

"Evaluation of Janani Suraksha Yojana (JSY) in Maharashtra"

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Abstract

Background:

Maternal mortality is a serious concern for The Governments across the globe. According to SRS 2011 MMR for India is 212 and for Maharashtra 104. Despite investing numerous resources in strengthening the maternal health care services, poor women are still at risk as they face a number of barriers, particularly financial, to access obstetric care in the absence of social safety nets and widely prevalent out-of-pocket payment mechanisms. To combat this issue government of India has launched a new Maternity Benefit Scheme under the National Rural Health Mission (NRHM) viz. Janani Suraksha Yojana (JSY), in 2005. The scheme was being implemented with the objective of reducing maternal and neonatal mortality and promoting institutional delivery particularly among the poor pregnant women.

There are few studies carried out to evaluate the JSY in India but hardly any survey had been conducted to know the extent of coverage of the scheme as well as outcome of the scheme in Maharashtra.

Aim: To evaluate the performance of Janani Suraksha Yojana in Maharashtra in 2010

Objectives:

- 1) To estimate the proportion of JSY beneficiaries in Maharashtra
- 2) To study the factors affecting the implementation of a scheme
- 3) To know the extent of institutional deliveries taken place in private Institutions under JSY
- 4) To find out the gap/deficiencies and suggest ways for improving the scheme

Methodology:

Cross sectional quantitative survey was conducted using stratified random sampling in all districts of Maharashtra in 2010. Women delivered in year 2008-09 (April 2008- March 2009) were assessed for the JSY eligibility. 5246 women delivered in reference year were assessed for the JSY eligibility of which 1870 (35.64%) women were eligible for the JSY scheme.

Results:

Out of 1870 eligible women, only 983 (52.5%) have received the JSY benefits. Out of total eligible population 53.9% have heard about the JSY scheme. And out of these 72.2% have

received actual benefits of JSY as compared to 28.9% eligible women who received benefits but not heard about the JSY.

Around 11% home deliveries were reported in the complete study population which is considerably low as compared to the NFHS-3 data for Maharashtra state (34%). Out of total eligible population 24.2% women were delivered in private institute out of which around 34.5% have received the JSY benefits. High proportions of eligible women (55.67%) were delivered in public institution.

The reported uptake of JSY benefits is around 68% among the women who have delivered in Public health facility. Similarly reported ANC uptake (3 or more than 3 ANCs) is 77.4% among the eligible women but the uptake of JSY benefits is only around 56%.

Only 23.9% have received the amount within the specific period of a week after delivery. Large proportion has received the benefits after a week to more than a month. Women also reported being asked for the cuts by the health staff, non co-operation by the health care provider for getting benefits. Women also reported that they faced problem in acquiring the documents such as caste certificate and BPL certificate. Some women also mentioned certificates such as certificate from ANM/Doctor/Dai etc.

Conclusion and Recommendations:

- 1) Overall JSY uptake in the state is low (52%). Knowledge/ heard about the scheme is an important factor that increases the uptake of the scheme. Therefore it is imperative to increase the awareness about the scheme through widening the IEC for the scheme.
- 2) Even though deliveries in public health facilities are increasing, the uptake of JSY scheme in public health facilities is underutilized. The reported uptake in the public health facility deliveries is only around 68%. As compared to uptake proportions of other delivery places (such as home or private institutional delivery) though this proportion is high, considering the public health centers as 'primary delivery point for the JSY scheme', expected uptake should be much more than this.
- 3) ANC visits as well as delivery in the Public health facility provides the opportunity to the health care worker to inform the beneficiary about the scheme and eventually delivering the benefits to the eligible population. But looking at the results from the study, it clearly shows that

this opportunity is being underutilized therefore need to emphasize on the proactive role of the health care provider.

4) Large proportion has received the benefits after a week to more than a month. Therefore on the programmatic level there is need to verify this duration and identify the reasons for this delay and take corrective actions for the same.

5) Women also reported being asked for the cuts by the health staff, non co-operation by the health care provider for getting benefits. Hence strict monitoring and supervision on the health staff is required.

6) Considering the problems faced by women in acquiring the documents and its submission it is required to work in the direction of simplification of the documentation process.

Background

Maternal mortality is a serious concern for The Governments across the globe. Despite various initiatives at National and global level, maternal mortality continues to be high in developing countries. A WHO, UNICEF and UNFPA had reported an estimate of 358 000 Maternal deaths worldwide in 2008 out of which 99% were from developing countries and India and Nigeria account for a third of maternal deaths worldwide (1). According to SRS 2011 MMR for India is 212 and for Maharashtra 104 which is substantial decrease from 254 (2004-04) for India and 130 (2004-06) for Maharashtra (2)

Considering the scenario of Maternal and child health in India, between 1992 and 2006, the Indian Ministry of Health and Family Welfare focused on strengthening the health system infrastructure to better support emergency obstetric care (EmOC) services especially in the public sector. A concerted effort was made to increase capacity for institutional deliveries by upgrading facilities to improve access to skilled birth attendance and EmOC (3). Key strategies included upgrading community health centers to function as first referral units, creating 24/7 access to health centers for delivery, and training and empowering non-specialist qualified medical doctors to administer anesthesia for emergency obstetric procedures (4). In spite of this government investment, national surveys showed that the proportion of institutional deliveries only increased marginally from 26% to 39% during that period (5, 6).

