How Is Janani Suraksha Yojana Performing in Backward Districts of India?

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With a view to reduce high levels of maternal and neonatal mortality, the National Rural Health Mission launched the Janani Suraksha Yojana in 2005. This is an innovative conditional cash transfer programme to provide monetary incentives to women to deliver in medical facilities. This study evaluates its functioning by using a unique data set covering eight districts spread across seven "low performing states" in the country. It shows that JSY is working reasonably well, judging by the proportion of women receiving incentives after delivering in a government facility, location of receiving incentives, mode of payments and payment of bribes. But the accredited social health activists, an important component of JSY, play a limited role in facilitating delivery in a medical facility. Importantly, even though the proportion of women delivering in a medical facility has improved considerably, a significant fraction of women continues to deliver at home. These women are more disadvantaged than those who deliver in government facilities.

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India's record in reducing maternal mortality and infant mortality has been very dismal. Maternal deaths in India constituted more than 20% of global maternal deaths, while neonatal mortality constituted 31% of global neonatal deaths at the beginning of 2005.[1] The gravity of the situation and commitments made towards millennium development goals (MDGs) prompted the Ministry of Health and Family Welfare (MOHFW) to launch the Janani Suraksha Yojana (JSY), a conditional cash transfer scheme which pays monetary incentive to pregnant women in case they deliver in a government medical facility or in an accredited private medical facility.

This paper assesses the performance of JSY with respect to a few key parameters, in some of the most backward districts located in the "low-performing" states in India, as defined by the National Rural Health Mission (NRHM). The data for this exercise comes from People's Assessment of Health, Education, Livelihood (PAHELI), a unique attempt to rapidly assess the status of human development, including maternal and child health.

We find that most of the women delivering in government facilities receive monetary incentives as per the norms, thus pointing to a reasonably well-functioning scheme. But the accredited social health activists (ASHAs), the community health workers who are supposed to motivate and facilitate institutional deliveries, play a limited role in this process. The data also shows that despite considerable improvement in proportion of women delivering in medical facilities compared to the most recent nationwide household survey on health, a significant fraction of women continue to deliver at home. These women are relatively more disadvantaged than those who deliver in government facilities – they are more likely to be from either scheduled castes (SCs) or scheduled tribes (STs) – less likely to have attended school and less likely to own household assets.

The rest of the paper is organised as follows: Section 1 provides a background of the JSY programme. Section 2 describes the process and method of data collection. Section 3 discusses the JSY-related findings from the survey. Section 4 discusses the characteristics of women who deliver at home, followed by concluding remarks.

1 Background of the JSY Programme

The main objective of JSY is to decrease maternal and infant mortality by encouraging pregnant women to deliver in medical facilities. This is sought to be achieved through payment of monetary incentives to women who deliver in government

or accredited private medical facilities. For the purposes of the scheme (and for NRHM as well), the states in India are divided into two categories: "low performing" and "high performing".[2] The low-performing states are those that had an extremely low proportion of women delivering in a medical institution in 2005, at the start of NRHM and consequently, had higher maternal mortality ratio (MMR).[3] Conversely, the high-performing states are those that were functioning relatively better on this indicator. Initially, the eligibility criteria for women to avail monetary incentives and the magnitude of the incentives were uniform across both, low- and high-performing states (Table 1).[4] However, over the years, the scheme has seen substantial changes in the low-performing states in eligibility criteria (making the scheme nearly universal in these states) as well as the amount of compensation (Table 1). Further, in order to increase coverage, the scheme has been extended to cover even the women in low-performing states who belong to "below poverty line" (BPL) households, are above 19 years of age, and deliver at home with the assistance of a skilled person. These women are now entitled to Rs 500 as cash incentives. No such changes are made in the high-performing states.

