A conditional cash assistance programme for promoting institutional deliveries among the poor in India: process evaluation results

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Abstract

India contributes significantly to the global burden of maternal deaths. More than 20% of all maternal deaths occur in India. To tackle this and especially to promote institutional deliveries, the government of India has introduced a conditional cash assistance programme called the Janani Suraksha Yojana (JSY). Under this programme, poor women who have had three antenatal check ups and who deliver in a health facility would get money soon after delivery to take care of their direct and indirect costs.

We interviewed staff and women who had recently delivered from four Indian states, to determine how the JSY is functioning in the field and whether it is meeting its original objective of increasing institutional deliveries. While there is some evidence to suggest that there has been an increase in institutional deliveries, we were able neither to quantify it nor attribute it to the JSY. This is because of the paucity of good quality data at the state and district levels. Both the staff as well as the pregnant women were happy with the scheme and felt that it met an important need. However, there were some important gaps in the implementation of the scheme. We found that some of the poor women were not aware of the programme; that the documentation processes had become very cumbersome and that there was a considerable delay in the women getting the cash benefit. Some women also mentioned that they received only partial amounts - the rest being pocketed by the health staff. The most significant issue was that the scheme has been changed to permit the cash benefit to go

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to all women who deliver, irrespective of the site of delivery. This has resulted in this scheme actually promoting home deliveries, a perversion of the original objective.

Keywords: India; maternal mortality ratio; institutional deliveries; conditional cash transfers; Janani Suraksha Yojana.

Introduction

India's maternal mortality ratio is high compared to many other Asian countries. The latest figure states that there are about 301 maternal deaths per 100,000 live births. However, this average hides a wide range: from 110 in Kerala to 517 in Uttar Pradesh (Ashish Bose 2007). This is much higher than neighbouring countries such as China (56), Thailand (44), Malaysia (41) and Sri Lanka (92) (UNFPA 2007). Pregnant women die in India due to a combination of important factors, ranging from poverty, to ineffective or unaffordable health services (Ganatra *et al.* 1998). Mavalankar states that the major causes of the high maternal mortality are lack of political, managerial and administrative will (Mavalankar *et al.* 2008). 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 India, while 77% of pregnant women receive some form of antenatal check up, only 41% deliver in an institution (International Institute for Population Science 2007). Again this is an average, which does not reveal that only 13% of the lowest income quintile delivers in a hospital, even though all services are free for them. While many women felt that institutional delivery was not necessary, a quarter interviewed expressed that they could not afford to deliver in a health facility (International Institute for Population Science 2007).

The Government of India has been implementing various programmes from time to time to tackle these issues. It launched the Reproductive and Child Health (RCH) programme in 1997, which aimed at universalising immunization, ante-natal care and skilled attendance during delivery. Reduction of maternal mortality was an important goal of RCH-II that was launched in 2005. One of the main interventions was to provide emergency obstetric care at the first referral unit. Incentives were also given to staff to encourage round the clock obstetric services at health facilities (Ministry of

Health & Family Welfare 2008).

Later in 2005 the Government of India launched the National Rural Health Mission (NRHM) mainly to strengthen health services in the rural areas. It seeks to provide effective health care to the rural population by improving access, enabling community ownership, strengthening public health systems, enhancing accountability and promoting decentralization (Ministry of Health & Family Welfare 2005a). Under the NRHM, there is a specific scheme - the Janani Suraksha Yojana (JSY), which was introduced in April 2005 to promote institutional deliveries. Cash assistance is provided to those women who deliver in a health facility. This demand side financing was supposed to reduce financial barriers and hence increase institutional delivery and thereby reduce maternal and neonatal deaths. While there is some evidence from Latin America (Attanasio *et al.* 2005) and Africa (Kakwani *et al.* 2005; Lagarde *et al.* 2007) about the effectiveness of conditional cash assistance, there is very little information about it in Asia. This document tries to fill this gap. It describes the JSY and then analyses the available information to see whether the JSY is able to meet its primary objective.

