

DOI: <http://dx.doi.org/10.18203/2320-1770.ijrcog20161703>

Research Article

Awareness regarding Janani Shishu Suraksha Karyakram among pregnant women of Marathwada, Maharashtra, India

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Received: 21 April 2016

Accepted: 16 May 2016

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ABSTRACT

Background: Government of India has launched “Janani Shishu Suraksha Karyakram” on 1st July 2011, to assure free and cashless services (including free transport) to all pregnant women and sick neonates accessing public health institutions. The objective of the study was to find out level of awareness regarding JSSK entitlement in pregnant women and to examine the association between different socio-demographic factors and awareness level.

Methods: This was a cross sectional study was conducted in the Department of Obstetrics and Gynaecology. Govt. Medical College and Hospital, Aurangabad involving 1000 pregnant women attending antenatal clinic between September 2015 to March 2016. Questionnaire was given to assess the awareness about JSSK entitlements and if it was known to them, then the source of information was noted. Information regarding socio-demographic characteristics was noted. The study subject was considered as aware of the scheme, if she had heard about the scheme and had knowledge about certain key points of the scheme. One point each was given to all the correctly answered questions and mean was calculated. Subjects whose correctly answered questions were more than the mean value were considered to have good awareness level. Analysis was done using SPSS version 20. Chi-square test for association between awareness level and different socio-demographic factors. Significance level was considered at p value <0.05.

Results: Among 1000 antenatal women, good awareness level regarding JSSK entitlements was seen in only 472 (47.2%) study subjects. Maximum awareness regarding JSSK entitlements was noted to be for Free vaginal delivery in 869 (86.90%) followed by free drugs and consumables to mother (73.4%) and free treatment for sick infants 662 (66.2%) and least awareness was noted for free drop back of sick infant from health facility to home (9%) and free caesarean section (9.6%). Not even a single woman answered all the 17 entitlements correctly. Only 13 (1.3%) women were able to answer 16 questions correctly. Advancing age, increasing level of education, member of nuclear family, increasing number of conception (gravidity) and advanced gestational age are significantly associated with the level of awareness. However, religion, socioeconomic status and occupation did not have any statistical significant association with the level of awareness regarding various entitlements of JSSK in antenatal women. Regarding the source of information, the most common source of information was from health personnel, followed by friends and family. None of the women reported that Radio, TV, Newspaper had contributed as a source of information.

Conclusions: Awareness level of JSSK entitlements in the pregnant women in our study is low. Maximum awareness was noticed for the provision of free vaginal delivery whereas awareness for provisions like free caesarean section, free drop back facility to home, free provision of blood is very low. Further efforts are needed to increase the overall awareness of various entitlements of JSSK among pregnant women to increase the utilization of the benefits of the scheme and thus indirectly helping in reducing MMR and IMR.

Keywords: Awareness, Free transport service, JSSK entitlements, Free caesarean delivery

INTRODUCTION

Maternal and child health is one of the eight Millennium Development Goals. Maternal and child mortality can be reduced by promoting institutional deliveries. Maternal Mortality Ratio and Infant Mortality Rate strongly reflect the overall effectiveness of health systems.¹ India has MMR of 167/1, 00,000 and IMR of 40/1000 live births. Maharashtra being the 3rd largest state in India has MMR of 68 and IMR of 24.²

Several initiatives have been launched by Ministry of Health and Welfare including Janani Suraksha Yojana (JSY) which is one of the key interventions that has resulted in phenomenal growth in institutional deliveries. However during programme review the state & district programme officers highlighted the situation where at times there is paucity of essential logistics like drugs, consumables, facilities of referral etc. Such situations are often being exploited by unwarranted persons and the beneficiaries are subjected for incurring out of pocket expenses. Thus in order to reduce out of pocket expenses under the overall umbrella of NRHM, Janani Shishu Suraksha Karyakram was launched on 1st June 2011 ensuring free entitlements like cashless delivery, C-section and management of sick neonate up to 30 days.³

Marathwada region from Maharashtra is economically backward. The utilisation of any scheme depends on the level of awareness among beneficiaries. Despite of wide availability of the scheme, there is poor utilization of the JSSK entitlements either due to ignorance or due to incomplete erroneous information about their use and procurement. Awareness has been highlighted by many as a key indicator of success in a range of performance. Awareness level among beneficiaries helps us to know the extent to which the programme is serving the purpose at root level. It is important to generate region based evidence on the awareness of JSSK entitlements. There are very few studies regarding assessment of awareness of JSSK entitlements and there was not a single study from Marathwada region. Keeping this in mind, this study was conducted to know the level of awareness about various entitlements of JSSK among pregnant women and to examine the association between different socio-demographic factors and awareness level.

