

Original Research Article

Awareness regarding Janani Shishu Suraksha Karyakram (JSSK) among mothers: a community based cross-sectional study in rural area of Raipur district, Chhattisgarh

Aditi Chandrakar*, Prem Sagar Panda, Gopal Prasad Soni, Srishti Dixit

Department of Community Medicine, Pt. JNM Medical College, Raipur, Chhattisgarh, India

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***Correspondence:**

Dr. Aditi Chandrakar,

E-mail: draditi7in7@gmail.com

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ABSTRACT

Background: In order to increase accessibility of health care services for pregnant women and sick infants and to reduce out-of-pocket expenditure, Ministry of Health and Family welfare, Government of India has launched a nationwide initiative- Janani Shishu Suraksha Karyakram on June 01, 2011. The objective of the study was to find out the awareness level about the entitlements of JSSK among mothers with child less than one year and its association with different socio-demographic variables.

Methods: A community based cross-sectional study was conducted in rural block of Raipur district, Chhattisgarh, India, among 352 mothers having child less than one year using multistage random sampling using predesigned, pretested proforma from July 2015 to June 2016. Chi-square test was applied to find out the association between awareness level and different socio-demographic variables. $P < 0.05$ was considered significant.

Results: Among 352 mothers, good awareness were found in only 207 mothers (58.80%). Maximum awareness (89.20%) regarding entitlements among mothers was seen for free transport services from home to health institution followed by the drop back transport facility from hospital to home (85.22%). None of the mothers know about free diagnostic services for mothers and for sick infants and for free provision of blood for sick infants. Increasing parity was significantly associated with good awareness regarding JSSK.

Conclusions: Level of awareness regarding JSSK entitlements for pregnant mothers and sick infants was found to be low. Extensive IEC needed to further increase the awareness regarding JSSK entitlements to increase utilization among beneficiaries.

Keywords: Awareness, Janani Shishu Suraksha Karyakram

INTRODUCTION

Current maternal mortality rate (MMR) in India is 167 per 100,000 live births (SRS 2011-13) with Chhattisgarh (221 per 100,000 live births) ranking 5th among all the states with high MMR.¹ Most of the maternal deaths are preventable. When mothers die, their families are much more vulnerable, and their infants are more likely to die before reaching their second birthday.² Over the years, government of India had taken various initiatives to

reduce maternal and child mortality, one such initiative was Janani Suraksha Yojna (JSY) in the year 2005.³

With the launch of JSY, there is considerable increase in institutional deliveries from 39 % (NFHS-3) to 79 % (NFHS-4) but still many women hesitate to access for institutional deliveries.⁴ Out of pocket payments are major barrier for pregnant woman to access to institutional health care. In order to reduce this barrier, the Ministry of Health and Family Welfare, Government

of India has launched a nationwide scheme Janani Shishu Suraksha Karyakram (JSSK) in the year 2011 to ensure cashless services (including free delivery care) to all pregnant women and sick infants at public health institutions across the country.

The scheme helps to improve the access to public health facilities and help to reduce both maternal and infant mortality and morbidity.⁵ For effective utilization of any scheme, awareness regarding the karyakram among the beneficiaries is an essential prerequisite, with this background, the present study was done with the objective to find out the awareness level about the entitlements of JSSK among mothers with child less than one year and its association with different socio-demographic variables.

METHODS

Study design, setting and subjects

A community based, cross sectional study was conducted during July 2015 to June 2016 in Dharsiwa block of Raipur district, Chhattisgarh, India among mothers who delivered in the last one year. This Block is a part of field practice area of rural health training centre of department of community medicine, Pt J.N.M Medical College Raipur Chhattisgarh, India.

Study tool and technique

Face to face interview of mothers using predesigned and pretested questionnaire.

Inclusion criteria

Mothers delivered within last one year and willing to participate in study

Exclusion criteria

Mothers having baby more than one year and not available at the time of study and not willing to participate

Sample size calculation using formula:

$$n = Z(1-\alpha/2)^2 P(1-P)/d^2$$

In Raipur district Rural population, Percentage of mother who received 3 or more ANC-67.7%. (As per AHS 2012-13), with absolute precision of 0.5, at 95 % confidence interval, sample size comes out to be 336 (which is rounded up to 352 so that equal number of mothers were considered for the study from each village.)

