# Exploring the Bottlenecks: An Assessment of the Implementation Process of Janani Suraksha Yojana in the State of West Bengal, India

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#### **ABSTRACT**

Introduction: Empirical research reported that Janani Suraksha Yojana (JSY) accomplished the proximate target of increasing institutional delivery. However, discontents existed on the process and other outcomes of the scheme. Methods: To assess the implementation process of JSY in West Bengal, a cross-sectional study was conducted in six districts with population of 29.5 million covering 80 health sub-centers, 12 Primary health centers, 12 community health centers and six district hospitals. Data regarding barriers for utilization were collected through structured interview of the women who delivered within last 12 months. In-depth interviews of health personnel at different levels of government health system and review of relevant records were conducted to assess their awareness as well as flow of fund, record keeping and community-based monitoring of the scheme. Results: Almost universal awareness regarding benefits and conditionality of JSY among beneficiaries and health personnel, flexibility from health institutions for making the process of disbursement more users' friendly, regular record keeping in cash books are the strengths of this scheme. Delay in disbursement and multiple visits from beneficiaries for receipt of incentive, almost no system of assessing the requirement of fund, inequitable distribution of fund, and diversion of fund from other head to meet the expenses of JSY, lack of community-level monitoring of the scheme might potentially affect the success of the scheme. **Conclusion:** Removal of procedural complexities for beneficiaries, smooth flow of fund based on actual need and community-level monitoring are a few challenges that are to be redressed urgently.

Key words: JSY, Process, Assessment, Cash incentives, Pregnant women, India.

## **INTRODUCTION**

Based on the policy of demand side financing (DSF), promotion of maternal care was envisaged in many parts of the world through Conditional Cash Transfer (CCT) schemes. 1,2,3,4 Most of such schemes have reported increase in utilization of maternal care services; though sometimes been criticized for partial success. 5 United Nations Development Programme (UNDP) commented that the success of DSF schemes was a 'particular challenge in the developing countries' for 'the lack of fair and functioning systems'. 6 Asian development Bank also observed that Out of Pocket Expenditure was not reduced with DSF schemes in Bangladesh, neither the equity of utilization was ensured. 7

The Government of India launched Janani Suraksha Yojana (Safe Motherhood Programme), on the principles of DSF through CCT for reduction of maternal mortality by increasing institutional delivery. It provides cash incentives to pregnant women and frontline workers, Accredited Social Health Activists (ASHA) for accompanying them for promoting

institutional delivery. The scheme reportedly met with reasonable success in increasing institutional deliveries. <sup>8,9,10</sup> In West Bengal, routine reports generated by state government as well as research studies also reported increase in institutional delivery, particularly in public health institutions among the beneficiaries of JSY. <sup>11-14</sup>

But notwithstanding these encouraging finding; Lim *et al*, indicated gross inter-state variation in the improvements in institutional delivery.<sup>15</sup> However, Das *et al*. commented that such increment should be interpreted cautiously.<sup>16</sup> Two Indian research studies, one from West Bengal, also argued that the risk-protection in JSY-supported child-birth was partial and might have triggered fresh out-of-pocket expenditure.<sup>8,17</sup> In Madhya Pradesh; around 40% JSY-benefitted women had to borrow money to bear the cost of institutional delivery, indicating the inadequacy of compensation under JSY.<sup>18</sup> Another study from Madhya Pradesh concluded that the benefit of the scheme precluded the marginalized and uneducated

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women.<sup>19</sup> The programme is still evolving itself to be more productive one with the Government relaxing the conditions of the women to avail its benefits.

Hence there are many scopes for better functioning of JSY in India. May it be the barrier of over-simplistic targeting mechanism and exclusionary eligibility criteria, <sup>19</sup> or predicament of inadequate knowledge, <sup>8,16</sup> or inadequacy of provider to deliver quality care <sup>16</sup> – all seemed to be significant issues.

So, keeping in mind the experiences regarding operational DSF schemes, especially about JSY, it is crucial to assess the functioning of the scheme. In this perspective it was planned to assess different facets of implementation of JSY in the state to identify gaps, if any.

