e-ISSN: 0975-1556, p-ISSN:2820-2643

Available online on www.ijpcr.com

International Journal of Pharmaceutical and Clinical Research 2023; 15 (12); 1562-1569

Original Research Article

Awareness of Services under Janani Shishu Suraksha Karyakram in a Rural Area

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Received: 25-09-2023 / Revised: 28-10-2023 / Accepted: 30-11-2023

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Conflict of interest: Nil

Abstract:

Background: Maternal health reflects the overall effectiveness of the health system of any country. Government of India has launched various health schemes under the umbrella of National Rural Health Mission (NRHM) to reduce pregnancy related morbidity and mortality but with limitations such as high out of pocket expenditure on drugs, transport, and unavailability of diet in institutions. For effective utilization of any services, awareness regarding the services among the beneficiaries is an essential prerequisite, with this background; the present study was carried out with an aim to study awareness about services under JSSK among mothers or caregiver having children less than two year.

Methods: A community based cross-sectional study was conducted in the field practice area of rural health training center (RHTC), Paithan, Dist. Aurangabad during the period 1st July 2017 to 30st November 2019. Multistage sampling was used .All women or caregiver having children <2 yr. of age were interviewed for awareness of JSSK.

Results: It was observed that out of 440 study subjects, 299 (52%) study subjects were aware about JSSK. Awareness regarding few component of JSSK was low like exemption from user charges was 14.8%, free transport between facilities in case of referral was 13.6% and free provision of blood was 8.4 %.

Conclusions: The study revealed that in spite of effective implementation of national programmes proportion of home deliveries is 3.9%.To avoid home deliveries and related consequences awareness regarding JSSK scheme need to be raised. It was seen that very few women were aware about elements of sick newborn of JSSK.

Keywords: Maternal health, OOP, sick neonate, JSSK.

Introduction

Women constitute about half of the human resource potential and overall development of a country is incomplete without them. The place of delivery is an important aspect of reproductive health care. [1] Maternal health continues to be an important indicator of the wellbeing in a country .Maternal and child health status reflects upon a nation's economic and social standards.2Health of child depends upon the health of mother. [2]

In India, about 67000 women die every year due to pregnancy related complications and approximately 13 lakhs infants die within one year of birth. Among infants, 9 lakhs die within four weeks of birth (i.e. approximately 2/3rd of total infant deaths), out of which about 7 lakhs i.e. 75% die within first week (majority of them within first two days after birth). Both maternal and infant deaths could be reduced by ensuring timely access to quality services (both essential and emergency), in public health facilities without any burden out of pocket expenses on the family. [3]

All over the world 13.6 million women have died in the past 25 years between 1990 and 2015 due to maternal causes. Over the course of time, however, the world has made steady progress in reducing maternal mortality, reducing MMR by 44 per cent, and reducing the lifetime risk of maternal deaths from 1 in 73 to 1 in 180.associated with the child care and child health. [4] Causes of maternal deaths may be direct or indirect. The major medical causes of these deaths are haemorrhage, sepsis, abortion, hypertensive disorder, obstructed labour and other causes including anemia. [5] The indirect causes that relate to the socioeconomic determinants of health like illetracy, low socioeconomic status, early age of marriages, low level of women's

empowerment and other factors contribute to the three known delays leading to these deaths are-

- The delay in deciding to seek care
- The delay in reaching the appropriate health facility, and
- The delay in receiving quality care once inside the institution. [6]

Ensuring newborn survival and health are intrinsically linked to maternal health. This starts with the survival and health of women before conception, during pregnancy and after delivery, along the continuum of care. [7] About 75-80% of maternal deaths can be prevented through universalizing skilled care at birth and round the clock emergency obstetric care during delivery. [8]

Promotion of Institutional delivery is one of the most important interventions in India to reduce maternal and neonatal mortality. Conditional cash transfer scheme, named Janani Suraksha Yojna (JSY) was introduced in India in the year 2005, with a strategy is to link cash assistance to institutional delivery. Due to JSY, institutional deliveries across country have increased but with limitations such as high out of pocket (OOP) expenditure especially for the purchase of drugs and transport, incurred by families. With the launch of the Janani Suraksha Yojana (JSY), the number of Institutional deliveries has increased significantly. About 25% women hesitate to access health facilities. Factors affecting access include: High out of pocket expenses on-User charges for opd, admission, diagnostic tests, blood, and expenses can be very high in case of caesarean section, non-availability of diet in most institutions [9].