Sampling technique- multistage random sampling

In first stage, both the community health centres (CHC) was taken for the study. In second stage, two Primary

health care centres (PHC) were being selected randomly using lottery method from each CHC, thus 4 PHCs included in the study. Under each PHC, two subcenters were selected with 5 km and two subcenters more than 5 km away from the respective PHC. In each of the subcenters thus selected, two villages were taken one in which subcenter is located and any other village selected via random sampling. Thus, study area covers 32 villages, which include equal number of subcenter villages and non-subcenter villages. From each selected village, 11 mothers were taken randomly from each village using random number table.

List of mothers having child less than one year was obtained from all the Anganwadi/ASHA in the study area. From the list, mothers equal to sample size were selected randomly using random number table. If total number of study subjects were less than required, adjacent village was included for the study.

Verbal informed consent of study subjects was taken prior to interview after explaining the purpose and nature of the study. House to house visit was done to collect the data.

Statistical analysis

Data was entered, compiled in Microsoft excel 2007. Collected data was checked for its completeness and correctness before analysis. Data was finally tabulated, analyzed and interpreted by using chi-square test. Significance level was considered, at p-value < 0.05. To assess the awareness level of Janani Shishu Suraksha Karyakram (JSSK) among mothers, a set of 18 questions, each having three possible responses were asked; one mark was allotted for each correct response; scoring range being 0-18. Mothers who scored above the mean score were considered to have good awareness level and score below the mean were taken as having poor awareness level.

The study was approved by institutional ethical committee (IEC).

RESULTS

Socio-demographic profile of study participants (mothers)

The average age of the mothers was 23.33 years with a Standard deviation of 2.81. The minimum age among the mothers was 18 and the maximum 35 years. Maximum (82.39%) belonged to age less than equal to 25 years. 15.90 % mothers had no formal education, 43.18 % mothers were educated up to middle school and 90 % mothers were housewives. Joint families were seen among 68.75 % of the participants and 85.51% mothers were below class III socio-economic status as per modified BG Prasad Scale. 45.45 % mothers were primipara.

Awareness regarding Janani Shishu Suraksha Karyakram

Only 5 (1.42%) of the mothers, heard about the name of the scheme as Janani Shishu Suraksha Karyakram (JSSK) (Table 1). Overall 58.8 % mothers had good awareness regarding Janani Shishu Suraksha Karyakram (Figure 1). Regarding awareness about entitlements of JSSK among mothers, 126 (35.80%) mothers were aware about free normal vaginal delivery and about free caesarian section. 108 (30.68%) mothers had awareness for free drugs and consumables for pregnant women. Only 8 (2.27%) respondents were aware about free provision of blood during pregnancy and 14 (3.98%) were aware about free diet during stay in the health facility. None of the respondents were aware about free diagnostics services for pregnant mothers. As far as awareness regarding free entitlements for sick infants is concerned, very low awareness was found among mothers regarding free

treatment of sick infants (14.77%) and free drugs and consumables for infants (17.90 %) and none of mothers were aware about free diagnostics and provision of free blood (Table 1).

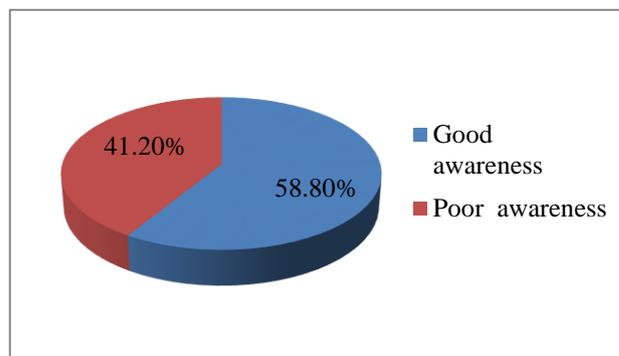


Figure 1: Distribution of study participants according to awareness level of services under JSSK.

