

## Awareness about Janani Shishu Suraksha Karyakram (JSSK) among pregnant mothers – a community based study in a rural area of West Bengal, India.

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**Background:** The Ministry of Health & Family Welfare, Govt. of India launched a national initiative - Janani Shishu Suraksha Karyakram (JSSK) on June, 2011 to reduce infant & maternal mortality. However, the utilization of any scheme depends on the awareness among the beneficiaries.

**Objective:** To study the level of awareness about various entitlements of JSSK among pregnant mothers and to examine the association between different socio-demographic factors and awareness level.

**Methodology:** It was a community based, observational, descriptive study; cross-sectional in design; conducted in three villages under Banspool sub-centre, North 24 Parganas during May - July of 2015. All Antenatal Care registered pregnant women of the study area during the study period constituted the study population. Mothers were selected applying inclusion and exclusion criteria. Data was collected by house to house visit and face to face interview of the mothers using a pre-designed & pre-tested data collection form. Analysis was done in Statistical Package for Social Sciences (SPSS) version 19. Chi-square test was done to examine the statistical significance.

**Result:** Overall 68.75% mothers had poor awareness regarding free entitlements of JSSK. Only 18.75% mothers were aware about free normal vaginal delivery and free drugs and consumables each. None of the respondents were aware about free caesarean section, free provision of blood for mother and sick infant. Each of 10.42% respondents was aware about free treatment for sick infant and free drugs and consumables for sick infants. Overall 58.33% mothers were aware about free diet during stay in the health facility. Parity of mother had statistically significant influence on the awareness level regarding JSSK.

**Conclusion:** Considering the low awareness level of the pregnant mothers regarding the entitlements of JSSK, awareness campaign is required to bring about proper utilization of benefits of the scheme.

**Key Words:** Janani Shishu Suraksha Karyakram (JSSK), Awareness, Rural, Pregnant women, West Bengal.

### I. Introduction

Maternal and child health is a priority in the Millennium Development Goals. While India has made considerable progress towards the reduction of Maternal Mortality Ratio (MMR) and Infant Mortality Rate (IMR), the current pace of decline is not sufficient to achieve the goals.<sup>1</sup> In India about 67,000 women die every year due to pregnancy related complications and approximately 13,00,000 infants die within one year of birth.<sup>1</sup> Maternal and child mortality is expected to be reduced by promoting institutional deliveries. Unfortunately, more than 25% pregnant women still hesitate to access health facilities due to high out-of-pocket expenditure on transport and medical care.<sup>1</sup> In order to increase accessibility of health care services for pregnant women & sick infants and to reduce out-of-pocket expenditure, Ministry of Health & Family Welfare, Govt. of India has launched a nationwide initiative - Janani Shishu Suraksha Karyakram (JSSK) on June, 2011. The scheme provides free entitlements for both pregnant mothers & sick infants accessing public health facilities with the key goal to reduce maternal & infant mortality. However, the utilization of any scheme depends on the awareness among the beneficiaries. Awareness regarding JSSK among pregnant mothers is not much studied in India. With this background the present study was conducted to assess the level of awareness about JSSK among the pregnant mothers in a rural area in North 24 Parganas district, West Bengal.

### II. Methodology

It was a community based observational, descriptive study; cross-sectional in design; conducted in three villages namely Banspool, Iswarigachha and Birpur under Banspool sub-centre, North 24 Parganas during May - July of 2015. All ANC registered pregnant women at Banspool Sub-centre, residing in the study area during the study period constituted the study population. Mothers were selected to participate in the study applying inclusion and exclusion criteria. Inclusion criteria included all pregnant women giving consent to participate in

the study whereas exclusion criteria were pregnant mothers who were seriously ill, who were not present in the study area during the study period. Data collection was done through house to house visit and face to face interview of the mothers using a pre-designed and pre-tested data collection form. The respondents were explained regarding the purpose of the study and verbal informed consent were taken. During house visits local ASHAs helped in locating the houses. Collected data was compiled and analyzed in SPSS, version 19 software. A set of 17 questions, each having three possible responses were asked to assess awareness; one mark was allotted for each correct response; scoring range being 0 – 17. Mothers who scored above the mean score were considered as having good awareness level and score below the mean were taken as having poor awareness level. Chi-square test was used to study the association between awareness level and different socio-demographic variables. Significance level was considered at p value <0.05

### **III. Result**

Mean age of the participants was 22.67±6.94 years, and the largest group 25(52.08%) was of age 20-24 years. Religion and caste-wise 33(68.75%) were Muslim and 42(87.50%) women were from general caste. Among mothers 46(95.83%) were literate with 45.83% educated upto high school level and 4(8.33%) were engaged in some form of employment. Joint families were seen among 41(85.42%) participants and 23(47.92%) were in class IV socio-economic status as per modified BG Prasad scale. In 23(47.92%) mothers there was no previous history of childbirth and 26(54.16%) were in second trimester of pregnancy.

