but below Middle	0.000	1.51	1.36	1.68
Middle but below High school	0.000	1.31	1.20	1.44
High school and above	0.000	1.59	1.32	1.91
Wealth Index				
Poorest@				
Poorer	0.002	1.15	1.05	1.26
Middle	0.000	1.51	1.35	1.69
Richer	0.000	2.00	1.74	2.31
Richest	0.000	3.96	3.16	4.96
Children Ever Born				
One@				
Two to Three	0.000	0.71	0.64	0.79
Four to five	0.000	0.42	0.37	0.48
Six and above	0.000	0.29	0.24	0.34
Region				
North@				
Central	0.111	0.90	0.80	1.02
East	0.000	0.58	0.51	0.66
Northeast	0.000	0.56	0.46	0.69
West	0.000	1.37	1.16	1.62
South	0.000	3.13	2.63	3.72
Women Autonomy				
Lower				
Higher	0.014	1.10	1.02	1.19

Note: @ Reference Category

Table-4: Odds ratio from Multivariate regression analysis assessing the association between women autonomy and other background characteristics and Place of Delivery 2005-06 , India

Independent Variables	significance	Exp(B)	95.0% C.I.for EXP(B)	
			Lower	Upper
Place of Residence				
Urban@				
Rural	0.000	0.56	0.51	0.61
Religion@				
Hindu				
Non-Hindu	0.003	0.87	0.79	0.95
Caste@				
SC&ST				
OBC	0.722	1.01	0.93	1.10
Others	0.000	1.38	1.26	1.52
Respondent Age				
Less than 25@				
25-34	0.000	1.40	1.27	1.53
35-49	0.000	1.99	1.70	2.34
Respondent Education				
Illiterate@				
Literate but below Middle	0.000	1.46	1.33	1.61
Middle but below High school	0.000	2.17	1.98	2.37
High school and above	0.000	6.03	4.72	7.70
Partner Education				
Illiterate@				
Literate but below Middle	0.000	1.29	1.15	1.44
Middle but below High school	0.000	1.38	1.25	1.52
High school and above	0.000	1.48	1.28	1.71
Wealth Index				
Poorest@				
Poorer	0.000	1.42	1.27	1.58
Middle	0.000	2.09	1.87	2.34
Richer	0.000	3.19	2.81	3.61
Richest	0.000	7.59	6.47	8.90
Children Ever Born				
One@				
Two to Three	0.000	0.42	0.39	0.46
Four to five	0.000	0.26	0.23	0.30
Six and above	0.000	0.20	0.16	0.24
Region				
North@				
Central	0.002	0.83	0.74	0.94
East	0.000	1.47	1.31	1.66
Northeast	0.485	0.94	0.78	1.13
West	0.000	2.59	2.27	2.94
South	0.000	6.28	5.53	7.14
Antenatal visit				
No@				
At least one	0.000	3.03	2.73	3.36
Women Autonomy				
Lower@				
Higher	0.001	1.14	1.06	1.22

Note: @ Reference Category

Table-5: Unadjusted and Adjusted Percentage reporting of Child Immunization status using multinomial logistic regression, 2005-06, India

Background Characteristics	Full		Partial		None	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Age- group						
less than 25@	44.2	42.15	50.7	55.45	5.1	2.40
25-34	45.0	50.25	50.1	48.08	4.9	1.67
35-49	29.3	50.78	60.9	47.32	9.9	1.90
Place of Residence						
Urban@	57.7	45.33	38.8	51.99	3.5	2.68
Rural	38.8	47.37	55.3	50.98	5.9	1.65
Caste						
SC $ST@	37.2	46.27	55.3	51.65	7.5	2.08
OBC	40.3	43.99	55.5	54.13	4.3	1.88
Other	55.1	49.87	40.9	48.12	4.0	2.01
Religion						
Hindu@	44.6	50.76	50.9	47.69	4.6	1.56
Non-Hindu	40.8	39.95	51.4	57.13	7.8	2.92
Respondent Education						
Illiterate@	26.3	35.30	66.0	61.58	7.7	3.12
Literate but below Middle	45.8	45.85	48.3	51.91	5.9	2.23
Middle but below High school	61.9	54.37	35.7	44.17	2.4	1.46
High school and above	80.1	63.99	19.5	35.29	0.3	0.72
Partner Education@						
Illiterate@	26.9	71.41	64.7	27.58	8.4	1.02
Literate but below Middle	39.6	73.73	52.8	25.23	7.6	1.04
Middle but below High school	50.2	73.62	46.0	25.64	3.7	0.73
High school and above	63.0	71.60	35.9	27.87	1.1	0.53
Wealth Index						
Poorest@	24.5	56.97	66.0	40.04	9.4	2.99
Poorer	33.5	63.39	60.3	34.61	6.2	2.00
Middle	46.9	72.14	48.4	26.66	4.7	1.19
Richer	55.7	74.48	41.5	24.77	2.8	0.75
Richest	70.9	82.16	28.0	17.42	1.0	0.42
Sex of the child						
Male@	44.0	72.01	50.7	27.01	5.3	0.98
Female	41.4	71.00	52.9	27.72	5.6	1.28
Children Ever Born						
One@	54.7	76.41	41.6	22.77	3.7	0.82
Two to Three	46.4	71.34	48.8	27.61	4.8	1.04
Four to five	29.9	64.55	62.9	33.71	7.2	1.74
Six and above	19.4	64.15	71.0	33.51	9.6	2.34
Region						
North@	45.8	75.07	47.6	23.39	6.6	1.53
Central	28.8	64.30	67.4	35.15	3.8	0.55
East	44.7	77.44	48.2	21.66	7.1	0.89
Northeast	34.9	63.17	49.9	33.80	15.3	3.03
West	54.3	72.54	42.3	26.61	3.4	0.85
South	60.5	78.05	36.0	21.07	3.5	0.88
Women Autonomy						
Lower@	41.9	69.58	53.4	29.17	4.7	1.25
Higher	45.3	72.75	49.0	26.21	5.8	1.04

Note: @ Reference Category