## **Original Research Article**

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20172835

# A study to assess awareness about Janani Suraksha Yojana among beneficiaries of urban slums of Raipur city, Chhattisgarh

Shanta P. Khes<sup>1</sup>\*, Divya Sahu<sup>2</sup>, G. P. Soni<sup>1</sup>, Aditi Chandrakar<sup>1</sup>

Department of Community Medicine, <sup>1</sup>Pt. JNM Medical College, Raipur, <sup>2</sup>Government Medical College, Ambikapur, Chhattisgarh, India

Received: 28 April 2017 Accepted: 24 May 2017

\*Correspondence: Dr. Shanta P. Khes,

E-mail: shantakhes@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### **ABSTRACT**

**Background:** Janani Suraksha Yojana (JSY) under the overall umbrella of National Rural Health Mission has been launched from April 2005. The scheme replaces the National Maternity Benefit Scheme. It aims at increasing institutional delivery, thereby reducing maternal and neonatal mortality. The objectives of the study were to assess awareness regarding JSY and to assess role of factors contributing in awareness.

**Methods:** A community based Cross-sectional observational study was conducted in urban slum of Raipur city among 384 mothers delivered within last one year. Study centre was Department of community medicine, Pt J.N.M. medical college Raipur, Chhattisgarh. The subjects were interviewed using a pre-designed and pre-tested questionnaire.

**Results:** Majority of the study subjects were not aware about the services under JSY except for the monetary benefit. Though a very small proportion of beneficiaries know the name of the scheme, majority delivered in the health facility.

**Conclusions:** To increase awareness regarding other components under JSY and to achieve 100% institutional delivery there is need to strengthen effective IEC along with active involvement of ASHA.

Keywords: Janani suraksha yojana, Awareness, Urban slum

#### INTRODUCTION

Pregnancy and child birth are the natural physiological phenomenon but unfortunately its consequences are still the leading cause of death, disease and disability among women of reproductive age in developing countries more than any other single health problem. Mother and child constitute a priority group in a community. They comprise approximately 71.14% of the population of the developing countries. In India women of the child bearing age constitute 22.2% and children under 15 years of age about 35.3% of the total population. Together they constitute nearly 57.5% of the total population. Mother and children not only constitute a large group but they are

also a vulnerable or special risk group. The risk is connected with child bearing in the case of women and survival in case of children. Maternal mortality ratios strongly reflect the overall effectiveness of health systems. Maternal mortality and infant mortality are the main health indicators of any civilized society. The universal declaration for human rights of 1948 in Article 25 stressed that "Motherhood and childhood are entitled to special care and assistance". The place of delivery is an important aspect of reproductive health care. Janani Suraksha Yojana (JSY) was launched by the Hon'ble Prime Minister on 12th April, 2005 and being implemented in all states and Union Territories (UTs). It is an ambitious scheme intended to encourage institutional delivery, and provide access to care during

pregnancy and in the postpartum period, and thereby reduce maternal and infant mortality. Globally since 1990, there is 43% decline in maternal mortality ratio (MMR).<sup>3</sup> India accounts for 22% of pregnancy related death. Although maternal mortality and morbidity is showing declining trends; but still figure remains alarming;<sup>4</sup> for example, it has declined from 301 per 100,000 births in 2001-2003 to 212 per 100,000 births in 2007–2009 and 167 per 100,000 live birth in 2011-13.<sup>5</sup> Similarly, while proportions of women reporting institutional deliveries or skilled attendance at birth have increased, the pace of increase has remained modest; for example, the percentage of women delivering in a health institution has increased from 34 in 1998-99 to 41 in 2005-06 and 87.1% in 2013.6 Institutional deliveries in Chhattisgarh has increased to 70.2%.7 Despite various initiatives at National and global level, although maternal mortality ratio has declined and proportions of women reporting institutional delivery has increased, the pace of increase has remain modest. JSY had completed a decade but Chhattisgarh state is lacking in studies related to awareness about JSY. Therefore, present study was undertaken with the following objective:

- To assess awareness regarding JSY.
- To assess role of factors in contributing awareness.

#### **METHODS**

Study design: Community based cross sectional, observational study.

Study centre: Dept. of community medicine, Pt J.N.M. Medical College, Raipur (CG).

Study area: Urban slums of Raipur city.

Study duration: 12 months (July 2015 to June 2016).

Study subjects: Mothers who delivered in last 1 year.

Sampling method: Multi- stage simple random sampling.

Sample size: 384 Beneficiaries.

Study tool: Pre-designed and pretested questionnaire.