#### MATERIALS AND METHODS

A cross-sectional study was conducted during July 2012 to June 2013 obtaining clearance from the Institutional Ethics Committee, B.S. Medical College, Bankura, West Bengal. West Bengal, is comprised of 18 districts. In this study six districts were selected and were stratified into two groups based on the rate of institutional delivery. Three districts, namely Cooch Behar, Purulia and Hooghly had the rate more than that of the state figure; while in Uttar Dinajpur, Murshidabad and South 24 Parganas it was less. Those six districts cover population of 29.5 million (2011 census). <sup>20</sup> 80 subcenters were identified in the study area using probability proportional to the population of the district.

Four to six enumerators with prior exposure to public health programs were selected in each district and were briefed by one of the authors at district level on the methods and tools used in the study. In each selected sub-center, twelve JSY-eligible women who delivered within April 2012 and June 2012 were randomly selected from the list available with the concerned health workers. Their residences were identified with the help of the local ASHAs and were interviewed at their household with a structured questionnaire to collect information regarding their socio-demographic characteristics, utilization of health related services including JSY and the process involved thereto. They were also enquired about the possible barriers in accessing the services.

In each district, the investigators assessed the process of implementation of the JSY scheme through in-depth interviews with the responsible health personnel of four sub-centers, two 24X7 Primary Health Centers, two Community Health Centers (known as Block Primary Health Centers / Rural Hospitals in West Bengal), selected through stratified purposive sampling as well as those of the District Hospital and District Family Welfare Bureau. The relevant records and reports were reviewed. In-depth interviews and review of records were conducted by trained district level investigators. They were selected and trained with a daylong session at the state level by the authors. Interview guides and observation checklists were prepared for each point of health care delivery system based on the guidelines laid down in the documents of National Rural Health Mission.<sup>21</sup> The investigators also guided and supervised the activities of enumerators in the respective districts. The topics of enquiry were: Awareness of health workers, Cash disbursement to beneficiaries, Cash handling by health providers, Maintenance of records, IEC activities and Monitoring of the programme.

Study participants for in-depth interview:

Level of health care	Study Participants	No.
Sub-center	Health worker (Female)	24
Primary Health Center	Medical Officer	12
Community Health Center	Block Medical Officer	12
	Public Health Nurse	12
	Block Accounts Manager	12

Distri	ct Hospital	Medical Superintendent	6
District Fami	ily Welfare Bureau	Chief Medical Officer	6
		Dy. Chief Medical Officer-3	6
		District Maternal & Child Health Officer	6
		District Public Health Nursing Officer	6
		District Accounts Manager	6
	Total		108

Filled up forms of structured interview were compiled at the district level by a Data Entry Operator and the dataset were sent for collation and analysis. Transcripts of in-depth interviews prepared from the field notes and audio-tapes along with filled-up observation check-lists were sent for further management and analysis. The data generated through semi-structured interview was analyzed quantitatively and the outcome indicators were expressed in percentages. The transcripts of in-depth interviews and observed information were reviewed to summarize data by coding and then by identifying idea clusters to generate a list of key themes.

#### **RESULTS**

Awareness of health workers: Almost all the respondents at all health institutions could enumerate the entitlement criteria and precondition for disbursing JSY cash. The first installment amounting Rs.500/- were distributed mostly after third antenatal check-ups, although in some sub-centers, completion of 28 weeks of gestation was also taken in consideration. The second installment of money amounting Rs. 500/- was generally distributed at discharge at Government health institutions. All the responsible health personnel at different health institutions were aware of required documents for entitlement and reportedly kept strict vigilance over availability of relevant documents before disbursing any cash.

Government guidelines on JSY were scarcely available in sub-centers, PHCs and BPHCs/ RHs. Even District Hospitals in three districts and district administration in one district reported that they did not possess it

Cash disbursement to beneficiaries: As per guidelines of the state government, cash benefits under JSY was disbursed in two equal installments of Rs. 500/-; first after third ANC and second after childbirth at government or accredited private institution. It was noted that 76.0% (719/946) received the first installments but 545 (75.8%) received it during pregnancy and 115 (21.1%) even before third ANC. Out of those who delivered in government or accredited private institutions, 55.6% (410/738) received second installments after delivery. In all districts except south 24 Parganas and Hooghly, more than 60% of women with institutional delivery received the second installments. Among the recipients, only 46.1% received it at the time of discharge and another 17.6% received it within one week of discharge. Those who did not get the benefit at the time of discharge, 56.6% of them had to visit the health institution twice or more.

