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# Impact Evaluation: A community based cross sectional study about beneficiary level factors influencing *Janani Suraksha Yojana*(Scheme for Institutional Delivery) Utilization in three South Indian states

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Abstract: Background: Maternal health is a subject of serious debate today. Maternal and infant mortality has become a major issue in many rural parts of the country. The Government of India has launched Janani Suraksha Yojana (JSY) under NRHM programme in 2005. This programme is intended in reducing maternal and neo-natal mortality by increasing institutional delivery among the poor pregnant women including post-partum proving cash and medical benefits. Objective: The major objective is to assess the knowledge, attitude, response and the extent of availability of JSY services and their utilization by the beneficiaries in the selected districts in Karnataka, Tamil nadu and Andra Pradesh (undivided) states of south India. Methodology: This study has done using mixed methods in three South Indian states using both qualitative and quantitative technique. Conclusion: This schema has played a key role in reducing the rate of maternal mortality and morbidity in the rural areas and also it concludes that the scheme has got a decent success and field level implementation required more structural re-arrangement.

Keywords: JSY, NRHM, Health, Rural, Women

#### Introduction

The pathetic state of maternal, neonatal and child health in India is great public health significance. Indian Council of Medical Research reports (2014) says in more than 99,000 out of 687200 maternal deaths and more than 1.3 million of 4.4 million neonatal death occurred across the country in 2013 [1]. It is learned that around 67600 women in India die every year in connection with various pregnancy related issues or complications. In the same way more than 16 lakh infant dies before turning one year and more than two by third of the Infants death that takes place within the 28 days of birth [2].

It is also noted that approximately 76% of infants death takes place within a week of the birth and moreover majority of infants are dying in the first two days after birth. Maternal and neonatal death is increasing despite various maternal health benefit schemes in India. In rural India normally women are giving birth to low weight babies and

are suffering from severe malnutrition problem [3]. This is because of some of the factors like poverty, illiteracy, unhygienic conditions, lack of livelihoods, socio cultural factors reproductive health, high cost secondary health services etc [4]. Today increasing out of pocket expenses is being incurred by pregnant women in form of for Csections, medicines, user charges, lab tests, diet etc in India [5]. Apart from this, in the rural India health sector today has been suffering from a lack of political, executive and organizational will.

To reduce the maternal and neonatal mortality the Janani Suraksha Yojana (JSY) has been implemented by the government of India which is a vital and key scheme with a specific focus on escalating hospital-based institutional for safe delivery focusing women from below poverty line category in the country. Janani Suraksha Yojana has implemented as a part of the National Rural

Health Mission covering pregnant women belonging to the BPL group for the age over 19 years. Janani Suraksha Yojana is a modified version of the National Maternity Benefit Scheme which was implemented in 2003 [6]. This scheme is for first to live birth only. In low performing states all pregnant women delivering in government health centers will get Rs.1400/- as cash incentives and all BPL/SC/ST women delivering in a government health centers will get Rs. 700/- under JSY scheme for institutional deliveries on the day of discharge.

Janani Suraksha Yojana covers both prenatal and antenatal care in the form of both medical as well as financial incentives during pregnancy and after. The major aim behind this scheme is to provide and motivate women to go for the medical based pregnancy including prenatal checkups, scanning, blood test delivery, postpartum care etc. Janani Suraksha Yojana covers both prenatal and antenatal care in the form of both medical as well as financial incentives during pregnancy and after. The Janani Suraksha Yojana (JSY) schem has proved a good programme with a number of women benefiting from it gradually increasing considerably for the past few last few years especially in the rural parts [7]. This evaluation study has been conducted in three south Indian states with the funding support from the Indian Council of Medical Research.

### **Material and Methods**

The major objective is to assess the knowledge, attitude, response and the extent of availability of JSY services and their utilization by the beneficiaries. This study has been conducted in the selected districts in Karnataka, Tamil nadu Andra Pradesh (undivided) states of south India.