Table 1: Initial and Revised Incentives under Janani Suraksha Yojana (Rs)

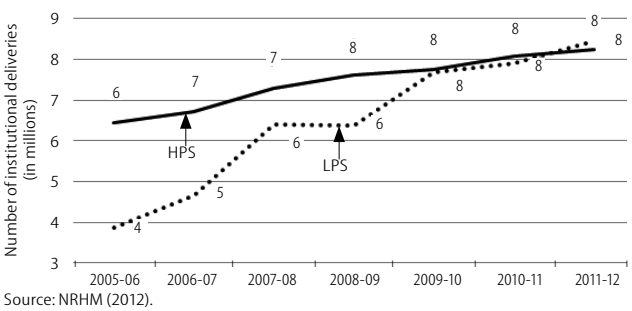
	Rural	Urban
Initial Incentives		
Low-performing state	700	600
High-performing state	700	nil
Revised Incentives		
Low-performing state	1,400	1,000
High-performing state	700	600

Source: UNFPA (2009).

To implement the scheme, JSY also introduced the ASHA, a trained female community health activist, who is supposed to work as an interface between the community and the public health system. Selected from the village itself and accountable to it, ASHAs are supposed to play an important role in the context of maternal and child health.[5] As far as JSY is concerned, she is supposed to facilitate delivery in a government or an accredited private medical facility. As per the guidelines, she is to be paid Rs 600 per delivery only if she facilitates delivery in government facilities.[6]

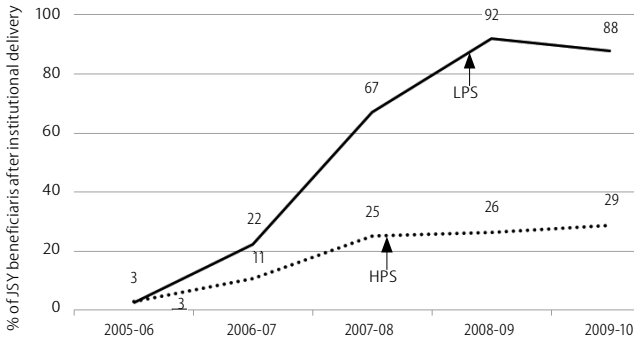
Over the years, the number of institutional deliveries in the low-performing states has seen a rapid increase compared to the high-performing states, and as a result, the gap between the two has almost disappeared (Figure 1). Moreover, the proportion of JSY beneficiaries out of total institutional deliveries, has also shot up dramatically in the low-performing states (Figure 2).[7]

Figure 1: Number of Institutional Deliveries in the Low-Performing and High-Performing States[8]



Source: NRHM (2012).

Figure 2: Percentage of JSY Beneficiaries Amongst Those Delivering in an Institution in the Low-Performing and the High-Performing States



Source: NRHM (2012), Right to Information filed by the Accountability Initiative.

Against this backdrop of these impressive aggregate numbers that PAHELI offered us an opportunity to assess how well is JSY functioning, through household surveys, in a few backward districts located in the low-performing states.

2 Data

The PAHELI is a rapid assessment of the prevailing status of human development, covering four major sectors: life and livelihood, water and sanitation, maternal and child health and education and literacy.[9] It comprises a set of simple survey formats that can be used by citizens to track progress towards the MDGs, as well as assesses the progress towards national objectives of poverty reduction, social protection and development of human capabilities.

The PAHELI survey was carried out in eight districts spread across seven states – Udaipur and Bhilwara (Rajasthan), Gumla (Jharkhand), Hardoi (Uttar Pradesh), Korba (Chhattisgarh), Nalanda (Bihar), Rajgarh (Madhya Pradesh) and Sundargarh (Orissa) in the second half of 2011. These were the focus districts of the Government of India (GOI) – United Nations (UN) Joint Programme on Convergence, and hence included in the survey.[10]

PAHELI employed a two-stage sampling design. In the first stage, 60 villages were selected randomly through "Probability proportional to size" (PPS) sampling technique using the village directory of the 2001 Census.[11] In the second stage, 20 households were selected randomly from each of the 60 villages.[12] This gave us a sample of 1,200 households per district. In reality, a total of 9,405 households in 471 villages were surveyed in this exercise.