In more than three-fourths women, necessary documents for eligibility were collected from the nearest office of the local bodies. However, in 58.3% cases, the relatives of the women had to visit the office for more than twice.

Cash handling by health providers: ANMs were responsible for disbursing money at sub-center level. At functional PHCs, Medical Officers in-charge usually disbursed money in three study districts and paramedics including nursing personnel were responsible in the others. In two-third

BPHCs/ RHs, nursing personnel and in the rest, Block Accounts Managers were responsible for this work. In district hospitals money was disbursed by the nursing personnel; excepting in two, where Office Assistants did the job.

All functional PHCs, BPHCs / RHs, district hospitals as well as almost 50% of sub-centers reported to disburse JSY benefits on all working days, excluding Saturday. In other sub-centers, it was paid twice or thrice in a week. In all health institutions, money was disbursed in cash only.

More than half (58.0%) of the sub-centers including all of Purulia district and all PHCs, BPHCs/ RHs of that district did not have any cash on hand for JSY benefits on the day of survey. Even the district hospital and district administration of Purulia did not have any fund for JSY benefits on that date.

There was no backlog in disbursing JSY benefits to the beneficiaries in any of the District hospitals. However, two district hospitals were not only short of cash on the date of survey, but also used money from other funds to meet the need of JSY. Though district authority in Purulia had no funds for JSY, the district authority of Murshidabad had enough fund at their disposal.

Assessment of requirement was almost non-existent. The system of advance and replenishment of JSY funds was grossly irregular in all districts and at all levels.

Except in Purulia and Uttar Dinazpur districts, there were ample amount of money at the district level, whereas the lower level health institutions had been suffering from irregular flow of funds. It was reported that at all levels funds were released after receipt of requisition and statement of expenditure of utilized funds. The basis of the requisition made at different health institutions was not explicitly spelt out.

Unlike in other districts, in Uttar Dinazpur, no mechanism existed for making payment regularly to the beneficiaries at sub-center level. Release of fund to the sub-centers and PHCs was neither timely nor adequate. Payment to the beneficiary was delayed by 4 weeks at PHC level in some cases. Since there was no uniform mechanism for release of fund; some institutes were out of cash; and others had it adequate. In Uttar Dinazpur submission of 'Statement of Expenditure' was belated compared to other districts

Maintenance of records: All sub-centers in the study districts correctly maintained dedicated JSY payment registers. Cash books were maintained in the districts of Hooghly and South 24 Parganas. Though about three-fourths of the mothers in Uttar Dinazpur collecting money with Thumb Impression as proof of identity was unacceptable. It was also found that the Mother and Child Tracking card was not timely updated. JSY beneficiary registers were maintained and updated in all sub-centers and functional PHCs. All BPHCs and RHs had computerized the list of JSY beneficiaries and 75% of them regularly updated it. Such computerization was done in four district hospitals. Only two districts maintained computerized list of beneficiaries with their respective details; whereas three other districts maintained only the number of beneficiaries per block. Both the district hospital and district administration of Hooghly could not computerize the list of JSY beneficiaries whatsoever.

IEC: Activities like flex board, writing on walls, poster and interpersonal communication through front-line health and nutrition workers were conducted. Involvement of ASHAs and Anganwadi workers in awareness generation on JSY was reported. At the village level, awareness was reportedly created through interaction with beneficiaries during Village Health and Nutrition Day (VHND) and mothers' meeting.

**Monitoring of JSY:** Functioning of JSY was a matter of discussion in the meetings of Rogi Kalyan Samiti (Patient Welfare Committee) in only two districts.<sup>21</sup> In other districts, RKS of PHCs were either not functional or was disinterested in coverage and utilization of JSY. It did not feature

as an important agenda in the meeting of RKS of district hospitals or District Health and Family Welfare Samitis in any district.

As shown in Figure 1, overall, awareness of health personnel, verification of relevant documents, displaying of appropriate IEC materials and maintenance of records on cash disbursement were noted in more than 90% of health institutions. However, achievement was below 50% in case of assessment of need for cash, availability of written guidelines, community-level monitoring and cash disbursement strictly from the JSY account.