METHODS

The present cross sectional study was conducted in the Department of Obstetrics and Gynaecology, Govt. Medical College and Hospital, Aurangabad. Sample size was calculated using the formula $n = \frac{4pq}{L^2}$ (p =positive character in %, $q=100-p$, L =allowable error 10% of p , n which was calculated was 880 and the sample size of our study is $n=1000$.⁴

All antenatal cases who reported for registration from 1st September 2015 onwards were given the option of being included in the study. Those who were not willing were

not enrolled for the study group and unwilling cases were not required to give reason for reluctance. Informed consent was obtained from all respondents prior to participating in the study. Confidentiality was maintained in data collection and compilation. This study was terminated in March 2016 when the requisite sample size of 1000 cases in the study group was achieved. Both willing and unwilling cases went through routine and standard antenatal care. Age, parity and other socio-demographic parameters were noted. Those who were included in the study were given the questionnaire in the first visit only. Questionnaire included a part to know about the JSSK entitlements and if it was known to them, then the source of information was noted. Questionnaire included all JSSK entitlements like Free Normal Vaginal Delivery, Free Caesarean Section, Free treatment for sick infant, Free drugs and consumables for mother, Free drugs and consumables for sick infants, Free diagnostics for pregnant women, Free diagnostics for sick infant, Free diet for mother, Free provision of blood for mother, Free provision of blood for sick infant. Exemption from user charges for mother and sick infant, Free transport for mother from home to health facility, Free transport for mother between health facility, Free drop back from health facility to home after delivery, Free transport for sick infant from home to health facility, Free referral transport for sick infant between health facilities, Free drop back of sick infant from health facility to home. Data was collected using a predesigned and pretested data collection form.

The study subject was considered to be aware of the scheme if she had heard about the scheme and had knowledge about certain key points of the scheme. One point each was given to all the correctly answered questions and mean was calculated. Subjects whose correctly answered questions were more than the mean value were considered to have good awareness level. Analysis was done using SPSS version 20. Chi-square test was applied for association between awareness level and different socio-demographic factors. Significance level was considered at p value <0.05 .

RESULTS

Table 1 showing socio-demographic profile of study participants revealed that maximum (63.10%) women belonged to the age group of 20-24 years. There were 61.80% Hindu women. Around 96.2% were literate, out of which 70.30% women were educated up to middle and high school level. Around 85.7% were home-makers, 61.40% belonging to socioeconomic class 4 and 61.4% women were belonging to joint family. Majority (53.30%) women were primigravida and 51.8% women were having Gestational age more than 20 weeks.

Table 2 showing statistical variables of correctly answered questions to assess awareness and the mean was found to be 6.22, mode was 5 and range was between 0-16.

Table 1: Socio-demographic characteristics of study group.

Characteristics	n=1000	%	
Age	≤19	060	06.00
	20-24	631	63.10
	25-29	245	24.50
	30-34	064	06.40
Religion	Hindu	618	61.80
	Muslim	382	38.20
Education	Illiterate	038	3.80
	Primary	127	12.70
	Middle	421	42.10
	High School	282	28.20
	Intermediate	108	10.80
	Graduate	017	01.70
	Postgraduate	007	00.70
Occupation	Home-maker	857	85.70
	Employed	143	14.30
Socio-Economic Status*	Class 3	115	11.50
	Class 4	614	61.40
	Class 5	271	27.10
Type of family	Nuclear	386	38.60
	Joint	614	61.40
Gravidity	G1	533	53.30
	G2	282	28.20
	G3	132	13.20
	G4	040	04.00
	G5	011	01.10
	G6	002	00.20
Gestational age	<20 weeks	482	48.20
	>20 weeks	518	51.80

*Socioeconomic status by B G Prasad Classification.

Table 2: Statistical variables of correctly answered questions regarding JSSK entitlements.

Variables	Value
Mean	6.22
Mode	5
S.D	3.52
Range	16
Minimum	0
Maximum	16

Table 3 showing maximum awareness regarding JSSK entitlements was noted to be for Free vaginal delivery in 869 (86.90%) followed by free drugs and consumables to mother (73.4%) and free treatment for sick infants 662 (66.2%) and least awareness was noted for free drop back of sick infant from health facility to home (9%) and free caesarean section (9.6%).

Table 4: showing advancing age, increasing level of education, member of nuclear family, increasing number of conception (gravidity) and advanced gestational age are significantly associated with good awareness.