The health-related questionnaire consisted of a series of questions related to maternal and child health, which enquired whether the respondent woman has accessed healthcare facilities in the period before, during and after pregnancy, the role of health workers such as ASHA and auxiliary nurse mid-wife (ANM), and most importantly, whether the pregnant woman received benefits under JSY after delivery and impediments, if any, in obtaining these benefits. These questions were asked only to those women who had a child in the age group of 0-3 years as on the date of survey.[13] If there was more than one such child, information about the youngest child was obtained.

3 Results[14]

This section discusses the results for the JSY-related indicators. These are presented in Tables 2a, 2b, and 3 (p 57).[15]

3.1 Location of Deliveries

Of the 3,178 deliveries reported, 48% deliveries took place in government facilities, 9.5% in private facilities, and remaining 42.5% deliveries took place at home.[16] The proportion of deliveries in government facilities is highest in Sundargarh and Rajgarh at around 70% followed by Udaipur at 61%. In contrast, only 23% of deliveries were in a government institution in Korba, and less than 40% in Gumla and Hardoi (Table 2a).

A comparison between PAHELI 2011 and District Level Household Survey (DLHS) III indicates that there has been a substantial decline in proportion of home deliveries (Table 2a).[17] Yet, these instances remain quite high. Moreover, home deliveries are often without the presence of a skilled person – a skilled person such as doctor/*dai* was present only in 69% of the home deliveries. Rajgrah, Sundargarh and Bhilwara are the worst performing districts when it comes to home deliveries in the presence of skilled personnel.

3.2 Receipt of Monetary Incentives

Survey results indicate that 94.5% women delivering in a government facility received the JSY benefit (Table 2a). In fact, this proportion is above 90% in all the eight districts, with Udaipur (98%) and Sundargarh (97.5%) performing the best.

The same, however, is not true in the case of home deliveries. Data shows that only 11% of women delivering at home receive money. Even if we restrict observations to those home deliveries where skilled personnel (dai/doctor) were present, the proportion of beneficiaries barely increases to 12%. Rajgarh (31%) and Sundargarh (25%) have the highest proportion of women getting benefits after a home delivery.[18]

Unfortunately, we could not collect information on whether the private institutions where women delivered were accredited. Nevertheless, 26% of women delivering in private facilities could avail JSY benefits.[19] Lack of awareness or confusion about availability of benefits in case of home delivery or delivery in private medical facility, additional eligibility criteria, and dearth of accredited private medical facilities might explain why proportion of women getting benefits in these instances is so low.[20]

3.3 Location of Receipt of Benefit and Mode of Payment

According to the guidelines, payment to JSY beneficiaries delivering in a government facility should be paid at the institution itself via cheque. Results indicate that 95% of the beneficiaries delivering in government facilities received payment at the institution (Table2b). But only 86% of the beneficiaries received it through cheques (Table 2b).[21] The proportion was highest in Hardoi (97%), and lowest in Bhilwara (76%).[22]

Table 2a: JSY-Related Indicators

	Location of Delivering the Baby	Rajasthan Udaipur	Rajasthan Bhilwara	Jharkhand Gumla	Uttar Pradesh Hardoi	Chhattisgarh Korba	Bihar Nalanda	Madhya Pradesh Rajgarh	Orissa Sundargarh	Overall
Sample size (households)		1,120	1,334	1,190	1,180	1,176	1,065	1,178	1,162	9,405
Percentage of women delivering the baby	Home	33.33	46.05	58.37	55.38	65.81	28.37	21.91	24.31	42.54
	Government facility	61.35	43.05	35.90	37.00	22.88	51.06	69.77	70.49	47.99
	Private facility	5.31	10.90	5.73	7.62	11.31	20.57	8.31	5.21	9.47
	No of respondents	414	367	454	446	389	423	397	288	3178
	Home (DLHS III)	60.50	60.7	89.8	86.0	81	59.1	50	53.6	
Percentage of home deliveries in the presence of skilled personnel (dai/doctor)		82.26	60.78	82.19	64.56	65.22	74.75	38.89	58.33	68.78
Percentage of women receiving money	Home	5.69	5.07	13.30	2.83	13.81	14.00	30.77	25.00	11.34
	Government facility	98.02	92.41	90.12	93.33	92.05	93.02	95.62	97.50	94.52
	Private facility	14.29	27.78	50.00	13.79	47.73	9.46	38.46	21.43	25.94
	No of respondents	397	332	402	406	371	389	365	274	2936
Percentage of JSY beneficiaries receiving incentives within seven days of delivery in government facility		89.36	78.17	19.12	35.33	37.97	43.01	67.78	78.57	60.42

Source: PAHELI data and authors' calculations.