This emphasizes the need for developing strategies for increasing the use of these services especially among the poor who suffer the largest burden of maternal deaths (7). Maternal mortality in resource-poor nations has been attributed to the “3 delays”: delay in deciding to seek care, delay in reaching care in time, and delay in receiving adequate treatment. Most deaths can be avoided by prompt access to EmOC services. However, despite strengthening of the supply side (facilities), poor women are still at risk as they face a number of barriers, particularly financial, to access EmOC in the absence of social safety nets and widely prevalent out-of-pocket payment mechanisms (8).

To combat this issue government of India launched a new Maternity Benefit Scheme under the National Rural Health Mission (NRHM) viz. Janani Suraksha Yojana (JSY), in 2005. The scheme was being implemented with the objective of reducing maternal and neonatal mortality and promoting institutional delivery particularly among the poor pregnant women. JSY is a

100% centrally sponsored scheme and it integrates cash assistance with ante natal care, delivery and post-delivery care (9).

About Janani Suraksha Yojana (JSY):

Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women.

Vision

- To reduce overall maternal mortality ratio and infant mortality rate,
- To increase institutional deliveries in BPL families.

Target Group

All pregnant women belonging to the below poverty line (BPL) households and

- Of the age of 19 years or above
- Up to two living children

Eligibility for Cash Assistance:

LPS States	All pregnant women delivering in Government health centers like Sub-centre, PHC/CHC/ FRU / general wards of District and state Hospitals or accredited private institutions
HPS States	BPL pregnant women, aged 19 years and above
LPS & HPS	All SC and ST women delivering in a government health centre like Sub-centre, PHC/CHC/ FRU / general ward of District and state Hospitals or accredited private institutions

Scale of Cash Assistance for Institutional Delivery:

Category	Rural Area		Total	Urban Area		Total
	Mother's Package	ASHA's Package		Mother's Package	ASHA's Package	
LPS	1400	600	2000	1000	200	1200
HPS	700		700	600		600

There are few studies carried out to evaluate the JSY in India but hardly any survey had been conducted to know the extent of coverage of the scheme as well as to know the outcome of the scheme in Maharashtra.

Aim and Objectives

Aim: To evaluate the performance of Janani Suraksha Yojana in Maharashtra in 2010

Objective:

- 1) To estimate the proportion of JSY beneficiaries in Maharashtra
- 2) To study the factors affecting the implementation of the scheme
- 3) To estimate the proportion of private institutional deliveries under JSY
- 4) To find out the gap/deficiencies and hurdles in implementation of the scheme

Methodology

Cross sectional quantitative survey was conducted using stratified random sampling in all districts of Maharashtra in 2010. Women delivered in year 2008-09 (April 2008- March 2009) were assessed for the JSY eligibility.

Sampling:

In the district, five strata (same as in NFHS-3 survey) were considered for the study, viz. tribal, non-tribal, urban slum, urban non-slum, and councils. Thus in the district, weighted mean of five strata in the same proportion as present in the district was included in the sample. The list of all villages per strata was considered for random sampling and villages were selected randomly from the list. The village was covered in the survey until required sample gets covered. If the required sample did not get covered in the same village, then the next village was selected to complete the sample. For urban areas, the list of all municipal corporations and municipal councils in the districts were obtained. From these lists, one municipal corporation and municipal council each was selected randomly. From the selected corporation, the list of notified slums and non-slum areas was obtained, and from these lists, one notified slum and non-slum area each was selected randomly. If the required sample did not get covered, then the next slum or non-slum area was selected to complete the sample.

2400 households were covered per district to get required calculated sample size of beneficiaries i.e. BPL/SC/ST woman delivered in 2008-09.

Detailed sampling procedure is attached as ***Annexure 1***

Following table I give detailed district wise sample coverage

Table I: District wise sample covered

Sr. No.	District	Households covered	No. of women delivered during the reference year 2008-09	
			Total no. of women delivered in reference year	No. of eligible women delivered in reference year
1	Amravati	2400	164	54
2	Ahmednagar	2400	245	120
3	Aurangabad	2400	205	52
4	Akola	2316	200	48
5	Beed	2400	134	42
6	Buldhana	2356	59	59
7	Bhandara	2400	109	47
8	Chandrapur	2739	69	35
9	Dhule	2400	124	41
10	Gadchiroli	2400	89	39
11	Gondia	2401	106	41
12	Hingoli	2427	217	52
13	Jalgaon	2400	161	52
14	Jalna	2438	186	55
15	Latur	2467	154	47
16	Mumbai Sub urban	2400	149	27
17	Mumbai	2400	128	49
18	Nanded	2496	248	87
19	Nashik	2400	290	100
20	Nandurbar	2539	147	85
21	Nagpur	2400	129	54
22	Osmanabad	2152	92	34
23	Parbhani	2811	200	56
24	Pune	2400	330	143
25	Raigad	2400	181	51
26	Ratnagiri	2400	131	27
27	Satara	2400	176	38
28	Solapur	2400	173	72
29	Thane	2485	92	42
30	Wardha	3676	214	86
31	Washim	2231	200	60
32	Yeotmal	2400	144	75
33	Kolhapur*	Not conducted	Not conducted	Not conducted
34	Sangali*	Not conducted	Not conducted	Not conducted
35	Sindhudurg*	Not conducted	Not conducted	Not conducted
	Total	78734	5246	1870