### **DISCUSSION**

DSF has been implemented to improve maternal health, by removing the social, cultural and financial barriers in accessing quality obstetric care; especially in Asia. <sup>22</sup> It has generally been accepted to have bettered acceptance of skilled intra-natal care through institutional deliveries and antenatal visits. This study was conducted to explore the details of functioning of JSY, the Indian program based on DSF, to reveal the intricacies in one of the better performing state of India regarding maternal health. We found that almost all the health workers knew about the two most critical features of the programme: the criteria for this privilege and the amount of incentive. Dissemination of requisite information to target population was near universal in other states of India also. <sup>18, 23</sup> So one of the principal criticisms of DST; that they do not reach the needy; was unfounded in our study. <sup>24</sup>

The timings of disbursement of money was in conformity with the state Government norms. <sup>25</sup> A large majority of the beneficiaries received cash before the expected date of delivery; though a few also were paid before their 3<sup>rd</sup> ANC and about a half was paid during discharge. The corresponding figure in Madhya Pradesh was only 39%. <sup>23</sup> Multiple visits to the health institution for receiving the second installment of cash benefits was found in around one-third women. In another study in Madhya Pradesh about two-thirds of women had to wait for about a month to receive the money. <sup>26</sup> Most of them collected documents from the local body's office, but multiple visits for those were a concern for the relatives of around half of the women. But the study in Chandigarh revealed dissatisfaction among the beneficiaries that JSY needed too much paper work and it would have been better if money could be disbursed before delivery. <sup>27</sup>

We found gross variety in terms of the concerned person disbursing cash. It seemed, whoever was found capable of handling money had been entrusted with doing so. This flexibility rather than depending on any particular principle ensured the accessibility of services but, that sort of non-uniformity might also culminate into chance of variance in following guidelines. This finding was in contrast compared to the results of UNFPA study, where only Medical Officers were in charge of distributing money.23 It was creditable that all hospitals and even half of the sub-centers managed to hand out the incentive on all working days of the week. Though the transaction was in cash; but that did not seem to be of any particular worry. UNFPA portrayed a gloomier image in their study where majority of women had to wait for undefined period to receive the cash and might sometimes had to resort to some form of bribery for it.<sup>23</sup> Spending "informal money" in order to get the benefits was documented from Jammu and Kashmir as well.28 However, a delay to a lesser extent, particularly in case of second installments, was found in the current study. Moreover, the recent linking of AADHAR with JSY cash disbursement has increased the technical complexities of the programme.<sup>27</sup> In Karnataka majority of disbursement was through Centralized Plan Scheme Monitoring System (CPFMS), which resulted in most of the women getting money after three to four months.29 They indict the complexities of this software-based system behind this delay; which has increased ever since.<sup>29</sup> On the contrary, time elapsed for

disbursement of money was only a few weeks in Jammu and Kashmir where no complicated method was in place.<sup>28</sup>

A supply-side obligation for DST-s to function effectively is to be the health officials sufficiently knowledgeable. This study revealed satisfactory preparedness of health officials. But in the same breath it is conceded that the reported scarcity of programme guidelines, which should be ready at hand to refer to, can be disconcerting. The possibility of failing to cope with the JSY-generated increased demand of personnel could be of concern in rural India.<sup>30</sup> This mismatch between the demand and supply sides of the programme is highlighted in literature. It is held as the cause behind the failure of the programme not being able to meet absolute success.<sup>31</sup> The study from Bangladesh as well had reported that the supply-side was not adequately prepared with logistics to cater to the needs of the demand-side.<sup>24</sup>

We came out with strange results regarding fund flow of JSY. There were gross inter-district disparities. Where Purulia had no funds, Murshidabad had enough funds for JSY on the day of survey. There had been instances of making diversion of funds from other sources to meet the requirement of JSY. In Madhya Pradesh 80% Medical Officers complained of not getting finds on time and had to divert it from the untied funds of the health centre. This resulted in women being paid with right earnest and could be seen as perceived importance of JSY or for the obvious demand side pressure for quick disposal. Such diversion of was observed in the UNFPA study as well and in the states like Rajasthan and Madhya Pradesh such practices were somewhat authenticated by allowing district officials to redirect money from funds like RKS and RCH flexi-pools. However, upholding one programme at the cost of other less popular ones with fewer noticeable interventions is potentially problematic.

The system of assessment of requirement of money for JSY was neither explicit nor understood at any level of health care system. It should be based on the expected number of deliveries in a designated area. But in this study, and also in UNFPA study, it was found that, owing to failure in anticipating the needs, all states had faced financial deficit at the point of disbursement.<sup>23</sup> Here district level officials reported that there existed no specific method of anticipation and realization of their demand from the higher authorities. There was variation among the study districts regarding levels where the bottleneck existed; sometimes within the district and in other occasions above that level. However, all these findings revealed that smooth flow of fund was a challenge, not only in West Bengal, but in the entire country, like delay in releasing funds from the Government was found in Chandigarh as well.<sup>27</sup>

Impropriety in maintaining records has been a major challenge in most of public health activities.<sup>32</sup> Concern about the deplorable state of record keeping was found in Madhya Pradesh as well.<sup>33</sup> In this study we found an attempt to computerize the various data, like those for identification of beneficiaries; but it was not universal. The condition was somewhat better in terms of regular updating of the dedicated cash registers at different levels of hospitals, where from payment was made. Shortage of dedicated, skilled staff to handle the record, with or without computers, has been documented and it is expected that once they are placed in proper positions; things would improve.<sup>27, 33</sup>

As reported, information about the scheme was fairly extensive in the districts surveyed. It was communicated where the beneficiaries were possibly contacted, both through inter-personal conversation as well as through various mass approaches. In the UNFPA study the finding was similar. They had also commented that the effects of such IEC activities was better if was taken up at the village level, which we found as the village health and nutrition day being utilized for propagation of messages.<sup>23</sup> JSY has in-built monitoring system in place. But it was beyond the scope of this study to assess its functioning. But at the community level, just is the case for other programmes, JSY remains a health sector initiative and

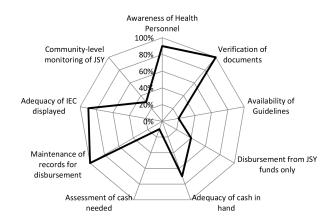


Figure 1: Spider graph depicting the percentage of attainment in different components of implementing JSY in studied health institutions (n=60)

the committees supposed to discuss the issues about its performance, such as Rogi Kalayan Samitis (RKS) were reluctant to get involved.<sup>34</sup> So the extent of community involvement remained largely lacking. Passivity on the part of the people to be an active stakeholder of the programme meant any early lapses from the supply side would be ignored. Improvement of purchasing power to the community was not translated into enhanced community empowerment.

Almost universal awareness among health personnel, adequate displaying of IEC materials and robust record keeping on cash disbursement are the strength in the process of implementation of JSY which need sustenance. Assessment of need for cash and community-level monitoring were two areas which warrant immediate action.

To conclude, mostly to the tune of the findings from other states,<sup>23</sup> the success story of JSY in increasing the rate of ANC and institutional delivery, now faces significant procedural apprehension. It has been found that documented increment in the proportion of institutional deliveries did not necessarily reduced maternal mortality.<sup>35</sup> Improved quality of care at the institutions is required for the programme to attain its intended effects. So the programme needs better planning and implementation about flow of funds and method of monitoring. JSY has achieved appreciably in the state and a few steps in these regards can make this programme a doubtless success.

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#### **CONFLICT OF INTEREST**

(If present, give more details): The work was financially supported from State Health & Family Welfare Samiti, West Bengal and appraised the functioning of a government scheme. However, we declare that sponsoring had no effect on any stage or on the outcome of the study.

#### **ABBREVIATION USED**

DSF: Demand Side Financing; CCT: Conditional Cash Transfer; UNDP: United Nations Development Programme; ASHA: Accredited Social Health Activist; JSY: Janani Suraksha Yojana; PHC: Primary Health Centre; BPHC: Block Primary Health Centre; RH: Rural Hospital; IEC: Information Education Communication; ANC: Antenatal Care; RKS: Rogi Kalyan Samiti; UNFPA: United Nations Fund for Peoples Activities; RCH: Reproductive Child Health.

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