Table 2b: JSY-Related Indicators

Variable	Government Institutions								Government	Private	Home
	Rajasthan		Jharkhand	Uttar Pradesh	Chhattisgarh	Bihar	Madhya Pradesh	Orissa	Overall (sample average)		
	Udaipur	Bhilwara	Gumla	Hardoi	Korba	Nalanda	Rajgarh	Sundargarh			
Percentage of beneficiaries receiving money at the institution	99.19	93.06	91.85	96.1	93.59	96.48	98.05	85.8	94.89	90.16	55.34
Percentage of beneficiaries receiving money through cheque	88.07	76.22	81.43	96.71	85	80.51	90.7	85.08	85.99	71.67	35.35
Percentage of beneficiaries receiving money in one instalment	93.06	93.01	78.87	93.51	82.5	92.93	82.31	95.56	89.37	95.00	94.59
Mean amount of benefits received (Rs)	1,532.22	1,458.86	1,571.43	1,388.82	1,553.12	1,403.52	1,399.61	1,381.28	1,451.25	1,504.39	859.47
Mean and(Median) no of days post-delivery to receive money	4.25 (3)	7.13 (3)	29.07 (25)	14.61 (10)	14.09 (11)	14.67 (10)	6.10 (3)	4.79 (2)	10.43 (4)	10.1 (5)	23.42 (15)
Percentage of beneficiaries reporting payment of bribe to receive money	4.56	1.49	2.19	7.95	5.19	8.63	12.6	3.57	6.4	0.0	5.56
Percentage of beneficiaries reporting facing other problems to receive money	13.93	8.51	28.17	31.37	14.1	17.1	20.47	7.78	17.62	26.67	29.25

Source: PAHELI data and authors' calculations.

The proportion of beneficiaries receiving payment through cheques in case of private facilities was even lower at 72%. In case of home deliveries, the proportion was 35%. Further, payment in case of home deliveries should ideally be made at beneficiary's home. But more than half of such beneficiaries received payment at the institution.

3.4 Payment in Instalments

The JSY guidelines explicitly say that the payment to the beneficiary should be made in one instalment. The data indicates that 89% of the JSY beneficiaries received payment in one instalment, in case of deliveries in government facilities (Table 2b). The corresponding proportion is 95% in case of deliveries in private facilities and home deliveries.

3.5 Amount Received[23]

As stated earlier, according to the JSY guidelines, women should receive Rs 1,400 in rural areas in case of an institutional delivery and Rs 500 in the case of home delivery. PAHELI data suggests that women delivering in government medical facilities receive, on an average, Rs 1,451, while median amount is Rs 1,400 (Table 2b). Average payments are above Rs 1,500 in Gumla, Korba and Udaipur, and below Rs 1,400 in Sundargarh, Hardoi and Rajgarh.[24] One possible explanation is that if the families are making the transport arrangement themselves, they will get the amount meant for transport support from the ASHA package, in addition to Rs 1,400 the woman is entitled to. Most of the households in our data report doing their own transport arrangements. Amount received by the JSY beneficiaries in case of home deliveries and deliveries in private facilities, on average, is also above the norm.[25]

3.6 Delays in Receiving Compensation

The guidelines indicate that beneficiaries should be given the benefit before they leave the institution. However, only 60% of the beneficiaries who deliver in government facilities report receipt of benefits within or up to seven days, while 71% report receiving benefits within or up to two weeks (Table 2a). Udaipur, Sundargarh and Bhilwara perform relatively better, while Gumla performs the worst.[26] Overall, the median days to receive benefits in case of delivery in government facilities are four while mean number of days are 10 (Table 2b).[27]

In case of delivery in private facilities, beneficiaries reported receiving money on an average, 10 days after delivery. The delays seem to be even higher for payment in case of home deliveries – on average, 23 days after the delivery.