Table 1: Distribution of study participants according to awareness regarding services under Janani Shishu Suraksha Karyakram (JSSK) (N=352).

| JSSK | Frequency | % |
|---|-----------|-------|
| Heard the name of JSSK | | |
| Yes | 05 | 01.42 |
| No | 347 | 98.58 |
| Awareness about entitlement for mothers | | |
| Free and zero expenses of delivery and caesarian section | 126 | 35.80 |
| Free drugs and consumables | 108 | 30.68 |
| Free essential diagnostics test | 00 | 00 |
| Free provision of blood | 08 | 02.27 |
| Free diet during stay in the health institution (up to 3 days for normal delivery and 7 days for caesarean section) | 14 | 03.98 |
| Free transport (from home to health institution) | 314 | 89.20 |
| Free transport between the facilities | 248 | 70.45 |
| Drop back from hospital to home | 300 | 85.22 |
| Awareness about entitlements for sick infants | | |
| Free treatment of sick infants | 52 | 14.77 |
| Free drugs and consumables for infants | 63 | 17.90 |
| Free diagnostics for sick infants | 00 | 00 |
| Free provision of blood | 00 | 00 |
| Free transport for sick infants from home to hospital | 110 | 31.25 |
| From institute to institute | 52 | 14.77 |
| Free transport from health to home | 100 | 28.40 |

Majority of the respondents (89.20 %) had awareness on free transport for mother from home to health facility and 300 (85.22%) of mothers were aware about free drop back facility from hospital to home but 70 % mothers were aware about free referral transport for mother between health facilities. In contrast to this, only 110 (31.25%) mothers had awareness on free transport for sick infant from home to health facility and 100 (28.40

%) about free drop back to home while less percentage (14.77%) of mothers were aware about free referral transport for sick infant between health facilities (Table 1).

Age, education, current working status of mothers, caste, type of family, socio-economic status and place of residence did not have any statistical significant

relationship with awareness level among the mothers regarding JSSK. However, parity of the mother had statistically significant relationship with the awareness

level among the mothers about JSSK. ($P < 0.05$) (Table 2).

Table 2: Association of socio-demographic variables of study subjects with awareness level.

| Socio-demographic variables | Awareness level (N=352) | | |
|-------------------------------|----------------------------------|------------------------|----------------------|
| | Good awareness (N=207) | Poor awareness (N=145) | Total (N=352) |
| Age (in years) | Frequency (%) | Frequency (%) | Frequency (%) |
| ≤ 25 | 171 (58.96) | 119 (41.04) | 290 (82.39) |
| >25 | 36 (58.06) | 26 (41.94) | 62 (17.61) |
| | $\chi^2=0.017$, df=1, p =0.89 | | |
| Education of mothers | | | |
| No formal education | 33 (58.92) | 23 (41.08) | 56 (15.90) |
| up to middle school | 82 (53.95) | 70 (46.05) | 152 (43.18) |
| High school and above | 92 (63.89) | 52 (36.11) | 144 (40.90) |
| | $\chi^2=3.01$, df=1, p =0.22 | | |
| Current working status | | | |
| Housewife | 183 (57.73) | 134 (42.27) | 317 (90.05) |
| Working | 24 (68.57) | 11 (31.43) | 35 (9.95) |
| | $\chi^2=1.52$, df=1, p =0.216 | | |
| Caste | | | |
| ST/SC | 68 (53.12) | 60 (46.88) | 128 (36.36) |
| Others | 139 (62.05) | 85 (37.95) | 224 (63.64) |
| | $\chi^2=2.6$, df=1, p=0.10 | | |
| Type of family | | | |
| Nuclear | 67 (60.90) | 43 (39.10) | 110 (31.25) |
| Joint | 140 (57.85) | 102 (42.15) | 242 (68.75) |
| | $\chi^2=0.2919$, df=1, p =0.589 | | |
| Socioeconomic status | | | |
| up to class III | 30 (58.82) | 21 (41.18) | 51 (14.49) |
| Below class III | 177 (58.80) | 124 (41.20) | 301 (85.51) |
| | $\chi^2=0.000$, df=1, p =0.997 | | |
| Parity | | | |
| Primiparous | 82 (51.25) | 78 (48.75) | 160 (45.45) |
| Multiparous | 125 (65.10) | 67 (34.90) | 192 (54.55) |
| | $\chi^2=6.91$, df=1, *p =0.008 | | |
| Place of residence | | | |
| Sub-centre village | 111(63.07) | 65 (36.93) | 176 (50.00) |
| Non-subcentre village | 96 (54.55) | 80 (45.45) | 176 (50.00) |
| | $\chi^2=2.63$, df=1, p =0.104 | | |

* $P < 0.05$ = significant.

