

Assessment of Knowledge of Janani Suraksha Yojna among RDWs of Aligarh: A community based cross Sectional study.

Neha Priya¹, Mahesh Kumar Shukla², Zulfia Khan³, Najam Khalique⁴

¹Assistant Professor, Department of Community Medicine, Teerthankar Mahaveer Medical College, Moradabad.

²Associate Professor, Department of Community Medicine, Teerthankar Mahaveer Medical College, Moradabad.

³Ex-Professor, Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh.

⁴Professor & HOD, Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh.

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ABSTRACT

Background: Janani Suraksha Yojana (JSY), launched on 12th April, 2005 under the umbrella of NRHM is a safe motherhood intervention. It is a conditional cash transfer scheme aimed to increase the number of institutional deliveries and decrease the 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 awareness of recently delivered women from rural areas and urban slums regarding JSY and to study the knowledge level of various components of JSY. **Methods:** A cross-sectional study was carried out in the rural areas and urban slums of field practice areas of Jawaharlal Nehru Medical College, AMU, Aligarh for a period of one year. The prevalence of institutional delivery in UP as found in a study by UNFPA 2008 (50.2%) was used for calculation of sample size. (95% confidence level, 12% relative precision and 8% non response) The yielded sample size was 278, which was rounded off to 300 and selected proportionately. 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 20 and Epi Info software (with Yate's correction). **Results:** The awareness of JSY was found to be high (85%) but knowledge regarding benefits covered under the scheme was only limited to cash incentive for institutional deliveries. Knowledge of 108 ambulance was also low (26.6%). **Conclusion:** There is an urgent need to strengthen IEC campaigns and monitoring strategies.

Keywords: Janani Suraksha yojana, knowledge, recently delivered women, ASHA.

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.^[1] WHO, UNICEF and UNFPA had reported an estimate that about 800 women die every day of preventable causes related to pregnancy and childbirth; 20 per cent of these women are from India. Annually, it is estimated that 55,000 women die due to preventable pregnancy-related causes in India. Mothers in the lowest economic bracket have about a two and a half times higher mortality rate.^[2]

Name & Address of Corresponding Author

Dr. Neha Priya,
Assistant Professor, Dept of Community Medicine,
Teerthankar Mahaveer Medical College & Hospital, T.M.U.
Moradabad, UP, India
E-mail: neha.priya287@gmail.com

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.^[3] Saving mothers' lives is not only a moral imperative, but a sound investment that benefits the children, families, communities and ultimately our country. Skilled birth attendance is most critical intervention for ensuring safe motherhood & has been accepted as one of the indicators for measuring progress to MDG 5.^[4] (UN MDG) Institutional delivery is the next step in this direction, includes timely intervention by skilled birth attendants backed by essential infrastructure and strong referral services when needed. But majority population still believe in comfort of home delivery.

Money is a powerful incentive to change behaviors.^[5] This concept is used in CCTs to raise the health service utilization in many countries across the world.^[6] India's CCT scheme to promote institutional deliveries, 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.^[7-8] Uttar Pradesh is one of the LPS and JSY has been implemented in this state since September 2005. JSY had completed eight years at the time of conduction of study and very few studies on awareness regarding JSY had been carried out in our state. Therefore, the present study was planned to assess the awareness of RDWs from rural areas and urban slums regarding JSY and its various components.

MATERIALS AND METHODS

A cross sectional study was conducted in the areas covered under Rural health training center(RHTC) & Urban health training center(UHTC) of department of Community Medicine , JNMC, AMU, Aligarh, UP. The total villages covered under RHTC (rural areas) were 6 & slums under UHTC were 4. The study was carried out over a period of 12 months (1st July 13 to 30th June 14) among recently delivered women. The prevalence of institutional delivery in UP as found in a study by UNFPA 2008⁹ (50.2%) was used for calculation of sample size. (95% confidence level, 12% relative precision and 8% non response) The yielded sample size was 278, which was rounded off to 300 and selected proportionately from the 10 areas. In each area, systematic random sampling was used and all eligible females of the houses were included. For households with no eligible female, next house was taken.

