Original Article:
Comparative Evaluation of Cash Benefit Scheme of Janani Suraksha Yojana for Beneficiary Mothers from Different Health Care Settings of Rewa District, Madhya Pradesh, India.

Authors
Rohit Trivedi, Associate Professor,
Adhikari P, Assistant Professor,
Singh SP, Associate Professor,
Sanjeev Singh, Assistant Professor,
Som Nath, Resident,
Manoj Saxena, Assistant Professor,

Department of Community Medicine, S.S. Medical College, Rewa, Madhya Pradesh.

Address for Correspondence
Dr. Rohit Trivedi,
Associate Professor,
Department of Community Medicine,
S.S. Medical College,
Rewa, Madhya Pradesh, India.

E-mail: drrohittrivedigmc@rediffmail.com

Citation

Abstract: Introduction: For better outcomes in mother and child health, Government of India launched the National Rural Health Mission (NRHM) in 2005 with a major objective of providing accessible, affordable and quality health care to the rural population; especially the vulnerable. Reduction in MMR to 100/100,000 is one of its goals and the Janani Suraksha Yojana (JSY) is the key strategy to achieve this reduction. The JSY, as a safe motherhood intervention and modified alternative of the National Maternity Benefit Scheme (NMBS), has been implemented in all states and Union territories with special focus on low performing states. The main objective and vision of JSY is to reduce maternal, neo-natal mortality and promote institutional delivery among the poor pregnant women of rural and urban areas. This scheme is 100% centrally sponsored and has an integrated delivery and post delivery care with the help of a key person i.e. ASHA (Accredited Social Health Activist), followed by cash monetary help to the women. Objectives: 1) To evaluate cash benefit service provided under JSY at different health care settings. 2) To know the perception and elicit suggestions of beneficiaries on quality of cash benefit scheme of JSY. Methodology: This is a health care institute based observational cross sectional study including randomly selected 200 JSY beneficiary mothers from the different health care settings i.e., Primary Health Centres, Community Health Centres, District Hospital and Medical College Hospital of Rewa District of Madhya Pradesh state. Data was collected with the help of set pro forma and then analysed with Epi Info 2000. Chi square test was applied appropriately. Results: 60% and 80% beneficiaries from PHC and CHC received cash within 1 week after discharge whereas 100% beneficiaries of District Hospital and Medical College Hospital received cash at the time of discharge; the overall distribution of time of cash disbursement among beneficiaries of PHC, CHC, DH and Medical College Hospital were found to be statistically significant (Chi-square =45.04, p-value: 0.0000). Shortage of doctors at Health Care Centers was found to be a major cause for the delay in cash disbursement.

Key Words: Janani Suraksha Yojana; National Rural Health Mission; ASHA; Beneficiaries

Introduction:
Safe motherhood is perceived as a human right and for achieving this, the health sector is encouraged to make good-quality services, including essential care for obstetric complications, available to all women during pregnancy and childbirth, with particular emphasis on ensuring that a skilled attendant is present at every birth.[1] Government of India launched the National Rural Health Mission (NRHM)[2] in 2005 with the major objective of providing accessible, affordable and quality health care to the rural population, especially the vulnerable populations. Reduction in maternal mortality ratio (MMR) to 100/100,000 is one of its goals and the Janani Suraksha Yojana (JSY) is the key strategy to achieve this reduction. The JSY[3] is a safe motherhood intervention, a modified alternative of the National Maternity Benefit Scheme (NMBS).[4] JSY has been implemented in all states and UTs with special focus on low performing states under the National Rural Health Mission (NRHM). The main objective and vision of JSY is to reduce maternal, neo-natal mortality and promote institutional delivery among the poor pregnant women of rural and urban areas. This scheme is 100% centrally sponsored and provides delivery and post delivery care, along with cash monetary help to pregnant women.[5] The key person for delivering such services is ASHA (Accredited Social Health Activist). ASHA is a trained activist of the same village and works as the link person among the health institutions, pregnant women and masses to increase institutional deliveries.[6] There is a provision of ample of...
funds for the successful implementation of JSY from the central government under the NRHM; with an annual expenditure of 8.8 billion rupees or $207 million, and an estimated 7.1 million individual beneficiaries.[7]