However, religion, socioeconomic status and occupation did not have any statistical significant association with the level of awareness regarding various entitlements of JSSK in antenatal women.

Table 3: Awareness regarding individual JSSK entitlements.

JSSK entitlements	n=1000	% of patients
Free vaginal delivery	869	86.90
Free Caesarean section	096	09.60
Free treatment for sick infant	614	61.50
Free drugs and consumables for mother	734	73.40
Free drugs and consumables for sick infants	662	66.20
Free diagnostics for pregnant women	611	61.10
Free diagnostics for sick infant	578	57.80
Free diet for mother	516	51.60
Free provision of blood for mother	173	17.30
Free provision of blood for sick infant	190	19.10
Exemption from user charges for mother and sick infant	350	35.00
Free transport for mother from home to health facility	212	21.20
Free transport for mother between health facilities	179	17.90
Free drop back from health facility to home after delivery	99	09.90
Free transport for sick infant from home to health facility	146	14.60
Free referral transport for sick infant between health facilities	137	13.70
Free drop back of sick infant from health facility to home	090	09.00

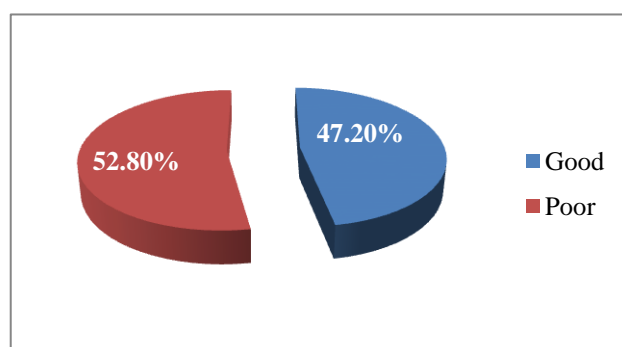


Figure 1: Awareness of JSKK.

Figure 1 showing among 1000 antenatal women, good awareness level regarding JSSK entitlements was seen in only 472 (47.2%) study subjects.

Regarding the source of information, the most common source of information was from health personnel 201(42.5%), followed by family 132(28.2%) and friends

75 (15.8%). None of the women reported that Radio, TV, Newspaper had contributed as a source of information (Table 5).

Table 4: Association of socio-demographic factors with awareness level.

Socio-demographic factors		Poor Awareness n (%)	Good awareness n (%)	Total n (%)	P value
Age	<20	38(63.3)	22(36.7)	60(100)	0.001
	20-24	352(55.8)	279(44.2)	631(100)	
	25-29	103(42)	142(58)	245(100)	
	30-34	30(52.3)	34(47.7)	64(100)	
Religion	Hindu	328(53.1)	290(46.9)	618(100)	0.533
	Muslim	195(51)	187(49)	382(100)	
Education	Illiterate	29(76.3)	9(23.7)	38(100)	0.000
	Primary	90(70.9)	37(29.1)	127(100)	
	Middle	279(66.3)	142(33.7)	421(100)	
	High School	76(27)	206(73)	282(100)	
	Intermediate	42(38.9)	66(61.1)	108(100)	
	Graduate	4(23.5)	13(76.5)	17(100)	
Occupation	Homemaker	441(51.5)	416(48.5)	857(100)	0.192
	Employer	82(57.3)	61(42.7)	143(100)	
Socioeconomic Status	Class 3	68(59.1)	47(40.9)	115(100)	0.158
	Class 4	308(50.2)	306(49.8)	614(100)	
	Class 5	147(54.2)	124(45.8)	271(100)	
Family	Nuclear	168(43.5)	218(56.5)	386(100)	0.000
	Joint	355(57.8)	259(42.2)	614(100)	
Gravidity	G1	408(76.5)	125(23.5)	533(100)	0.000
	G2	68(24.1)	214(75.9)	282(100)	
	G3	36(27.3)	96(72.7)	132(100)	
	G4	10(25)	30(75)	40(100)	
	G5	1(9.1)	10(90.9)	11(100)	
	G6	0(0)	2(100)	2(100)	
Gestational Age	<20weeks	380(78.8)	102(21.2)	482(100)	0.000
	>20weeks	143(27.6)	375(72.4)	518(100)	

Table 5: Source of information regarding JSSK entitlements in women with good awareness.