Study Design: Both quantitative and qualitative research methods have been used in the study. The beneficiaries of JSY scheme have been selected by using scientific and standard quantitative methodologies. Qualitative methods using focus group study have been done to get data

This study has been conducted in two phases;

- a) Ground Analysis;
- b) Institutional ethnography

#### a. Ground Analysis:

Study area: This study has been conducted in the following Three of South Indian states;

- Karnataka (Koppal, Gulberga ,Bidar Distrticts)
- Tamil nadu (Ramanthapuram Madurai Perambalur Salem Dist)
- Andra Pradesh (Kurnool, Mahbubnagar, Ananthpuram, Medak Dist)

In the first phase four districts from each of the three states have been chosen based on various health survey reports. In order to obtain a sufficient comparison between different outcomes and context, the districts have been chosen as follows: Two out of the four best performing districts in terms of institutional deliveries, and Two of the four least performing districts in case of institutional deliveries. While selecting the districts concentration of SC/ST/OBC population have been considered. Next, beneficiaries who have had devilry both at institutions and at the home have also been interviewed. All health officials have been administered with structured questioners.

#### *Selection of the health centers:*

- 1. Three CHCs i.e. Two high performing, and one poor performing CHCs but which had more than 20 baby deliveries in a month have been selected form the each selected district.
- 2. Three PHCs at the sector level attached to CHCs. Two of which were designated as 24×7 PHC and conducting a notable number of baby delivery per month.
- 3. No sub centers found handling delivery cases in the study.
- 4. At the District level, the district hospital and one private hospital/nursing home accredited for JSY have been visited and the facility questionnaire has been administered.

In the *second phase* a total of Six [6] Districts have been selected with the purposive sampling technique from all the three States. Two districts from each state i.e. One progressive district and one `non- progressive' district have been chosen here. In each district, a list of all the villages with the

population had been compiled. Then from this sample, a total of 18 villages based on the RCH (2017) survey have been chosen by the population proportionate size method. In each village every household have been surveyed and those women who had delivered a child in the last one year had been listed. Also different lists have been drawn who opted for the institutional delivery and those who opted for delivery at home.

The sample pregnant women who are eligible for JSY benefits as per the prevailing state rule have been randomly drawn from the list of institutional and deliveries at home in each of the 18 villages for the study. A total of 150 institutional deliveries per district had been aimed to be included. After the field assessment and the unexpected issues, finally 902 women (from six

districts) who have had institutional deliveries and 30 women (we found only this much in the study area) who have had a delivery at home have been selected for the study. It is important to note that institutional deliveries that occurred in the private facilities are not eligible for JSY and home deliveries and not the BPL holders or below the age of 19 (or other state specific exclusionary clauses) have been identified in the listing but barred from the thorough questionnaire.

Analysis of Data: The qualitative data which have been generated from the survey, interviews and focus groups have been thematically coded in the NUD\*IST database software the quantitative data has been analyzed using SPSS software.

