

## Original Research Article

# A study to assess receipt and utilization of janani suraksha yojana cash incentive among mothers in urban slums of Raipur city, Chhattisgarh, India

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## ABSTRACT

**Background:** Janani Suraksha Yojana (JSY) replaces the National Maternity Benefit Scheme. It was launched by the Government of India in April 2005. The aim was to reduce maternal and neonatal mortality by increasing institutional delivery by providing cash incentive to the beneficiaries as well as the link worker ASHA. Objectives of this study was to assess receipt of Janani Suraksha Yojana (JSY) cash incentive and to assess fields of utilization of Janani Suraksha Yojana (JSY) cash incentive.

**Methods:** A Community based cross-sectional study was conducted among 384 mothers delivered within last one year in urban slum of Raipur city. Study centre was department of community medicine, Pt. J.N.M. medical college Raipur, Chhattisgarh. A pre-designed and pre-tested questionnaire was used to interview the study subjects.

**Results:** Out of total 384 study subject's cheque of JSY cash incentive was received by 70.83%. All (100%) beneficiaries who received cheque was stipulated amount as per JSY guideline. Reasons for not receiving cheque was no availability of BPL card for those who delivered in accredited private health facility. Other reasons were absconded after delivery, unaware of cash incentive, did not go back to get the cheque when called later, patient shifted to another ward. None of the study subjects who delivered at home received the cash incentive cheque. Realization of cheque was not done by 22.79% of study subjects due to complex procedure to open an account in bank. Cash incentive money was utilized in neonatal care, drugs, food, household activities and some deposited in bank.

**Conclusions:** JSY scheme is definitely functioning well in terms of providing cash incentive cheque of JSY on delivery in Government Health facility. There is need to simplify the procedure to open an account so that beneficiaries can avail cash incentive money. There is need to address the problems to receive cheque in home delivery and accredited Private health facility in addition to motivation for institutional delivery.

**Keywords:** Cash incentive, Cash incentive utilization, Janani suraksha yojana, Urban slum

## INTRODUCTION

Reduction of mortality of women is an area of concern for the Governments across the globe. According to

WHO, globally estimating the maternal mortality rate, over 500,000 die every year and in that 1,500 women in a day because of complications of pregnancy and childbirth.<sup>1</sup> In India, an estimated 1,36,000 maternal

deaths and one million newborn deaths occur each year, thus pregnancy related mortality and morbidity continues to take a huge toll on lives of Indian women and their newborn. Maternal mortality rate in India is 167 per 100,000 live births. In Chhattisgarh state MMR is 221 per 100,000 live birth.<sup>2</sup> According to National Sample Registration System, in India, pregnant women die due to a combination of important factors like, poverty, ineffective or unaffordable health services, lack of political, managerial and administrative will. All this culminates in a high proportion of home deliveries by unskilled relatives and delays in seeking care and this in turn adds to the maternal mortality ratios. In addition, lack of adequate referral facilities to provide emergency obstetric care for complicated cases contribute to high maternal morbidity and mortality.

Increasing the number of births attended by skilled health personnel, providing access to emergency obstetric care and providing postnatal care for mothers and babies could sharply reduce both maternal and neonatal deaths. Skilled attendance at birth is considered to be the most critical intervention for ensuring safe motherhood.<sup>3,4</sup>

The government of India, Ministry of Health and Family welfare, has implemented different types of programmes for the improvement of maternal health, child health and family welfare since 1951. National Maternity Benefit Scheme (NMBS) was introduced in 2001 to provide nutrition support to pregnant women. Under this scheme Below Poverty Line (BPL) pregnant women were given a onetime payment of Rs. 500/-, 8 to 12 weeks prior to delivery.

Following the review of the implementation of this scheme and recommendations from that review, Janani Suraksha Yojana (JSY) was planned. It was launched by the Hon'ble Prime Minister on 12<sup>th</sup> April 2005 and being implemented in all states and Union Territories (UTs). It is an ambitious scheme intended to encourage institutional delivery and provide access to care during pregnancy and in the postpartum period, and thereby reduce maternal and infant mortality.

According to the new guidelines issued in late 2006, eligibility Criteria in low performing states are- 1) All pregnant women, irrespective of age, poverty status, and number of births, are eligible for benefit under the JSY if they deliver in a government medical facility. 2) The women from the BPL households and all the women (irrespective of poverty status) from the scheduled caste (SC)/Scheduled Tribe (ST) households are eligible for the benefit under the JSY if they deliver in an accredited private medical facility. In High performing states - 1) Only those pregnant women who are aged 19 years and above and belong to the BPL households are eligible for cash assistance. 2) In case of the Scheduled Caste (SC) or scheduled Tribes (ST) households, all women irrespective of their poverty status, are eligible for cash

assistance, provided they are above the age of 19. Cash assistance is limited to only 2 live births.<sup>5</sup>

In brief, any pregnant woman in a targeted state is eligible for the benefit under JSY while age, poverty status and the number of births still matter in the non-targeted states. Under JSY, cash assistance to mothers and ASHAs is provided for institutional deliveries. Different criteria for eligibility have been applied for low- and high-performing states since October 2006.