Among mothers 33(68.75%) had poor awareness regarding free entitlements of JSSK. Only 9(18.75%) mothers were aware about free normal vaginal delivery and same percentage of mothers had awareness on free drugs and consumables for pregnant women. None of the respondents were aware about free caesarean section, free provision of blood for mother and sick infant. Only 5(10.42%) respondents were aware about free treatment for sick infant and same numbers of mothers were aware of free drugs and consumables for sick infants. 14(29.17%) mothers had awareness on free diagnostics for pregnant women and 3(6.25%) mothers were aware about free diagnostics for sick infants. Awareness on exemption from user charges was among 7(14.58%) participants. Overall 28(58.33%) mothers were aware about free diet during stay in the health facility.

About one-third (35.42%) respondents had awareness on free transport for mother from home to health facility and free drop back home after delivery. But 9(18.75%) mothers were aware about free referral transport for mother between health facilities. Only 8(16.67%) mothers had awareness on free transport for sick infant from home to health facility and free drop back home after treatment. Even lesser percentage of mothers(12.50%) was aware about free referral transport for sick infant between health facilities. (Table 2) None of the mothers were able to answer the correct name of the scheme.

Age, religion, caste, education, occupation, family type, socio-economic status, number of antenatal check-up, gestational age of the respondents did not have any statistically significant relationship with awareness level among the respondents regarding various entitlements of 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. (Table 3)

### **IV. Discussion**

In the current study, awareness level of majority of the respondents regarding JSSK was poor. Good awareness was observed among 31.25% mothers. Whereas, in a study at Karnataka carried out among pregnant women, none were found aware of it.<sup>3</sup> Most of the other studies that have explored awareness of maternity benefit schemes mainly concentrated on the awareness regarding Janani Suraksha Yojana (JSY). According to a Delhi based study, awareness level about JSY was 62.3% and in a study at Maharashtra it was 52.7%.<sup>4, 5</sup> None of the mothers were able to utter the correct name of the scheme (Janani Shishu Suraksha Karyakram) in the present study. As per the Maharashtra study only 17.24% mothers were able to answer the correct name of the scheme (JSY).<sup>5</sup>

In the present study, 18.75% of the mothers were aware of free normal vaginal delivery and none of them were aware of free caesarean section. However, in an Assam study 88.1% of respondents were aware of free delivery.<sup>2</sup> Awareness regarding free treatment for sick infant was 10.42% in the current study. This finding corroborates with the Assam study where the awareness was 26.1%.<sup>2</sup> Awareness regarding free drugs and consumables for pregnant women (18.75%) and sick infants (10.42%) was low in the present study whereas in the Assam study awareness on free drugs and consumables was 85%.<sup>2</sup> Among the participants 29.17% were aware of free diagnostics for pregnant women and 6.25% were aware of free diagnostics for sick infants. However in the Assam study awareness about free diagnostics was 77%.<sup>2</sup> Awareness level was highest for free diet for the mothers (58.33%); it was also high in the Assam study (80.1%).<sup>2</sup> None of the respondents was aware of free provision of blood for mother and sick infant whereas according to the Assam study 17.8% mothers were aware.<sup>2</sup> In the present study only 14.58% mothers were aware about no user charges; however as per the Assam

study as high as 85% respondents were aware of it.<sup>2</sup> Awareness on free transport from home to health facility was 35.42% and 16.67% respectively for mother and sick infant in the current study. According to the Assam study, awareness on free transport from home to health facility was 82.7%.<sup>2</sup> In the current study awareness on free referral transport for mother was 18.75% and for sick infant it was 12.50%. In the Assam study awareness about free referral transport was 40.3%.<sup>2</sup> About 35.42% mothers were aware about free drop back home after delivery and 16.67% were aware about free drop back home after treatment of sick infant in the present study. As per the Assam study, 72.4% of respondents were aware about free drop back from health facility to home.<sup>2</sup> This wide difference in awareness level regarding various entitlements of JSSK between these two studies may be due to difference in type of beneficiaries chosen for these studies. The present study was conducted taking pregnant mothers as the study population whereas the Assam based study was conducted on mothers who had delivered within the past one year.