#### **Results**

|                                | States    |            |                |       |  |  |
|--------------------------------|-----------|------------|----------------|-------|--|--|
| Particulars -                  | Karnataka | Tamil Nadu | Andhra Pradesh | Total |  |  |
| No                             | 303       | 298        | 301            | 902   |  |  |
| Age                            |           |            |                |       |  |  |
| Below 25 years                 | 67.7%     | 54.5%      | 75.9%          | 66.1% |  |  |
| 25-30 years                    | 28.5%     | 34.7%      | 24.1%          | 29.1% |  |  |
| Just above 30 years            | 3.8%      | 10.8%      | 1.0%           | 4.8%  |  |  |
| Years of schooling             |           |            |                |       |  |  |
| Primary                        | 52.1%     | 16.5%      | 32.3%          | 33.6% |  |  |
| High school                    | 31.1%     | 79.1%      | 54.8%          | 55.0% |  |  |
| College                        | 16.0%     | 3.2%       | 7.1%           | 8.7%  |  |  |
| Illiterate                     | 1.0%      | 1.7%       | 5.8%           | 2.8%  |  |  |
| Income (per annum/in thousand) |           |            |                |       |  |  |
| Below 25k                      | 90.3%     | 99.7%      | 77.6%          | 89.2% |  |  |
| 25k-35k                        | 7.5%      | 0.3%       | 16.7%          | 8.1%  |  |  |
| 35k and above                  | 2.2%      | 0.0%       | 5.8%           | 2.6%  |  |  |
| Social Groups                  |           |            |                |       |  |  |
| SC                             | 23.3%     | 18.4%      | 19.1%          | 20.4% |  |  |
| ST                             | 2.2%      | 3.4%       | 3.1%           | 2.9%  |  |  |
| OBC                            | 74.4%     | 76.1%      | 71.2%          | 73.9% |  |  |
| Others                         | 0.0%      | 1.7%       | 6.7%           | 2.8%  |  |  |
| Average numbers of Family Memb | ers       |            |                |       |  |  |
| Just 2                         | 13.2%     | 0.7%       | 6.1%           | 6.6%  |  |  |
| Between 2-4                    | 40.4%     | 67.0%      | 44.2%          | 50.3% |  |  |
| 4 and above                    | 46.4%     | 32.3%      | 49.7%          | 42.8% |  |  |

| Particulars              | Karnataka | Tamil Nadu | Andhra Pradesh | Total |
|--------------------------|-----------|------------|----------------|-------|
| Domicile                 |           |            |                |       |
| Local                    | 93.4%     | 93.6%      | 76.5%          | 87.8% |
| From Other Dist          | 6.6%      | 6.1%       | 17.3%          | 10%   |
| Other state              | 0.0%      | 0.3%       | 6.1%           | 2.1%  |
| Religion                 |           |            |                |       |
| Hindu                    | 92.2%     | 72.1%      | 64.3%          | 76.2% |
| Muslim                   | 6.3%      | 5.4%       | 27.9%          | 13.2% |
| Christian                | 1.6%      | 10.1%      | 7.1%           | 6.2%  |
| Others                   | 0.0%      | 12.5%      | 0.7%           | 4.4%  |
| Source of Drinking Water |           |            |                |       |
| Тар                      | 84.3%     | 86.9%      | 90.1%          | 87.1% |
| River                    | 15.7%     | 5.4%       | 7.5%           | 9.7%  |
| Tube Well/Well           | 0.0%      | 7.7%       | 2.4%           | 3.3%  |
| BPL Status               | 72.5%     | 63.2%      | 78,3%          | 71.2% |

| Particulars                                       | States    |            |                |        |  |
|---|-----------|------------|----------------|--------|--|
|   | Karnataka | Tamil Nadu | Andhra Pradesh | Total  |  |
| N   | 303       | 298        | 301            | 902    |  |
| Awareness about JSY (spontaneous and probed)      | 93.2%     | 91.4%      | 89.7%          | 91.4%  |  |
| Sources of information about JSY                  |           |            |                |        |  |
| ASHA/ Health worker                               | 96.2%     | 93.3%      | 99.7%          | 96.4%  |  |
| Relatives/Friends                                 | 4.1%      | 6.7%       | 1.3%           | 4.1 %  |  |
| Posters/Hoardings                                 | 4.7%      | 1.0%       | 2.0%           | 2.6%   |  |
| TV/Radio  | 5.6%      | 3.0%       | 1.0%           | 3.5%   |  |
| News papers                                       | 4.4%      | 2.0%       | 2.0%           | 2.8%   |  |
| Others  | 5.0%      | 0.0%       | 1.0%           | 1.8%   |  |
| Main focus / objective of JSY                     |           |            |                |        |  |
| Promoting institutional deliveries                | 71.2%     | 73.4%      | 46.6%          | 64.0%  |  |
| Promoting safe deliveries                         | 46.4%     | 18.9%      | 57.5%          | 41.0%  |  |
| To avoid maternal/neo natal deaths                | 50.2%     | 2.7%       | 60.2%          | 37.3%  |  |
| No idea   | 18.5%     | 15.4%      | 10.0%          | 14.7%  |  |
| Awareness about vital components of JSY scheme    |           |            |                |        |  |
| Cash invectives                                   | 68.7%     | 71.7%      | 72.8%          | 71.0   |  |
| Free transport                                    | 44.4%     | 41.0%      | 41.5%          | 42.3   |  |
| Free ANC/PNC                                      | 54.%      | 31%        | 52%            | 45.6%  |  |
| Free hospital service                             | 89.7%     | 92.3%      | 83.1%          | 88.36% |  |
| Help from the health workers                      | 62.4%     | 31.7%      | 62.3%          | 52.1%  |  |
| Delivery even in the selected private hospitals   | 34.3%     | 41.2%      | 42.4%          | 39.3%  |  |
| Knowledge about 24x7 Govt. Hospitals for delivery | 72.4%     | 61.7%      | 72.3%          | 68.8%  |  |