Varying degrees of success of JSY scheme has been reported across various states in India. JSY has increased client-provider contact, proportion of women having ANC check-ups and institutional delivery.<sup>6</sup> In Chhattisgarh state, definitely institutional delivery has increased to 70.2%.<sup>7</sup> Since the implementation of the scheme, no studies have been conducted in Chhattisgarh to assess the receipt and utilization of JSY cash incentive, so this study was undertaken in urban slums of Raipur city.

## METHODS

A Community based cross sectional study was conducted in Urban Slums of Raipur City among mothers who delivered in last 1 year in Department of community medicine, Pt. J.N.M. Medical College, Raipur (CG).

Study period was July 2015 to June 2016. Sampling method was multistage random sampling. Study tool was predesigned and pretested questionnaire. Study technique was interview technique.

### Inclusion criteria

- Mothers who delivered in last 1 year and willing to participate in the study

### Exclusion criteria

- Mothers who have not received services from Government/Accredited private hospital

### Sample size calculation

$$n = Z^2 \frac{1-a}{2} \frac{P(1-P)}{d^2}$$

The prevalence of institutional delivery in Chhattisgarh 59.8% (AHS 2012-13) was taken. At 95% confidence interval and absolute precision of 0.5, sample size came out to be 369, which was rounded up to 384.

From total 8 zones of Raipur city, 4 zones were selected by lottery method using simple random sampling method viz. zone 8, zone 4, zone 1 and zone 5.

From each selected zone, 4 wards were selected by simple random sampling method. In this way total 16 wards were selected.

Study subjects were identified by house to house survey from urban slums of the selected 16 wards. From each ward, 24 study subjects were selected. As there was no proper listing and numbering of houses in most of the slum, a central landmark was chosen, and then by pen technique consecutive houses were visited till required number of study subject was obtained. In this way, total 384 sample size was fulfilled.

Study subjects were explained about the purpose of study and informed verbal consent was taken from them.

### Statistical analysis

Data was entered and compiled in Microsoft excel 2007 and collected data was checked for its completeness and correctness before data was analyzed. Data was tabulated, analyzed and result was expressed in number and percentages.

## RESULTS

This study observes about 4/5th of the study subjects belonged to upper lower class and the rest 1/5th belonged to upper middle class and lower class. Majority (43.22%) of the study subjects belonged to Schedule Caste (SC), nearly 22% and 12% from Other Backward Classes (OBC) and Schedule Tribes (ST) respectively while only 23% were from General category. About 45.05% of the study subjects had BPL card. A significant proportion of the beneficiaries (91.66%) were not working followed by 8.33% of the beneficiaries who were working. About 98.70% knew about provision of cash incentive money given for institutional delivery, 353(91.92%) out of 384 beneficiaries had institutional delivery whereas 31 (8.07%) opted for home delivery.

Total 272 beneficiaries out of 384(70.83%) received cheque of JSY cash incentive (Table1). In institutional delivery about 272(77.05%) received cheque whereas in home delivery none received the cheque (Table1-2a, 2b). All (100%) received stipulated amount i.e. Rs.1000 who delivered in institution in urban area and Rs. 1400 who delivered in rural health centre as they went to mother's place for delivery (Table 1).

In Institutional delivery about 66.91% received cheque of cash incentive on discharge from hospital, 27.57% within one week of delivery and 5.51% after 1 week of delivery. Majority received the cheque from accountancy at place of delivery (Table 2).

Reasons for not receiving Cheque of JSY Cash incentive, almost half (52.67%) of the study subjects did not received JSY cash incentive cheque due to be non-availability of BPL card, home delivery (27.67%) and about (18.75%) due to reasons like absconded after delivery, no one told about cash incentive, did not go to health facility to receive cheque as she was called after 3

days, beneficiary was shifted to other ward as newborn was shifted to nursery. (Table 3)

**Table 1: Distribution of beneficiaries who received cheque of JSY cash incentive.**

Variable	JSY beneficiaries	
	Yes	No
1 Aailed JSY cash incentive cheque (N=384)	272(70.83%)	112(29.16%)
2 Cash incentive cheque aailed according place of delivery		
Institutional (N= 353)	272(77.05%)	81(22.94%)
Home (N=31)	00(0%)	31(100%)
3 Stipulated amount Received (N=272)	272(100%)	00(0%)