According to the present study religion, caste, socio-economic status of mother, number of antenatal visits had no significant association with the awareness level regarding JSSK. As per the Delhi based study significant association was found between awareness regarding JSY and religion of mother & number of antenatal visits.<sup>4</sup> According to a Maharashtra based study awareness on JSY was found to be significantly associated with socio-economic status and caste of mother.<sup>5</sup> In the present study level of awareness regarding various entitlements of JSSK was found lower in mothers who became pregnant for the first time than those who had history of previous childbirth. Whereas as per a Delhi based and a Maharashtra based study there were no significant association between awareness regarding JSY and parity of mother.<sup>4,5</sup>

There were not much studies stating level of awareness regarding various entitlements of JSSK and its association with socio-demographic factors. Overall awareness level regarding JSSK was poor. Long way to go to achieve good awareness level on JSSK among pregnant mothers to bring about successful utilization of the scheme.

## V. Conclusion

Awareness level of the rural pregnant mothers regarding the entitlements of JSSK is low in rural West Bengal. Minimum awareness is noticed for the entitlements namely free caesarean section, free provision of blood for transfusion for mother & sick infant. Maximum awareness was noticed regarding free provision of diet during stay in the health facility. Significant association was found between parity of mother and awareness level about JSSK. Efforts are needed to increase awareness level of rural pregnant mothers regarding various free entitlements of JSSK to increase the utilization of the benefits of the scheme. Further qualitative studies are recommended in the future on a large sample.

## References

- [1]. Ministry of Health & Family Welfare. Guidelines for Janani-Shishu Suraks a Karyakram (JSSK). National Rural Health Mission , Maternal Health Division, Government of India, NirmanBhavan, New Delhi, June 2011
- [2]. KabitaBarua. Awareness and utilisation of Janani ShishuS uraksha Karyakram (JSSK) in rural areas of Kamrup District, Assam.(Unpublished)
- [3]. Johnson AR, Rock B, Catherin N, Berlin Sr, Rupini R, Kasthuri A. Awareness of Government Maternity Benefit Schemes among women attending antenatal clinic in a rural hospital in Karnataka, India. *Int J Curr Res Aca Rev* 2015; 3:137-43
- [4]. Vikram K, Sharma AK, Kannan AT. Beneficiary level factors influencing Janani Suraksha Yojana utilization in urban slum population of trans-Yamuna area of Delhi. *Indian J Med Res* 2013;138: 340-6
- [5]. Singh VS, Chavan SS, Giri PA, Suryavanshi SR. Study on awareness and knowledge regarding Janani Suraksha Yojana (JSY) among ANC registered women in a primary health centre of tribal area of Thane District of Maharashtra. *Int J Res Med Sci* 2014;2:122-6.

## Tables & Figures

**Table 1.** Socio-demographic & clinical profile of mothers under study.(n=48)

Characteristics	No. (%)	
Age (Years)	<20	11(22.92)
	20-24	25(52.08)
	25-29	8(16.67)
	30-34	4(8.33)
Religion	Hindu	15(31.25)
	Muslim	33(68.75)
Caste	General	42(87.50)
	OBC	6(12.50)
Educational status	Illiterate	2(4.17)
	Middle school	13(27.08)
	High school	22(45.83)
	Intermediate	11(22.92)
Occupation	Homemaker	44(91.67)
	Employed	4(8.33)
Occupation of husband	Semi professional	4(8.33)

	Clerical job/shop owner/farmer	19(39.58)
	Skilled worker	14(29.17)
	Unskilled worker	11(22.92)
Socio-economic status	Class III	15(31.25)
	Class IV	23(47.92)
	Class V	10(20.83)
Type of family	Nuclear	7(14.58)
	Joint	41(85.42)
Parity	0	23(47.92)
	1	15(31.25)
	2	10(20.83)
Gestational age	1 <sup>st</sup> Trimester	8(16.67)
	2 <sup>nd</sup> Trimester	26(54.16)
	3 <sup>rd</sup> Trimester	14(29.17)