|   | Beneficiaries by their Awareness about JSY and its Mechanism |            |                |       |  |  |
|---|--|------------|----------------|-------|--|--|
| Particulars   | States   Tourish Nation   And Incompanies                    |            |                |       |  |  |
|   | Karnataka  | Tamil Nadu | Andhra Pradesh | Total |  |  |
| N   | 303  | 298        | 301            | 902   |  |  |
| Did any link person approached you for registration for JSY |  |            |                |       |  |  |
| Yes   | 74.0%  | 96.6%      | 89.1%          | 86.5  |  |  |
| No  | 26.0%  | 3.4%       | 10.9%          | 13.4  |  |  |
| Did JSY/ANC cards filled up by the link person /ANM         |  |            |                |       |  |  |
| Yes   | 83.7%  | 99.7%      | 91.8%          | 91.7% |  |  |
| No  | 16.3%  | 0.3%       | 8.2%           | 8.2%  |  |  |
| Difficulties faced during registration for JSY              |  |            |                |       |  |  |
| Requested service providers for help several times          | 7.8%   | 70.4%      | 0.0%           | 26.0% |  |  |
| Demanded for money  | 0.3%   | 13.1%      | 0.0%           | 4.4%  |  |  |
| Avoiding service because of the caste/ religion             | 2.2%   | 0.0%       | 0.0%           | 0.8%  |  |  |
| Negligence /carelessness                                    | 1.6%   | 4.7%       | 0.0%           | 2.1%  |  |  |
| Making unnecessary delay and other reasons                  | 4.7%   | 0.0%       | 1.4%           | 2.1%  |  |  |
| No such difficulties  | 82.8%  | 71.8%      | 76.5%          | 77.0% |  |  |
| Person who registered the respondents for JSY               |  |            |                |       |  |  |
| PHC/CHC Doctor  | 12.3%  | 29.0%      | 13.6%          | 18.3% |  |  |
| ANM/FHW   | 18.2%  | 33.0%      | 10.2%          | 20.4  |  |  |
| Anganwadi worker  | 2.2%   | 31.3%      | 2.0%           | 11.8  |  |  |
| ASHA *  | 64.1%  | *          | 73.1%          | 68.5% |  |  |
| PRI staff   | 1.3%   | 0.3%       | 0.0%           | 0.5%  |  |  |
| Do not know   | 1.6%   | 0.0%       | 0.0%           | 0.5%  |  |  |
| Registration done within Three month of pregnancy           |  |            |                |       |  |  |
| Yes   | 93.4%  | 89.9%      | 96.0%          | 93.1% |  |  |
| No  | 0.4%   | 0.5%       | 0.7%           | 0.5%  |  |  |
| Place where respondent was registered                       |  |            |                |       |  |  |
| District/sub-district hospital                              | 6.9%   | 7.4%       | 10.2%          | 8.1%  |  |  |
| Community Health Centre                                     | 7.8%   | 3.0%       | 25.9%          | 12.2  |  |  |
| PHC/Subcentre   | 56.1%  | 81.8%      | 37.4%          | 58.4  |  |  |
| Anganwadi centre  | 24.5%  | 5.4%       | 45.9%          | 25.2% |  |  |
| At home   | 18.2%  | 0.0%       | 6.8%           | 8.33  |  |  |
| At PRI  | 0.3%   | 4.4%       | 0.0%           | 1.5%  |  |  |