To eliminate out of pocket expenditure Ministry of health and Family Welfare (MoHFW) has taken a major initiative to ensure free and cashes facilities for women and child health services and launched Janani Shishu Suraksha Karyakram (JSSK) on 1st June, 2011. Following are Entitlements for Pregnant Women: Free and zero expense delivery, Free caesarean section (C-section), Free drugs and consumables Free essential and desirable diagnostics (Blood & urine tests, USG, etc.) during Ante Natal Care, Intra Natal Care and Post Natal care Free diet for the beneficiary during stay in health facilities (up to 3 days for normal delivery and up to 7days for C-section.) Free provision of blood, Free transport – home to health institution(HI), Free transport- inter facility and Free transport -drop back from facility to home, Exemption from all kinds of user charges. Entitlements for Sick Infant (till 1yr age):Free and zero expense treatment, Free Drugs and Consumables ,Free Diagnostics ,Free provision of Blood Free transport from Home to Health Institutions ,Free transport between facilities in case of referral ,Drop back from Institution to home Exemption from all kinds of User Charges [9].

For effective utilization of any services, awareness regarding the services among the beneficiaries is an essential prerequisite, with this background; the present study was carried out with an aim to study awareness about services of JSSK among mothers or caregiver having children less than two year.

Objective:

To study awareness regarding Janani Shishu Suraksha Karyakram (JSSK) among women in rural area.

Material & Method:

The Community based cross-sectional study was conducted in the field practice area of Rural Health Training Centre (RHTC) of medical college during 1st July 2017 to 30st November 2019 to study awareness of services under JSSK among women having children less than two years in a rural area.

Pilot study was conducted among 30 women having children less than 2 year at the time of study in one of the village of study area. Women were interviewed by house to house visits. After explaining about study intention, data was collected using a predesigned structured questionnaire. The study tool comprised of details including baseline characteristics of study participants, details of antenatal and post natal period, and awareness about maternal and neonatal services under JSSK services. Those who could tell at least two silent features of JSSK scheme were considered to be aware of the scheme. [10] The study revealed that 12 out of 30 women (45%) were aware of JSSK services. For the calculation of sample size. Anticipating awareness of 45%, sample size derived was 396.Considering 10% non-response rate, sample size came to 436 which were rounded off as 440. In India, women of child bearing age (15-44 years) constitute 22%.To study 440 women investigator needed to study population of 1910. Considering average family size in rural area as 5.4, the investigator collected data from 353 houses to cover population of 1910. [5] Necessary modification was made in the proforma according to pilot study.

Inclusion criteria:

Women or caregiver who were having children less than 2 years age at the time of Study; Women who were residing in study area for more than 6 months, permanent resident of that area; Women who were willing to participate in the study.

Exclusion Criteria:

Women who are not willing to participate in the study; Study subjects who interviewed during pilot study were excluded from study; Women who were

residing in study area since less than 6 months at the time of study; Women or caregiver who's houses were locked at the time of visit were excluded.

Multistage sampling was used for the study. In the first phase investigator selected one PHC from 3PHCs of the field practice area by lottery method .In the second phase from selected PHC having six subcenters two were selected randomly. Probability proportionate to size (PPS) sampling was used to draw study subjects from villages of selected subcenters. Survey was started from one side of the village from prominent landmark of that village. First house was selected by last two digits of note currency method. Next houses were selected by systematic random sampling.

The sampling interval for systematic random sampling was calculated from the total number of households and the desired sample size. Accordingly, every 12 th house was included in the study. Information was collected accordingly from women or caregiver having child less than 2 years old, if women having two children of less than 2 year at the time of data collection, antenatal, delivery and other details were asked pertaining to recent delivery. Questions were asked about socio-demographic factors like age, religion, education ,occupation, income, type of family, socioeconomic status, antenatal visits, type of delivery, place of delivery, details of the delivery, source of information of JSSK, awareness about maternal and neonatal services under JSSK services. Those who were aware of any two services among entitlements for pregnant women and neonates provided under JSSK were considered to be aware of the scheme. [10] For respondent women's awareness assessment a scoring system were developed.

