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Non-use of Janani Avam Bal Suraksha Yojana in a district of Bihar: ensuring safe deliveries needs strategy modification

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ABSTRACT

Background: India's Janany Surakhsha Yojana (JSY) is the largest conditional cash transfer (CCT) program in the world in terms of the number of beneficiaries - covering about 9.5 million (36%) of 26 million women giving birth in India. Eleven States/UTs including Bihar, are still below the National estimate for institutional delivery of 78.9% (NFHS 4). In this study we attempted to find out the status of institutional and home deliveries in district Arwal of Bihar and reasons why in spite of cash incentives a proportion of mothers are opting for home delivery.

Methods: A cross sectional descriptive design was used to interview 407 women, who had given birth to a child in previous one year. Focuss group discussions was held with community and health staff to corroborate the interview data

Results: Fifty nine percent of mothers were found to have preferred home delivery over institutional one. Reasons which came to light were home deliveries are cheaper (24.1%), unawareness about JSY (22%), unavailability of transport to reach hospital (22%) and better care being taken at home delivery (20.1%) variables. Older age, having a BPL card, and literacy of husband were found as favoring institutional delivery whereas dissatisfaction during a previous abortion or a livebirth in hospital were both associated with non-use.

Conclusions: Better client awareness, strengthening of public health infrastructure, availability of skilled birth attendants at health subcentres (HSCs) and emergency transport in time can reduce number of home deliveries and lead to success of JBSY programme and subsequent reduction in maternal morbidity and mortality.

Keywords: Home delivery, Incentives, Quality of care, Transport

INTRODUCTION

Janani Suraksha Yojana (JSY)), in India, a 100% centrally sponsored scheme is the largest Conditional Cash Transfer (CCT) program in the world in terms of the number of beneficiaries - covering about 9·5 million (36%) of 26 million women giving birth in India, with a budget allocation in the 2009-2010 financial year of 15.4 billion rupees (\$342 million). Established in 2005 as a key component of the National Rural Health Mission

(NRHM), JSY is a safe motherhood intervention being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. Reduction in the number of unsafe home deliveries is the expected outcome of the programme.² However in spite of cash incentive and other facilities home deliveries continue to occur. The same exists in states such as Bihar, Chhattisgarh, Jharkhand, Uttar Pradesh, Assam, West Bengal, Himachal Pradesh, Manipur, Meghalaya,

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Nagaland and Uttarakhand with figures of institutional delivery below the national estimate of 78.9% (NFHS 4).³ Under the programme, poor women receive cash compensation for institutional deliveries and for accessing antenatal and postnatal care. Accredited Social Health Activists (ASHAs) are also given cash incentives for accompanying the poor pregnant women to the hospital. In Bihar, the scheme was launched as Janani and Bal Surksha Yojana (JBSY) in April 2006. Though institutional deliveries in Bihar rose from 19.9% (NFHS 3; 2005-06) to 27.7% (DLHS 3; 2007-08) and to 63.8% (NFHS 4; 2015-16) but home based deliveries by dais still remains

To reduce maternal mortality and morbidity, it is necessary to achieve 100% institutional/ safe deliveries (12th plan and NRHM). However, National Health Policy 2017, has made a more practical 90- 90 twin objective i.e. to achieve above 90% Antenatal care (ANC) and skilled attendance at birth by 2025. This paper attempts to assess the causes resulting in home deliveries in spite of cash incentives in district Arwal, Bihar and recommend possibilities of minimizing the same.

METHODS

The cross sectional study was undertaken in Arwal, an average performing district of Bihar, for institutional deliveries. A multistage random sampling method was used to select two health sub centres (HSCs) from PHC Arwal for interviewing the beneficiaries and nonbeneficiaries of JSBY. Women who had childbirth in the previous year, in the two selected HSCs, 407 in number were interviewed within July 2015 to September 2015. Focussed group discussion were held with the ANMs and ASHAs in both the HSCs to assess the attitude of the grass root level workers towards the J BSY programme and also with the community members to elicit their perception of JBSY.

Study subjects were divided into two groups based on whether they were beneficiaries of the scheme or not. Categorical variables were compared using the chi square test. Variables found to be significantly associated (p<0.05) were included in the analysis using logistic regression. Data analysis was done in SAS 9.4.

The project was examined and cleared by Ethical Committee and the institution review board of National Institute of Health and Family Welfare (NIHFW) New Delhi.

RESULTS

Majority of the women (83%) belonged to the low socioeconomic status (Table 1). Sixty four percent of the illiterate women had home delivery, but more of middle and above educated men had their wives deliver at a hospital than at home. Seventy percent of the ANC registration was done at the Anganwari three ANC at

center was given to only 3% women and 42% had only one ANC visit. FGD s of ASHAs and Aganwari workers revealed that poor ANC care was due to ANC day coinciding with take home ration day and the mother in laws come to collect it without the pregnant women. Post-delivery stay for 48 hours in hospital under JBSY was also not followed and the women were discharged within 4 to 6 hours from hospitals after childbirth. In many instances the ASHAs preferred to take back the parturient soon since ASHAs had difficulty in finding a place to stay for two days. Information about JBSY had been given by ASHAs and Anganwari to 45% of the pregnant women. Radio, TV and hoardings had been totally ineffective in creating awareness as only 1% learnt from those and 26% women had no knowledge at all.

Table 1: Standard of living of families of pregnant women.

Description	Numbers	Percentage (%)
1-Low	336	82.56
2-Medium	53	13.02
3-High	18	4.42
Total	407	100

Table 2: Common reasons favouring home delivery.

Description	Frequency	Percentage (%)
1. Home delivery is cheaper	110	27.03
2. Lack of transport	100	24.57
3. Unawareness	100	24.57
4.Compromised quality of care	91	22.36
5. Others	6	1.47
Total	407	100.00

Fifty nine percent (240) women out of total 407 interviewed, had home delivery and in 67% of the cases the decision was taken by either husband or mother in law. Main reasons stated by these women (59%) for home delivery (Table 2) were that it was convenient to take care of children at home and also cost was less by (27.03%) women, unawareness about JBSY (24.57%), unavailability of transport to reach hospital (24.57%) and better care at home by dais during delivery (22.36%). On an average Rs 700 to Rs 800 was spent in hospital delivery for buying medicines, consumables and transport, compared to Rs 500 paid to traditional dai for childbirth at home.. The difference in the expenditure between the two groups was statistically significant (p<0.05). During focused group discussion (FGDs) the community informed that the women were mostly defendant on ASHA for transport as per the JSBY programme. Ninety five percent of the non-beneficiaries and 29.34% of beneficiaries were unaware of the availability of any government emergency transport system. Even on requesting government transport there was long delay forcing the family to opt for another transport. Distance was a major determinant of choice for hospital delivery as three fourth of the hospital deliveries were from families residing within 5 km.

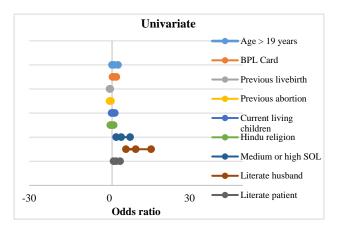


Figure 1: Predictors of institutional delivery in univariate analysis.

Amongst the various variables tested for association and significantly related with use of institutional delivery using logistic regression, are age >19 years (OR: 1.8; 95% CI: 1.01-3.26), having a BPL card (OR: 1.77; 95% CI: 1.19-2.64), medium/high standard of living (OR: 4.46; 95% CI: 2.56-7.78), literate husband (OR: 9.87; 95% CI: 6.22-15.65), and literate wife (OR: 2.52; 95% CI: 1.58-4.03). On the other hand, having had a previous abortion (OR: 0.29; 95% CI: 0.13-0.61) or previous live birth (OR: 0.2; 95% CI: 0.11-0.37) was associated with non-use due to exposure to poor quality services in hospital (Figure 1).

DISCUSSION

In the present study low standard of living was found to be associated with non-use of institutional delivery and Salam et al also found in their study that socioeconomic status of women is associated with non- use of maternal health services. They found, 45% of poor women and 12% of rich women did not get antenatal checkup and a difference of 40% was found between poor and rich women who gave birth at home, and about three fourths and one third respectively had delivered their babies without professional assistance.⁷ The major barrier to availing JBSY services was unawareness about the scheme. In the Concurrent Evaluation of Janani Suraksha Yojna (JSY), UNFPA (2009) found 78.6% of the women as aware of the J BSY scheme in Bihar, none the less it was not reflected in the utilization of JBSY as 50.9% of the women in Bihar concurrent evaluation and 59% of women in present study preferred to have home deliveries.⁸ Regarding the JSY scheme in Uttar Pradesh, Kaushik et al in their study in Varanasi found that as much as 60% and 50.6% subjects were aware about monetary benefits and the exact amount of money given to beneficiaries respectively. Husband's literacy status had a significant influence on the knowledge level of study subjects about the benefits of the scheme.9 In present study too literacy of husband and wife was

significantly (p<0.001) associated with utilization of JBSY services. Kumar, et al while assessing awareness and perception regarding JSY scheme in rural Agra, found "don't know" response in 27.64% of the subjects, which agrees with the present study finding of 24.57%, and this variable was significantly associated with nonuse (p<0.001). Awareness and understanding of the community are significant for rolling out large flagship scheme so that the benefits reach the needy. 11

Lack of proper facilities for transporting pregnant women from their homes to government hospitals was considered to be an important factor for low utilization of services, as 25% ante natal women in our study found it difficult to utilize hospital deliveries due to lack of transport facility. ASHAs too emphasized, that even though ambulance facilities were available, there was considerable delay between informing the control room and the actual arrival of ambulance at the client's homes. Delay in arrival of ambulance led to loss of credibility of ASHAs amongst the families.¹² A study on "Evaluation of referral transport system in Patna District" found that only 11.5% of the total 811 households had ever availed the referral transport services for transferring a patient to hospital in previous two months. 13 Status of availability of hospital transport in Bihar had not improved over time. Tenth Common Review Mission, 2016 finds that Services under the JSSK program have now streamlined to a large extent. However, certain challenges that persist which include, lack of assured drop back services to postnatal mothers (in Uttar Pradesh, Andhra Pradesh, Chandigarh, Jammu and Kashmir, Delhi, Bihar, Gujarat, Nagaland). 14

Cost incurred for institutional delivery was the greatest hindrance to availing the facility. Beneficiaries were more likely to have incurred a total cost of Rs.700 to Rs 800, for normal vaginal delivery, so the incentive of Rs.1400 was not lucrative vis a vis the trouble to leave behind the children and go to hospital for normal delivery. Delivery by traditional birth attendant was cheaper and satisfying for the mother. A delivery by caesarean section incurs cost which is much higher. A study on delivery care in rural Rajasthan, observed that the cost of accessing home-delivery care was Rs 379 (US \$8) while the mean costs in facilities for elective, difficult vaginal deliveries and for caesarean sections were Rs 1336 (US \$30), Rs 2419 (US \$54), and Rs 11,146 (US \$248) respectively. Most families took loans at high interest to meet these costs.¹⁵

Although the quantity rather than quality of health services has been the focus historically in developing countries, ample evidence suggests that quality of care (or the lack of it) must be at the center of every discussion about better healt. In this study, 22.35% of respondents clearly express that "dai" takes better care than service providers in hospital. Lack of quality care in government health facilities was one of the most frequent reason given for low utilization Non-use of hospital delivery in present study was found significantly associated with previous childbirth/ abortion as many of the patients who delivered their previous baby in

government hospitals did not want to deliver their next baby in a government hospital... they said that "behavior of hospital staff was very inhuman and they had no respect for life". 12 While Comparing domiciliary and institutional delivery-care practices in rural Rajasthan, India, Iyengar et al found only 34% of the women delivered in health facilities, and modern care providers attended only half of all those deliveries. Most women were discharged prematurely after institutional delivery, especially by smaller health facilities.¹⁵ which concurred with the finding in this study, indicating lack of quality of care. Noted population scientist, Aasish Bose,* commented that 'reduction of maternal mortality should focus on creation of health infrastructure and ensuring road connectivity in rural areas rather than merely dolling out money to poor families.¹⁷ The health system needs to find innovative and effective ways to strengthen midwifery and ensure the availability of and accessibility to safe delivery practices at community level. 18

CONCLUSION

Factors for home delivery can be tackled if the child birth is conducted near the client's home. Better client awareness, strengthening of public health infrastructure, availability of skilled birth attendants at health subcentres (HSCs) and emergency transport in time, can lead to success of JBSY programme and subsequent reduction in maternal morbidity and mortality.

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Institutional Ethics Committee

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