3.7 Payment of Bribes and Other Problems

Only 6% of the beneficiaries who delivered in government facilities reported that they had to pay bribes to receive the money (Table 2b). Bhilwara (1%), Gumla (2%) and Sundargarh (4%) are the best performers, while Rajgarh is the worst performer with 13% of the beneficiaries reporting that they had to pay bribes. The corresponding fractions are 6% and 0% in case of home deliveries and deliveries in private medical facility.

When one takes into account other problems (distance to the health facility, paper work, inconvenient timings, behaviour of health workers) the proportion rises (Table 2b). Data indicates that 18% of the beneficiaries in case of deliveries in government facilities reported facing one or more of these problems. The proportion was lowest in Sundargarh (8%) and Bhilwara (9%), and highest in Hardoi (31%) and Gumla (28%). The corresponding fractions are 27% in case of delivery in private health facilities and 29% in case of home deliveries.[28]

3.8 Role of ASHA

An ASHA is a critical element of the NRHM and JSY. As per the guidelines, an ASHA is supposed to identify the pregnant woman in the village, make sure that the woman receives antenatal care, identify the functioning government or accredited private medical facility where the woman can deliver her baby, make transport arrangements, escort the woman and stay with her till the time of discharge. She is also supposed to be involved in arranging immunisation for the new born and postnatal care. To what extent are ASHAs able to carry out their responsibilities? The results are indicated in Table 3 (p 57).

(a) Mode of Transport and Transport Arrangements: As mentioned, making transport arrangement for pregnant women is the ASHA's responsibility. But 82% respondents reported that members of their households or other relatives made such an arrangement.[29] Only 16% women mentioned that such an arrangement was made by an ASHA, while 2% reported that some health worker, other than ASHA made the arrangement.

(b) Staying with Pregnant Woman: Only 72% women delivering in government medical facilities reported that a health worker stayed with them during delivery. The proportion is highest in Sundargarh, Hardoi (more than 90% in both) and Gumla (88%), while it is lowest in Udaipur (48%) and Rajgarh (55%). Only 67% of these women reported that ASHAs stayed with them.[30]

(c) Post Delivery Visit: A health worker is also supposed to visit the woman within seven days of delivery to track her

Table 3: Role of ASHA and Other Health Workers

		Rajasthan		Jharkhand	Uttar Pradesh	Chhattisgarh	Bihar	Madhya Pradesh	Orissa	Overall
		Udaipur	Bhilwara	Gumla	Hardoi	Korba	Nalanda	Rajgarh	Sundargarh	
Mode of transport to government medical facility who made arrangements in case of car/taxi/jeep to the government facility?	Ambulance	3.15	1.9	4.38	0.61	0	2.35	6.14	27.98	6.3
	Car/ taxi/ jeep	79.13	86.08	58.13	58.18	47.19	60.09	56.68	65.8	64.94
	ASHA	7.96	13.24	23.91	23.96		28.13	3.25	29.13	16.09
	Other health worker	2.99	4.41	1.09		7.14		0.65		1.74
	Household	86.07	77.94	72.83	75	88.1	69.53	90.26	67.72	78.79
	Other relatives	1.99	2.94	2.17		4.76	2.34	5.19	3.15	2.77
Did any health worker stay with you at the government facility during the birth?		47.68	58.11	87.66	90.8	76.19	80.86	54.62	96.95	72.18
Did any health worker visit you within a week of delivery at the government facility?		41.67	42.04	72.26	41.36	53.93	54.07	19.03	72.02	47.21
If yes, who visited you?	ASHA	23.53	40.63	67.27	75.76	51.06	78.18	20	84.56	59.71
	ANM	42.16	32.81	26.36	10.61	25.53	15.45	66	6.62	24.96
	AWW	24.51	23.44	4.55	6.06	21.28	3.64	2	4.41	10.22
	Others	7.84	3.13	0.91	7.58		1.82	10	2.94	3.94
	Do not know	1.96		0.91		2.13	0.91	2	1.47	1.17
Amount received by ASHA per delivery (Rs)	Mean	354.84	426.92	398.57	596.51	342.39	600	340.38	477.38	447.61
	Median	400	400	350	600	350	600	350	550	400
	Observations	31	26	49	43	46	38	26	42	301
Percentage of ASHAs receiving incentives after delivery in government facility	Within seven days	83.33	87.1	27.91	16.67	63.04	48.72	59.26	86.36	57.79
	Within 14 days	86.11	90.32	30.23	33.33	73.91	51.28	77.78	88.64	64.94
Days post delivery to receive the amount (Rs)	Mean	8.06	7.16	28.74	23.48	8.52	24.03	7.56	4.86	14.55
	Median	3	3	30	15	7	8	7	1	5.5