The level of awareness was calculated based on respondent's awareness of entitlement. One point was given for respondent's knowing of entitlements JSSK for mother and sick newborn, while no mark was given if they were unaware of particular entitlement. There are total 18 entitlement of JSSK. Awareness of each respondent was scored out of 18. Women with score less than 8 were categorized as poor awareness and those with 8 and above labeled as giving good awareness. [11]

Observation and results:

The present study data was collected from 1st January 2018 to 31st December 2018 in selected two subcenters under one of the PHC in the field practice area of Rural Health Training Center (RHTC) of medical college. 440 Women or caregiver having children less than 2 years were interviewed by house to house visit.

The study was carried out to study of awareness level about JSSK component among women in selected study area.

Table 1: Distribution according to history of recent delivery of study subjects

History of recent delivery	Number	Percentage
ANC visits		
≥ 4 visits	435	98.9
≤ 4 visits	5	1.1
Total	440	100
Type of delivery		
FTNVD	372	84.5
LSCS	68	15.5
Total	440	100
Place of last delivery		
Govt. Hospital	253	57.5
Private hospital	170	38.6
Home	17	3.9
Total	440	100

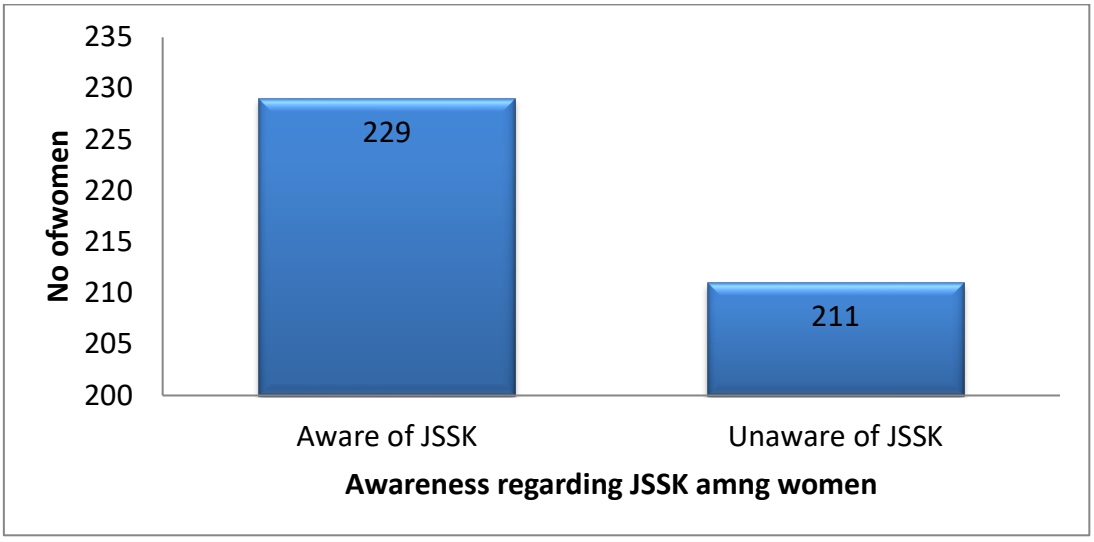
With respect to history of recent delivery of study subjects, it was observed that 435 (98.9) women received ≥ 4 ANC checkup and only 5(1.1%) women had ≤ 4 ANC visits. Out of 440 study subjects 372(84.5%) women had normal vaginal delivery followed by 68 (15.5%) had C-section. For 253 (57.5%) women, place of delivery was Government institute, for 170 (38.6%) women it was private hospital and 17(3.9%) women undergone delivery at Home by skilled birth attendant.

Table 2: Distribution of study subjects according to Awareness of JSSK of study participant

Aware of JSSK	Number	Percentage
Aware	229	52
Unaware	211	48
Total	440	100

Women who could tell any two silent features of JSSK were considered as aware of JSSK scheme. It was observed that out of 440 study subjects, 299 (52%) study subjects were aware about JSSK i.e Knowing key

points of any two entitlements of JSSK and 211 (48%) study subjects were unaware of JSSK.