Methods

We conducted a descriptive study to understand how JSY was implemented and how JSY was perceived by the staff and the community. The authors first reviewed all existing literature about the JSY programme. Much of this information was obtained from government sources as well as the internet. These documents provided information regarding the description of the scheme and secondary data about coverage and utilisation of services. Following this, the authors conducted a qualitative study in January 2008 to understand the functioning of the scheme and the perceptions of various stakeholders. We interviewed stakeholders of the scheme in the states of Maharashtra, Chattisgarh, Orissa and Karnataka. These states were selected because of the presence of the authors. One district in each state was selected purposively. 17 members from the health team including District Health Officers (4), PHC Medical Officers (5) and nurses (8) were selected in these districts randomly and were interviewed by trained interviewers. Semi-structured interview schedules were used to collect the data. The main topics for the interviews were to describe how the JSY was being implemented in

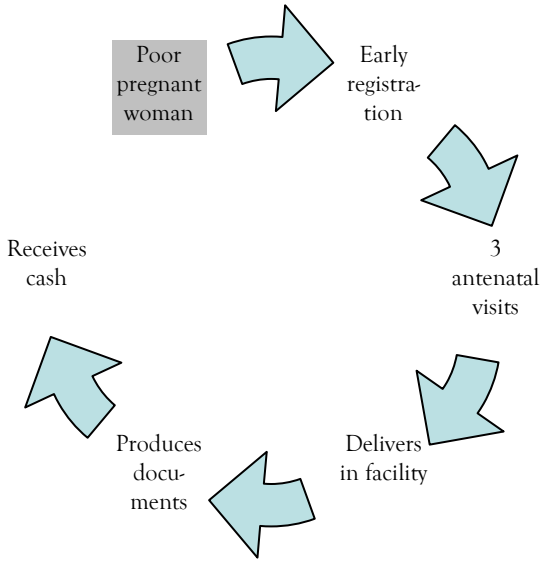
their district, document the manner in which the JSY is being monitored, to understand the problems that the stakeholders are facing, and to listen to their suggestions for improvement. Interviews were done in the local language and data were directly transcribed to the questionnaire by the interviewer. Data were then translated into English for a thematic analysis by the first author.

We also reviewed the nurse's birth register and identified poor women (BPL) who had delivered in the past six months. Twenty two of them were randomly selected and interviewed. The main topics for the interview were: knowledge of the scheme, amount of money received, time delay, documents required, unofficial payment, opinion about the scheme, and suggestions for improvement.

Description of the scheme

The Janani Suraksha Yojana (JSY) or 'Women's security scheme' is a 100% central government sponsored scheme to give cash assistance to poor pregnant women (Ministry of Health & Family Welfare 2005b). The JSY is functional in the entire country. Its main objective is to increase institutional deliveries and thereby reduce overall maternal and neonatal mortality rates. The main steps in availing of the benefits are given in Figure 1. The description of this scheme as given below is taken extensively from the JSY guidelines that were drawn up by the national government.

Figure 1. Steps in receiving the Janani Suraksha Yojana benefit



Eligibility criteria

Pregnant women who are below the poverty line[4] (BPL), of the age of 19 years or above and with no more than 2 live births are eligible to enrol in this scheme. If any woman even after the third live birth chooses to undergo a tubal ligation soon after delivery, she is also eligible to receive the cash assistance.

The process

The pregnant woman has to register with the government nurse at the nearest sub-centre. She subsequently is expected to visit the nurse for three antenatal checkups, the last of which has to be in the third trimester. At the time of delivery, the woman is expected to deliver in the nearest health facility - be it a primary health centre (PHC) or a First Referral Unit (FRU). Soon after delivery, she should produce a certificate to prove that her family

[4] The government of India has drawn a poverty line based on a set of 8 criteria. As per these criteria, those below the poverty line consume less than 2,400 calories per day.

belongs to the "below poverty line" (BPL) category. The medical officer reviews this document as well as the discharge summary from the facility and then sanctions the funds. The cash is handed over to the post-natal woman by the nurse. She is expected to use this money to meet the indirect costs of delivery, as well as to purchase nutritious food. The cash assistance depends on the type of delivery (Table 1). If the pregnant woman was identified and taken to the hospital by the village health worker (ASHA), the latter also gets a cash incentive.

Table 1. The cash assistance as per the Janani Suraksha Yojana guidelines

	INSTITUTIONAL DELIVERY		
	Normal delivery in a government facility	**Caesarean section in a government facility**	**Incentive for the village health worker (ASHA)**
Rural areas	Rs 700 (US$ 18)	Rs 1,400 (US$ 36)	Rs 600 (US$ 16)
Urban areas	Rs 600 (US$ 16)	Rs 1,400 (US$ 36)	Rs 200 (US$ 5)

This assistance is slightly less in economically advanced states. The guidelines state that if there is no government obstetric facility in the area, especially for caesarean sections, the nurse can arrange for the pregnant woman to be admitted in a private facility. Rs 1,500 is then paid by the government to the practitioner for this.