Source: PAHELI data and authors' calculations.

health post-delivery. However, only 47% women reported a health worker visiting them in a week. Out of these women, 60% reported that an ASHA visited them, while 25% reported being visited by an ANM. Thus, proportion of women who delivered at a government facility reported that ASHAs visited them within seven days is barely 28%.[31]

This discussion clearly indicates that the role of the ASHAs leaves a lot to be desired. Why do they fall short in performing their duties? Is it lack of experience? Is it due to their incentives not being paid or not being paid on time? In order to answer these questions, a short questionnaire was designed and canvassed – specifically for the ASHAs.

The data indicates that three-quarters of the ASHAs interviewed were appointed in the period during 2005 and 2008. So inexperience does not seem to be a reason for lack of performance. The data also shows that the ASHAs receive Rs 448 per delivery, on an average.[32] Interestingly, 35% of the ASHAs interviewed report receiving Rs 350 per delivery, while 37% report receiving Rs 600. Overall, 62% received less than Rs 600 per delivery. This might also reflect the fact that the households are making transport arrangements themselves and ASHAs are being paid only the incentive amount and amount for escorting women to the facility. When it comes to the timing of receiving incentives post-delivery, overall, only 58% of the surveyed ASHAs received their incentives within or up to sevendays, while 65% received it within or up to 15 days.[33] Clearly, timing of receiving their payment seems to be an issue.

To summarise, JSY is functioning well when it comes to payment of incentives – most of the women delivering in government facilities receive payment at the institution itself, mostly through cheque, and amount received is more

Table 4: Comparison between Women Who Deliver at Home and Who Deliver in Government Facilities

	Deliveries at Home (1)	Deliveries in Government Facilities (2)	Difference (1) - (2) = (3)	t-stat (4)
Belong to SC/ST	0.637	0.4943	0.1427	(5.36)***
Stays in kutcha house	0.6207	0.5243	0.0964	(4.17)***
No electricity connection	0.4743	0.3618	0.1125	(4.16)***
Attended school	0.2871	0.42	-0.1329	(6.10)***
No HH toilet	0.8442	0.8447	-0.0005	(0.03)
Does not own operational land	0.1457	0.1807	-0.035	(2.14)**
Ownership of Various assets				
Cell phone	0.5616	0.6601	-0.0985	(4.59)***
Electric fan	0.2758	0.4032	-0.1274	(5.64)***
Pressure cooker	0.1179	0.1639	-0.046	(3.03)***
Chair and table	0.292	0.3203	-0.0283	(1.30)
Clock/watch	0.6472	0.6595	-0.0123	(0.56)
Cot	0.9091	0.9272	-0.0181	(1.39)
AC	0.0277	0.0357	-0.008	(1.10)
Fridge	0.0062	0.0155	-0.0093	(2.36)**
Telephone	0.0077	0.0148	-0.0071	(1.83)*
TV	0.1394	0.2016	-0.0622	(3.73)***
Mixer-grinder	0.0069	0.0283	-0.0214	(3.68)***
Bicycle	0.8866	0.8231	0.0635	(3.73)***
Motorcycle	0.1969	0.3155	-0.1186	(6.02)***
Cart	0.0557	0.0822	-0.0265	(1.98)**
Goats	0.4237	0.3674	0.0563	(2.84)***
Cows	0.7467	0.7118	0.0349	(1.81)*
Poultry	0.258	0.2153	0.0427	(1.98)**
Antenatal Care				
Consumed IFA tablets	0.5734	0.6981	-0.1247	(5.61)***
Had at least one check-up during pregnancy	0.5235	0.764	-0.1746	(8.11)***
Have taken at least one TT injection	0.791	0.9286	-0.1376	(8.08)***