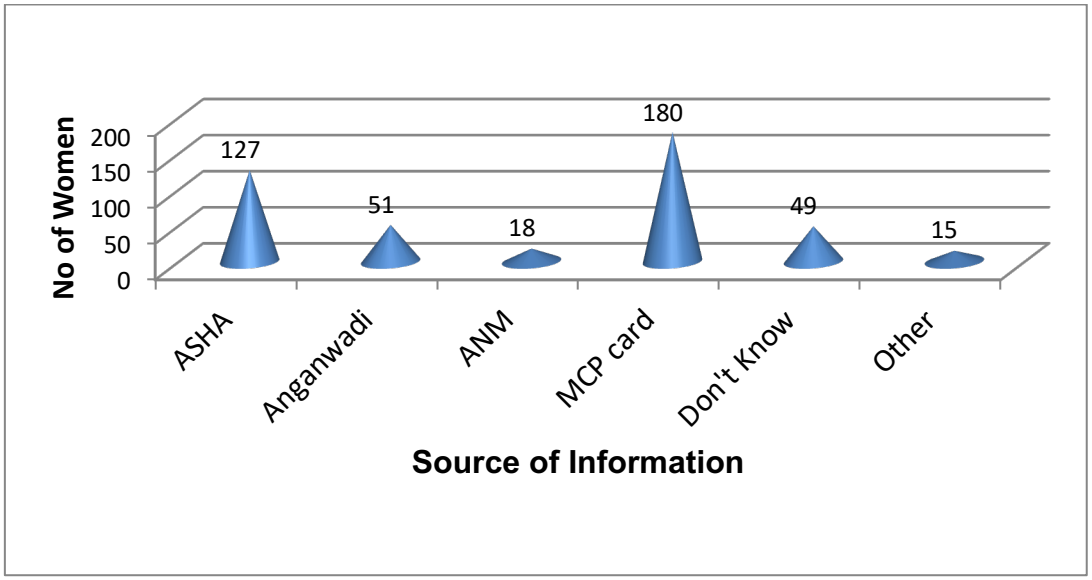


Graph 1: Awareness about JSSK among Women or caregiver

Table 3: Distribution of study subjects according to source of information of JSSK

Source of information	Number	Percentage
ASHA	127	28.9
Anganwadi worker	51	11.6
ANM	18	4.1
MCP card	180	40.9
Don't know	49	11.13
Other	15	3.4
Total	440	100

It was seen that 180 (40.9%) study participants knew JSSK information from Maternal and child health card (MCP card) followed by 127(28.9%) study subjects from ASHA worker,51(11.6%) study subjects from anganwadi worker(AWW),18(4.1%) from ANM, 49 (11.13%) were not having any information about JSSK, (3.4%) women cane to know about JSSK from other sources like family, friends ,television, newspaper, displayed poster at public places.



Graph 2: Distribution according to source of information of JSSK

Table 4: Distribution of study subjects according to level of Awareness about entitlements for pregnant women of JSSK

Entitlements of pregnant women	Awareness (n=440)	
	Aware	Unaware
Free and cashless delivery	422 (95.9)	18 (4.1)
Free C-section	195 (44.3)	245 (55.7)
Free drugs and Consumables	224 (50.9)	216 (49.1)
Free diagnostics	185 (42)	255 (58)
Free diet during stay in health institution	121 (27.5)	319 (72.5)
Free provision of blood	37 (8.4)	403 (91.6)
Exemption from user charges	65 (14.8)	375 (85.2)
Free transport from home to health institution	180 (40.9)	260 (59.1)
Free transport between facilities in case of referral	60 (13.6)	380 (86.4)
Free drop back from institution to home after 48hr stay	161 (36.6)	279 (63.4)

(Figures in the parenthesis indicates percentages)

It was observed that 422 (95.9%) proportion of women aware about component free and cashless delivery and 195 (44.3%) for C-section, 224 (50.9%) for free drugs and consumables, for free diagnostics, for free diet during stay in health facility, for transport facility from home to health institution and for drop back from institution to home, 185 (42%), 121 (27.5%), 180 (40.9%), 161 (36.6%).