| Particulars  | States    |            |                |        |  |
|--|-----------|------------|----------------|--------|--|
|  | Karnataka | Tamil Nadu | Andhra Pradesh | Total  |  |
| N  | 296       | 289        | 294            | 879    |  |
| Have you done Pre and Post Natal Check-up              | 89 .2%    | 86.5%      | 89.8%          | 88.5   |  |
| Reasons for not taking pre natal check up (if any)     | 7         | 9          | 12             | 28     |  |
| Lack of family support                                 | 18.5%     | 26.9%      | 18.5%          | 21.3%  |  |
| No good transport                                      | 10.7%     | 28.7%      | 25.8%          | 21.7%  |  |
| Felt that it was not necessary                         | 18.8%     | 13.0%      | 21.7%          | 17.8   |  |
| Traditional health behavior                            | 18.2%     | 20.7%      | 25.0%          | 21.3%  |  |
| Distance factor  | 12.0%     | 4.7%       | 5.3%           | 7.3%   |  |
| Didn't know  | 11.0%     | 4.0%       | 3.1%           | 6.0    |  |
| Reasons for not receiving post natal check up (if any) |           |            |                |        |  |
| Lack of information from the service provider          | 18.2%     | 20.5%      | 11.3%          | 16.6.% |  |
| Felt it was not necessary                              | 31.7%     | 56.9%      | 46.6%          | 45.0   |  |
| No 24X 7 hospital nearby                               | 16.0%     | 39.2%      | 31.7%          | 28.9   |  |
| No transport facility and time available               | 7.8%      | 6.1%       | 2.0%           | 5.3    |  |
| Absences of lady staff at SC/PHC                       | 29.8%     | 84.5%      | 73.5%          | 62.6   |  |
| Didn't know  | 19.7%     | 8.8%       | 5.1%           | 11.2   |  |
| Why pre and post natal check-up is important           | 303       | 298        | 301            | 902    |  |
| To ensure future health of the mother and the baby     | 36.5%     | 46.9%      | 58.5%          | 47.3%  |  |
| To make sure no complications during delivery          | 76.7%     | 68.7%      | 75.8%          | 73.7   |  |
| To avoid problem in the second pregnancy(if)           | 32.0%     | 41.7%      | 35.3%          | 36.3   |  |
| To avoid future disability of the child if any         | 28.2%     | 40.7%      | 45.0%          | 37.9%  |  |
| These are not really necessary                         | 29.8%     | 33.0%      | 21.7%          | 28.1   |  |

#### **Discussion**

Table-1 shown the socio-economic background of the given scheme beneficiaries is an important issue. It is found that around 61% of the mothers have gave birth in the reference period in all three studied states, were found to be (average) below 25 years of age. In Tamil nadu around 54% of these women were in this category. Only a small proportion of beneficiaries (4.8%) were found to be above 30 years in all the states. Next, 33.6% of the JSY beneficiaries have finished the primary

level of education and 55% beneficiaries have finished their high school. Beneficiaries income group is below Rs.25,000/- per annum as we found. Around 20.4 % of the beneficiaries are from SC category and one-third (74%) belongs to the OBC. Backward class mothers have availed JSY service more in numbers. We found the litracey level and availing the services has a close link.