Administration of the scheme

The BPL card is used to identify poor pregnant women. In regions where the BPL card is not available, the elected representative can use his/her discretion to issue a certificate. The local nurse is given an initial advance of Rs 10,000, which is used for disbursing the assistance. The money is put into a joint bank account that is controlled by the nurse and the local elected representative. The assistance is given as one instalment soon after the delivery and on providing the Medical officer with at least two documents - certificate of delivery and the BPL card. The advance is replenished every time the nurse submits a utilisation certificate to the district authority.

Monitoring of the scheme

Implementation committees at the National, State and District level monitor

the scheme closely. The nurses file monthly reports to the district office with information about the number of women benefited, the amount of money disbursed and the outcome of the delivery. Seven percent of the entire fund is allocated to the state for meeting administrative costs. To promote transparency, all health centres are expected to write the names of the beneficiaries and the amount disbursed on a board that is displayed publicly. A grievance officer is also appointed in each district to look into any problems that may arise for the pregnant woman.

Results

IMPLEMENTATION

Though there was a general understanding about how the scheme should function, each of the four states studied has modified the central guidelines. The inclusion criteria, documents to be submitted, the timeline for receiving the cash benefit and the amount given varies from state to state. Table 2 gives further details.

Eligibility criteria

In the second year, even home deliveries were eligible for cash assistance. Policy makers in many states felt that all poor pregnant women should get some cash benefit. Thus women who deliver at home were to be provided with Rs 500 (US$ 13).

In the economically weaker states (Orissa & Chattisgarh) all pregnant women were targeted for this scheme, not just the poor. In Karnataka and Maharashtra however, the focus remained on the poor pregnant women. Low caste and tribal women were included in Maharashtra, irrespective of their economic status.

Amount of cash assistance

The amount varies a little from state to state and according to the type of delivery. While some of the states gave only Rs 500, others gave Rs 700 for a normal delivery. The assistance for Caesarean sections was similar in all the states. In most of the states the money was disbursed by the nurse. To improve transparency, in some states she disbursed the money in the presence of locally elected members.

Provider

One of the objectives of this scheme was to increase access to institutional care. Hence women were encouraged to use either the public or private facility. Unfortunately, in the economically weaker states (where the public health facilities would naturally be weaker), the government decided to limit the benefit to only those who either delivered at home or in a public health facility.

Table 2. Differences in the implementation of the Janani Suraksha Yojana in different states

		Economically weak states		Economically better off states	
	Central Govt. guidelines	**Chattisgarh**	**Orissa**	**Karnataka**	**Maharashtra**
Eligibility criteria	All BPL women who deliver in a health facility (public or accredited private facilities) Of the age of 19 years old or above Up to 2 live births Has been extended to home delivery after 1 year of implementation	**All women** if they deliver at home or in **public facilities.** Only BPL women - if they deliver in accredited private hospitals.	**All women** if they deliver at home or in **public facilities**.	Only BPL women and only for first two deliveries	Women belonging to the BPL category or **belonging to low caste or tribal groups**
Documentation required	BPL card. In the absence of BPL card, the State/UnionTerritories governments/ Municipalities have to lay down a simple criterion for certification of BPL Status, through Panchayats[5] or other mechanisms	**None** if the woman delivers in government facilities. If a BPL woman delivers at home or in a private hospital, she has to produce the **BPL card**. She also has to produce a **discharge summary** if delivered in a private institution.	**ANC card** **JSY form**	**Income certificate** **ANC card &** **JSY form** **A photograph of the parents with the baby**	**BPL card** **Proof of residence** **ANC check up details** **Age proof** **Discharge summary** **JSY form** **All within 7 days of delivery**.

[5] Panchayats are locally elected bodies (one member per village). Usually 5 villages form one panchayat

Cash assistance	**Rural area** Normal deliveries Rs 700 Caesarean sections. Rs 1,400 **Urban area** Normal deliveries Rs 600 Caesarean sections Rs 1,400	**Home delivery** Rs 500 **Normal delivery in insitution** Rs 1,400 **Caesarean section** Rs 1,400	**Home delivery** Rs 500 **Normal delivery in institution** Rs 1,400 **Caesarean section** Rs 1,500	**Home delivery** Rs 500 **Normal delivery in institution** Rs 700 **Caesarean section** Rs 1,500 (Rs. 700 for the beneficiary and Rs. 800/- for the attending doctor)	**Home delivery** Rs 500 **Normal delivery in institution** Rs. 700 **Caesarean section in Govt. Hospital** Rs 500 to the beneficiary and Rs.1,000 for the surgeon **Caesarean section in Private Hospital-** Rs.1,500

Source: Interviews in the four states.