**Table 2: Time and place of receipt of cheque of JSY cash incentive.**

Variable	JSY beneficiaries	
	No.	%
Time of receipt (N=272)		
Before delivery	00	0%
At the time of discharge from hospital	182	66.91%
Within 1 week of delivery	75	27.57%
After 1 week of delivery	15	5.51%
Place of receipt of cash incentive (N=272)		
At home	00	0%
Place of delivery	267	98.16%
In village	05	01.83%
Don't know	01	0.36%

**Table 3: Reasons for not receiving cheque of JSY cash incentive.**

Variable	JSY beneficiaries (N=112)	
	No.	%
No BPL card	59	52.67%
Home delivery	31	27.67%
Others	21	18.75%
Don't Know	01	0.89%
Total	112	100%

Regarding the experience in getting money, out of 272(70.83%) beneficiaries who received cheque of cash incentive, realization of cheque was done by only four fifth of the beneficiary (77.20%), realization of cheque was not done by 88.70% and 11.29% due to absence of bank account and wrong details in the cheque respectively (Table 4).

About 33.82% of the beneficiaries utilized JSY cash incentive money for household activity, 27.20%

deposited the money in bank, 23.52% utilized the money in drugs/Food and 4.04% in neonatal care (Table 5).

**Table 4: Reasons for not availing cash incentive money.**

Variable		JSY beneficiaries	
		No.	%
Realization of Cheque (N=272)	Done	210	77.20%
	Not done	62	22.79%
Problem in cheque realization (N=62)	No bank account	55	88.70%
	Wrong details in cheque	07	11.29%

**Table 5: Distribution of beneficiaries according to utilization of JSY money.**

Items on which JSY money was spent*	JSY beneficiaries (N=272)	
	No.	%
Neonatal care	11	4.04%
Drugs/Food	64	23.52%
Deposited in bank	74	27.20%
Household activity	92	33.82%

\* Multiple choice responses

## DISCUSSION

The study reveals that about 70.83% received cheque of cash incentive whereas about 29.16% did not received cheque of cash incentive. Similar percentage (70%) of the beneficiaries received monetary incentive in a study by Yangchen Dolma.<sup>8</sup> A higher percentage was observed in a study in West Bengal and Aligarh that revealed about 90% and 94.7% of JSY eligible women received the intended cash benefit respectively.<sup>9,10</sup> A study from Ujjain district shows all women who participated in JSY program received the cash benefit.<sup>11</sup> Study in Uttar Pradesh by CORT reported only half of the JSY beneficiaries received JSY cash assistance for delivery.<sup>12</sup>

In present study, stipulated amount as per JSY guideline i.e. Rs 1400 for institutional delivery in Urban Health Center and Rs.1000 in Rural Health Center was received by all (100%) of the study subjects. About 97.42% of beneficiaries who delivered in institutions of urban area received Rs.1000 whereas 2.57% of those who delivered in rural health center as they went to their mother's place for delivery received Rs.1400.

None of the beneficiaries who delivered at home received the cash assistance money though according to JSY guideline, there is entitlement of financial assistance of Rs. 500/- for home delivery. Study by Yangchen Dolma revealed 67.2% of the mothers who delivered in government institution received Rs 1400/- and Rs 1000 by 30.3% while all the beneficiaries (2.1%) who had home delivery got Rs 500 as incentive. None of the

woman who delivered at private facility received the incentive.<sup>8</sup>

Study in Rajasthan by CORT revealed, beneficiary who delivered in an institution received Rs. 900 while home delivery beneficiaries received around Rs. 500. Since beneficiaries covered were given cash assistance at different points in time, it was difficult to relate to the different guidelines because some of them received Rs.700 when the scheme began, which was increased to Rs.1,400.<sup>13</sup>

However, Regarding the experience in getting cash money, out of 272 beneficiaries who received cheque of cash incentive, realization of cheque was done by only four fifth of the beneficiary (77.20%), realization of cheque was not done by 88.70% and 11.29% due to absence of bank account and wrong details in cheque respectively. The minimum amount required to open an account in bank was Rupees five hundred, so due to lack of money they did not open bank account. Another reason of absence of bank account was non-availability of ID proof and address proof as the beneficiaries were residing on rent and they frequently moved from one place to other so they were lacking with address proof.

