

Utilization and perception of health services under Janani Suraksha Yojna among mother in a rural area of Ambala district, Haryana

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Abstract

Background: Janani Suraksha Yojna (JSY) is an ambitious scheme serving as a safe motherhood intervention and was launched under National Rural Health Mission on 12th April 2005. It is a cash incentive-based program to promote institutional deliveries. The main objective of this scheme was to reduce maternal and neonatal mortality.

Objective: To study the utilization of health services by mothers during antenatal, natal and postnatal period under JSY.

Materials and Methods: A cross-sectional study was carried out among 200 beneficiaries under JSY residing in the rural area of district Ambala, Haryana. A predesigned, semi-structured questionnaire was used to collect relevant data and analyzed using SPSS version 21.

Result: Majority 73.5% mothers were registered after 12 weeks of pregnancy whereas 26.5% of them were registered within first 12 weeks of pregnancy. Around 14% mothers did not receive the recommended minimum three antenatal visits. The coverage of tetanus toxoid (TT) immunization was 95.5%. Majority 88.5% deliveries were institutional and home deliveries were about 11.5%. Majority of institutional deliveries were conducted in government hospital as compared to private hospital. Around 54.5% mothers received at least three or more postnatal care (PNC) visits. Only 25.5% mothers received cash benefits under JSY. Awareness and perception regarding JSY were low among mothers.

Conclusion: The utilization and perception of JSY was found to be low in the study group. We are lacking behind the goal of 100% institutional deliveries, ANC, and PNC visits. There is scope for improvement such as awareness about JSY benefits.

KEY WORDS: Antenatal check-up, institutional delivery, Janani Suraksha Yojna, postnatal care

Introduction

In any community, mothers and children constitute a priority group. In sheer numbers, they comprise approximately 71.14% of the population of the developing countries. In India, women in reproductive age group (15–45 years) and children

(below 15 years) constitute nearly 57.5% of the total population.^[1] Mother and child must be considered as one unit. In India, maternal and infant mortality rate was higher, reducing maternal and infant mortality is one of the key indicators of millennium development goal (MDG 4-5) substantiates the high priority accorded maternal health and survival at global arena.^[2] In India, the estimated MMR was 437 per 1,00,000 live births in 1990. In order to meet the MDG target, the MMR should be reduced to 109 per 1,00,000 live births by 2015. As per the latest estimates, the MMR status was 254/100,000 in 2004–2006 and to 212/100,000 in 2007–2009 and 167 in 2011–2013 whereas in Haryana, it is 153. As per the historical trend, MMR is likely to reach the level of 140 maternal deaths by 2015.^[3]

To achieve the MDG 5, the Government of India launched the Janani Suraksha Yojana (JSY). JSY is a safe motherhood

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intervention under the National Health Mission (NHM). Earlier it was known as National Rural Health Mission (NRHM) it is being implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women. The scheme is under implementation in all states and union territories, with a special focus on low performing states.^[4]

According to NHM, Haryana is among the high-performing states, so the scheme is for below poverty line women and all scheduled caste or scheduled tribe women aged 19 years and above, up to two live births. Since the JSY scheme has been operational for more than 5 years, and very few evaluation studies has been conducted in Haryana, it was found appropriate to review and assess the performance of this scheme in this state. Our aim was to assess the utilization of maternal health services (antenatal, natal, and postnatal) among JSY beneficiaries. The study may be helpful in strengthening the program implementation.

Material and Methods

A cross-sectional study was conducted among beneficiaries under JSY residing in the rural area of Ambala district, Haryana, from January 2015 to August 2015.

Sample Size: As our main focus in JSY is on increasing institutional deliveries, so we have used percentage of institutional deliveries for calculating sample size. The percentage of institutional deliveries in Haryana is 74%,^[5,6] so the sample size came to be 140, which was rounded off to 200.

All married women of reproductive age group, who had delivered a child in past 1 year, women residing in the study area and women who were willing to participate were included in our study and those women who were not available even after three visits to their residence were excluded in our study.

In district Ambala, there are four CHC's. Of these four CHC's, one CHC was randomly selected. From chosen CHC, two primary healthcares (PHCs) were randomly selected. In each PHC, two subcenters were randomly selected. A list of mothers who delivered during last 1 year (July 2014–June 2015) was obtained from (MPHW-F) and only those entitled under JSY were included in the study. From this list, first 50 females, according to date of delivery from all the four subcenters were selected for the study. Eligible beneficiaries under JSY were interviewed on a pre-designed, pretested semi-structured schedule, by house-to-house visit. Data were entered in Microsoft Excel and analyzed using SPSS version 21, for qualitative variable χ^2 -test was used and for quantitative variables *t*-test was used for finding out significance. Informed consent was taken from the study participants and permission was taken from Institutional Ethics Committee before the start of the study.

Result

A total of 200 mothers were interviewed. Table 1 shows sociodemographic profile of mothers and it was found that

majority of mothers were in the age group of 20–25 years (i.e. 127 (63.5%)) followed by 25–30 years, less than 20 years, and 30–35 years were 48 (24%), 11 (5.5%), and 9 (4.5%), respectively.