Scheme	Table of source of information						
	JSSK source of info of subjects having good awareness	Health care personnel	TV	Radio	Newspaper	Family	Friend
472(100%)	201(42.5%)	0	0	0	132(28.2%)	75(15.8%)	64(13.5%)

DISCUSSION

Developing countries today still face high maternal and infant mortality rates. Maternal and child mortality is expected to be reduced by promoting institutional deliveries. To address this issue, the Government of India launched JSSK in 2011 to provide free-of-cost care for

delivery including transport, drugs ,investigations , diet and blood.³ It is complete cashless scheme to give free services to all pregnant woman and sick neonates irrespective of their economic condition.Increasing trend has been seen in India in Percentage of Institutional Deliveries 70.625% in 2008-09 and 82.864% in 2012-13.⁵ However still about 17% of pregnant women are

delivering at home and those deliver at institution are unwilling to stay for 48 hours, hampering the provision of essential services both to mother and neonate which are critical for identification and management of complications during first 48 hours of delivery. Though the government intention was good, utilization of scheme remained poor. While going in depth of non-utilization of service to the fullest extent, we found ignorance and less

information among pregnant women regarding JSSK scheme. There were very few studies stating level of awareness regarding JSSK entitlements and its association with socio-demographic factors. This hospital based cross sectional study was conducted to find out the level of awareness in pregnant women coming to attend antenatal clinic who are the immediate beneficiaries of the scheme.

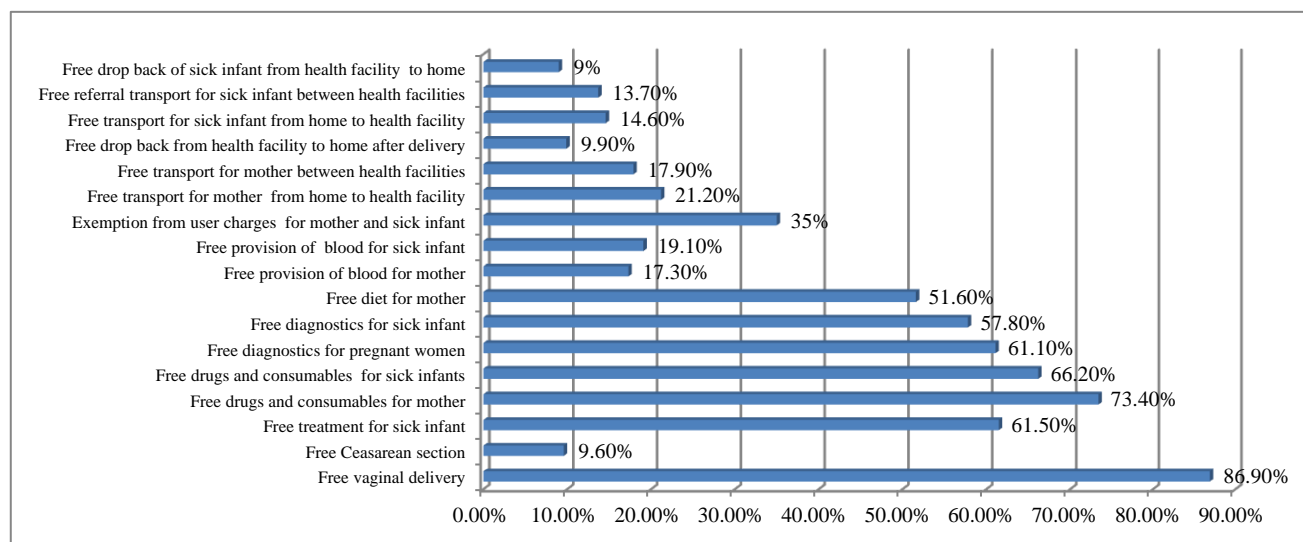


Figure 2: Awareness regarding individual JSSK entitlements in study subjects.

In the present study, good awareness was observed among 47.2% pregnant women whereas in a study conducted among pregnant women from West Bengal reported good awareness in 31.25%.⁵ In a study conducted at Karnataka among pregnant women, not a single subject was aware about JSSK entitlements and they emphasised the reason could be that the study was conducted in a private rural hospital where most of the government maternity benefit schemes were not available.⁶ In the present study, 86.9% were aware of free normal vaginal delivery and only 9.6% were aware of free caesarean section whereas in a West Bengal study only 18.75% of the pregnant mothers were aware of free normal vaginal delivery and none knew about the provision of free caesarean section.⁵ However, in an Assam study which was conducted on mothers who had delivered within the past one year, 88.1% were aware of free delivery.⁷

Around 61.5% of pregnant women of our study were aware about free treatment for sick infant whereas 10.42% and 26.1% of subjects were aware of free treatment of sick infant in West Bengal and Assam study respectively.^{5,7}