(*Study in Kolhapur, Sangli and Sindhudurg districts was not conducted due to some administrative reason)

Therefore from whole of Maharashtra 78734 households were covered (2400/district). Out of the total, 5246 women were interviewed who have delivered in the reference year and amongst them 1870 women were fitting in to JSY eligibility criteria.

Data collection:

Structured questionnaires were prepared to collect data.

Two different formats were prepared

- 1) **Household questionnaire:** To assess the availability of woman delivered in the reference period (*Annexure 2*)
- 2) **JSY Eligibility assessment and details of JSY benefits received:** First section of the form assessed eligibility of the women delivered in reference year for JSY benefits and if woman was eligible then next section was filled up i.e. details about ANC profile and JSY benefits she received etc. (*Annexure 3*)

Data was collected in 2010 by the PSM departments of government Medical colleges.

Sr. no	Name of Organization	Districts covered
1	VACHAN, Nashik	Nashik, Jalgaon
2	Dep. of PSM, SBH Gov. Medical college, Dhule	Dhule, Nandurbar
3	Dep. of PSM , Gov. Medical College, Aurangabad	Yavatmal, Aurangabad, Jalana, Beed
4	Dep. of PSM, Gov. Medical College, Latur	Solapur, Latur, Osmanabad,
5	Dep. of PSM, Rajeev Gandhi Medical College, Thane	Thane
6	Dep. of PSM, Gov. Medical College, Nagpur	Amravati, Gondia, Gadchiroli,
7	Dep. of PSM, Indira Gandhi Medical College, Nagpur	Nagpur, Bhandara
8	Dr. Sushila Nair School of Public Health, Wardha	Wardha, Chandrapur

9	Dep. of PSM, Gov. Medical College, Akola	Akola, Washim, Buldhana
10	Dep. of PSM, Dr. Shankarrao Chavan Gov. Medical College, Nanded	Nanded, Hingoli
11	Dep. of PSM, G.S. Medical College and K.E.M. Hospital, Parel, Mumbai	Mumbai, Ratnagiri
12	Dep. of PSM, Lokmanya Tilak Municipal Medical College, Sion, Mumbai	Mumbai Suburban, Raigarh

Data analysis:

Collected data was entered in predesigned template in excel sheet. Data entry was done at respective sites and softcopies of the entered data was sent to SHSRC. Due to feasibility issues of sending hard copies of data forms from each district all data in hard copies are not available centrally.

Soft copy of data was cleaned wherever required and analysis was done on the cleaned data.

Data analysis was done in SPSS software and descriptive and univariate analysis was preformed.

Results

Results presented in this report are for complete state to have comprehensive understanding of the JSY implementation for the whole state. This will help in having specific recommendations and insights for program improvement and impact understanding.

The results are broadly divided in to four sections:

- I) Proportion of eligible population
- II) Socio-demographic profile of the study population (women delivered in reference year and eligible for the JSY benefits)
- III) Proportion and detailed profile of beneficiaries
- IV) Factors affecting/associated with JSY benefits

I) Proportion of eligible population:

As presented in following table total 78,734 households were covered under this study to screen the women delivered in the reference year. From this sample total 5246 women were delivered in the reference year and out of which 1870 women were eligible for the JSY benefits. Therefore from total covered population 35.6% population were eligible for getting JSY benefits.

Households covered	No. of women delivered during the reference year 2008-09		
	Total no. of women delivered in reference year	No. of eligible women delivered in reference year	Percentage of eligible population (%)
78734	5246	1870	35.6%

II) Socio-demographic profile of the study population (women eligible for the JSY benefits)

Area of residence:

Table A presents the percent distribution of complete study population (women delivered in reference year, JSY eligible and JSY beneficiaries) by socio-demographic characteristics. As shown in the table high proportion of women delivered in reference year was from urban non slum area (33%). This could be because of sampling proportionate to population size.

Out of total no. of women delivered in reference year, almost equal proportion of JSY eligible women across all residence categories ranging in 40-50% except for urban slum area where this proportion is 27%.

Out of the eligible women only the 40-60% proportion of women was actually received the JSY benefits across all area of residence categories. This proportion is higher almost around 60% in tribal area.

Age of the study population:

High proportion (59.4%) of study population is falling under the age group category of 21-25yrs. Out of total women from age group category of “up to 20 years”, around 62% proportion was eligible for JSY benefits and around 44% from 21-25yrs age group category was eligible for JSY benefits. For remaining two age group categories this proportion is less than 30% which could be because of eligibility criteria of parity (till 2nd pregnancy) for JSY eligibility.

