

# IS JANANI SURAKSHA YOJANA'S (JSY) AWARENESS A REFLECTION OF HEALTHY PREGNANCY OUTCOME? DIFFERENCES IN RURAL AREAS AND URBAN SLUMS

Sharma Parul<sup>1</sup>, Srivastava Kajal<sup>2</sup>, Vyas Shaili<sup>3</sup>, Kishore Surekha<sup>4</sup>, Semwal Jayanti<sup>5</sup>

<sup>1</sup>Assistant Professor, Department of Community Medicine, Subharti Medical College, Meerut ,  
<sup>2</sup>Assistant Professor, Department of Community Medicine, D.Y.Patil College, Pune, <sup>3</sup>Assistant Professor, Department of Community Medicine, SRMSIMS, Bareilly, <sup>4</sup>Professor & Head, S.P.M, Shri Guru Ramrai Institute of Health & Medical Sciences, Dehradun, <sup>5</sup>Professor, S.P.M, Himalayan Institute of Medical Sciences, Dehradun

## ABSTRACT

**Context:** Janani Suraksha Yojana (JSY), launched on 12<sup>th</sup> April, 2005 under the umbrella of NRHM has shown its impact in terms of increase in number of institutional deliveries and decrease in maternal and neonatal mortality rates but still the awareness about the scheme is low in women from rural areas and urban slums, especially in low performing states.

**Aims:** To assess the differences in awareness of married women from rural areas and urban slums regarding JSY and to study the effect of socio-demographic factors on the level of awareness.

**Settings and Design:** A cross-sectional study was carried out in the rural areas and urban slums of field practice areas of Himalayan Institute of Medical Sciences, Dehradun, for a period of one year.

**Methods and Material:** all the married women (15-49 years) of reproductive age group were included in the study. After taking informed consent from the head of the families and targets, the study subjects were interviewed by a pre-designed and pre-tested questionnaire.

**Statistical analysis used:** SPSS 10 and Epi Info software (with Yate's correction).

**Results:** Awareness was more among women belonging to rural areas i.e 79%. Age, educational status, occupation, socio-economic status and place of residence showed a significant statistical association with the level of awareness.

**Conclusions:** There is an urgent need to strengthen IEC campaigns and monitoring strategies.

**Key-words:** Janani Suraksha yojana, awareness, married women, rural areas, urban slums

## INTRODUCTION

As far as the sphere of health is concerned, maternal and child health issues still continue to be a forefront of national and global health policies. Despite various initiatives at National and global level, maternal mortality continues to be high in developing countries.<sup>1</sup> WHO, UNICEF and UNFPA had reported an estimate of 536,000 Maternal deaths worldwide in 2005 out of which 99% were from developing countries.<sup>2</sup> It also has been reported that India and Nigeria account for a third of maternal deaths worldwide while India alone accounts for 22% of pregnancy-related deaths worldwide.<sup>3</sup> Saving mothers' lives is not only a moral imperative, but a sound investment that benefits their children, their

families, their communities and their countries, "Indeed, there is a clear connection between maternal health and other Millennium Development Goals, such as eradicating extreme poverty, reducing child mortality and combating HIV and AIDS and other diseases".<sup>4</sup>

One of the major concerns of the state Reproductive and Child Health (RCH) Programme, phase II, is the extremely low percentage of institutional deliveries.<sup>(5)</sup> Among women living Below Poverty Line (BPL) and in remote villages the number of institutional deliveries is almost negligible.<sup>5</sup> To combat this a maternity benefit scheme (JSY) was launched under the umbrella of NRHM to cover all states and UTs with special focus on 10 low

performing states, that includes 8 Empowered Action Group (EAG) states, Assam and Jammu & Kashmir and the remaining North Eastern states. The main objective and vision of JSY is to reduce maternal, neo-natal mortality and promote institutional delivery.<sup>6-7</sup> Uttarakhand is one of the LPS and JSY has been implemented in this state since September 2005.