Awareness was found low 65 (14.8%), 60 (13.6%), 37 (8.4%) for exemption from user charges, free transport between facilities in case of referral, free provision of blood were respectively.

Table 5: Distribution of study subjects according to level of Awareness about entitlements for Sick newborn of JSSK

Sr. No	Entitlements of Sick newborn	Awareness (n=440)	
		Aware	Unaware
1	Free and zero expense treatment	84(19.1)	356 (80.9)
2	Free drugs and consumables	71 (16.1)	369 (83.9)
3	Free drugs diagnostics	55 (12.5)	385 (87.5)
4	Free provision of blood	26 (5.9)	414 (94.1)
5	Free transport from home to health institution	36 (8.2)	404 (91.8)
6	Free transport between facilities in case of referral	31 (7)	409 (93)
7	Free drop back from institution to home after 48hr stay	70 (15.9)	370 (84.1)
8	Exemption from user charges	101 (23)	339 (77)

(Figures in the parenthesis indicate percentages). It was seen that very few women were aware about elements of sick newborn of JSSK. Maximum awareness was seen 101 (23%) for exemption from user charges followed by (19.1%) for component free and zero expense treatment, 70 (15.9%) for drop back from institution to home after 48hr stay,71 (16.1%) for free drugs and consumables, 55 (12.5%) for drugs diagnostics, 36 (8.2%) for free transport from home to health institution, 31 (7%) for free transport between facilities in case of referral and 6 (5.9%) for blood.

Table 5: Distribution according to level of awareness about all entitlements of Jssk of study participants

Awareness	Number	Percentage
Good	139	31.5
Poor	301	68.5
Total	440	100

The proportion of women who were knowing of 8 or more than 8 component of JSSK were called as having good awareness and those who were knowing of less than 8 component of JSSK were called having poor awareness .It was seen that there were 139 (31.5%) women with good awareness and there were 301 (68.5%) women with poor awareness.

Discussion

Study participants came to know about JSSK from Maternal and child health card (MCP card) followed by 127(28.9%) study subjects from ASHA worker.

About 51(11.6%) study subjects knew from anganwadi worker, ASHA and AWW together constitute 40.6%, 18(4.1%) from ANM, 49

(11.13%) were not having any information about JSSK.

About 3.4% women came to know about JSSK from other sources like family, friends, television, newspaper, displayed poster at public places.

Our study findings are consistent with study by Mangulikar S.K.et al and Kuruvilla A.et al with regard to source of information by ASHA and AWW [11].

The percentage was more in study by Mitra S.et al where source of knowledge was mainly ASHAs (69.2%) and ANMs (27.8%) for mother beneficiaries [12] and less in Deshpande S.et al where ASHA 13.5% were the source of information about JSSK.

In the present study it was found that out of 440 study subjects ,229 (52%) study subjects were aware about JSSK i.e Knowing key points of any two entitlements of JSSK and 211 (48%) study subjects were unaware of JSSK whereas study conducted by Khadse S.et al revealed (38.46%) awareness, lower than our study. Difference in awareness correlated as it was conducted in urban area. Manjula k.et al JSSK awareness was 25% in rural area [13].

Our study revealed that 139 (31.5%) women were having good awareness. The findings of our study were consistent with study by Dr. Chatterjee S.et al [22]. Chandrakar A et al. and Deshpande S et al. in their study noticed good awareness among 58.8% and 47.2% women respectively [14,15].

In our study 42% and 12.5% women were aware about free diagnostics for pregnant women and sick newborn respectively. Study by Deshpande S.et al revealed awareness as 61.1% and 57.8%, in Barua K.et al study awareness about free diagnostics was 77% both for pregnant women and sick newborn. The study carried by Dr. Chatterjee S.et al found awareness 29.17% and 6.25% respectively, [14,16,17].

In the present study awareness level for free diet among women was found 27.5%, which was noted higher in studies by Deshpande S.et al and Barua K.et al with proportion 51.6% and 80.1% respectively. The findings of study Dr. Chatterjee S.et al revealed the awareness as 58.33% [14,16,17].

The present study findings revealed that awareness about free provision of blood for pregnant women and sick newborn was 8.4 % and 5.9% respectively whereas Deshpande S.et al and Barua K.et al in their study observed similar awareness percentages [14,16] ,whereas none of the respondents were aware of free provision of blood for mother and sick infant in study carried by Dr. Chatterjee S.et al [17].