Out of the eligible women, proportion of women receiving JSY benefits ranges from 40-50% across all age groups.

Education:

Data on education of woman was not taken for the total population and was collected only for eligible women and JSY beneficiaries. High proportion (54.7%) eligible women were from secondary schooling category. Out of the eligible women the proportion of women receiving JSY benefits is almost similar (53-54%) from illiterate to secondary education category. For graduate and above category the uptake of JSY benefits is around 37% which is low from other age group categories.

Parity:

As parity is one of the criteria for JSY eligibility 46% first parity women were eligible and 48% second parity women were eligible and out of the total eligible women more than 50% proportion of women from both parity categories were received JSY benefits.

Though third parity is not eligible for JSY benefits, 4% women were eligible from this category out of which only 25% proportion received JSY benefits.

Caste:

For caste, all SC, ST and NT categories were clubbed together as reserved category and OBC and Open clubbed together considering the eligibility criteria for JSY scheme. High proportion (59.5%) of women was from OBC/Open category from the total women delivered in reference year.

Out of the total women delivered, 69% proportion from reserved category and 22.5% from Open/OBC category was eligible women proportion which is logical considering the eligibility criteria of JSY scheme.

Out of this eligible proportion 52.8% women actually received the JSY benefits.

Income category:

Similar to caste variable, for income category also, high proportion (59.7%) of women from total women delivered in reference year falls under APL category. Whereas out of women from BPL category 80% women were eligible and out of which around only 55% actually received the JSY benefits.

From APL category around 15% proportion of women was eligible out of which only 45% received JSY benefits.

JSY eligibility:

As mentioned in the background section eligibility criteria for the JSY scheme are no. of living children, caste and income category. So considering these, proportion of eligible population was 41.15% and 58.85% study population was ineligible for the study.

Received JSY benefits:

Out of total JSY eligible women only 52.57% have received JSY benefits, 24% mentioned that they have not received the JSY benefits and for 23% women information regarding this indicator is missing or respondent could not specify whether they received it or not.

Table A: Background characteristics of study population:

Sr. no	Variable / Indicator	Category	Women eligible for JSY		JSY beneficiaries	
			Frequen	%	Frequency	%
	Woman SES characteristics					
1	Area	Urban Slum	169	9	78	7.9
		Urban Non-Slum	201	10.7	72	7.3
		Council	259	13.9	101	10.3
		Tribal	365	19.5	252	25.6
		Non-Tribal	825	44.1	451	45.9
		Total				
2	Age	Up to 20 years	317	17	151	15.4
		21 to 25 years	1207	64.8	659	67.3
		26-30 years	301	16.2	150	15.3
		Above 30 years	37	2	19	1.9
		Not Specified				
3	Education of woman	Illiterate	239	12.8	127	12.9
		Primary (1st-4th)	216	11.6	118	12
		Secondary (5th -	1024	54.8	554	56.4
		Higher Secondary	269	14.4	144	14
		Graduate &	103	5.5	39	4
		Not Specified				
4	Caste	Reserved				
		OBC / Open				
		Not Specified				
5	Income category	BPL	1393	74.5	771	78.4
		APL	427	22.8	196	19.9
		Not Specified				
		Non-eligible				
6	Remunerated (Yes/No)	Yes	538	29.8	325	34
		No	1268	70.2	630	66
7	Type of occupation	Agriculture	286	15.3	197	20
		Industrial laborer	19	1	16	1.6
		Other laborer	98	5.2	44	4.5
		Farmer (on own	83	4.4	40	4.1
		Self employed	52	2.8	28	2.8
		Homemaker	1268	67.8	630	64.1
		Other	41	2.2	24	2.4

		Not Specified				
8	Received JSY benefits	Yes				
		No				
		Not specified				
Sr. No.	Variable / Indicator	Category	Women eligible for JSY		beneficiaries JSY	
			Frequency	%	Frequency	%
	Husband Background Characteristics					
9	Husband education	Illiterate	161	8.6	97	9.9
		Primary (1st-4th)	162	8.7	83	8.4
		Secondary (5th -	956	51.1	508	51.7
		Higher Secondary	384	20.5	216	22
		Graduate &	180	9.6	75	7.6
		Not Specified				
10	Husband occupation	Agriculture	370	19.8	255	22.9
		Industrial laborer	215	11.5	100	10.2
		Other laborer	471	25.2	243	24.7
		Farmer (on own	224	12	120	12.2
		Self employed	325	17.4	164	16.7
		Other	233	12.5	97	9.9
		Not Specified				
	Awareness					
11	Heard about JSY	Yes	1009	54	729	74.2
		No	792	42.4	229	23.3
		Not specified	69	3.7	25	2.5
	Pregnancy and Delivery related characteristics					
12	Delivery place	Home	207	12	81	8.5
		Public Institution	1041	60.3	709	74.9
		Private	459	26.6	158	16.9
		Other	19	1.1	7	0.7
		Not specified				
13	Parity	1 st	961	51.4	491	49.9
		2 nd	879	47	485	49.3
		3 and above	27	1.4	7	0.7
		Not Specified				
Total						

Remuneration: High proportion (67%) of eligible women was in non remunerated category. But uptake of JSY benefits for the same variable shows that high proportion (58.6%) of women who were remunerated availed JSY benefits than the non remunerated women (49.6%). Emphasizing on the possibility of remuneration may influence the JSY benefits uptake.