The JSY provides an ideal testing ground to examine the effects of financial incentives on health. Although a set of standard guidelines were laid out by the Ministry of Health and Family Welfare, the actual pattern of payments under JSY varies within the country. As per the national guidelines, in the high focus states, all pregnant women in rural areas who deliver in a health facility are eligible for a cash transfer of Rs. 1400. The amount is given at or immediately after the delivery and is meant to defray the expenses - both visible (drugs, supplies, transport) and invisible costs (costs of the accompanying attendant, or informal fees/gifts to hospital staff, and costs of food). For women who deliver at home, only those who are below poverty line (BPL) are eligible for a payment of Rs. 500.[9]

The JSY started in August 2005 in Madhya Pradesh (MP). After October 2006, some changes were made based on the feedback from the ground implementation and the noticeable changes are: removal of age restriction for the benefit in Low Performing States (LPS), doing away with the restriction on the order of childbirth, need for Below Poverty Line (BPL) or Marriage Certificate etc.[10]

Over a decade after the JSY implementation under the umbrella of NRHM, there have been declines in maternal mortality in India. The MMR declined to 212/100,000 live births (SRs-2007-09)[11] and Infant Mortality Rate (IMR) declined to 50/1000 live births (SRs-2009). However, this rate of decline is not sufficient to achieve the goals of MMR less than 100/100,000 live births and an IMR of less than 30/1000 live births by the end of the 11th Five Year Plan Period. So as to achieve the goals of JSY on time, various changes and modifications have been incorporated from time to time, based on experiences and feedbacks. Several new approaches, interventions and alternatives have been initiated to reduce maternal morbidity, mortality ratio and child mortality rates all over the nation.

As the state of Madhya Pradesh has been a beneficiary of the JSY right from the beginning, it is important to know the effectiveness and impact of the programme in terms of its various parameters, particularly the utilization of cash benefit scheme, at different levels of health care delivery system. This study was carried out in Rewa district to assess the cash benefit scheme of JSY and to elicit suggestions of beneficiary mothers for improvement in JSY scheme at different levels of health care delivery system.

**Aims and objective**

The present study was carried out with the following objectives:

- To evaluate cash benefit service provided under JSY at different health care settings.
- To know the perception and suggestions of beneficiaries on quality of cash benefit scheme of JSY.

**Materials and Methods:**

**Study Area:** Different levels of health care delivery system of Rewa District including 1 PHC, 1 CHC, District Hospital, Rewa and Medical college affiliated hospital i.e., Gandhi Memorial Hospital (GMH), Rewa.

**Study Type:** Health care institute based Observational Cross sectional study.

**Study Duration:** October 2012 to September 2013.

**Study Subjects:** 200 Beneficiary mothers of JSY.

**Eligibility Criteria for JSY Beneficiary mothers:** Women who have delivered at institution within six month duration at the time of data collection and those who were willing to participate, were included in the study.

**Sampling Method:** For the selection of community health center, primary health center and the beneficiaries from these health centers, Multistage Random Sampling Method was adopted and for the selection of the beneficiaries from the District hospital and from the medical college affiliated hospital i.e., Gandhi memorial hospital, Simple Random Sampling Method was adopted. Fifty beneficiaries were selected randomly from the each level of health centre so that a total of 200 beneficiaries were included in the present study. Fifty beneficiaries were selected randomly from the District Hospital; Govindgarh Community Health Centre was selected randomly out of total 12 CHCs, and the corresponding 50 beneficiaries from the selected Community Health centre were also selected randomly. After the selection of CHC, 1 Primary Health Center was also selected randomly out of total 29 PHCs and 50 beneficiaries were selected from the PHC randomly. Finally 50 beneficiaries from the GMH were also selected randomly. Ethical clearances were obtained before conducting the study.