In Karnataka, there were no marked differentials in the institutional deliveries

based on the BPL status of the family. However, mothers living in *semi pucca* houses and of younger ages were found to opt for institutional delivery more in Andra Pradesh. In Tamil nadu those living in katcha house and belong to SCs have found the lower level of institutional deliveries. Over and above, it is seen that the differentials in institutional deliveries by a variety of categories were the state specific and the JSY beneficiaries were largely from the various segments of the society having different socioeconomic backgrounds. In Karnataka and tamil nadu institutional deliveries are lower among the Muslim women

The respondents were checked about the JSY intentionally and also probing. Considering both spontaneous responses and those which were obtained after the deliberate questioning and probing, the awareness about JSY scheme was found to be quite high in almost all the states. It is 93 % in Karnataka, 91 % in Tamil nadu and in 89 % in Andre Pradesh in the rural areas of these states. We also found those who deliver at home also knew about this scheme. It is revealed that mothers obtained knowledge about JSY mainly from the ASHA (96.4%) followed by their friends and relatives (4.1%) in Karnataka and AP.

The Most key issue is ASHA workers have been excluded from the JSY service in Tamil nadu state. Mothers were also clear about the objective of the scheme and most of them knew that promoting institutional or safe delivery has been the main focus of the scheme (64%). The majority of them were able to properly explained as who are the intended beneficiaries of the scheme too. We found good prior knowledge about the various vital components of the JSY scheme among the samples. We found around 71% mothers were aware that it is a conditional cash transfer scheme. Also beneficiaries have good knowledge about the provisions for free ANC/PNC, free transport etc attached to the scheme. Mothers have poor knowledge about the provision to opt private hospitals for delivery but have good knowledge about 24x7 Govt hospitals for delivery in rural parts (68%) [Table-2].

The awareness level among the mothers about the various important components or mechanisms of JSY scheme and the sources of knowledge and

assistance in registration, place of registration, difficulties faced during registration for JSY are presented in the above table. More than 86.5% mothers approached the link person for the registration and 91.7% of mothers got help from the link person to fill the JSY card to get the benefits. We found 68.5% mothers have been registered with the ASHA whereas and 20.4% with ANM and 18% with PHC/CHCs. Regarding the difficulties faced during the registration for JSY around 26% replied that they had to request the different service providers for help several times while 4.4% alleged that service providers demanded for the money while registration.

The registration process still has some problem here it need more simplification. Regarding the place of registration, more than 58.4% were opted PHC/Sub centers for registration and 25% of them registered with the aganwadi centers. Around 3% of the mothers have registered for JSY after the first semester. It is found that overall 93% mother's were registered for JSY within the first three months of pregnancy which is a very impressive phenomenon and AP state stood first in this issue. It shows this early registration (first trimester) will motivate them to seek a full schedule of ANC, which will have a better outcome of the pregnancy (Table-3).

# Place of Delivery and Reasons for Institutional Delivery:

The extent of success of the JSY programme can be judged by the proportion of all the deliveries conducted in the government health facility or in the private hospitals accredited under the JSY scheme. Regarding the institutional deliveries among the studied samples Andra Pradesh recorded the highest (97.3 per cent) of the institutional delivery followed by Tamil nadu and Karnataka states. The majority of the deliveries were conducted in the PHCs in the state of Tamil nadu (80 per cent) and AP (51.4 per cent) in Karnataka majority of the deliveries were conducted in the CHCs (20%) and District hospital (30.2%) which is an interesting issue. In case of advice received by the respondents regarding institutional deliveries ASHA stood first in both Karnataka (94%) and Andra Pradesh (95%) states. In Tamil nadu ASHA has been excluded from the JSY work. ASHA play a major role in advising for institutional delivery.

This study has revealed the type of delivery which the women had experienced for their index child. The C-section rate came out to be in the range of 26% per cent in the three studied states and 73% mothers had a normal delivery. We also probed the reasons for opting the institutional delivery. We found 86% of new mother's opined safety for both the mother and the baby while 39.6% of them said availability of cash and other free facility under the JSY scheme. It shows even in the rural parts people are aware of maternal and infant mortality and the significance of the institutional delivery.