Documents required

In all the states, the 'BPL card' was the main document required to avail of the benefits of this scheme, especially if the woman delivers at home. Where BPL cards had not yet been issued or had not been updated, alternate documents had been specified, which vary from state to state. In Karnataka, the new parents were expected to furnish a photograph of themselves with the baby to receive the cash assistance. While Maharashtra insisted on all the documents being submitted within seven days of delivery, in most other states, there was no time limit. In Karnataka, even women with a one year old child were allowed to claim the assistance.

Delay of reimbursement

In Maharashtra, the women said that they received the benefit the moment they had submitted the documents. However, women from other states said that there was considerable delay in receiving the benefit. As stated earlier, in Karnataka, the money was disbursed up to one year after the child was born. The most common reason for this delay was the fact that the advance was not replenished by the district/state (as per the nurses and medical officers). On the other hand, the state level officers said that this delay was because the nurses did not submit the utilisation certificates in time. In all the facilities conducting institutional deliveries, there is a huge backlog of JSY payments. During the survey, a nurse reported that in her area, out of 20 institutional deliveries, only 8 women and village health workers have received the JSY entitlement. The remaining 12 have not yet been paid due to paucity of funds.

Coverage

We made an estimate from various sources to assess the coverage of the scheme (Table 3). According to the figures reported by NRHM, the estimated coverage of the scheme was around 75% in Karnataka and 21% in Chattisgarh, whereas it was only 8.5% in Maharashtra. One needs to interpret this figure with caution as it is just an estimate. Moreover, there is considerable lag period between the cash assistance in the field and the report reaching the state and the central government.

Table 3. The estimated proportion of beneficiaries under the Janani Suraksha Yojana (2006-2007)

State	Number of BPL individuals (Planning commission 2005)	Estimated no of deliveries among BPL families[#]	No of deliveries covered under JSY (Ministry of Health & Family Welfare 2008)	% covered	Budget allocated in rupees (Ministry of Health & Family Welfare 2008)
Karnataka	13,889,000	305,558	233,147	76.3%	91,600,000
Maharashtra	31,738,000	698,236	59,000	8.4%	106,800,000
Chattisgarh	9,096,000	309,264	64,000	20.7%	40,000,000
Orissa	17,849,000	464,074	227,000	48.9%	85,200,000

Estimated data using fertility rates from SRS data (Sample Registration System).

UTILISATION

NRHM reports state that there is a steady increase in the number of beneficiaries utilising the scheme. According to these updates (Ministry of Health & Family Welfare 2007) there is a *'significant increase in institutional deliveries because of Janani Suraksha Yojana'*. To substantiate this statement, the reports further state that in 50 Blocks of Madhya Pradesh, institutional deliveries recorded a 27% increase (from 26% to 53%). In Orissa, figures from three CHCs show an increase in institutional delivery from 88 to 149, 59 to 120 and 97 to 169 respectively over a corresponding time period. In Haryana, the institutional deliveries went up from 28% in 2004-05 to 43.6% in 2005-06 (Ministry of Health & Family Welfare 2007).

Table 4. The number of Janani Suraksha Yojana beneficiaries

States	No of JSY beneficiaries, 2005-2006	No of JSY beneficiaries, 2006-2007
Low performing states[6]	26,000	223,000
High performing states	300,000	969,000

Source: NRHM report 31/12/07 (Ministry of Health & Family Welfare 2008).

Table 5. Janani Suraksha Yojana beneficiaries in Karnataka.

Year (1st April to 31 March)	Total number of deliveries	Number of JSY beneficiaries (% of all deliveries)	Number of JSY beneficiaries who delivered in institutions (% of total JSY beneficiaries)	Proportion of JSY beneficiaries who had Caesarean sections
2005-2006	901,260	50,542 (5.6%)	30,142 (59.6%)	NA
2006-2007	909,631	233,147 (25.6%)	133,778 (57.4%)	NA
2007-2008*	454,874	162,192 (35.6%)	107,286 (66.2%)	26,291 (16%)

* April to September 2007

From the above two tables, it appears that there is an increase in the number of women who receive the assistance of JSY. Unfortunately, this does not inform us whether there has been a substantial increase in the institutional deliveries. We managed to get figures from Karnataka where we note that the proportion of institutional deliveries has shown some increase over the years. It is interesting to note the relatively high caesarean rate. In other states we could access only the number of beneficiaries. The denominator was not available.