**Research tools:** A pre-tested, semi-structured questionnaire based pro forma was used for in-depth interviews.

**Data Analysis:** It was done by using epi info 2000 and chi-square test was applied appropriately.

**Observations:**

Majority of beneficiaries received monetary benefit at the time of discharge: from PHC Baikunthpur, 30(60%), CHC Govindgarh, 40(80%), District Hospital, 50(100%) and Medical College Hospital, 50(100%). Some of beneficiaries received monetary benefit within one week of discharge from Hospital viz. 18(36%) in PHC Baikunthpur, 10(20%) in CHC Govindgarh, whereas 2(4%) in PHC Baikunthpur received it more than one week after discharge. The overall distribution of time of getting the cash benefit in relation to time is statistically significant. (Chi-square =45.04, p-value: 0.0000)

For the majority of respondents 29(58%) from the PHC, the delay was due to timely unavailability of JSY Medical Officer in charge and for 27(54%) respondents the shortage of doctors was a barrier. Same reasons were also reported from the beneficiaries of CHC in 6(12%) and 9(18%) mothers respectively. Shortage of accountant was also found to be a reason for delay in cash transfers in case of 6(12%) and 4(8%) from the PHC and CHC respectively. Delay in opening of bank account was also found to be a reason for delay in dispersal of the cash benefit in case of 19(38%) and 10(20%) in PHC and in CHC respectively.

### Table 1: Time of cash benefit Service provided at different health care settings.

<table>
<thead>
<tr>
<th>Time of Money Provided</th>
<th>Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary Health Care Level</td>
</tr>
<tr>
<td></td>
<td>PHC Baikunthpur (N=50)</td>
</tr>
<tr>
<td>At the time of discharge</td>
<td>30 (60%)</td>
</tr>
<tr>
<td>Within one week of discharge</td>
<td>18 (36%)</td>
</tr>
<tr>
<td>More than one week after discharge</td>
<td>02 (4%)</td>
</tr>
<tr>
<td>Total</td>
<td>200(100%)</td>
</tr>
</tbody>
</table>

Chi-square=45.04, p-value: 0.0000, statistically significant
Table 2: Reasons for not getting monetary incentives at the time of discharge from the different health care settings

<table>
<thead>
<tr>
<th>Reasons for delay in getting cash incentives*</th>
<th>Beneficiary Mothers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHC (N=50)</td>
<td>CHC (N=50)</td>
</tr>
<tr>
<td>Delay in receiving fund (Budget) at the Health Centre</td>
<td>17 (34.0%)</td>
<td>8 (16.0%)</td>
</tr>
<tr>
<td>Shortage of Doctors in Health Centres</td>
<td>27 (54.0%)</td>
<td>9 (18.0%)</td>
</tr>
<tr>
<td>Deputation/Inregularity of JSY Medical Officer in-charge</td>
<td>29 (58.0%)</td>
<td>6 (12.0%)</td>
</tr>
<tr>
<td>Shortage of Health Staff/Accountant</td>
<td>06 (12.0%)</td>
<td>04 (8.0%)</td>
</tr>
<tr>
<td>Delay in opening bank account of mother to encash A/C payee cheque</td>
<td>19 (38.0%)</td>
<td>10 (20.0%)</td>
</tr>
</tbody>
</table>

*Multiple Responses

Total 39 (19.5%) beneficiaries from different levels of Health Care i.e. PHC, CHC, DH and GMH, Rewa suggested that the scheme can further be improved by hike in monetary benefit. Around half, i.e., 101(50.5%) of the beneficiaries also demanded additional transportation facility to further improve the scheme. Some of them [42 (21%)] also put forth a special opinion that there should be extra package for high risk mothers in JSY. Many [120(60%)] of the beneficiaries from different health care Levels suggested that there should be extra services along with cash benefit at the time of discharge or during hospital stay so that the maximum utilization can be done by the beneficiaries.

Table 3: Suggestions of beneficiaries for the improvement in the scheme

<table>
<thead>
<tr>
<th>Suggestion*</th>
<th>Beneficiaries</th>
<th>Total Responden</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHC (N=50)</td>
<td>CHC (N=50)</td>
<td>Dist. Hospital</td>
</tr>
<tr>
<td>Hike in monetary benefit</td>
<td>14 (28%)</td>
<td>11 (22%)</td>
<td>08 (16%)</td>
</tr>
<tr>
<td>Prompt Transportation facility</td>
<td>29 (58%)</td>
<td>27 (54%)</td>
<td>24 (48%)</td>
</tr>
<tr>
<td>Extra package for High Risk Delivered mother</td>
<td>14 (28%)</td>
<td>11 (22%)</td>
<td>09 (18%)</td>
</tr>
<tr>
<td>Other services i.e., diet, tonics, medicines after delivery along with cash benefit.</td>
<td>36 (90%)</td>
<td>43 (86%)</td>
<td>23 (46%)</td>
</tr>
</tbody>
</table>