## **Reasons for Not Opting Institutional Delivery:**

The majority of mothers have received JSY scheme for the second delivery. In the case of the history of natal/neo natal death/s in the family 91% responded no such natal/neo natal death in their family. All these delivery were in hospitals only. In case of causes for maternal/ natal/neo natal deaths majority (46.2%) respondents opined unsafe baby delivery at home could be the major reason whereas 22% of them opined negligence /carelessness may be the reason for such deaths. Around 7.4% opined negligence by the doctors at the hospital also counts here. However, mothers know delivery at home is a major reason for such deaths. The main reasons for not delivering in the hospital were found to be 'convenience of delivering at home' and 'normalcy of pregnancy.

The cost of delivery as one of the reasons for delivering at home was reported by around 11 and 33 per cent of the respondents in Karnataka and Tamil nadu respectively, while 19% of them cited poverty and illiteracy are the main reasons for opting delivery at home. Further, 17.6 % opined lack of knowledge about the importance of institutional delivery while 13.4% said they unaware of JSY scheme. It is also noted that unavailability of someone to take pregnant women to the hospital was reported by around 15.3% of those who delivered at home in Tamil nadu and AP. The unavailability of transport facility and the absence of nearby 24X7 also have been cited by the noted per cent of the mothers in the study.

Pre and post natal check-up is a vital issue to avoid any delivery complications. Regarding pre and post natal check-up more than 88.5% have under gone minimum one pre and post natal checkups. All three states have shown a good result here. However, noted percent of mothers have not undergone post natal checkups on their own. The majority of them felt both mother and baby are keeping well. Hence no post natal check-up is required. Regarding the reason for not having pre-natel check up we found some issues like lack of family support (21.3%) absence of transport (21.7%) and 21.3% said traditional health behavior.

In case of reason for not having post-natel check up we found three vital reasons including felt that it was not necessary (45%), no 24X 7 hospital nearby (28%) and absences of lady staff at SC/PHC (62.6%). Few mothers did not felt that it was not necessary. We also asked why pre and post natal check-up is important. For this, we found it my avoid nay complication during second pregnancy whereas 47% of them opined to ensure the future health of the mother and the baby while 37% of them said to avoid any disability of the child if any. It shows people are gradually getting aware of significance of ANC/PNC (Tab 4).

# Beneficiaries Opinion about Hospital Service:

We also deeply probed about the money spent during hospitalization if any. Around 65% of them have opined they received all the services (including medicines) at free of cost during hospitalization while 34.5% of them had to pay certain fees. Further we asked about the reason for this expenditure. Around 10% had to pay user fee during admission while 4.3% have them paid money for medicines and 8.2% have paid money for the staff and 11.7% have paid for other costs of hospitalization. Overall, the average amount paid by mothers is highest in Tamil nadu and lowest in AP state as per the calculation.

Moreover some patients alleged that they had been demand money by the staff in few hospitals. They opined if the male baby born, staff demands more money from the family in certain hospitals. For the general opinion about the facilities in the hospital 77.2% of them gave a positive response. They opined hospitals had every facility and was really good. Commenting on the hospital service an overwhelming proportion (58.3%) of the mothers opined different services were reasonably good in all the three states. Around 42.5% of them said service was good. However, 13% of them claimed corruption and discrimination in hospitals. Around 11% of the respondents expressed dissatisfaction about the hospitals and its' services. Those mothers who had undergone institutional delivery under the JSY scheme were asked about their experience and opinion about the hospital in which they delivered their child.

We found that the greater part of mothers (59%) were in the hospital at the time expected date of delivery (EDD.) Further analysis showed those women having normal delivery are being discharged within 30-40 hours, after 3 days in case of assisted delivery and after 5 days in case of the caesarean. On an average, women are being discharged from the hospital within 20-25 hours after the delivery in the norm cases. This is against the medical guidelines. Also we found that the majority (78%) reported that they were immediately attended after their arrival at the hospital for the delivery. A delay of 15 to 30 minutes or more was reported by only a meager per cent of mothers as can be seen in the study areas. It shows hospitals are not maintaining a minimum duration of stay as recommended by the Govt. health department.