PERCEPTION OF THE SCHEME BY THE PROVIDERS

The senior government officials and medical officers felt that the scheme was beneficial for poor and needy patients who normally could not afford institutional deliveries. They reported that the scheme was resulting in

[6] Low performing states are the economically weaker states as defined by the Government of India.

promotion of institutional delivery and it should also help in minimizing family size as this scheme is applicable for the first two children. To quote one of the medical officers, "*People are becoming aware and coming to hospital for delivery. Maternal and infant deaths have reduced since JSY. It is a very good scheme for both the mother and child. They are directly getting benefits and our death rate is decreasing. Also after delivery they are able to buy medicine especially for chronically anaemic mothers. Also the gap which used to be there between rural people and the public health facility has been bridged and now people who used to go to a quack for treatment are now coming immediately to seek care*."

Most of the medical officers in the health centres reported that the work load has definitely increased since the introduction of this scheme. The number of institutional deliveries increased but at the same time many hospitals did not have the adequate infrastructure and staff facilities required to handle this extra load. They reported that due to this, they are often forced to discharge the women within a day of the delivery. They also stressed that necessary training has to be given to village health workers and other field staff to improve the quality of their work.

They pointed out that as the benefits of the scheme are extended even to home deliveries, this might affect the success of the scheme. To quote a nurse; "*if the delivery is at home, they get Rs.500, and if it is conducted in a hospital, they get Rs.700. They have to spend more for travel, food and other expenses if they deliver in a hospital. So they are reluctant to go to hospital, and prefer to deliver at home.*"

The medical officers suggested that the fund flow has to be more streamlined so that the delay in payment can be avoided. They reported that the village health worker (ASHA) has a heavy work load and she does not get rewarded for her performance on time. They felt that due to this she might lose her motivation and that in turn will affect the success of the scheme. They suggested that the scheme should be made open to all, irrespective of caste and economic status and the grievance procedure to be strengthened. They also felt that the facilities at the sub-centres[7] have to be improved. They strongly opined that the benefits should be restricted to only two children, lest it contradict the population policy.

[7] Sub-centres are the lowest formal institutions in the government health system. It has an auxiliary nurse and provides preventive care for a 5000 population. The nurse reports to the doctor at the primary health centre which is in turn responsible for 30,000 population

PERCEPTION OF THE SCHEME BY THE BENEFICIARIES

The level of awareness about the scheme was low in Chattisgarh and Karnataka compared to Maharashtra and Orissa. Beneficiaries interviewed from the state of Maharashtra reported that the scheme was good as it benefits the poor and it should be continued. To quote a beneficiary, "*this is a good scheme, [we receive] financial support for maternal expenses and there is no need to borrow money*". But the majority of the BPL mothers who had delivered in the past six months from Chattisgarh and Karnataka mentioned that they had not heard about this scheme.

Corruption is another issue of serious concern. According to the Jan Swasthya Abhiyan report, "*there are instances of negligence on the part of the block level health officials in Chattisgarh whereby the full entitlement does not reach the beneficiaries*" (People's health movement 2007). In Karnataka beneficiaries interviewed stated that they did not receive the full amount. All the beneficiaries interviewed from Orissa reported that they received only Rs 350 instead of Rs 700. The rest was apparently distributed among the facility staff.

The pregnant women suggested that the coverage of the scheme has to be extended to all women and up to 3 live births. The payment has to be made on time, and the procedure for documentation has to be simplified. They felt that the amount should be increased as they spend more money associated with delivery (hospital charges, medicines, transportation charges etc). They also suggested that the assistance has to be given for the new born baby's treatment also. They felt the information regarding the scheme has to be provided a long time before the delivery so that the documents can be arranged in time. If an application is rejected, the reason for rejection has to be explained also.

Discussion

Maternal mortality rates have become one of the major concerns globally and many countries have developed different strategies to address the same. Some of them include free access to health care, insurance schemes and voucher schemes. Many countries have successfully implemented cash assistance schemes to increase the utilisation of health care and educational facilities by children (Lagarde *et al.* 2007). JSY was such an attempt by the

Government of India, to increase the access to obstetric care for poor women.