Awareness regarding free drugs and consumables for pregnant women (73.4%) and sick infants (66.2%) was comparatively higher in present study than the awareness in West Bengal pregnant women which was 18.75% and

10.42% respectively, whereas in the Assam study awareness on free drugs & consumables was 85%.^{5,7}

In the present study 61.1% and 57.8% pregnant women were aware about free diagnostics for pregnant women & sick infant respectively. Whereas in West Bengal study, 29.17% and 6.25% were aware of free diagnostics for pregnant women and sick infant respectively.⁵ In the Assam study awareness about free diagnostics was 77%.⁷

Awareness level for free diet (51.6%) in the present study was comparable with that of West Bengal study (58.33%), whereas awareness of free diet for mothers was 80.1% in the Assam study.^{5,7}

In the present study free provision of blood for mother & sick infant was 17.3% and 19% respectively whereas none of the respondents was aware of free provision of blood for mother and sick infant in the West Bengal study.⁵ According to Assam study 17.8% mothers were aware of free provision of blood for mother and sick infant.⁷

In the present study 35% pregnant women were aware about no user charges whereas 14.58% pregnant women knew about no user charges in West Bengal study.⁵ However as per Assam study as high as 85% respondents were aware about no user charges.⁷

Awareness on free transport to pregnant women from home to health facility, between health facilities and drop back from health facility to home was 21.2%, 17.9% and 9.9% respectively, whereas it was comparatively higher in West Bengal study that is 35.42%, 18.75% and 35.42% respectively.⁵ In the present study, awareness about free transport facility for sick infant from home to health facility, between health facilities and drop back from health facility to home is 14.6%, 13.7% and 9% respectively whereas it was 16.6%, 12.5% and 16.6% respectively in West Bengal study.⁵ In the Assam study awareness on free transport from home to health facility, free referral transport and free drop back from health facility to home was much higher that is 82.7%, 40.3% and 72.4% respectively.⁷ A study conducted at Solapur and study conducted Wardha from Maharashtra state reported that 45.6% and 44.17% participants were aware about free transport service available under JSSK respectively.^{8,9}

The present study and West Bengal study were conducted among pregnant women, whereas the Assam study was conducted among mothers who had delivered within the past one year. This may be one of the reasons for wide differences regarding awareness about JSSK entitlements in different studies.

The present study noted that advancing maternal age, increasing level of education, member of nuclear family increasing number of conception (gravidity) and advanced gestational age were significantly associated with good awareness. However, religion, socioeconomic status and occupation did not have any statistical significant association with the level of awareness regarding various entitlements of JSSK in antenatal women. In a study from West Bengal reported religion, caste, socio-economic status of mother, number of antenatal visits had no significant association with the awareness level regarding JSSK. However, parity of mother had statistically significant relationship with awareness level among the pregnant mothers about JSSK ($p < 0.05$). Mothers having previous history of childbirth are more aware of the various entitlements of JSSK in comparison to those who were pregnant for the first time.⁽⁵⁾

Our study showed that the source of information is mainly from health personnel 201 (42.5%) (Health workers, Health professionals), followed by family 132 (28.2%), friends 75 (15.8%) and ASHA workers 64 (13.5%). Radio, TV, Newspaper has not contributed to any source of information. Similar observation is noted by a study conducted at Karnataka on awareness about different maternity benefits.⁶ A cross sectional study was conducted by Mohapatra et al on assessment of the functioning and impact of Janani Suraksha Yojana in Orissa, revealed that health worker female and accredited social health activists were playing key roles in generating awareness regarding Janani Suraksha Yojana.¹⁰

Overall awareness level on JSSK entitlements is poor. There is still a long way to achieve good awareness in large number of beneficiaries to bring out proper utilization of JSSK services to its fullest extent.

CONCLUSION

Awareness level of JSSK entitlements in the pregnant women in our study is low. Maximum awareness was noticed for the provision of free vaginal delivery whereas awareness for provisions like free caesarean section, free drop back facility to home, free provision of blood is very low. Further efforts are needed to increase the overall awareness of various entitlements of JSSK among pregnant women to increase the utilization of the benefits of the scheme and thus indirectly helping in reducing MMR and IMR.

This study was not community based and along with awareness, utilization should have been assessed.

Funding: No funding sources

Conflict of interest: None declared

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

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Cite this article as: Deshpande S, Gadappa S, Pagare S, Dhaduti R, Andurkar S. Awareness regarding Janani Shishu Suraksha Karyakram among pregnant women of Marathwada, Maharashtra, India. *Int J Reprod Contracept Obstet Gynecol* 2016;5:1985-91.