DISCUSSION

The main aim of this programme is a provision of free entitlements for pregnant mothers which includes management of normal delivery, C-section and any complications during pregnancy and free entitlements of sick new-borns up to one year in any government facilities.

In present study only 1.42% mothers heard about the name of the scheme. Similar finding was observed

Mondel et al in West Bengal where 1.4 % mothers could state the name of the scheme.⁶ Another study done in rural area of West Bengal by Chatterjee S et al stated none of the mothers were able to answer the correct name of this scheme.⁷

Regarding free transport service under this Karyakram, present study revealed that majority (89 %) mothers were aware of free transport from home to hospital, 85 % were aware about free drop back facility and 70 % were aware of free transport between the health facilities. A study

conducted by Chatterjee et al on awareness about JSSK among pregnant mothers in rural area of West Bengal reported awareness on free transport from home to health facility was 35.42 % and 16.67 % respectively for mother and sick infants while for free referral transport for mother was 18.75 % and for sick infant it was 12.50 % where as 35.42 % mothers were aware about free drop back after delivery and 16.67 % for free drop back to home after treatment of sick infants.⁷ Mangulikar SK et al in Sholapur (Maharashtra) observed that 45.6% respondents were aware of free transport service available under JSSK.⁸

In a study conducted by Goyal RC in Wardha (Maharashtra) found that awareness about free referral transport services among study participants were 44.17 % where as a study in Karnataka, none were found aware of it.^{9,10} A study done by Barua et al in Assam stated about the awareness among mothers regarding free transport from home to facility (82.7%), drop back to home (72.4%) and from one health facility to other (40.3%).¹¹

In present study, 35.80 % of the mothers were aware about the principal entitlement under JSSK i.e. free delivery (including caesarian section) available in public health facilities. However, in an Assam study 88.1% of respondents were aware of free delivery while a study done by Chatterjee et al stated that 18.75% of the mothers were aware for normal delivery while none of them were aware of free caesarian section.^{7,11} Concurrent assessment of the impact of JSSK in Rajasthan, Tripura, Kerala, Maharashtra and Himachal Pradesh by national health systems resource centre (NHSRC) in 2013-14 found higher awareness levels (ranging from 90-100%) about free delivery component of JSSK among beneficiaries in Tripura, Kerala, Maharashtra, Rajasthan and Himachal Pradesh.¹¹

Awareness regarding free drugs and consumables for pregnant women (30.68 %) and sick infants (17.90%) was low in the present study where as in Assam study awareness was 85 % and in West Bengal it was 18.75 and 10.42 respectively.^{7,11} Among the participants, none of them were aware of free diagnostics services both for pregnant females and sick infants. In contrast to this, in Assam study awareness about free diagnostic was 77 % and Chatterjee et al reported 29.17 % and 6.25 % respondents were aware of free diagnostics for pregnant mothers and sick infants respectively.^{7,12}

Awareness level for provision of free diet during stay was also low (3.98 %) among mothers while this was found to be high in Assam (80.1%) and in West Bengal (58.33%).^{7,12} Only 2.27 % of mothers were aware about free provision of blood for mother while for infants, none of them were aware. This is similar to West Bengal study in which none of them had awareness for the same whereas dissimilar to Assam study where 17.8 % mothers were aware.^{7,12}

CONCLUSION

Awareness level of JSSK entitlements among mothers in present study was low. Maximum awareness was seen for the provision of free transport services from home to hospital, free drop back from hospital to home and from hospital to hospital whereas low awareness was noticed for other entitlements under this programme. Extensive information, education and communication is needed to further increase the awareness in the community among beneficiaries regarding JSSK entitlements to increase utilization of this scheme which in turn help in reducing maternal and infant morbidity and mortality.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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