We have tried to document the JSY through a review of secondary literature and some primary data collection. While we were successful in interviewing important stakeholders, our attempts to get quantitative data about the scheme were not very successful. This was mostly because the data required was not available in the states studied. This results in a more descriptive study rather than an analytical one and our conclusions need to be interpreted keeping this in mind. Furthermore, we had only historical controls and had to rely on government data that concentrated only on numerators, without taking the denominator into account. Not having any data on private sector utilisation is a serious limitation because the (apparent) increase in government utilisation may reflect a shift from the private sector with no increase in institutional deliveries overall.

JSY was introduced mainly with the aim of increasing the institutional delivery rate and thereby decreasing maternal and neonatal mortality. While the central government developed broad guidelines, we see that each state has modified it: home deliveries included, private excluded, difference of cash amount, etc. By permitting even home deliveries to be covered, the primary objective may have been undermined. As graphically described by a nurse, currently the JSY is an incentive for home deliveries. This needs to be looked into urgently; else the JSY will be converted into a programme to support deliveries, not necessarily institutional deliveries.

The reasons for divergence are not clear: was it a result of poor understanding and communication of the policy, or independent changes made to suit the local context? This needs further investigation.

In three of the four states there is anecdotal evidence that some of the BPL women were not aware of the scheme and its benefits. Those women who have received the benefits did not receive the cash immediately after delivery. Except for Maharashtra, in the other states, the disbursement was considerably delayed. This defeats the purpose of providing funds at the time of delivery to take care of indirect costs. The states have to make sure that the money is disbursed at the time of delivery, or even before, to improve the effectiveness of the scheme. Also the incentives given to the health workers should be on time to maintain her morale. Obviously this is an issue of proper financial management, as both central and state officers maintain that there are adequate funds available for this scheme. What is required is

to streamline the fund flow, so that funds are always available at the local level.

Yet another issue that affects the proper utilisation of the scheme is the documentation required to get the money. While the original guidelines just require a BPL certificate and a discharge summary, some of the states have increased the number of documents required. This places a burden on the family. Also these documents have to be produced after the delivery, which begs the question *- is the mother going to look after her newborn or is she going to run around trying to collect the documents?* The Karnataka requirement that the neonate has to be photographed exposes the child to the dust and infection of the market place, thereby increasing the probability of infection and subsequent mortality.

And then of course there is the ubiquitous role of corruption. While only few women complained about it, most accepted that they did not receive the promised amount. They seem to have accepted this situation *"something is better than nothing."*

Anecdotal evidence suggests that the quality of care has suffered in institutions because of the increased number of deliveries. Staffs are not able to cope with the increased demand on their time and services. It was hoped that some of these deliveries would happen in the private sector, and so reduce the burden on the existing health services. But most states have been less than proactive in involving the private sector and so the public facilities have borne the entire burden. Also the caesarean section in Karnataka seems to be high (16%). This needs to be reviewed very carefully to understand the reason behind this.

The monitoring of the scheme is currently done by the District Programme Manager (NRHM) and the RCH officer at the district level. There is a need to strengthen the monitoring mechanism at the field level to make sure the scheme is implemented effectively. Currently the variables monitored are "the number of beneficiaries" and the "amount disbursed." As stated earlier, this does not permit the policy maker to understand whether the JSY has met its original objectives, those of increasing institutional delivery and reducing maternal and neonatal deaths. A real problem with monitoring the incentive scheme is that it encourages over-reporting on utilisation data. An independent agency could monitor the scheme to provide timely and accurate reports of its performance. There is no formal evaluation being undertaken. An independent evaluation was

recommended by the government but has not been carried out yet. There is a need to add private data to have a full picture of what is happening.

Conclusion

The Janani Suraksha Yojana is an attempt to promote institutional deliveries. Its strength lies in the fact that the government has made budgetary allocations for the poorest. There is some evidence to suggest that institutional deliveries have increased due to the JSY. However, it is apparent that there are some weaknesses in the scheme. Women are not aware of the scheme in some states. Changes in the benefits now promote home deliveries which conflicts with the original objective of encouraging institutional deliveries to reduce maternal and neonatal deaths. Documentation procedures have evolved into a cumbersome process and have the potential to deny benefits to the needy. If the implementation process is strengthened, quality improved and the programme is effectively monitored, then the poor can benefit from this scheme and, in the long run, it may reduce maternal and neonatal deaths.

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