Thus, a total of 300 study subjects were interviewed regarding awareness about JSY by means of a self-designed pretested questionnaire. Sociodemographic information was also collected and the association between the two was assessed. The data was entered in SPSS software version 20 and subsequently analyzed using SPSS and Epi Info software (with Yate's correction).

Informed consent was taken from all the subjects and non aware were informed about the benefits of the scheme. The study obtained clearance from the Institutional Ethics Committee, J.N. Medical College, AMU, Aligarh.

RESULTS

Sociodemographic data

Both in the urban and rural slums, majority (45%) of women belonged to the age group 18-24. More than two third (71.3%) of study population were from rural background, as most of the field practice areas were rural and PPS sampling was done. 67% women were Muslims and 33% were Hindus. Only 2 women belonged to other religion and were Christians. About 40% of study population belonged to the OBC, 32.8% General & 27.2% to SC/ST category. 76.7% of women had joint family

and 23.3% women lived in nuclear family. More than 50% of women were illiterates or had no formal education while 22% of women had education up till middle school and 14% females had attended high school. While 11% had received higher education i.e. attended college or above. More percentage of the women belonged to lower middle class (34.40 %) followed by upper lower class (29.62%).Majority of women (97.7%) under study were housewives. Though some of them used to do field work or making parts of locks in the home, they were not earning independently.

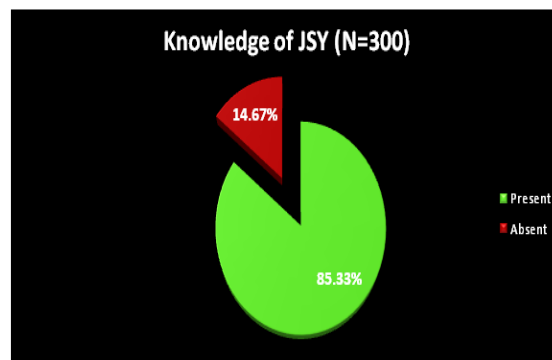


Figure 1: Knowledge of JananiSurakshaYojna among RDWs of Aligarh.

Knowledge of JSY

Knowledge is a precursor to utilization of any behaviour (JSY scheme). In our study, [Figure 1] most (85.33%) of the participants knew that there is a monetary benefits scheme running by government, though very few (5%) were able to tell the name of the scheme [Figure 1].Of the 85%, about three quarter of subjects of our study had awareness about different components of JSY [Figure 2]. As comprehended from [Figure 3], majority (75%) of females were able to tell the right amount of cash incentive given. About 20% of females said institutional delivery to be the main component of JSY, while ANC services (5.18%) were least identified by them as a part of JSY benefits.

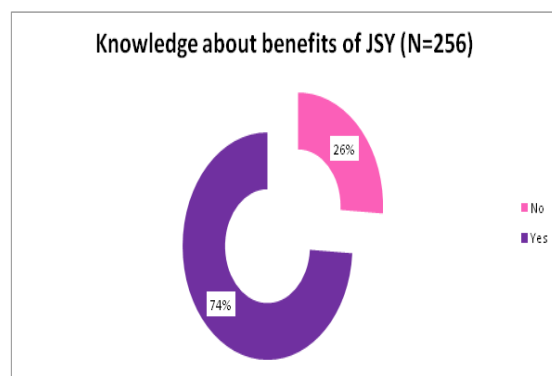


Figure 2: Knowledge of benefits available under JSY.

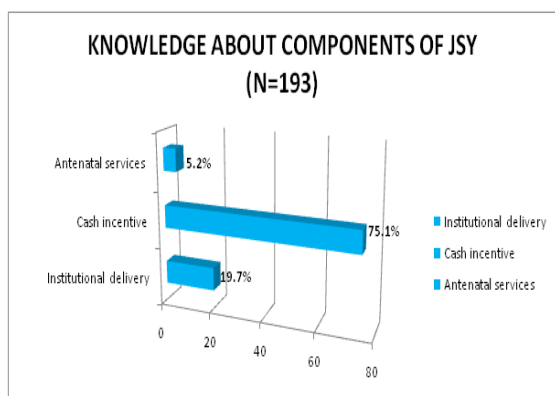


Figure 3: Knowledge about components coming under JSY.