JSY had completed two years at the time of conduction of study and very few studies on awareness regarding JSY had been carried out in our state (Uttarakhand). Therefore, the present study was planned to assess the differences in awareness of married women from rural areas and urban slums regarding JSY and to study the effect of socio-demographic factors on the level of awareness.

## SUBJECTS AND METHODS

A cross sectional study was conducted in the areas covered under Rural health training centre (RHTC) & Urban health training centre (UHTC) of department of Community Medicine, HIMS, Swami Ram Nagar, Dehradun. The total villages covered under RHTC (rural areas) were 08 & slums under UHTC (urban areas) were 02. As per working feasibility only 50% of villages & slums were chosen for the study purpose. The study was carried out over a period of 12 months (May-08 to April-09). All married women of the reproductive age group were taken as study subjects that included 931 women from rural areas and 1290 women from slums while 07 women refused to give consent. Thus a total of 2221 married women were interviewed regarding awareness about JSY by means of a self-designed pretested questionnaire. Socio-demographic information was also collected and the association between the two was assessed.

The data was entered in SPSS software version 10 and subsequently analyzed using SPSS and Epi Info software (with Yate's correction).

## RESULTS

A total of 2221 married women of reproductive age (15-49 years) formed the universe of the study. All these women were considered for awareness regarding JSY. Higher percentage (86.09%) of the women were Hindu followed by Muslims (13.33%) but the proportion of Muslims was found to be high (28.89%) in rural areas as

compared to urban slums (2.09%). Both in the rural and urban slums majority (85.14%) of the women belonged to 19-35 years age group. Almost one third (38.37%) of the women were illiterate. Most (93.65%) of the women were housewives, both in rural and urban slums. More percentage of the women belonged to lower middle class (34.40%) followed by upper lower class (29.62%). Majority (71.82%) of the women belonged to nuclear families out of which majority (75.04%) belonged to urban slums.

Awareness was significantly more among women belonging to rural areas i.e. 79.27% as compared to urban areas i.e. 59.38%. The statistical association between the place of residence and knowledge about JSY was found to be statistically significant ( $\chi^2=97.854$ ,  $df=1$ ,  $p<0.01$ ). Maximum number of the women from rural areas had no knowledge about the year of JSY implementation i.e. 64.90%. The statistical association between the place of residence and knowledge about year of JSY implementation was found to be statistically significant ( $\chi^2=10.71$ ,  $df=1$ ,  $p<0.01$ ). It was further observed that ASHA was the main source of information in rural areas (48.91%) and neighbours and friends were the main source of information in urban slums and the source of information was found to be statistically associated with their place of residence ( $\chi^2=36.02$ ,  $df=4$ ,  $p<0.001$ ). Awareness regarding beneficiaries under the scheme was found to be high (91.6%) among women of rural areas and the place of residence was found to effect this awareness. ( $\chi^2=67.93$ ,  $df=1$ ,  $p<0.001$ ) A higher proportion (97.26%) from urban slums knew about the benefits given under JSY ( $\chi^2=12.15$ ,  $df=1$ ,  $p<0.001$ ). As compared to rural areas greater number (97.58%) of women from urban slums had fair knowledge about the benefits under JSY. More proportion (49.82%) of women in urban areas knew that the difference in benefits in rural areas and urban slums is at incentive level. **(Table 1)**

The knowledge regarding ASHA as a link worker was more (64.50%) in the rural areas as compared to urban slums (51.30%). The association between this knowledge and the place of residence was found to be statistically significant ( $\chi^2=26.81$ ,  $df=1$ ,  $p<0.01$ ). **(Table 2)**

It was found that greater proportion (69.62%) of women belonging to 19-35 years age group knew about JSY whereas in less than 19 years age group

only 58.49% women knew about JSY and the statistical association between age of respondent and knowledge about JSY was found to be highly significant ( $\chi^2=17.11$ ,  $df=2$ ,  $p<0.01$ . Mean age  $\pm$  28.8 years). Higher percentage (75.21%) of the women who were just literate had knowledge about JSY whereas 74.51% women who were educated up to primary, 73.47% women who were graduates and 72.51% women with junior high school education had knowledge about JSY respectively. A highly significant statistical association was found between education of respondent and knowledge about JSY ( $\chi^2=47.851$ ,  $df=6$ ,  $p<0.01$ ).

Greater (85.00 %) proportion of women working as skilled labourer knew about JSY whereas

75.81% women who were employed as unskilled labourer and 78.26% women who were shopkeeper/businessman by occupation had knowledge about JSY and the statistical association between women's occupation and knowledge regarding JSY was found to be significant ( $\chi^2=12.707$ ,  $df=6$ ,  $p<0.05$ ). Majority (75.36 %) women belonging to lower class knew about JSY as compared to other classes. It was further followed by percentage of women in lower middle class (71.33%) and upper middle class (68.82%) and the relation between socio-economic status and knowledge regarding JSY was found to be statistically significant ( $\chi^2=17.139$ ,  $df=4$ ,  $p<0.05$ ). (Table 3)

**Table1: Distribution of married women (15-49 years) according to awareness regarding JSY (N=2221)**

Women's awareness	No of married women (15-49 years) (%)		Total (%) (N=2221)	$\chi^2$ (df)	p value
	Rural (n=931)	Urban slums (n=1290)			
<b>About JSY</b>					
Present	738(79.27)	766(59.38)	1504(67.72)	97.85(1)	$p<.001$
<b>About JSY implementation</b>					
Yes	259(35.10)	332(43.34)	591(39.30)	10.71(1)	$p<.001$
<b>Source of information</b>					
ASHA	361(48.91)	258(33.68)	619(41.50)	36.02(4)	$p<.001$
ANM/AWW	41(5.56)	09(1.18)	50(3.32)		
Doctors	41(5.56)	52(6.78)	93(6.20)		
T.V	40(5.42)	07(0.92)	47(3.12)		
Neighbors and friends	255(34.55)	440(57.44)	695(46.21)		
<b>Beneficiaries under JSY</b>					
Know	676(91.6)	581(75.85)	1257(83.57)	67.93(1)	$p<.001$
Don't know	62(8.40)	185(24.15)	247(16.43)		
<b>Benefits under JSY Knowledge</b>					
No	48(6.50)	21(2.74)	69(4.58)	12.15 (1)	$p<.001$
Yes**	690(93.50)	745(97.26)	1435(95.42)		
Good	21(3.04)	15(2.01)	36(3.20)		
Fair	623(90.28)	727(97.58)	1350(94.07)		
Poor	546(79.13)	371(49.79)	917(63.90)		
<b>Difference in benefits at rural and urban slums</b>					
No	506(73.33)	472(63.35)	978(68.15)	16.43(1)	$p<.001$
Yes	184(26.67)	273(36.65)	457(31.85)		
Difference in incentive	57(30.98)	136(49.82)	193(42.23)		
Others***	11(5.98)	11(4.03)	22(4.82)		
Don't Know	116(63.04)	126(46.15)	242(52.95)		

@ 07 refused to give consent, thus N=2221 \*\*Multiple response \*\*\*Others=ANC/PNC services

**Good** = women having knowledge about >3/6 benefits given under JSY

**Fair** = women having knowledge about 3/6 benefits given under JSY

**Poor** = women having knowledge about <3/6 benefits given under JSY

**Benefits given under JSY:**ANC services, PNC services, Monetary incentive, Newborn care, Family Planning services, Immunization

**Table 2: Knowledge regarding ASHA as a link worker (N=1504)**

Knowledge regarding ASHA	Present (%)
No of married women (15-49 yrs)	
Rural (n=738)	476(64.50)
Urban slums (n=766)	393(51.30)
Total (N=1504) (%)	869(57.78)
$\chi^2$ (df)	26.81
P value	P<.001

## DISCUSSION

In the present study, majority of the married women (15-49 years) were aware about JSY i.e 67.72%. Contrary to this, all the JSY beneficiaries were aware about the scheme in a study by

Ramakant Sharma in Rajasthan (2006-07)<sup>8</sup>. Similarly, according to a report from UNFPA (Bella Patel Uttekar et al, 2007) in Rajasthan<sup>9</sup> and Orissa<sup>10</sup> where awareness of JSY amongst the beneficiaries was found to be 100%. Almost half of the beneficiaries had never heard about the scheme according to a study by Ashok Mishra et al, in Gwalior and Guna (2007-08).<sup>11</sup> This may be because both the schemes i.e JSY and Vijaya Raje Janani Kalyan Bima Yojana (VRJKBY), were running in the area and majority of the beneficiaries were concerned about getting some more financial incentives but they were not aware under what scheme, this money was being distributed. Also less than half of the ANMs/AWWs were aware of the scheme.

**Table 3: Association of awareness regarding JSY and various socio-demographic factors**

	Know about JSY		Total (N=2221)(%)	$\chi^2$ (df), P value
	Yes(n=1504)(%)	No(n=717)(%)		
<b>Age of respondent</b>				17.11 (2), p<0.01
<19Yrs	31(58.49)	22(41.51)	53(2.39)	Mean age $\pm$ 28.8 years
19-35Yrs	1295(69.62)	565(30.38)	1860(83.74)	
>35Yrs	178(57.79)	130(42.21)	308(13.87)	
<b>Education of respondent</b>				47.851 (6), p<0.01
Illiterate	504(59.15)	348(40.85)	852(38.36)	
Just literate	173(75.21)	57(24.79)	230(10.35)	
Primary	190(74.51)	65(25.49)	255(11.50)	
Junior high school	248(72.51)	94(27.49)	342(15.40)	
High school	178(71.48)	71(28.52)	249(11.21)	
Intermediate	103(70.55)	43(29.45)	146(6.57)	
Graduate and above	108(73.47)	39(26.53)	147(6.61)	
<b>Occupation of respondent</b>				12.707 (6), p<0.05
Unskilled labourer	47(75.81)	15(24.19)	62(100.00)	
Skilled labourer	17(85.00)	03(15.00)	20(100.00)	
Farmer	02(25.00)	06(75.00)	08(100.00)	
Shopkeeper, businessmen	18(78.26)	05(21.74)	23(100.00)	
Professional	05(62.50)	03(37.50)	08(100.00)	
Govt./Private service	14(70.00)	06(30.00)	20(100.00)	
Housewife	401(67.35)	679(32.65)	2080(100.00)	
<b>Socio-economic status</b>				
Upper class	85(66.93)	42(33.07)	127(100.00)	
Upper middle class	415(68.82)	188(31.18)	603(100.00)	
Lower middle class	545(71.33)	219(28.67)	764(100.00)	
Upper lower class	407(61.85)	251(38.15)	658(100.00)	
Lower class	52(75.36)	17(24.64)	69(100.00)	

The present study revealed that the main source of JSY information was neighbours, friends and relatives (46.21%) followed by ASHAs (41.50%). Contrary to this, ASHAs were one of the main source of information in Orissa (61.6%).<sup>10</sup> and local health workers (ANMs/ ASHAs/ Dais/

AWWs) were found to be the main source of information in Madhya Pradesh i.e 63.33%.<sup>12</sup> The present study showed that only 3.32% ANM/AWW contributed to be the main source of information regarding JSY as whereas a study conducted by Ashok Mishra in Gwalior and

Guno (2007-08) have reported a very high percentage i.e 79% and 84% of ANM/AWWs as the source of JSY information.<sup>11</sup>

In our study, majority (83.57%) of the women knew about the eligibility of beneficiaries under JSY, almost comparable results (80.5%) were reported by Ramakant Sharma in a study in Rajasthan.<sup>8</sup> Our study also depicted that a high proportion (94.07%) women had fair knowledge about the benefits under JSY, out of which a majority (97.58%) were from urban slums. In the present study, only 57.78% of the beneficiaries knew about ASHA as a link worker. A much greater percentage (91.5%) of the women knew about ASHA as a link worker according to a study in Rajasthan,<sup>8</sup> while only 24.1% women from Jharkhand knew about ASHA as a link worker.<sup>13</sup>

The present study showed that the knowledge regarding JSY was higher in rural women i.e. 79.27% in comparison to their counterparts i.e. women from urban areas. It could be because of the reason that there is more accessibility and availability of health services in urban areas. Moreover women in rural areas are often poor and thus would be more inclined towards knowing and utilizing services from schemes like JSY. MOHFW also reported that the awareness about JSY among mothers living in rural areas was fairly high in almost all the states.<sup>14</sup>

The present study showed that women between age group of 19-35 years were more aware about JSY (69.62%) in comparison to other age groups, the average age was 28.8 years. According to a study by A Singh et al regarding quality of antenatal care in Rural North India, majority (77.40%) of the women who registered at the health centre were between 21 and 29 years age group.<sup>15</sup> A higher proportion (63.3%) of the JSY beneficiaries in Madhya Pradesh belonged to 21-25 years age group.<sup>12</sup>

In the present study, amongst the literate women knowledge about JSY was more i.e. 73.04% as compared to illiterate women whereas a small percentage of JSY beneficiaries from Rajasthan were found to be literate i.e. 54%.<sup>8</sup> Similar to the above findings, according to UNFPA report in Orissa 66.1% beneficiaries were found to be literate.<sup>10</sup> This shows that women's illiteracy is one of the major barriers in accessing the benefits of government schemes like JSY.

## CONCLUSION AND SUGGESTIONS

In the above study awareness was significantly more among women belonging to rural areas i.e 79.27% as compared to urban areas i.e 59.38%. Maximum number of the women from rural areas had no knowledge about the year of JSY implementation i.e. 64.90%. It was further observed that ASHA was the main source of information in rural areas (48.91%) and neighbours and friends were the main source of information in urban slums. Awareness regarding beneficiaries under the scheme was found to be high (91.6%) among women of rural areas whereas a higher proportion (97.26%) from urban slums knew about the benefits given under JSY.

**First recommendation:** IEC activities should be intensified in slums with focus on Maternal and Child Health Care utilizing TV/Radio as the main channel for dissemination of knowledge regarding JSY.

**Second recommendation:** It has been pointed out that the MPHW (F) focus is primarily on family planning and immunization, leading to attrition of skills in other areas. Quality training of MPHW (F) and ASHAs along with monitoring of the workers in the field both in rural areas and slums by government as well as independent observers is the need of the hour. Monitoring of monitors should be included in the health system.

**Third recommendation:** The awareness of beneficiaries about JSY is found to be high but knowledge regarding benefits covered under the scheme is only limited to cash incentive for institutional deliveries especially in rural areas. They are not aware of other aspects of the scheme like complete antenatal check-up, provision of iron and folic acid tablets, Tetanus Toxoid immunization, post natal care etc. It is required to create better awareness regarding all aspects of JSY so that people should avail all the benefits of the scheme and it will certainly help in reducing maternal as well as infant morbidity and mortality. PRIs can be instrumental in this change. The incentives to the PRIs can be linked to the MCH indicators. The carrot and stick policy is must for PRIs for ensuring the preparedness of the women to go for pregnancy. Unless and until the community participation is not there, which also acts as pressure group, no

scheme can fulfill its aims and objectives completely.

**Fourth recommendation** is that the incentives given to ASHAs should be increased with reward system for good work so that they could get more motivation and could work with new vigour and enthusiasm. Also re-orientation trainings of ASHAs should be carried out periodically along with written examinations.