Husband Education: High proportion (51%) of eligible women shows husband education as secondary education. And out of the total eligible women population uptake of JSY benefits across all husband education categories is similar as 50-60% except for graduate or above category which shows JSY uptake as 41.6%.

Husband Occupation: Around quarter of the proportion have husband occupation as other laborer from eligible women category. Out of the category of agricultural laborer, 68% eligible women were received JSY benefits and for remaining occupation categories the JSY benefit uptake ranges from 40-50%.

Heard about JSY: Only around half (53%) of the eligible women have heard about JSY scheme and around 48% have not heard about the scheme. Out of the eligible women who have heard about the JSY scheme 72% have received the JSY benefits and out of the eligible women who have not heard about JSY only 28.9% have received JSY benefits. This emphasizes the knowledge about the scheme plays important role in uptake of scheme.

Place of delivery: High proportion (55.6%) of eligible women delivered at public health facility and out of which around 68% received JSY benefits. Though JSY benefit uptake is high for public health institutional deliveries, as compared to home (39.1%), Private (34.5%), and other places deliveries (36.8%), it is focusing on the lack of proactive efforts from the health staff to provide JSY benefits to eligible women at the public health institutes.

III) ANC profile of the JSY eligible women

Table B shows the ANC profile of the JSY eligible women and uptake of JSY benefits from the eligible population.

More than 50% of women reported having 4 or more ANC visits during the reference pregnancy. Around 77.4% women reported of 3 or more ANC visits which is comparable with the NFHS-3 Maharashtra state figures of 75%.

Out of the eligible women, proportions of JSY beneficiaries were higher ranging from 44-56% for 2, 3 and More than 3 ANC visits. For zero or 1 ANC visits JSY uptake is 27.6% and 39.7% respectively. This focuses that higher the ANC visits more possibility of getting JSY benefits. But though for women who have more than 3 ANC visit JSY beneficiary proportion is only around half again emphasizing on the need for proactive efforts from health staff.

Around 85.35% women received two or more Tetanus Toxoid (TT) doses which is also comparable with the NFHS-3 Maharashtra state figures of 85.1%.

High proportion (49%) of women received 100 or more IFA tablets but only 38% women consumed 100 or more IFA tablets emphasizing on the fact that proportion of tablets received/given cannot be the proxy indicator for actual consumption of tablets.

Table B: ANC profile of JSY eligible women:

Sr. No.	Variable/Indicator	Categories	Women eligible for JSY		JSY beneficiaries	
			Frequency	Proportion	Frequency	Proportion
1	No. of ANC visits	00	47(47)	2.51(2.5)	13(13)	27.66(27.7)
		01	83(83)	4.44(4.4)	33(33)	39.76(39.8)
		02	275(275)	14.71(14.7)	121(121)	44.00(44)
		03	436(436)	23.32(23.3)	242(242)	55.50(55.5)
		04 and above	1013(1011)	54.17(54.1)	574(573)	56.66(55.5)
		Not Specified	16(16)	0.86(0.9)	0(0)	0.00(0)
2	No of TT received	00	57(57)	3.05(3)	18(18)	31.58(31.6)
		01	197(197)	10.53(10.5)	101(101)	51.27(51.3)
		02	1557(1557)	83.26(83.3)	850(850)	54.59(54.6)
		03	13(13)	0.70(0.7)	4(4)	30.77(30.8)
		04	26(26)	1.39(1.4)	10(10)	38.46(38.5)
		Not Specified	20(20)	1.07(1.1)	0(0)	0.00(0)
3	IFA tablets Received	IFA <100	710	37.97	350	49.30
		IFA ≥100	915	48.93	552	60.33
		Not Specified	245	13.10	81	33.06
	IFA tablets Consumed	IFA <100	893	47.75	486	54.42
		IFA ≥100	705	37.70	418	59.29
		Not Specified	272	14.55	79	29.04

Sr. No.	Variable/Indicator	Categories	Women eligible for JSY		JSY beneficiaries	
			Frequency	%	Frequency	%
4	Delivery place	Home	207(207)	11.07(12)	81(81)	39.13(39.1)
		Public	1041(1041)	55.67(60.3)	709(709)	68.11(68.1)
		Private	458(459)	24.49(26.6)	158(158)	34.50(34.4)
		Other	19(19)	1.02(1.1)	7(7)	36.84(36.8)
		Not Specified	145	7.75	28	19.31
5	Type of delivery	Normal	1122(1265)	74.85(67.6)	642(682)	57.22(53.9)
		Forceps /	16(21)	1.07(1.1)	5(6)	31.25(28.6)
		Caesarean	194(210)	12.94(11.2)	91(91)	46.91(43.3)
		Not Specified	167	11.14	129	77.25
	TOTAL		1870			

For place of delivery high proportion (55.67%) of women has reported being delivered at public health facility which is substantially high from the NFHS3 Maharashtra state report figure of 26.5%. Even there is considerable decrease in proportion of home deliveries reported by study population (11%) than NFHS-3 Maharashtra state report figures (35.1%). Issues regarding uptake of JSY benefits is already discussed above.