Study technique: Interview technique and observation.

## Statistical analysis

Data was entered and compiled in Microsoft excel 2007 and collected data was checked for its completeness and correctness before data was analyzed. Data was finally tabulated, analyzed and interpreted by using percentages and Chi-square test. If the expected value in any cell was less than 5, Fischer exact test was done; p<0.05/0.001 was used as the definition of statistical significance.

#### Permission from the concerned authorities

Information & permission regarding study had been taken accordingly through proper channel.

#### **RESULTS**

Majority (91.92%) of JSY beneficiaries belonged to the younger age group of 20 to 30 years About 50% were educated up to Higher secondary school, 8.34% were Graduate and above whereas 15.3% received no formal education. About 4/5th of the beneficiaries belonged to upper lower class and the rest 1/5th belonged to upper middle class and lower class. A significant proportion of the beneficiaries (91.66%) were not working followed by (8.33%) who were working.

Table 1: Distribution of beneficiaries according to awareness about JSY.

TOX7	JSY beneficiaries		
JSY	No.	%	
Heard about JSY (N=384)			
Yes	155	40.36	
No	229	59.63	
Source of information about JSY* (N=155)			
ASHA	136	87.74	
Hospital staff	06	3.87	
Radio/TV	03	1.93	
ANM /AWW	03	1.93	
Family member, friend/neighbour	07	4.51	
When was JSY related			
information received (N=155)			
During this pregnancy	76	49.03	
During previous pregnancy	75	48.38	
After this pregnancy	04	2.58	

<sup>\*</sup> Multiple choice responses

Beneficiaries were asked about the scheme and their responses were noted after deliberate questioning and probing. It was found that majority (59.63%) of the beneficiaries have not heard about the name of the scheme JSY whereas only 40.36% have heard about the scheme JSY (Table 1).

Source of information about JSY for majority (87.74%) was ASHA, less than 5% by Radio/TV, ANM /AWW and around 5% by hospital staff, family member, friend/ neighbour (Table 1). About half (49.03%) of the beneficiaries received JSY related information during this pregnancy and other half (48.38%) during previous pregnancy. About 2.58% received information after this pregnancy (Table 1).

Out of two fifth (40.36%) of the beneficiaries who were aware of JSY component, majority (98.70%) knew about provision of cash incentive money given for institutional

delivery followed by 39.35% who were aware that it promotes institutional delivery, one tenth (7.09%) knew about the component that there is provision of accompanying person to escort pregnant woman to health care facility. None of the beneficiary was aware of postnatal visit and transport facility (Table 2).

Table 2: Distribution of beneficiaries according to awareness about JSY components.

Awayanag abaut ICV campanant* (N-155)	JSY beneficiar	JSY beneficiaries		
Awareness about JSY component* (N=155)	No.	%		
Escort women to health facility	11	7.09		
Institutional delivery	61	39.35		
Postnatal visit	0	0		
Transport facility	0	0		
Cash incentive	153	98.70		
All	02	1.29		

<sup>\*</sup> Multiple choice responses.

Table 3: Association between background characteristics of beneficiary and awareness about JSY.

		Awareness about JSY			
Variable	Category	Yes (N=155)	No (N=229)	Total (N=384)	
		No. (%)	No. (%)	No. (%)	
Age (years)	≤30	143 (39.94)	215 (60.05)	358 (93.22)	
	>30	12 (46.15)	14 (53.84)	26 (6.77)	
$\chi^2 = 0.388$ , df = 1, p>0.05 (0.5332)					
Education	No formal education	25 (42.37)	34 (57.62)	59 (15.36)	
	Up to Higher secondary	111 (37.88)	182 (62.11)	293 (76.30)	
	Graduate and above	19 (59.37)	13 (40.62)	32 (8.33)	
$\chi^2 = 5.652$ , df = 2, p>0.05 (0.0592)					
Socioeconomic status	Class II- III (Middle class)	32 (43.83)	41 (56.16)	73 (19.01)	
	Class IV and above (Lower class)	123 (65.42)	188 (60.45)	311 (80.98)	
$\chi^2 = 0.451$ , df = 1, p>0.05 (0.5018)					
Occupation	Working	18 (56.25)	14 (43.75)	32 (8.33)	
	Not working	137 (38.92)	215 (61.07)	352 (91.66)	
$\chi^2 = 3.660$ , df = 1, p>0.05 (0.0557)					

Table 4: Service utilization and awareness about JSY through ASHA.

	Awareness abou	L.	
Services utilized	Yes (N=136) No (%)	No (N=248) No (%)	Total No. (N=384) No (%)
Antenatal checkup			
Complete ANC	106 (38)	175 (62.2)	281 (73.1)
Incomplete ANC	30 (29.1)	73 (71)	103 (27)
$\chi^2 = 2.435$ , df =1, p>0.05 (0.1187)			
Place of delivery			
Institutional	134 (38)	219 (62.0)	353 (92)
Home	02 (6.4)	29 (93.5)	31 (8.0)
$\chi^2 = 12.369$ , df =1, p<0.001 (0.000)**			
PNC visit in 24 /48 hours			
Received	135 (36)	243 (64.2)	378 (98.4)
Not received	01 (17)	05 (83.3)	06 (1.5)
p>0.05 (0.4297) (Fischer exact test)			

<sup>\*</sup>Highly significant.

Awareness about JSY was low in all age group. It was around 40%, in age group below 30 years and 46.15% above 30 years of age. Statistical association between age and awareness regarding JSY was found to be insignificant (Table 3). About 60% of beneficiaries who were graduate and above were more aware as compared to those educated up to higher secondary (37.88%) and with no formal education (42.37%) respectively though the association between education and awareness regarding JSY was found to be statistically insignificant (Table 3).

It was observed that awareness was more among beneficiaries belonging to lower class than those belonging to middle class but this association was not found to be significant statistically (Table 3). When awareness was associated with occupation of beneficiaries, it was found that awareness of working women was more (56.25%) than those who were not working (38.92%) (Table 3). The association between working status and awareness was not found to be significant.

Only 38% who received complete Antenatal checkup were made aware of JSY by ASHA. In institutional delivery only 38% were made aware of JSY by ASHA as compared to 6.4% in home delivery The statistical association between place of delivery and knowledge about JSY was found to be highly significant (p<0.001). Only 36% who received postnatal visit in 24/48 hours were made aware of JSY by ASHA (Table 4).

#### **DISCUSSION**

From Table 1 it was known that found that majority (59.63%) of the beneficiaries have not heard about the name of the scheme JSY whereas only 40.36% have heard about the scheme JSY. So, we can say that the existing mechanism is still not properly functioning for creating awareness. Similar finding was observed in Madhya Pradesh where 26% of beneficiaries have heard about JSY. Contrary to this, 95.5% had heard about JSY in an evaluation study of JSY under National Rural Health Mission in Kashmir valley.

Regarding source of information about JSY majority came to know by (87.74%) ASHA, less than 5% by Radio/TV, ANM /AWW and around 5% by hospital staff, family member, friend/neighbour. Contrary to this, the main source of information in a study in Rajasthan and Madhya Pradesh, was ANMs (71 % & 60 %) followed by ASHAs (24 % & 21 %). Study in Jabalpur reported the main source of information was ANM/ Dai/ ASHA/ AWW, and only in 1.66% cases the information sources were doctors. 12

According to the results of Table 1 about half (49.03%) of the beneficiaries received JSY related information during this pregnancy and other half (48.38%) during previous pregnancy. About 2.58% received information after this pregnancy. Similar finding was observed in a study in Rajasthan which reported most of the beneficiaries heard about JSY during their pregnancy. On contrary, Deshpande reported 78% had heard about it during pregnancy and 22% before being pregnant. <sup>14</sup>

Study in Jharkhand cited 64% of women received information about JSY during this pregnancy whereas 35.2% during previous pregnancy.<sup>15</sup>

Each of the beneficiaries was asked about what they have heard about JSY. Analysis of their responses shows that they were not very clear about the scheme. Out of two fifth (40.36%) of the beneficiaries who were aware of JSY component, majority (98.70%) knew about provision of cash incentive money given for institutional delivery followed by 39.35% who were aware that it promotes institutional delivery, one tenth (7.09%) knew about the component that there is provision of accompanying person to escort pregnant woman to health care facility. None of the beneficiary was aware of postnatal visit and transport facility. On contrary, Uttekar et al. Madhya Pradesh and CORT Rajasthan reported 26% and 71% of beneficiaries heard that JSY provided for free institutional delivery services for poor women with monetary benefits. 8,13 Jabalpur reported more than threefourth of beneficiaries knew that there is a scheme in which cash incentive is given after institutional delivery but they didn't know about exact name of the scheme as JSY. 12 It was found in a study by Kaushik et al in Varanasi 56% subjects knew that there is component to escort pregnant woman to health care facility. 16

Awareness about JSY was low in all age group. In our study, 60% of beneficiaries were graduate, 37.88% completed higher secondary education and 42.37% were illiterates. Kaushik et al found 61.9% illiterate subjects were aware about the provisions of benefits under the scheme, corresponding value was significantly more. <sup>16</sup>

The association between working status and awareness was not found to be significant. A study in Varanasi revealed that all the women (100%) in working group were aware about the scheme, while the awareness level among housewives was found to be 72% (p=0.01). <sup>16</sup>

### **CONCLUSION**

Majority of the study subjects were not aware about the services under JSY except for the monetary benefit. Though a very small proportion of beneficiaries know the name of the scheme majority delivered in the health facility. Further to increase awareness regarding other components under JSY and to achieve 100% institutional delivery there is need to strengthen effective IEC along with active involvement of ASHA.

#### **ACKNOWLEDGEMENTS**

We acknowledge our sincere thanks to Maternal and Child Health Division, Government of Chhattisgarh for their invaluable support by providing the required data. Also we are grateful to all the mothers of community and Mitanins for their co- operation and support in this study.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

#### REFERENCES

- Park K. Textbook of Preventive and Social medicine 24th edition. Jabalpur Banarsidas publishers. 2017: 555.
- 2. Gupta SK, Pal DK, Tiwari R, Garg R, Shrivastava AK, Sarawagi R, et al. Impact of Janani Suraksha Yojana on institutional delivery rate and maternal morbidity and mortality: an observational study in India. J Health Popul Nutr. 2012;30(4):464-71.
- Achieving Sustainable Development Goal A Vision Document 2016-2030 for Health Department of Health and Family Welfare Government of Chhattisgarh.
- Parischa A. UN official calls maternal mortality rate in India "Shocking News Voice of America. 2007. Available at: http://www.vonews.com/English/ 2007-12-03-voa39.cfm. Accessed on 3 April 2017.
- 5. Government of India. Special Bulletin on Maternal Mortality in India 2011-13, SRS, 2014, Office of the Registrar General of India; 2014.
- 6. International Institute for Population Sciences & Macro International, 2007; All India Report, 2010.
- 7. National Family Health Survey (NFHS-4) 2015- 16. International Institute for Population Sciences, Mumbai India. Ministry of Health and Family Welfare, Government of India.
- 8. Uttekar BP, Sharma J, Uttekar V, Shahane S. Assessment of ASHA and Janani Surksha Yojana in Madhya Pradesh. Centre for Operations Research and Training. Vadodara, India; 2007: 1-58.
- 9. Singh D. A study of the knowledge, attitude and practices regarding care of the neonate in rural community. MD thesis, Faculty of medical sciences, University of Delhi. 2002.

- Sharma R. Population research centre Mohanlal sukhadia university Udaipur Janani Suraksha Yojana: a study of the implementation status in selected districts of Rajasthan. Udaipur. 2007-08.
- 11. Chauhan PL, Dhadwal DS, Mahajan A. Client's satisfaction with the health services under Janani Suraksha Yojana in rural area of Himachal Pradesh. Chrismed J Health Res. 2016;3(3):187.
- 12. Gupta SK, Pal DK, Tiwari R, Garg R, Sarawagi R. Assessment of Janani Suraksha Yojana (JSY)–in Jabalpur, Madhya Pradesh: knowledge, attitude and utilization pattern of beneficiaries: a descriptive study. IJCBMS. 2011;1(2):6-11.
- Centre for Operations Research and training (CORT), 2007. Assessment of ASHA and Janani Suraksha Yojana in Rajasthan, Vadodara, UNFA, New Delhi. 2007.
- 14. Deshpande RV. Is Janani Suraksha Yojana (JSY) contributing to the reduction of maternal and infant mortality? An insight from Karnataka. J Family Welfare. 2011;57(1):1-9.
- 15. Rai SK, Dasgupta R, Das MK, Singh S, Devi R, Arora NK. Determinants of utilization of services under MMJSSA scheme in Jharkhand 'Client Perspective': a qualitative study in a low performing state of India. Indian J Public Health. 2011;55(4):252.
- 16. Kaushik A, Mishra CP, Kesharwani P, Richa, Hussain MA. Awareness about JSY among Reproductive age women in a rural area of Varanasi. Indian J Prev Soc Med. 2010;41(3):159-61.

Cite this article as: Khes SP, Sahu D, Soni GP, Chandrakar A. A study to assess awareness about Janani Suraksha Yojana among beneficiaries of urban slums of Raipur city, Chhattisgarh. Int J Community Med Public Health 2017;4:2423-7.