More than 38% participants in our study revealed health worker (ASHA/ANM/AWW) to be the source of information [Table 1]. Others had neighbours (28.9%) or family members as their informants. A few reported multimedia, while some (10%) were informed about the scheme when they went to government hospital for their second last delivery. Majority (67.58%) of the respondents correctly named the beneficiaries as all those having institutional deliveries. Few (10.55%) thought the scheme was for mothers delivering girl child. Rest either had no knowledge of the beneficiary or said it was for poor people. Only 51% mothers had heard of ASHA/USHA of their area. The knowledge of free transport available under JSY was seen to be low in our study with only 26.6% knowing about it.

Table 1: Mean ostium diameter, length, diameter and distance from supra-valvular ridge measurements in right coronary artery and left coronary artery

| Source of knowledge (N=256) | | |
|--|-----|------|
| 1.ASHA/ANM/AWW | 99 | 38.7 |
| 2.Neighbour | 74 | 28.9 |
| 3.Family | 41 | 16.0 |
| 4.Multimedia | 10 | 3.9 |
| 5.Others | 32 | 12.5 |
| Total | 256 | 100 |
| Knowledge about beneficiaries (cash is given to) (N=256) | | |
| 1.All institutional deliveries | 173 | 67.6 |
| 2. Girl child delivery | 27 | 10.5 |
| 3. Poor people | 7 | 2.7 |
| 4. No idea | 49 | 19.2 |
| Total | 256 | 100 |
| Knowledge about ASHA/USHA (N=300) | | |
| Yes | 153 | 51 |
| No | 147 | 49 |
| Total | 300 | 100 |
| Knowledge of 108 ambulance (N=300) | | |
| Yes | 80 | 26.7 |
| No | 220 | 73.3 |
| Total | 300 | 100 |

DISCUSSION

Most (85.33%) of the participants in our study knew that there is a monetary benefits scheme running by government [Figure 1] Similarly, in Raipur, Sahu et al found 89% females having knowledge of JSY scheme.^[10] Gupta et al told that 87% beneficiaries in Jabalpur knew that there is a scheme in which cash incentive is given after institutional delivery. But only (13%) beneficiaries were aware about the name of JSY.^[11] In Aligarh most women (88%) were aware of the JSY and the incentive it offers for institutional delivery (Khan et al).^[12] Mandal et al (2012) in WB found that 90% mothers knew that some financial benefits are being given to pregnant mothers but only 64% had heard the name of JSY.^[13]

Some areas like Bihar had very good awareness regarding the scheme with Singh & Tamulee^[14] reporting that all (100%) knew about JSY and thus registered for benefits but not all knew the name or specifications of the scheme. Santhya et al notified awareness of the JSY to be almost universal in Rajasthan.^[15] Sidney et al from Ujjain, reported that ninety percent of the women had prior knowledge of the program.^[16]

Contrary results were reported by Vikram K who found that the awareness regarding JSY scheme was 62.3 per cent in Delhi.^[17] In Jaipur Sahu et al reported knowledge percentage of JSY among total subjects to be 48.2%. Only 31.3% knew the exact name of the scheme.^[18] In a district of West Bengal, more than half (52.8%) respondents had heard about JSY (Panja et al).^[19] In Varanasi, even a single female included in the study didn't know the name of the scheme, but 76% of the study subjects

were aware of the provision of cash benefit by the Government for females delivering in a public health facility (Kaushik et al).^[20] Patel et al found knowledge about the Chiranjeevi Yojana and JSY to be very poor (5%).^[21] Concurrent Assessment of the JSY Scheme by UNFPA (2009) concluded fairly positive awareness about the scheme (75.9%) in UP.^[9]

Showing slightly better results than other studies, 74% subjects of our study had awareness about different components of JSY [Figure 2]. In Maharashtra Singh et al estimated about 54.5% women had the knowledge about the components of JSY.^[22] Panja et al in WB, found that a quarter knew all the benefits correctly.^[19] Gupta et al from Jabalpur observed that only (13%) beneficiaries were aware about the benefits of JSY.^[11] The few who had heard about the scheme in Jharkhand had no knowledge of its specific provisions (Rai et al).^[23] Better response of our study subjects may be due to the frequent visits by the medico social workers and the nearby proximity to CHC Jawan.

As comprehended from [Figure 3], majority (75%) of females were able to tell the right amount of cash incentive given. ANC services (5.18%) were least identified by mothers as a part of JSY benefits. In Bihar, Singh & Tamulee reported that all respondents knew about the correct amount of cash benefit.^[14] Vikram et al found that 72 percent respondents of trans Yamuna Delhi region, were not aware if they were eligible for monetary benefits under the scheme.^[17] In Jharkhand, majority recalled when probed specifically about monetary incentive, ANC registration and care were overwhelmingly perceived as benefits from scheme (Rai et al).^[23] In Varanasi Kaushik et al found that out of total study subjects 66.8% were aware about the correct amount i.e. Rs. 1400 are paid to the beneficiary.^[20] A study by Santhya et al observed few females of Rajasthan to be correctly informed about the conditions for benefiting from the scheme. Moreover, just half women knew that they were entitled to receive cash benefit, just 30 percent reported comprehensive awareness of antenatal care practices.^[15] In UP, CORT (2009) found half subjects to be aware about its cash benefit aspect & one fourth about institutional delivery.^[24]

More than 38% participants in our study revealed health worker (ASHA/ANM/AWW) to be the source of information [Table 1]. Others had neighbours (28.9%) or family members as their informants. A few reported multimedia, while some (10%) were informed about the scheme when they went to government hospital for their second last delivery. Other studies also mentioned quite similar findings. From Maharashtra, Singh et al estimated this knowledge came mainly from the ANMs (58.6%), AWWs (22.4%) and ASHAs (17.2%).^[22] In Delhi, Vikram K found place of

ANC (51.7%) and place of delivery (40.1%) acting as the major sources of information about JSY with ASHA acting as the third major source (25.7%). Other sources were neighbours (20.5%), relatives/family members (6.5%), media (3.1%) and others (2.7%).^[17]

Singh & Tamulee reported that the source of information was the neighbours for 72% of females of Bihar. This reflects the community level awareness about the scheme; if not specifications but the existence of the scheme have reached the community. 18.4 per cent had ASHA as their source.^[14] In Punjab, source of information was ANM & AWW mostly (66%) (Panja et al).^[19] In Rajasthan, family members, friends and neighbours were the leading sources of information on the JSY (Santhya et al).^[15] ANM/ASHA/ AWW were the main source of information regarding JSY (Gupta et al) in Jabalpur, MP.^[11]

Only 51% mothers had heard of ASHA/USHA of their area [Table 1]. The knowledge percentage is low compared to other studies, as females of urban area are also included, where no USHA is working. Santhya et al in Rajasthan, mentioned that less than one-half of women had heard of the ASHA.^[15] While Khan & Bhatnagar in UP discovered a higher population, i.e. 71 percent knew the ASHA of their village. In spite of much publicity of free transport services for going to hospital, knowledge of 108 ambulance was seen to be low in our study with only 26.6% knowing about it. In another study done by Santhya et al detected that less than half of women were aware of the ambulance service in Rajasthan.^[15]

CONCLUSION

In the above study, knowledge of JSY among women was comparatively more than other studies. This could be due to the proximity of areas to health centers as well as CHC. Maximum number of the women had no knowledge about the name of the scheme. When asked to name the most characteristic component of the scheme, three fourth of the females described the cash component to be most attractive. It was further observed that ASHA (38.7%) followed by neighbours and friends (28.9%) were the main source of information about the scheme. Knowledge about free transport was low with only a quarter of females being aware about it. 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 as very few coated this as their source of information. Second recommendation: Though the awareness of JSY is found to be high but knowledge regarding benefits covered under the scheme is only limited to cash