High proportion (74.8%) of eligible women had normal delivery out of which 57.2% received JSY benefits. Around 12.9% had C-section delivery meaning institutional delivery but in spite of that JSY uptake is only 46.9%

IV) Factors affecting JSY benefits

Data on awareness/knowledge about JSY were collected through several questions such as have you heard about JSY, Who informed you? Who promoted you for it? etc. Table C shows results of all these indicators.

Out of the eligible women only 53.9% have heard about the scheme and from women who received actual benefits of the scheme, proportion of women knowing about the scheme increases up to 74.1%. And 23.3% proportion of women has not heard about the JSY scheme in spite of getting benefits of the scheme.

The role of ANM is more in informing women about JSY in both eligible and beneficiary women's group. 33.4% eligible women reported being informed about the scheme through ANM and 37.9% beneficiary women reported being informed about JSY from ANM. And role of ASHA worker reported in this regard is very less only 7% in both eligible and beneficiary group.

Table C: Knowledge/awareness about JSY among eligible women:

Sr. No.	Variable	Categories	Eligible women		Women who received JSY benefits	
			Frequency	Percentage	Frequency	Percentage
1	Heard	Yes	1009(1009)	53.96(54)	729(729)	72.25(72.2)

	about JSY	No	792(792)	42.35(42.4)	229(229)	28.91(28.9)
2	Who informed about JSY	ASHA	81(81)	8.03(4.3)	61(61)	75.31(75.3)
		ANM	355(356)	35.18(19)	294(294)	82.82(82.6)
		AWW	97(97)	9.61(5.2)	69(69)	71.13(71.1)
		Medical Officer	101(101)	10.01(5.4)	74(74)	73.27(73.3)
		NGO Staff	12(12)	1.19(0.6)	6(6)	50.00(50)
		Family member	54(54)	5.35(2.9)	37(37)	68.52(68.5)
		Other	74(74)	7.33(4)	34(34)	45.95(45.9)
3	Purpose of JSY	Prevention of maternal death	122(122)	12.09(6.5)	96(96)	78.69(78.7)
		Prevention of neonatal death	80(78)	7.93(4.2)	69(68)	86.25(87.2)
		Safe delivery	280(281)	27.75(15)	211(212)	75.36(75.4)
		Institutional	70(71)	6.94(3.8)	50(50)	71.43(70.4)
		Other	40(40)	3.96(2.1)	23(23)	57.50(57.5)
		Don't know	280(286)	27.75(15.3)	189(194)	67.50(67.8)
4	Who is the beneficiary of JSY	All pregnant	185(186)	18.33(10)	141(142)	76.22(76.3)
		Mother from BPL	277(278)	27.45(14.9)	205(206)	74.01(74.1)
		Mother from	181(184)	17.94(9.8)	135(137)	74.59(74.5)
		Other	17(18)	1.68(1)	14(15)	82.35(83.3)
		Don't know	190(196)	18.83(10.5)	128(132)	67.37(67.3)
5	What benefits can be availed	Cash	614(619)	60.85(33.1)	469(473)	76.38(76.4)
		Food grains	22(22)	2.18(1.2)	14(14)	63.64(63.6)
		Credit (Loan)	1(1)	0.10(0.1)	1(1)	100.00(100)
		Other	18(19)	1.78(1)	14(15)	77.78(78.9)
		Don't know	136(143)	13.48(7.6)	87(91)	63.97(63.6)

When asked about what is the purpose of JSY scheme, there was similar proportion of eligible women reported for all options such as prevention of maternal deaths, prevention of neonatal deaths and safe delivery but only 6% reported purpose as “institutional delivery” whereas reporting of this option increases in beneficiary group which is around 22%. Large proportions of women from both the groups have reported purpose as don't know. Though high proportion from both the groups have reported that women from BPL category are the beneficiaries of JSY this proportion is considerably low i.e. only 26%. More than 60% of proportion has reported that cash is the form of getting JSY benefits.

Following table D shows the data about details of JSY benefits received by the beneficiaries.

49.6% received JSY benefits in the form of cash and 12.6% received in form of cheque. For large population proportion (37.7%) this data is missing as women did not know that in which form they received the benefits. 55.7% received benefits in 1 installment and here also for large proportion (40%) data is missing.

High proportion (23.8%) of women had received the amount from PHC followed by sub centre (15.9%) and followed by District hospital (11.7%). Similar to above two variables, large data is missing for this variable as well (38.8%).

When asked about what were the different documents submitted to get the benefits, large proportion (28.8%) reported as BPL certificate followed by caste certificate (17.1%) and age proof (10.6%). Additionally around 6-8% reported being submitted certificate from doctor, nurse, Dai and village. What these certificates are for are not explained any where is their response. Again data for large proportion is missing (25.8%).

Duration of getting benefits after delivery is important factor. It is expected to deliver the amount to beneficiary within 7 days after delivery. Only 23.9% have received the amount within this specified period. 23.8% have received the benefits between 7 days to 1month after delivery and around 14% proportion received the benefits after a month. Data for around 40% proportion is missing.

Out of total beneficiary around 10% population proportion has mentioned that they have faced problems while getting the benefits and around 60% have not reported response for this variable.

Table D: Details about JSY benefits

Sr. No.	Variable	Categories	Beneficiary women	
			Frequency (n)	Percentage
1	Form of JSY benefits	Cash	488(488)	49.64(49.6)
		Cheque	124(124)	12.61(12.6)
		Not Specified	371(370)	37.74(37.6)
2	No. of Installments received	1	548(553)	55.75(56.3)
		2	26(26)	2.64(2.6)
		3 or more	7(7)	0.71(0.7)
		Not Specified	402(397)	40.90(40.4)
3	From where did you receive the amount	Sub Centre	157(158)	15.97(16.1)
		PHC	234(235)	23.80(23.9)
		RH	45(46)	4.58(4.7)
		DH	115(117)	11.70(11.9)
		Other Hospital	16(17)	1.63(1.7)
		Other	34(34)	3.46(3.5)
		Not Specified	382	38.86
4	Documents submitted to get the JSY benefit	BPL Certificate	421(421)	28.89(42.8)
		Caste Certificate	250(250)	17.16(24.4)
		Age proof	155(155)	10.64(15.8)
		Address proof	122(122)	8.37(12.4)
		Certificate from doctor	61(61)	4.19(6.2)
		Certificate from ANM	15(15)	1.03(1.5)
		Certificate from Dai	8(2)	0.55(0.2)
		Certificate from Village	29(29)	1.99(3)
		Other	19(19)	1.30(1.9)
		Not Specified	377	25.88

5	Where submitted documents	Sub Centre	157(157)	15.97(16)
		PHC	234(234)	23.80(23.8)
		RH	52(52)	5.29(5.3)
		DH	101(101)	10.27(10.3)
		Other Hosp.	17(17)	1.73(1.7)
		Other	18(18)	1.83(1.8)
		Not Specified	404	41.10
6	Within how many days received monitory benefits?	Within 7 days	235(235)	23.91(23.9)
		7-15 days	134(134)	13.63(13.6)
		15-30 days	100(100)	10.17(10.2)
		More than 30 days	137(137)	13.94(13.9)
		Not Specified	377(377)	38.35(38.4)
7	Did you face any problems for getting	Yes	97(97)	9.87(24.4)
		No	292(292)	29.70(73.4)
		Not specified	594(9)	60.43(2.3)

During the interview it was also asked what are the problems they have faced while availing the benefits various responses had came. Most of the responses were like difficulty in getting BPL or caste certificate etc. 12.5% proportion have also mentioned that they faced the problem for getting benefits as they have submitted the documents late. Around 8% mentioned that they have been asked by the facility staff for cuts or faced non co-operation from the facility staff.

Table E: List of problems faced while availing the JSY benefits:

Sr. no	Problems faced in availing the benefits	No. of women	%
1	Difficulty in obtaining BPL Certificate	29 (33)	19.21
2	Difficulty in obtaining Caste Certificate	22(26)	14.57
3	Difficulty in obtaining Certificate from provider	5(8)	3.31
4	Not all documents submitted	3(6)	1.99
5	Documents submitted late	19(21)	12.58
6	Documents misplaced	2(3)	1.32
7	Non-Cooperation by facility staff	7(14)	4.64
8	Demand of cuts by facility staff	4(4)	2.65
9	Other	6(11)	3.97

10	Not Specified	54	35.76
	Total	151	100

Question was asked to the women who have faced the problem of availing the JSY benefits that "How did you overcome the problem faced for availing the JSY benefits?"

Table F shows the frequencies and Percentage of the responses given by the women.

Table F: How did women overcome the problems faced during availing the JSY benefits

Sr. no	Ways taken to overcome the problems	Frequency (n)	Percentage (%)
1	Arranged all documents	56(65)	44.44
2	Paid cuts to facility staff	15(15)	11.90
3	Sought influence of Medical Officer	4(5)	3.17
4	Sought influence of ANM	5(5)	3.97
5	Sought influence of ASHA	3(5)	2.38
6	Sought influence of Political Leader	1(1)	0.79
7	Sought influence of NGO	0	0.00
8	Other	7(13)	5.56
9	Not Specified	35	27.78
	Total	126	100

Out of the total responses 44.4% have responded that they have arranged all required documents. Around 12% responded that they Paid cuts to the facility staff and around 10% have mentioned that they have sought influence from ANM/ASHA or Medical Officer.

Conclusion

Out of total study population 41.15% proportion of women were eligible for the JSY benefits. Among these eligible women only 52.5% women reported as received the JSY benefits. In spite of having some variation in the JSY uptake across different variables such as area of residence, education status, parity, caste etc. the uptake is ranging between 40% to maximum of 70%. Therefore overall uptake of the JSY benefits is low.