We also probed about the mode of transport used to reach the hospital. Around 34% have used own /hired four wheeler vehicles while 40% of them could reach the hospital by Govt. the ambulance. Though it is a negligible percentage 1.6% of the mothers have reached the hospital by walk!. It shows good road connectivity in the rural areas plays a vital role in the success of institutional delivery for speedy transport. We found 64% of them spent above 250/- for transport and only 16% of them have been reimbursed. The mode of transport needs to be improved with the help of PRIs. Delay in transport also causing a lot of medical complications during delivery and causing maternal death. The local NGOs can play a vital role in proving transport.

# Beneficiaries Knowledge on Cash Incentives and Mode of Payment:

The major aim and objective of the JSY scheme is to provide an amount of Rs.1,400/ in LPS and Rs. 700/- in HPS to the mothers as an incentive for institutional delivery. More than 94 per cent of the mothers who delivered in an institution in the studied states reported having received Rs. 700/ as an incentive. Few of them have received less than Rs.700/- for certain reasons. Next 84% of the mothers didn't have any problem in getting cash while 8.2% per cent of the mothers had to make several contacts to obtain their money. Next around 3.2% per cent mothers could get the amount after few efforts through link person.

Regarding the person who paid the cash incentives, in Karnataka 21.2% beneficiaries received money from the ASHA workers and more than 51% have received from the CHCs where they had delivered the baby in Karnataka. However, in case of Tamil nadu the majority of them (50%) have received the money from ANMs. In Tamil Nadu, ASHA have been excluded from JSY service. In Andhra Pradesh 78% of them received incentives from the concerned hospital heads and few of them received cash from the PRI office (5.2%). In cases of home deliveries, ANM/ASHA were the main source of cash disbursements.

Regarding the time of receipt of money 83% of them have received money immediately after discharge from the hospital, whereas 7% of them have received incentives 2-5 days after the discharge from the hospital. Effort needs to make an early payment. With respect to the mode of payment, 93.5% of them have received incentives through cheque only. Some time the non availability of enough check leaves has caused a delay in the payment. The District agency has to take some initiation to avoid the delay in receiving the money from the state office and also every effort is required to pay the money at the time of discharge itself [6]. It is further noted in some cases mothers who delivered in hospitals were given 'coupon' with discharge. This coupon along with verification of ANM or ASHA is obligatory for the release of cash. some cases ANM accompanied beneficiaries' husband or relatives or friends and in several other cases, coupon was collected and submitted by the ANM at the facility centre, cash was collected and distributed to beneficiaries at their home. Multiple channels of disbursement are being followed in all 3 states to ensure payment which is not a good sign. Next, Out of interest we asked the beneficiaries 'how did they use the money received under JSY?'.

About 75% of them purchased consumables for the family and bought medicines for self and child, while one-fourth said that they used it for self-nutrition or the husbands took it away. A few of them saved it, while only one percent used the money for medical expenses. In some cases women used it to repay the loans taken for meeting the delivery expenses [7]. The cash assistance was beneficial to poor women in many ways as they opined. This community-based cross sectional study about beneficiary level factors influencing *janani suraksha yojana* (scheme for institutional delivery) utilization in three south Indian states has shown that schema has reasonable success

#### Conclusion

Study has found that beneficiaries have good knowledge and access to the scheme. Women's active participation in tackling healthcare issues is offering new views on how women's educa-

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tional level and awareness plays a vital role in accessing and accepting JSY programmes including ante and post natal checkups. Illiterate women are least bothered about antinatal and post natal care in rural parts [5].

Also women's occupation and income has a positive effect on maternal health and is connected with reduced rate of maternal mortality and morbidity in rural areas. Reasons for not opting institutional delivery needs further research. JSY scheme should have many more benefits including vaccinations for new diseases and providing free health insurances to both child and the baby.

Incentives must be hiked. It is also felt that the Village Health Committee (VHC) should work closely with both Panchayats and the community. Committee working with the Gram Panchayats should ensure an easy accessing of every pregnant woman to JSY scheme on time in rural parts. This committee may prepare an action plan and maintain village level data benefited by JSY with assistance from Gram Panchayats.

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