*Multiple responses

Discussion:

Time taken for receiving the cash benefit of JSY was found to be different among PHC and CHC but it was same for District Hospital and Medical College Hospital (Table 1). Beneficiaries who received cash at the time of discharge 30(60%) from PHC Baikunthpur and 40(80%) from CHC Govindgarh, but all of mothers received cash at the time of discharge from the District Hospital and Medical College Hospital. Eighteen(36%) beneficiaries from PHC Baikunthpur received monetary benefit within one week of discharge and 10(20%) beneficiaries from CHC Govindgarh also got it during the same time; only 2(4%) beneficiaries of PHC Baikunthpur received it after more than one week. Thus the total mothers who received cash benefit after the discharge from the health care settings were 30 (15%) out of 200 and the overall distribution of time of getting the cash benefit in relation of time was found to be statistically significant. (Chi-square =45.04, p-value: 0.0000). Some other studies have also found variations in the time of cash disbursement under the JSY. Mahawar P, Anand S et al(2008-09)[12] conducted a cross-sectional study in Indore district and observed that all the beneficiaries received exact amount of assistance as provided by the government; but only 62(24.8%) of beneficiaries received cash just as a reason for delivery while the majority 167 (66.8%) of them took a month to receive cash. In our study majority(85%) of the beneficiaries received exact amount just after discharge and only 15% got it by one week.

Mishra A et al(2008)[13] also found discrepancies in money disbursed to the beneficiaries. Mishra et al found the time period of disbursement of money from the discharge to one month, median period was found to be one week; while in our study, majority(85%) of the beneficiaries received exact amount just after discharge and only 15% after by week. Malini S et al(2008) [14] found that majority of beneficiaries of JSY received money within 7 days to one month (70.9%).

When the causes of delay for cash disbursement were assessed (Table 2), the maximum respondents 29(58%) from the PHC replied that the delay was due to timely unavailability of JSY Medical Officer in charge and 27(54%) respondents replied that the shortage of doctors was also a barrier. Same reasons were also reported by the beneficiaries of CHC, 6 (12%) and 9 (18%) respectively. Shortage of accountant was also found to be a reason for delay in cash disbursement in case of 6(12%) from the PHC and 4(8%) from the CHC respectively. Delay in opening bank account was found by the beneficiaries in case of 19(38%) and 10(20%) in PHC and in CHC respectively. Most such responses were from the beneficiaries of PHC and CHC and this may be due to maximum shortcomings at the lower level of health care settings for implementations of any health care activities.

Causes of delay in cash disbursement was also found by Mohapatra B et al(2008).[15] According to these authors, the shortage of medical and para medical staff at district, block and sub centre level pose a major hindrance for the programme. These findings are similar to the findings of our study.

Suggestions for improvement in any scheme or programme can be best provided by the beneficiaries of that programme or scheme. Such feedback can help to rectify the shortcomings of the concerned programme and help in its better implementation so that the best output can be achieved. In the present study, total 39 (19.5%) beneficiaries from different levels of Health Care i.e PHC, CHC, DH and GMH, Rewa suggested that the scheme can further be improved by hike in monetary benefit. Table-3) Around half [101(50.5%)] of the beneficiaries also demanded prompt transportation facility to further improve the scheme. Some of them [42 (21%)] also suggested extra package for high risk mothers in JSY. Many [120(60%)] of the beneficiaries from different health care levels suggested that there should be extra services along with cash benefit at the time of discharge or during hospital stay so that the maximum utilization can be done by the beneficiaries.

Maximum number of such respondents were from PHC and CHC in comparison of higher level of health care facility.
Conclusions
Although a small study of this kind may not be very conclusive with regard to public health research, it will not be unfair to suggest improved accessibility and better delivery of JSY at the lower level of health care settings.

References: