Evaluation of safe motherhood practices in relation to Janani Suraksha Yojna

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ABSTRACT

Background: Janani Suraksha Yojna (JSY) is one of the main strategies under National Rural Health Mission (NRHM) formulated to reduce maternal and infant mortality.

Objectives: The study was conducted to evaluate safe motherhood practices and observe impact of JSY on it.

Methods: This study was conducted in a rural field practice area of a Medical College in Jaipur using 30-cluster technique of WHO in two month duration. Seven women (delivered in last 11 months) were selected from each cluster making a total sample size 210. .

Results: In our study 49.52% women took proper antenatal care which includes proper TT immunization, complete Iron-Folic Acid prophylaxis and appropriate antenatal checkups. Delivery was institutional or at health center in 93.8% cases. Most of the mothers who registered at the beginning of pregnancy received proper antenatal care. Registration for JSY had a significant relationship with literacy level of husband and socio-economic status. Motivation for registration under JSY was the monetary incentive in 60% cases, while 30.6% mothers were motivated by ASHA.

Conclusions: All these observations point towards better safe motherhood interventions in the surveyed area, which can be attributed to JSY registration.

Keywords: JSY, ASHA, ANC, safe motherhood.

INTRODUCTION

Children are the future of every nation and the development of child depends on the mother. In developing countries, approximately 515,000 women die from complications related to pregnancy or childbirth every year. Nearly all maternal deaths (99%) occur in the developing world-making maternal mortality the health statistic with the largest disparity between developed and developing countries.[1] The current MMR in India is 212/lakh (2007-09) and in Rajasthan still higher, 318/lakh (2007-09).[2] Such a discrepancy and inequity in distribution, access, and outcome of maternal care services poses a huge challenge to meeting the fifth Millennium Development Goal (MDG-5) to reduce maternal mortality by 75% between 1990 and 2015.[3] The tragedy is that these deaths are largely preventable. Global reviews and studies reveal that maternal deaths are clustered around labor, delivery, and the immediate postpartum period with obstetric hemorrhage being the main medical cause of death.[4]

Under NRHM, one of the main strategies to reduce maternal mortality is Janani Suraksha Yojna (JSY) introduced on 12th April, 2005 for promoting institutional deliveries among the poor pregnant women and also to provide better antenatal care and post natal care through facilitatory role of Accredited Social Health Activist (ASHA). It is a conditional cash transfer scheme to motivate pregnant women for institutional deliveries.[5]

State Government of Rajasthan launched the ambitious Janani Shishu Suraksha Yojna (Maa) on 12th September 2011, which supplements the cash assistance given to a pregnant woman under Janani Suraksha Yojna.

METHODOLOGY

This cross sectional study was conducted in a rural area of Jaipur. Eligible mothers who delivered in last 11 months (n=210), were selected using 'WHO-30 cluster sampling technique'. They were interviewed face-to-face using a pre-structured, pretested questionnaire. Verbal consent was obtained. Those who were not willing to participate were excluded.

To fulfill Safe Motherhood criteria, age at first

pregnancy should be at least 20 years, mean inter-pregnancy interval at least three years, and administration of adequate tetanus prophylaxis. Pregnancy should have been followed by at least three valid antenatal checkups, excluding registration. The mother should have taken at least 100 Iron Folic Acid (IFA) tablets. The delivery should be institutional or at least done by a trained dai, if conducted at home, and she should have undergone at least one postnatal checkup.[6]

Analysis was done in the form of percentage, contingency tables and tests of significance (chi square) using Excel & Sigma XL 6.11. Socio-economic status was determined as per modified Prasad classification.[7]

RESULTS

In our study majority of mothers (81%) were in the age group of 18-25 years, followed by the age group 25-30 years (15.24%). Majority were Hindus (92.86%) and near about two third (66.19%) belonged to joint family; were housewives (94.29%) and possessed primary to secondary level education. Majority of the participants belonged to middle (41.90%) and lower (52.38%) socio economic class.

Age at marriage of the participants was between 18-25 years (71.43%) while in about 27.62% it was below 18 years. Large proportion (51.3%) of the mothers was primipara. Majority (94.29%) had their first child during 18-25 years and only 1.9% during 25-30yrs, while only 3.81% mothers had children at less than 18 years of age. Only 32% mothers had a mean spacing of 3 years or more, whereas majority (54.67%) had two years spacing, and 13.33% had just one year. About 39.3% had two children and 9.2% mothers had 3 or more children. Most deliveries (93.81%) were conducted by health personnel at institution or health center. Deliveries were conducted at home by dais in 6.9%of cases, out of which half were by untrained dais.

The safe motherhood interventions availed by the surveyed women are depicted in Table 1.

Table-1. Safe motherhood interventions

	Complete/Proper (%)	Incomplete/Improper/ Not taken (%)
Antenatal Checkups	58.09	41.91
TT Immunization	79.52	20.48
IFA Prophylaxis	52.86	47.14
Postnatal Checkups	62.86	37.14

The effect of literacy level on utilization of the safe motherhood interventions is as in Table 2.

Table-2. Literacy level and safe motherhood interventions

Literacy level of mothers / Safe motherhood intervention	Illiterate (%)	Primary (%)	Middle & sec (%)	Higher sec & above (%)
3 or >3 antenatal checkups taken	48.98	55.56	55.57	85.71
Complete TT immunization taken	85.72	77.78	74.28	85.72
Proper IFA prophylaxis taken	28.57	42.86	64.28	89.28
1 or >1 postnatal checkups taken	65.3	65.08	52.85	78.57

In our study 88.82% of literate mothers were registered for JSY in comparison to 81.63% illiterate women. However this difference was statistically not significant. On the other hand, 71.43% women with illiterate husbands were registered for JSY in comparison to 90.29% women with literate husbands. This difference was found to be statistically highly significant. Working women (91.67%) were more aware of JSY than their housewife counterparts (86.87%). 94.36% mothers from middle class were taking benefit of JSY followed by lower class (82.73%) and higher class (75%). Observed difference was statistically significant.

About one third (32.79%) of mothers were self-motivated, 30.60% by ASHA, and rest by family members or other sources. Half of the mothers (51.37%) were escorted by ASHA Majority (90.71%) got their payment at the time of delivery.

DISCUSSION

The female literacy level in our study is much better than the 2011 census for rural Jaipur.[8] This is in contrast to other similar studies where maximum

were illiterate.[9,10] Literacy level of husbands (83.33%) is similar to 2011 census for rural Jaipur, but better than other studies.[8,10]

About 3.81% mothers had children at age less than 18, a finding similar to DLHS-3 (2007-08),[11] which is not advisable. Majority of them had mean spacing of two years & 13.33% had a spacing of just one year, which has an adverse effect on the health of the mother & the newborn. The recommended mean spacing of three or more years was seen only in 32% of mothers.

In our study about half of the women (49.52%) took proper antenatal care which is much higher than NFHS-3 (2005-06) and Singh et al.[10,12] Mothers seeking three or more antenatal checkups (58.09%) were higher than other studies.[6,8-13]

Most of the deliveries were normal, only 11.90% were caesarean. Similar results were shown by NIPI's baseline survey[14] and SOWC (State Of World's Children) – 2011.[15] The number of institutional deliveries (93.81%) conducted was much higher than other previous studies.[8-11] It may be due to increased awareness of JSY, in addition to presence of PHC and medical college in the vicinity.

We observed that level of education carries a significant correlation with registration with JSY, number of antenatal checkups, and complete consumption of IFA tablets. Husband's literacy level had a statistically significant relationship with these activities. This may be due to the reason that males still are final decision makers in our society.

Most of the mothers (87.14%) were taking the benefit of JSY. But majority of them (73.77%) registered only at the time of delivery. Comparison of our data to DLHS-3 shows that awareness about JSY has increased. Timing of registration for JSY is statistically significant with the number of antenatal checkups taken. However in case of postnatal checkups unregistered mothers had taken lead, though statistically not significant. It may be taken as an indication towards more complications during or after delivery in unregistered mothers.

Women of middle and lower class registered more for JSY. The difference was found to be statistically significant. Monetary benefit under JSY can be the reason for this higher registration by lower and middle class which was a little more than CORT's study.[16]

CONCLUSION

Our observations indicate towards a better safe motherhood interventions in the surveyed area. More stress should be given on registration at beginning in order to ensure safe motherhood. For most a monetary incentive was the sole reason for registering in JSY, which, in turn, indicates a scope for further improvement by making the ASHA more active. However, we feel that, safe motherhood practices though can be achieved through financial incentives; nevertheless, it should be a felt need of the community.

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