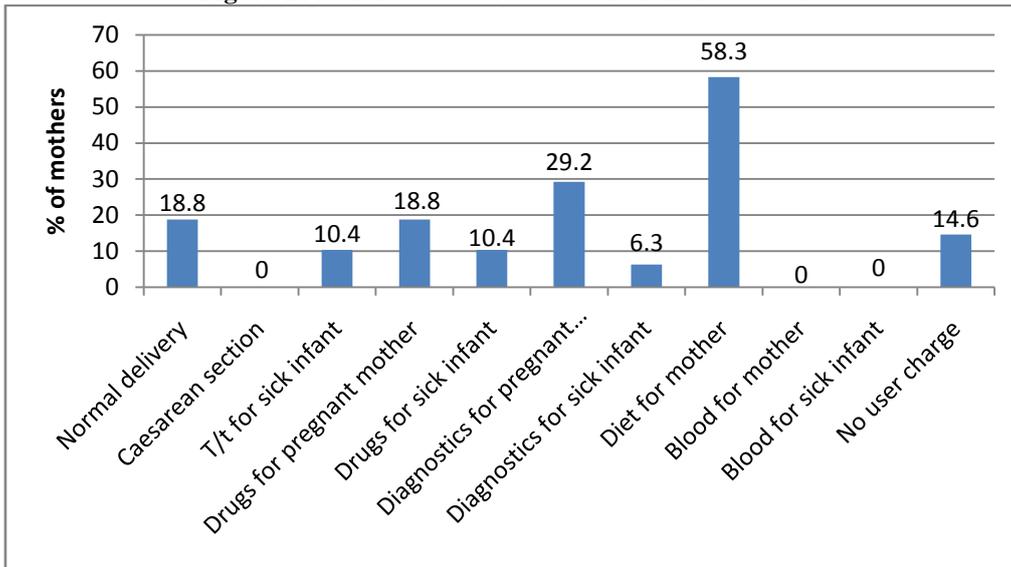
**Table 2.** Distribution of mothers according to awareness regarding JSSK entitlements. (n=48)

JSSK entitlements known to mother	Frequency No. (%)
Free normal vaginal delivery	9(18.75)
Free caesarean section	--
Free treatment for sick infant	5(10.42)
Free drugs and consumables for mother	9(18.75)
Free drugs and consumables for sick infant	5(10.42)
Free diagnostics for pregnant women	14(29.17)
Free diagnostics for sick infants	3(6.25)
Free diet for mother	28(58.33)
Free provision of blood for mother	--
Free provision of blood for sick infant	--
Exemption from user charges for mother and sick infant	7(14.58)
Free transport for mother from home to health institute	17(35.42)
Free referral transport for mother between health facilities	9(18.75)
Free drop back from facility to home after delivery	17(35.42)
Free transport for sick infant from home to health facility	8(16.67)
Free referral transport for sick infant between health facilities	6(12.50)
Free drop back from health facility to home	8(16.67)

**Table 3.** Relationship between socio-demographic factors and awareness level of study population regarding JSSK. (n=48)

Characteristics		Poor awareness Frequency (%)	Good awareness Frequency (%)	Total (%)	Odds ratio	Chi-square value	p value
Age	<Mean	18(69.23)	8(30.77)	26(100)	1.050	0.006	0.938
	>Mean	15(68.18)	7(31.82)	22(100)			
Religion	Muslim	25(75.76)	8(24.24)	33(100)	2.734	1.483	0.223
	Hindu	8(53.33)	7(46.67)	15(100)			
Caste	OBC	2(33.33)	4(66.67)	6(100)	0.177	2.341	0.126
	General	31(73.81)	11(26.19)	42(100)			
Education	<Median	11(73.33)	4(26.67)	15(100)	1.375	0.016	0.900
	≥Median	22(66.67)	11(33.33)	33(100)			
Occupation	Homemaker	32(72.73)	12(27.27)	44(100)	8.000	1.983	0.159
	Employed	1(25.00)	3(75.00)	4(100)			
Type of family	Nuclear	4(57.14)	3(42.86)	7(100)	0.552	0.076	0.783
	Joint	29(70.73)	12(29.27)	41(100)			
Socio-economic status	<Median	9(90.00)	1(10.00)	10(100)	5.250	1.553	0.213
	≥Median	24(63.16)	14(36.84)	38(100)			
Parity	0	20(87.00)	3(13.00)	23(100)	6.154	6.813	0.009
	≥1	13(52.00)	12(48.00)	25(100)			
Gestational age	1 <sup>st</sup> half of pregnancy	25(75.76)	8(24.24)	33(100)	2.734	1.483	0.223
	2 <sup>nd</sup> half of pregnancy	8(53.33)	7(46.67)	15(100)			
No. of ANC	<4	22(75.86)	7(24.14)	29(100)	2.286	1.725	0.189
	≥4	11(57.89)	8(42.11)	19(100)			

**Figure 1.**Awareness on various free entitlements of JSSK.



**Figure 2.**Awareness on free transport under JSSK.