In the present study 14.8% of pregnant women were aware about no user charges. The findings were consistent with study carried by Dr. Chatterjee S.et al [17] whereas 35% and 85% women were aware about no user charges in study conducted by Deshpande S.et al and Barua K.et al [17,14,16].

In our study awareness regarding free transport to pregnant women from home to health facility, between health facilities and drop back from health facility to home was found 40.9%, 13.6% and 36.6% respectively which was similar to Dr. Chatterjee S.et al study as they noted awareness regarding same as 35.42%, 18.75% and 35.42% respectively. The study conducted by Deshpande S.et al revealed awareness as 21.2%, 17.9% and 9.9% respectively [17,14].

In the present study, awareness about free transport facility for sick infant from home to health facility, between health facilities and drop back was 8.2%, 7% and 15.9% respectively. Study by Deshpande S.et al observed 14.6%, 13.7% and 9% respectively. Whereas Dr. Chatterjee S.et al study revealed 16.6%, 12.5% and 16.6% respectively. The study by Barua K.et al noted awareness as 82.7%, 40.3% and 72.4% respectively [14,17,16]. A study conducted by

S.K.Mangulikar.et al and R.c.Goyal.et al in Wardha from Maharashtra state reported that 45.6% and 44.17% participants were aware about free transport service available under JSSK respectively [18,19]. It was observed that 435 (98.9) women have received ≥4 Antenatal check-up which were consistent with M. Rafiq Mir et al [20].The findings were comparable withi Revu S.et al study in which 84.21% women out of 57 have received ≥4 Antenatal check-up [21].

Conclusion:

The present study revealed that proportion of institutional deliveries was 96.1% whereas home deliveries account only 3.9% respectively. It was observed that 52% study subjects were aware about JSSK i.e knowing key points of any two entitlements of JSSK and 48% study subjects were unaware of JSSK.

It was seen that main source of information of JSSK was Maternal and child health card (MCP card) which account 40.9% and ASHA worker accounting for 28.9%. Awareness regarding few component of JSSK was low like exemption from user charges was 14.8%, free transport between facilities in case of referral was 13.6% and free provision of blood was 8.4 %. It was seen that very few women were aware about elements of sick newborn of JSSK. Among women highest awareness of services of JSSK for sick newborn was found for free drugs and consumables which

accounts for 19.1% whereas it was lowest for free provision of blood accounting only 5.9 %.

Ethical approval:

Institutional ethics committee approved the study at GMCH, Aurangabad.

References:

1. Jitendra B Surwade, Yallppa U Jadhav, Ganesh Kalyankar. Assessment the knowledge of Janani Shishu Suraksha Karyakram (J.S.S.K.) among health workers in rural block Shirur. MedPulse International Journal of Community Medicine, Print ISSN: 2579-0862, Volume 2, Issue 1, April 2017 pp 09-14.
2. A.H Suryakantha. Community Medicine with recent advances. Chapter 22.Maternal and child health services.5Th Edition.2019.New Delhi.
3. Madhur Bala Gupta, A.K. Gupta,S.R. Mazta. A Study on level of satisfaction among beneficiaries under Janani Shishu Suraksha Karyakaram (JSSK) at regional hospital Nahan (H.P.)International Journal of Social Science Vol. 5, Issue 1 , March 2016.
4. Ministry of Health & Family Welfare Government of India .Maternal and Newborn Health Toolkit. To provide quality maternal and newborn health services at health facilities in India. page 1-18.January 2013
5. Park K. Preventive and Social Medicine. Chapter 10. Preventive Medicine in Obstetrics, Paediatrics and Geriatrics. Edition 24. Jabalpur. 2019. pp. 447-525.
6. Chaudhary. S, Rohilla R., Vijay Kumar et al. Evaluation of Janani Shishu Suraksha Karyakram scheme and out of pocket expenditure in a rural area of Northern India. Journal of Family Medicine and Primary Care,Volume 6 : Issue 3 : July-September 2017.
7. World Health Organization, Unicef.Reaching the Every Newborn National 2020 Milestones Country Progress, Plans And Moving Forward. May 2017.Indicators and Monitoring Framework for the Global Strategy for Women's Children's and Adolescents' Health (2016-2030), Every Woman Every Child, 2016.pg1-20.
8. Mondal, J., Mukhopadhyay, D. K., Mukhopadhyay, S., and Sinhababu, A. (2015). Does Janani Shishu Suraksha Karyakram ensure cost-free institutional delivery? A cross-sectional study in rural Bankura of West Bengal, India. Indian Journal of Public Health, 59(4), 279–85.
9. Neetu Tripathi, Sushma Kumari Saini, Shankar Prinja. Impact of Janani Shishu Suraksha Karyakram on Out-of-pocket Expenditure among Urban Slum Dwellers in Northern India. Indian Pediatrics Volume 51, June 15, 2014.
10. Chowdhury D., Chakraborty A., Minz S.et al. Janani Shishu Suraksha Karyakram services utilization among rural mothers: community perspective from southern areas of West Bengal. Int J Community Med Public Health. 2018 Oct; 5(10):4427-4432.
11. Deshpande, S., Gadappa, S., Pagare, S., Dhaduti, R., and Andurkar, S. (2016). Awareness regarding Janani Shishu Suraksha Karyakram among pregnant women of Marathwada, Maharashtra, India.Int J Reprod Contracept Obstet Gynecol. 5(6):19851991.
12. Barua K. Awareness and utilisation of Janani Shishu Suraksha Karyakram (JSSK) in rural areas of Kamrup District, Assam.Int J Community Med Public Health. 2016 Jun; 3(6):1665-1671.
13. Manjula K, Ravish K. S., Ranganath T. S. The awareness and utilization of maternity benefit schemes among women receiving postnatal services in a tertiary care centre. Int J Community Med Public Health. 2016 Jun; 3(6):1660-1664.
14. Mitra, S., Saha, S., Haldar, D., Sarkar, A. P., Biswas, D., and Sarkar, G. N. (2016), Evaluation of Janani-Sishu Suraksha Karyakram in a Community Development Block of Bankura District, West Bengal, India: A Mixed Methods Approach.Indian J Comm Health, 28(4): 344-351.
15. Chandrakar A., Panda P, Soni G.et al. Awareness regarding Janani Shishu Suraksha Karyakram (JSSK) among mothers: a community based cross-sectional study in rural area of Raipur district, Chhattisgarh. Int J Res Med Sci. 2017 Oct; 5(10):4374- 4379.
16. Jan R., Mir R., Munshi I.,et al. Assessment of free referral services under JSSK in District Ganderbal, Kashmir: a Cross sectional Study. Journal of Medical and Dental Science/ July 16, 2015. Eissn-2278-4748/ vol. 4(57).
17. Johnson AR, Rock B, Catherin N, Sr. Berlin, Rupini R, Kasturi A. 2015. Awareness of Government maternity benefit schemes among women attending antenatal clinic in a rural hospital in Karnataka, India. International Journal of Current Research and Academic Review: ISSN: 2347-3215: 2015: 3(1):137-143
18. Deshpande, S., Gadappa, S., Pagare, S., Dhaduti, R., and Andurkar, S. (2016). Awareness regarding Janani Shishu Suraksha Karyakram among pregnant women of Marathwada, Maharashtra, India.Int J Reprod Contracept Obstet Gynecol. 5(6):19851991.
19. Chatterjee, S., Das, D., Singh, R., Chakraborty, A., and Ghosh, P. (2015). Awareness about Janani Shishu Suraksha Karyakram (JSSK) among pregnant mothers -a community based

study in a rural area of West Bengal, India. IOSR Journal of Dental and Medical Sciences Ver. IV, 14(9), 2279–861.
20. Vinoth Gnana Chellaiyan, Christina S. C., Christopher, Shailaja Daral. Availing entitlements under Janani Shishu Suraksha Karyakram in Tamil Nadu: a reality. Int J Community Med Public Health. 2018 Mar; 5(3):1127-1132.
21. Revu S., Venkata Kodali R., Dongabanti H. Study of impact of JSSK scheme on institutional deliveries and maternal mortality rate: Visakhapatnam district Andhra Pradesh. Int J Res Med Sci. 2018 Jan; 6(1):160-166.