In present study place of disbursement of cash assistance depended on the place of delivery. Majority (98.16%) received the cheque of cash incentive at the place of delivery viz, PHC/CHC/SC and Tertiary care hospital, about 1.83% in village and less than 1% did not knew the place of receipt of cheque. It is remarkable that all JSY beneficiaries received cash assistance in one go. Study in Uttar Pradesh revealed 87% received cash at CHC/PHC/SC, 9% at home while less than 3% at the place of delivery.<sup>12</sup> Similar to this finding study in Rajasthan also reported payment for institutional delivery was done at the place of delivery or at PHC/CHC/SC and in home delivery beneficiaries received payment in the village of their residence.<sup>13</sup>

The purpose of giving cash incentive is to meet with the expenses for medicine, transport, care of mother and care of child with timely disbursement of cash. In this study about 66.91% received the cheque at the time of discharge from health facility, beneficiaries who delivered by caesarian section i.e. about one third (27.57%) within 1 week of delivery, 5.51% after 1 week of delivery. All (100%) received the cheque from accountancy at the place of delivery. Study by Mukhopadhyay et al, shows 46.1% received cash incentive at the time of discharge and 17.6% received it within 1 week of discharge.<sup>9</sup> A study by Priya et al reported 18% females received cash or cheque at the time of discharge from hospital and 48.27% within 2 weeks' time. In total, 87% received their payments by 1 month post-delivery.<sup>10</sup> A study in Ujjain district shows 57% of women received the cash benefit at the actual time of discharge and 28% within 2 weeks of delivery.<sup>11</sup> In a study in Uttar Pradesh about 22% of the women who

delivered at institution got money immediately after delivery and 11% of the women who delivered at home got money much before delivery. However, 51 percent of the beneficiaries who received the money got it much later. 32% of the cases received money by ANM and medical officer at the CHC/PHC whereas 21 percent received money from accountant, and less than one percent received cash assistance from ASHA or others.<sup>12</sup> A Study in Rajasthan reported 4 out of 10 beneficiaries received the cash before delivery or within a week of delivery and the remaining received much later. Break-up between institution and home deliveries indicated that half of the beneficiaries who delivered in institutions received cash assistance within a week of delivery while only 12% received for home deliveries. In majority cases, especially home deliveries, ANMs was the main source of cash disbursement, and for institutional deliveries, it was ANM followed by medical officer at the CHC/PHC and accountant.<sup>13</sup> In an evaluation study of JSY by Yangchen Dolma Accountant/ clerk was the main source of cash disbursement (54%) followed by 29% of women who got money through ANM and 17.2% through medical officer.<sup>8</sup>

In Present study reasons observed for not availing cash incentive was, about 67.85% had no BPL card, one third (31.25%) did not availed JSY cash assistance due to reasons like absconded after delivery, no one told about cash incentive, did not go to hospital to get the cheque as she was called after 3 days, home delivery, patient was shifted to other ward as newborn was shifted to nursery. A few (0.89%) were not aware of the reason for not getting cash incentive. Priya et al, reported few similar findings in their study, about 5.3% mothers who did not receive cash were those not aware of cash benefit or those told to come after sometime but did not turn up again.<sup>10</sup> In a study by Doke et al, common reasons for not getting the benefit was lack of information of JSY (37.19%), difficulty in getting the documents in time (25.62%) and delay by ANM (15.29%).<sup>14</sup>

This study shows about 33.82% of the beneficiaries utilized JSY cash incentive money for household activity, 27.20% deposited the money in bank, 23.52% utilized the money in drugs/food and 4.04% in neonatal care. Majority (78.91%) of this study subjects belonged to upper lower class and a significant proportion (91.66%) were not working. So, the cash assistance was beneficial for them, at the same time majority told that the cash assistance given was too less. It was not enough to meet the expenses during entire pregnancy period, so they had to borrow money to meet the expenses. Money spend was more than the amount they received as cash incentive. Similar finding was observed in studies done in Rajasthan and Madhya Pradesh. In Rajasthan about two-fifths of the study subjects purchased consumables for the family and bought medicines/ tonics for self and child, while one-fourth used it for self-nutrition or the husbands took it away, according to anganwadi worker some women used it to repay loans taken for meeting delivery expense.<sup>13</sup> In

a study in Madhya Pradesh about 27 % purchased consumables for the family and one-fifth used for medical expenses during delivery.<sup>15</sup> Contrary to this finding, a study in Jabalpur reported one third of the respondents intended to use the amount received for purchasing nutrients for herself.<sup>16</sup>

## CONCLUSION

One of the components of JSY is the provision of cash incentive to the mothers. According to study the scheme is definitely functioning well in terms of providing cheque of JSY on delivery in Government Health facility, timely disbursement of cheque and providing the stipulated amount as per JSY guideline. When delivered in accredited hospitals without BPL card the beneficiary has to bear all the hospital charge and are not entitled for the cash incentive, still they choose accredited private hospital and borrow money to bear the hospital expenses.

For them cash incentive is not more important than quality of care. None of the mothers who delivered at home received the cash incentive though are entitled for cash incentive. There is need for motivation for institutional delivery. The cash received is utilized to meet the needs of the mother and newborn. Some utilized the money by depositing it in bank in the name of newborn and some used it to fulfil their household needs. Though the amount is less as compared to the expenses during antenatal period, but it is still adding to the needs of mother and child. Problems in cheque realization has been encountered due to absence of account due to complex procedure to open an account. So, there is need to simplify the procedure.

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