About educational status 52 (26%) of mothers were illiterate and 148 (74%) were literate, among the literate 95 (47.5%) were educated up to primary school, followed by high school and senior secondary school. About two-thirds, that is, 132 (66%) mothers were housewife and only 68 (34%) were working somewhere. Of them, 113 (56.3%) belonged to joint family and 87 (43.5%) belonged to nuclear family.

About the utilization of health services among mothers, Table 2 shows that majority of mothers were registered after 12 weeks of pregnancy (i.e., 147 (73.5%)), only 53 (26.5%) were registered before 12 weeks of pregnancy, majority 172 (86%) of mothers had 3 or more ANC visits, only 28 (14%) mothers had less than 3 ANC checkup. Almost all mothers received TT Booster dose, that is, 191 (95.5%) and only 9 (4.5%) of mothers received only one dose of TT.

Three-fourth of mothers received recommended number of IFA tablets (i.e. 100 IFA tablets), about 36 (18%) mothers received less than 100 IFA tablets and 12 (6%) received more than 100 IFA. Nearly half of mothers who rent the vehicle paid by self, that is, 117 (58.5%) and 83 (41.5%) were paid by ASHA. Majority of mothers were escorted by ASHA (i.e., 121 (60.5%)) and majority of mothers did not get incentive under JSY (i.e. 149 (74.5%)) and only 51 (25.5%) received incentive under JSY after at the time of interview.

Institutional deliveries were found to be higher in our study [Table 3], about 177 (88.5%) were institutional deliveries and only 23 (11.5%) were home deliveries. Of the 200 mothers 119 (59.5%) delivered in Government hospital and 58 (29%) delivered in private hospital.

About the postnatal care (PNC), Table 4 shows that maximum number of mothers (i.e., 141 (70.5%)) get PNC through ASHA/MPHW-F followed by nurse/doctor (22.5%) and trained dai (5.5%), more than half get more than 3 PNC checkups (i.e. 109 (54.5%)), 88 (44%) get 3 PNC visits.

Regarding the perception of JSY among mothers, Table 5 shows three-fourth of mothers were aware about cash benefits 143 (71.5%) followed by safe delivery 111 (55.5%), care of mother and baby 89 (44.5%), free hospital delivery 74 (37%), and free food 32 (16%), respectively.

Discussion

To achieve the MDG 4 & 5, the government of India launched JSY to improve maternal and child health status. In this study, institutional deliveries were found to be 88.5% and 11.5% where deliveries at home. A total of 59.5% delivered in government hospitals and 29% delivered in private hospitals. Almost similar finding was observed by Sidney *et al.*^[7] in Ujjain found that institutional deliveries was 89% and a study done by Malik *et al.*^[8] in rural area of Panipat and Rewari found that institutional deliveries were 82.9% and 97.7%, respectively. DLHS-4^[6] reported 74.4% institutional deliveries whereas

Table 1: Sociodemographic profile of the mothers

Variables	Number	Percentage
Age (years)		
<20	11	5.5
20–25	127	63.5
25–30	48	24
30–35	9	4.5
>35	5	2.5
Educational status		
Illiterate	52	26
Primary	95	47.5
High school	30	15
Senior secondary	18	9
Graduate	5	2.5
Occupation		
Housewife	132	66
Employed	68	34
Types of family		
Joint	113	56.5%
Nuclear	87	43.5%

Table 2: Utilization of health services among mothers

	Numbers	Percentage
Registration		
<12 weeks	53	26.5
>12 weeks	147	73.5
No. of ANC visit		
<3	28	14
3	125	62.5
>3	47	23.5
TT received		
TT1	9	4.5
TT2	191	95.5
IFA received		
<100 tablets	36	18
100 tablets	152	76
>100 tablets	12	12
Rent of vehicle paid by		
ASHA	83	41.5
Self	117	58.5
Escorts by ASHA		
Yes	121	60.5
No	79	39.5
Incentive received		
Yes	51	25.5
No	149	74.5

45.7% deliveries were in government hospitals and 28.7% deliveries were in private hospitals. Our study has quite higher rate of institutional deliveries compared to DLHS-4 because our study was carried out in 2015 and report was collected

Table 3: Distribution of mothers according to place of delivery

Place of delivery	Number	Percentage
Home	23	11.5
Government hospital	119	59.5
Private hospital	58	29
Total	200	100

Table 4: Postnatal care received among mothers under JSY

PNC care provided by	Number	Percentage
MPHW-F/ASHA	141	70.5
Doctor/nurse	45	22.5
Trained dai/AWM	11	5.5
None	3	1.5
No. of PNC visit		
None	3	1.5
1–3	88	44
>3	109	54.5

Table 5: Perceptions of women regarding benefits of Janani Suraksha Yojna (JSY)

Benefits of JSY	Number*	Percentage*
Cash benefits	143	71.5
Safe delivery	111	55.5
Care of mother and baby	89	44.5
Free hospital delivery	74	37
Free food	32	16
Free transport	33	16.5

in 2012–2013. Another study carried out by different authors shows lower rate of institutional deliveries as compared to this study, for example, Kumar *et al.*^[9] in rural area of north India found 53.25%, Malini *et al.*^[10] in Orissa 65%, Singh *et al.*^[11] in Ghaziabad 31%, Iyengar *et al.*^[12] in Rajasthan found 34% institutional deliveries; this difference might be because of the area and the year of study.

In this study, majority (73.5%) mothers were registered after 12 weeks of pregnancy, 26.5% were registered before 12 weeks of pregnancy, delay registration of pregnancy was due to lack of awareness and knowledge among mothers. In a study conducted by Malik *et al.*,^[8] 12.3% registered before 12 weeks and 87.7% registered after 12 weeks of pregnancy, early registration was quite higher in this study because Maikl carried out his study in 2013 and this study was conducted in 2015. Majority (86%) of mothers had 3 or more ANC visits and 14% mothers had less than 3 ANC checkups. A study done by Malik *et al.*^[8] in Haryana and Kumar *et al.*^[13] in Agra found that 76.4% and 63% of mothers done 3 or more ANC checkups. According to DLHS-4^[6] report 40.9% mothers had 3 or more ANC visits. Almost 95.5% mothers received two doses of TT. Similar findings were observed by Malik *et al.*,^[8] Mandal *et al.*,^[14] Kumar *et al.*,^[13] Agarwal *et al.*^[15] 90.6% DLHS-4 reported 92%, 97%, 93%, and 90.6%, respectively. TT coverage was higher in this and other studies. We have nearly achieved

100% TT coverage and, in 2015, World Health Organization (WHO) declared India free from neonatal tetanus.

In this study, 82% mothers received 100 or more tablets of IFA. A similar finding was observed by Agarwal *et al.*^[16] in Indore. A cross-sectional study conducted by Kumar *et al.*^[13] in Agra and Agrawal *et al.*^[15] in rural area of Punjab found 71% and 53% mothers received 100 or more tablets of IFA. According to DLHS-4^[6] only 18% mothers from rural area of Haryana received 100 or more tablets from IFA, this difference might be due to area and year of study. This study was conducted in Ambala, it is one of the developed districts of Haryana. Nearly 58.5% mothers who rent the vehicle paid by self and 41.5% were paid by ASHA and 60.5% of mothers were escorted by ASHA. A study carried out by Kumar *et al.*^[9] in north India found that 48% rent vehicle paid by ASHA and 52% paid by self, whereas 79% were escorted by ASHA. Majority of this study do not get incentive under JSY scheme only 25.5% get incentives under JSY scheme. According to DLHS-4^[6] in rural area of Haryana, only 12.6% mothers get incentives under JSY, this study finding was quite higher as compared to DLHS-4 because DLHS covers all rural area and Ambala district is more developed as compared to other areas of Haryana. Higher number of mothers received incentives under JSY was found in a study by Kumar *et al.*^[9] and Uttekar *et al.*^[17] it might be due to period of study and area of study.

In this study, 98.5% mothers get PNC, among them 70.5% through ASHA/MPHW-F followed by nurse/doctor (22.5%) and trained dai (5.5%), and 54.5% mothers get 3 or more PNC checkup. A study done by Kumar *et al.*^[13] in Agra and Malik *et al.*^[8] in Panipat and Rewari found similar findings, that is, 69%, 70.5%, and 55.4%, respectively. DLHS-4 reported from rural area of Haryana show that 66.8% mothers get PNC checkup within 24 h of delivery.

Regarding the perception and awareness about JSY among mothers was low, most common perceptions were cash benefits (71.5%) followed by safe delivery (55.5%), care of mother and baby (44.5%), free hospital delivery (37%), and free food (16%), respectively. In a study conducted by Kumar *et al.*^[9] in north, most common was cash benefits (65.8%) followed by care of mother and baby (15.8%), and safe delivery (9%), respectively.

Recommendations

On the basis of the findings, few recommendations can be looked forward. Need to increase awareness and knowledge about the JSY scheme among mothers to achieve 100% institutional deliveries and also need to provide easy accessibility of free transport and free medicines. Quality services at health facility should be assured as poor services is a reason for non-utilization. Cash incentive should be given immediately after the discharge of patient. Hence, it is proposed to make the quality of services as an integral component of the JSY scheme. Continuous monitoring of service providers need to be emphasized by the program managers to improve quality of health services under the JSY scheme.

Conclusion

An institutional delivery was higher; more than three-fourth of mothers deliver in government and private hospitals. TT and IFA coverage was satisfactory in this study; ANC and PNC visits were quite low among mothers; utilization and benefits of JSY were not reaching to all the beneficiaries, such as, availability of free transport facility and free of cost delivery at government health facility like spent for purchasing of medicines, etc. Majority of the mothers were aware about cash benefits and safe deliveries were the main benefits of the JSY. We find some limitations in this study, first the sample size is too small so it cannot be generalized in whole of the community and second, duration of study is only 7 months so we cannot access the utilization and incentive given to mothers, we need more study on utilization of the JSY scheme.

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