incentive for institutional deliveries. People are not aware of other aspects of the scheme like complete antenatal check-up, provision of IFA, TT immunization, post-natal care etc which are equally important as institutional deliveries in reducing maternal as well as infant mortality and morbidity. Unless and until the community participation is not there, which also acts as pressure group, no scheme can fulfill its aims and objectives completely. Third recommendation is that the incentives given to ASHAs should be timely and more with reward system for good work as they are instrumental in spreading awareness about scheme as well as taking expectant mothers to institutions. 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. [Assessed on Apr 24,2014]
2. UNICEF India, Maternal health in focus 2014. See more at: <http://unicef.in/Whatwedo/1/Maternal-Health#sthash.QvhW3h1M.dpuf>. [Assessed on Apr 3,2016]
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 2014jul 5].
4. UN Millennium Development Goals, Available: <http://www.un.org/millenniumgoals> Accessed 2014 October 1.
5. Morris SS, Flores R, Olinto P, Medina JM. Monetary incentives in primary health care and effect on use and coverage of preventive health care interventions in rural Honduras: Cluster randomized trial. *Lancet*. 2004;364:2030-7.
6. Lagarde M, Haines A, Palmer N. Conditional cash transfer for improving uptake of health intervention in low and middle income countries: A systematic review. *JAMA*. 2007; 298:1900-10.
7. Cabinet committee on Economic Affairs (CCEA). CCEA clears JananiSurakshaYojna. New Delhi: The Committee: 2005.
8. Govt. of India. JananiSurakshaYojna features. New Delhi: MOHFW;2006.
9. Concurrent Assessment of JananiSurakshaYojana (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 3,2014]
10. Sahu D, Gandhi NK, Soni GP. Knowledge and utilization of JSY: An epidemiological study; *Indian Journal of MCH*. 2012;14:1-7.
11. Gupta SK, Pal DK, Tiwari R, Garg R, Sarawagi R, Kumar A. Assessment of Janani Suraksha Yojana (JSY) - in Jabalpur, Madhya Pradesh: knowledge, attitude and utilization pattern of beneficiaries: a descriptive study. *International Journal of Current Biological and Medical Science*. 2011;1(2):6-11.
12. Khan Z, Mehnaz S, Ansari MA, Khaliq N, Siddiqui AR. Existing practices and barriers to avail of Maternal healthcare services in two slums of Aligarh. *Health and Population: Perspectives and Issues*. 2009;32:113-123.
13. Mandal DK, Kaur P, Murhekar MV. Low coverage of JSY among mothers in 24-Parganas (South) of West Bengal in 2009. *BMC Proceedings*. 2012; 6:1-2. O3 doi:10.1186/1753-
14. Singh HS, Tamulee P. Janani Surasksha Yojana: Impact on Socio-Economic Conditions among Beneficiary Families. *International Journal of Scientific and Research Publications*. 2012; 2:1-4.
15. Santhya KG, Jejeebhoy SJ, Acharya R, Zavier AJF. Effects of JananiSurakshaYojna on maternal and newborn care practices: Women's experience in Rajasthan. *Population Council* 2011.
16. Sidney K, Diwan V, Khatib ZE, Costa A. India's JSY cash transfer program for maternal health: Who participates and who doesn't – a report from Ujjain district. *Journal of Reproductive Health*. 2012; 9:1-7.
17. 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 Journal of Medicine Research*. 2013; 148:340-346.
18. Sahu D, Gandhi NK, Soni GP. Knowledge and utilization of JSY: An epidemiological study. *Indian Journal of MCH*. 2012; 14:1-7.
19. Panja TM, Mukhopadhyay DK, Sinha N, Saren AB, Sinhababu A, Biswas AB. Are institutional deliveries promoted by JSY in a district of West Bengal, India. *Indian Journal of Public Health*. 2012; 56:69-72.
20. Kaushik K, Mishra CP, Kesharwani P, Richa, Hussain MA. Awareness of JSY among reproductive age women in a rural area of Varanasi. *Indian Journal of Preventive & Social Medicine*. 2010;41:158-61.
21. Patel VD, Puwar BT, Sheth JK. Utilization of antenatal care services in the Gandhi nagar (rural) district, Gujarat. *National Journal of Community Medicine*. 2013; 4:104-8.
22. Singh VS, Chavan SS, Giri PA, Suryavanshi SR. Study on awareness and knowledge regarding JananiSurakshaYojana (JSY) among ANC registered women in a primary health centre of tribal area of Thane district of Maharashtra; *International Journal of Research in Medical Sciences* 2014; 2:122-6
23. 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 Journal of Public Health*. 2011; 55(4): 252-9.
24. Centre for Operations Research and Training (CORT) 2007. Assessment of ASHA and Janani Suraksha Yojana in Uttar Pradesh. <http://www.cortindia.com/UP/UP-2007-0306>.

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