## REFERENCES

1. Maternal Mortality in 2005. Estimates developed by WHO, UNICEF, UNFPA, and The World Bank Available from: [http://www.who.int/whosis/mme\\_2005.pdf](http://www.who.int/whosis/mme_2005.pdf). [Assessed on Apr 3,2012]
2. UNICEF highlights maternal mortality in India. Karnataka Learning Partnership, January 25, 2009. Available from: <http://blog.klp.org.in/2009/01/unicef-highlights-maternal-mortality-in.html>. [Assessed on Apr 3,2012]
3. International Institute of Population Sciences and ORC Macro National family Health Survey -3. International Institute of Population Sciences, Mumbai. Available from: <http://www.iipsindia.org/nfhs3.html>. [last accessed on 2007 jul 5].
4. Risk of maternal mortality in developing world, UNICEF report, United States fund, Geneva, September 19, 2008. Available from: <http://www.unicefusa.org/news/releases/unicf-report-highlights.html>. [Assessed on Apr 3,2012]
5. Dr. Anuradha Davey, Voucher scheme for institutional delivery and immunization, Jharkhand. Government Of India Central Bureau Of Health Intelligence, Directorate General Of Health Services. Ministry of health and family welfare. Health sector Policy Reform options database (HS - PROD)-INDIA, 2006. Available from: [http://www.hsprodindia.nic.in/sear\\_descl.asp?SD=19&SI=18&ROT=1&qryAll=Jharkhand](http://www.hsprodindia.nic.in/sear_descl.asp?SD=19&SI=18&ROT=1&qryAll=Jharkhand). [Assessed on Apr3,2012]
6. Cabinet committee on Economic Affairs (CCEA). CCEA clears Janani SurakshaYojna. New Delhi: The Committee: 2005.
7. Govt. of India. JananiSurakshaYojna features. New Delhi: MOHFW;2006.
8. Sharma R. JananiSurakshaYojana: a study of the implementation status in selected districts of Rajasthan. 2007-08.
9. Assessment of ASHA and JananiSurakshaYojna in Rajasthan, UNFPA; New Delhi; 2007. Available from: [www.cortindia.com/RP/RP-2007-0302.pdf](http://www.cortindia.com/RP/RP-2007-0302.pdf) [Assessed on Apr 3,2012]
10. Assessment of ASHA and JananiSurakshaYojana in Orissa. UNFPA, New Delhi. 2007. Available from: [www.cortindia.com/RP/RP-2007-0303.pdf](http://www.cortindia.com/RP/RP-2007-0303.pdf) [Assessed on Apr3,2012]
11. Mishra A, Lahariya C, Gupta S, Shivdasani JP, Datta U, Adhish V et al. An Appraisal of Janani Sahyogi Yojana in the state of Madhya Pradesh. Health and Population: Perspectives and Issues . 2008;31:98-105.
12. Gupta.K.Sanjeev,Pal K Dinesh,Tiwari Rajesh,Garg Rajesh,Sarawagi Radha et al.Int J Bio Med Sci.2011;2:6-11.
13. Haider S, AdhishVivek, Gupta S, Dhar N, Datta U, Menon S, Nandan D et al. A Rapid Appraisal of Sahiya (ASHA) in Jharkhand. Health and Population: Perspectives and Issues.2008;31:80-4.
14. Concurrent Assessment of Janani Suraksha Yojana (JSY) Scheme in selected states of India, UNFPA.2008. Available from: [mohfw.nic.in/NRHM/Documents/JSY\\_Study\\_UNFPA.pdf](http://mohfw.nic.in/NRHM/Documents/JSY_Study_UNFPA.pdf). [Assessed on Apr 3,2012]
15. Singh A, Arora AK. The changing profile of pregnant women and quality of antenatal care in rural North India. Indian J Commun Medicine 2007;22:135-8.

## Correspondence:

Dr. Parul Sharma  
G-9/5, MalviyaNagar, New Delhi-110017  
E-mail: [paru\\_1sharma@yahoo.co.in](mailto:paru_1sharma@yahoo.co.in)  
Phone No: 011-26686139, 91-9412051105