* significant at 10%; ** significant at 5%; *** significant at 1%
Source: As in Table 3.

or less as per the norm. But there are delays in receiving these payments, and women report facing problems in the process. When it comes to the ASHAs, our findings suggest that very few households rely on the ASHAs for making transport arrangements. Further, not many women report that the ASHAs stayed with them during delivery or paid a visit with a week post-delivery. Thus, the ASHAs seem to perform quite a limited role compared to what was envisaged. Our data suggests that issues related to their payment and timing of payment might provide some explanation for this. Knowing whether the ASHAs' performing as per the expectations and if not, understanding the reasons for it requires much more detailed investigation, which was beyond the scope of this survey.

4 Characteristics of Women Who Deliver at Home

We discussed earlier that even though the proportion of home deliveries has declined, a significant number of women continue to deliver at home. This section discusses the characteristics of women who deliver at home and those who deliver in government facilities.[34]

Table 4 (p 57) shows that the women who deliver at home are more likely to belong to the SC or the ST households. These women are less likely to have attended school. They are more likely to stay in *kutcha* houses, and houses without electricity. Further, they are less likely to own various household assets.[35] More importantly, they are less likely to have received antenatal care, i e, proportion of women who have consumed iron folic acid (IFA) tablets or received at least one check-up or have taken at least one TT injection is much lower in case of home deliveries, as compared to deliveries in government facilities.

This indicates that the women delivering at home tend to be from the disadvantaged households. It is precisely these women who the ASHAs were supposed to help.

5 Concluding Remarks

This paper shows that JSY is working well if judged on specific parameters, even in the most backward districts of India, with the exception of problems in receiving benefits and below-expectation performance of the ASHAs. Number of women delivering in medical facilities has also increased since the launch of the JSY. Yet, a significant number of women continue to deliver at home even now. What might explain this?

Preference for home delivery either due to cultural or convenience factors, lack of awareness about benefits of delivering in a medical facility, inaccessible institutions (due to distance or transportation costs), various expenses that have to be incurred in institutional delivery, inadequate infrastructure, poor quality of care and services received in these facilities are some of the reasons why women deliver at home.[36] Encouraging women through incentives such as cash transfers

are likely to be more effective when expenses involved in institutional delivery are a binding constraint. It is likely to be less effective when factors other than expenses are the driving reasons for why women deliver at home. Hence exclusive focus on providing incentives at the cost of ignoring other factors influencing a woman's or a household's decision to deliver at home may not yield the desired increase in institutional deliveries or decline in maternal and neonatal mortality.

NOTES

1 See *Trends in Maternal Mortality-1990 to 2010* for details. Though maternal mortality ratio (MMR) has declined from 254 in 2004-06 to 212 in 2007-09, it remains high (Office of Registrar General, 2011).

2 JSY is a part of NRHM.

3 Low-performing states include Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Orissa, Jharkhand, Madhya Pradesh, Chhattisgarh, Rajasthan, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

4 Only the women above 19 years of age and belonging to BPL family could avail these benefits for the first two live births.

5 http://mohfw.nic.in/NRHM/asha.htm#abt

6 Some states have divided this amount into three components – Rs 250 for transport, which is given to whoever pays for the transport (may not be ASHA), Rs 200 as an incentive for ASHA (non-transferable) and Rs 150 if ASHA escorts woman to the facility/stays with her.

7 Studies such as CORT (2007); UNFPA (2009), NHSRC (2011), NRHM (2011) have also documented increase in institutional deliveries post-JSY. This is not to suggest that JSY has caused institutional deliveries to increase. See Lim et al (2010), Dongre (2010), Joshi and Sivaram (2012) for more details on causal impact of JSY on institutional deliveries.