Univariate analysis of uptake of JSY benefits (no. of beneficiaries) vs. socio demographic factors has shown that area of residence, income category, remuneration of women are affecting the uptake of JSY benefits. High proportion of women from tribal population strata (59.4%) have received the JSY benefits as compared to other residence strata which ranges from 40%-50%. This might be because of concentrated efforts are being taken up for tribal districts about the whole RCH issues.

Out of the 427 eligible women from APL category, only 45.9% have received the actual benefits as compared to BPL category where uptake is 55.3%. Which emphasizes that as it is a cash assistance a scheme though women are fitting in to eligibility criteria may be due to caste, if they are economically competent they are less likely to avail the benefits of the scheme.

High proportion of women who are having remunerated activity (58.6%) are getting JSY benefits as compared to non remunerated women (49.6%). This may be because if women are remunerated then the possibility of outer exposure increases which might lead to getting more information about the scheme.

72.2% eligible women who have heard about the JSY have received actual benefits of JSY as compared to 28.91% eligible women who received benefits but not heard about the JSY. This emphasizes that knowing about the scheme is an important factor that increases the uptake of the scheme. However out of total eligible population only 53.96% have heard about the JSY scheme. It emphasizes the need to increase the awareness about the scheme through widening the IEC for the scheme.

Third objective of the study was to know the extent of institutional deliveries taken place in Private institutes under JSY. 24.4% eligible women were delivered in private institute and out of which only 34.5% have received the JSY benefits. Reasons for this low uptake was not documented in the study but one reason could be some deliveries might have taken place in unaccredited private health facilities and therefore may not received the benefits.

Around 11% home deliveries were reported in the study which is considerably low as compared to the NFHS-3 data for Maharashtra state which shows 26.5%. This might be because of initiation of JSY scheme as well as focused efforts by state public health department on the RCH issues mainly MMR and IMR.

Study data also reveals that the high proportion of eligible women (55.67%) was delivered in public institution which is again substantially high from the NFHS-3 Maharashtra state figures of 26.5%. This could be also because of the initiation of JSY scheme. However even though deliveries in public health facilities are increasing, the uptake of JSY scheme in public health facilities is underutilized. The reported uptake in the public health facility deliveries is only around 68%. Though as compared to other delivery places this proportion is high, considering the public health centers as 'primary delivery point of the JSY scheme', expected uptake should be much more than this may be around or more than 90%. Similarly reported ANC uptake (3 or more than 3 ANCs) is 77.4% among the eligible women but the uptake of JSY benefits is only around 56%. This emphasize on the need of proactive role of the health care provider for implementation of the JSY scheme. Because having visits for ANC as well as for delivery in the Public health facility gives the opportunity to the health care worker to tell about the scheme and eventually delivering the benefits to the eligible population. But looking at the results from the study, it clearly shows that this opportunity is being underutilized therefore need to emphasize on the proactive role of the health care provider.

Duration of getting benefits after delivery is important factor. It is expected to deliver the amount to beneficiary within 7 days after delivery. Only 23.9% have received the amount within this specified period. Large proportion has received the benefits after a week to more than a month. Therefore on the programmatic level there is need to verify this duration and identify the reasons for this delay and take corrective actions for the same.

Similarly women also reported being asked for the cuts by the health staff, non co-operation by the health care provider for getting benefits. Hence strict monitoring and supervision on the health staff is required.

Women also reported that they faced problem in acquiring the documents such as caste certificate, BPL certificate etc. some have also mentioned certificates such as certificate from ANM/Doctor/Dai etc. Why these certificates were for, was not reported in the study. There was also late submission of the documents and thus could not avail the services. Therefore it is require to work in the direction of simplification of the documentation process.

Recommendations

- 1) Overall uptake of JSY scheme in the state is around 50% therefore urgent need to improve the awareness about the scheme through widening the scope of relevant IEC. Rigorous IEC is required.
- 2) Innovative approaches can be thought of for reaching to the maximum eligible population thus ultimately increasing the uptake of the scheme.
- 2) Impetus is given to the health care provider at the facility level to have proactive efforts by them for delivering the scheme in order to have complete utilization of the scheme at least for the Public health facility deliveries.
- 3) At the programmatic level there is need to have supervision and verification on the duration required for the cash transfer to the beneficiary after delivery. For the cases where there is delay of more than a week, need to find out the reasons for the delay and take corrective action.
- 4) Strict and stringent monitoring and supervision is required to control the malpractices such as asking for the cuts and non cooperation by the health care staff at the facility level.
- 5) There is need to simplify the process of submitting the required documents or may be consider the alternatives for the process.

Limitations of the study

Though data is revealing many important aspects about the program implementation and uptake, it is important to know the limitations of the project which will help in examining the results more appropriately.

- 1) Delay in data collection activity due to several field level reasons and also lack of sufficient supervision and monitoring from nodal agency (SHSRC).
- 2) Due to lack of sufficient human resources at SHSRC, the activity was not supervised and monitored as proposed which might created some lacunae in data collection activity.
- 3) For many variables and for substantial proportion data is missing.
- 4) Due to feasibility issues and lack of human resources soft copy of the data can't be verified with hard copies.

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