8 The states in north-east and union territories are excluded in these calculations.

9 See PAHELI Report (ASER et al 2012) for details (http://www.asercentre.org/ngo-education-india.php?p=PAHELI+2011). Accountability Initiative was one of the knowledge partners in this exercise.

10 These districts are extremely backward districts, and except Bhilwara, are covered under Backward Regions Grant Fund (BRGF) programme.

11 At the time of the survey, 2011 Census was not yet available.

12 Specifically, each surveyed village was divided into four parts. In each of the four parts, the investigators were asked to start at a central location, and pick every fifth household in a circular fashion till five households were selected. For details, see PAHELI Report (ASER et al 2012).

13 The child would have been born between second half of 2008 and the date of survey.

14 Due to lower number of observations, the district-level estimates are likely to be imprecisely estimated. Hence the results should be taken as indicative.

15 We have not given district-wise results for deliveries in private facilities and at home in Table 2b due to lower number of observations per district.

16 The MIS of NRHM reports proportion of home deliveries out of total deliveries as of September 2012 as 18.6%.

17 DLHS III is the latest available household level data on maternal health. Respondents in DLHS III are the women who had given birth to a child after 1 January 2004 onward (IIPS 2010). DLHS III was carried out between December 2007 and December 2008.

18 We also calculated percentage of women receiving JSY benefit after home delivery (and after delivery in a private facility) by restricting observations to those women who report staying in a kutcha house, those whose households do not own any operational land, and finally those who belong to SC/ST households. We did not find much difference between those numbers and numbers reported in the paper (Table 2a). The same holds for delivery in private facilities. According to NHSRC (2011), the major reason for non-payment of Rs 500 is a strong, almost universally shared view among the providers that this (payment of) Rs 500 is uncalled for. In many states, even ASHAs hold this view. This is treated as needless distraction from the goal of promoting institutional delivery. Further, non-availability of BPL cards might prevent many eligible women from receiving the benefit.

19 Few women deliver in private facilities. Hence proportion of women receiving benefits in case of delivery in private facility has been calculated with very few observations.

20 Though we do not have district-wise data on accredited private medical facilities, the numbers at the state level themselves are telling. According to the NRHM MIS, there are no private "accredited" hospitals in Bihar and Uttar Pradesh. The number is low at 17 in Odisha and 41 in Madhya Pradesh, Chhattisgarh (171), Rajasthan (191) and Jharkhand (236) are only slightly better.

21 The survey did not specifically ask whether the cheques were account payee.

22 These findings are consistent with other evaluation reports such as the CES (2009), which found that on average, across rural India, cheque was the main mode of payment in 70.6% of institutional deliveries.

23 Only those women who receive benefits have been considered.

24 Median amount is never below Rs 1,400 for any district.

25 A closer look at the data shows that most of the women delivering at home receive either around Rs 500 or around Rs 1,400. NHSRC (2011) reports similar findings.

26 Irregular fund flow to districts, tedious documentation and verification processes are some of the reasons why payment to beneficiary gets delayed (NHSRC 2011).

27 Median numbers of days are indicated in brackets in Table 2.

28 We are not able to provide problem-wise proportion of beneficiaries since there is a significant number of beneficiaries who report problems coded as "others", and we do not know precisely what "others" contain.

29 78.79% +2.77% =81.56%.

30 This is not reported in the tables.

31 (47% * 60% = 28%).

32 Median is Rs 400. There are three observations with values above Rs 100 and three observations with values greater than Rs 800. These have been excluded in calculations.

33 Fifteen observations with more than 90 days have been excluded in these calculations.

34 As shown before, almost all women who deliver in government facilities get JSY benefits. Very few women delivering at home get JSY benefits. Hence, Table 4 also indicates differences in the characteristics of JSY beneficiaries and non-beneficiaries. Results in Table 4 are from binary regressions with dependent variable being whether a woman delivers at home and explanatory variables being indicators of household characteristics. The standard errors are clustered at village level. The results with district dummies are qualitatively similar with the above results, and hence not indicated here.

35 Interestingly, percentage of households without ownership of operational land is higher in case of deliveries in government facilities.

36 UNFPA (2009), CES (2009), NHSRC (2011).

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