

# ASSESSMENT OF IMPLEMENTATION STATUS OF JANANI-SHISHU SURAKSHA KARYAKRAM (JSSK) FOR FREE REFERRAL TRANSPORT SERVICES AT SELECTED PUBLIC HEALTH FACILITIES IN WARDHA DISTRICT, OF CENTRAL INDIA

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# ABSTRACT

**Background:** In India about 67,000 women die every year due to pregnancy related complications like haemorrhage, infection, high blood pressure; unsafe deliveries, etc that may result in maternal and infant mortality. However, 25% pregnant women still hesitate to access health facilities due to High out of pocket expenses on Medical care and transport required to take pregnant women from home to the health facility and back. Govt. of India had launched, Janani-Shishu Suraksha Karyakram (JSSK) in Wardha district from September, 2011 to ensure that each and every pregnant woman and sick neonates up to 30 days gets timely access to health care services including transport free of cost.

**Objective:** To assess awareness, availability and utilization of Referral transport services to pregnant women and sick newborns at selected Public health facilities in Wardha district, Maharashtra.

**Material & Methods:** This was a community and facility based observational cross-sectional study conducted from September 2012 to August 2013 at two Primary Health Centres (PHCs). All mothers (120) having children less than six months of age were interviewed. A modified pre-tested Questionnaire (JSSK Guidelines)(1) was used to assess the implementation status of JSSK for free referral transport services at villages. All health professionals from selected public health facilities were also interviewed. The collected data was entered and analysed by using software SYSTAT 12.0 version.

**Results:** Only 28.00 % pregnant women and NO sick newborns availed free referral transport services from home to health institutions; Nearly one-fifth (19.24%) pregnant women and 50.00% sick newborns availed free referral transport services from transfer to higher level facility for complications; Nearly two-third (65.83%) pregnant women and no sick newborns availed free referral transport services to drop back home in the study area.

**Conclusion:** Although JSSK had been started in Wardha district since September 2011; however, the awareness and utilization of free referral transport services were not to the fullest extent. Gaps were found between the reported figures by health professionals & actual responses of study participants (mothers).

Key Words: JSSK, Pregnant woman, free referral transport services, Utilization, Availability

# **INTRODUCTION**

In India about 67,000 women die every year due to pregnancy related complications like haemorrhage, infection, high blood pressure; unsafe deliveries, etc that may result in maternal and infant mortality. Similarly, every year approximately 13 lakhs infants die within one year of birth. Out of this, 9 lakhs newborns that die within four weeks of birth  $(2/3^{rd} of the infant deaths)$ ; about 7 lakhs i.e. 75 % die within the first week (a majority of these in the first two days after birth). The first 28 days of infancy period are therefore very important and critical

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to save children. 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 of out-of-pocket expenses. <sup>(1)</sup>

However, 25% pregnant women still hesitate to access health facilities. Important factors affecting access include: High out of pocket expenses on transport required to take pregnant women from home to the facility, to higher facility in case she is referred further, and for going back from the health institution to her home.<sup>(1)</sup>

Govt. of India had launched **Janani-Shishu Surak-sha Karyakram (JSSK)**, to ensure that each and every pregnant woman and sick neonates upto 30 days gets timely access to health care services including transport free of cost.<sup>(1)</sup>

JSSK was implemented in September 2011 in Wardha district and till the time of this study evaluation of JSSK was not done at any place in Vidharbha region and especially in Wardha district. Hence, this topic was selected to know the implementation status (availability and utilization) of JSSK in relation to provision for free referral transport services at selected government health facilities in Wardha district, Maharashtra.

# face interview techniques using a third party validated modified pre-tested Ouestionnaire (JSSK Guidelines) in local language after obtaining informed written consent from mothers and health professionals. The information obtained from mothers include-Socio-demographic information, Awareness, availability & utilization of free referral transport services provided under JSSK. The information from JSSK service providers included Health worker female at Sub-Centres, Medical Officer at Primary Health Centres, Medical superintendent at Rural Hospital, Civil Surgeon at DH, Taluka Health Officers at Taluka health office and District Nodal Officer (JSSK, RCH officer) as per guidelines for JSSK. Secondary data was collected from the available reports and the records at health facility regarding the availability and utilization of the services under the JSSK for verification of primary data. A written permission from the District Health Officer was obtained. The study protocol was approved by Institutional Ethics Committee. The collected data was entered and analysed by using software SYSTAT 12.0 version. The descriptive analysis of data was depicted in graphs, percentages etc. Chi-square test and Z-test was used and significance level was considered, at p-value <0.05.

### RESULTS

# **OBJECTIVES**

- 1. To assess awareness of free referral transport services among pregnant women at selected Public health facilities.
- 2. To find out availability and utilization of referral transport services to pregnant women and sick newborns at selected Public health facilities in the study area.
- 3. To suggest measures to improve availability and utilization of services under JSSK at selected Public health facilities.

# **MATERIAL AND METHODS**

Wardha district has a total population of 12, 96,157 (Census 2011)<sup>(4)</sup> inhabitants in eight blocks and situated in eastern part of Maharashtra. This was a community and facility based observational cross-sectional study conducted between September 2012 to August 2013 at Two Primary Health Centres (PHCs) i.e. one best performing and other least performing for JSSK services based on District Health Office Reports in two blocks i.e. Deoli and Wardha block. All mothers (120) having children less than six months of age who delivered between September 2012 to February 2013 and public health professionals at selected Government Health Facility were included in the study. Multi-stage simple random sampling method was used. Information was collected by face-toThis study was done at two blocks of Wardha district wherein beneficiaries of JSSK and JSSK service providers were studied.

### JSSK Beneficiaries (Mothers)

Socio-demographic profile of study participants(mothers) revealed that maximum number of study participants belong to age group of 20-24 yrs (68.33%) followed by 25-29 yrs (23.33%). Housewives were more (83.07%) followed by farm labours (12.05%) and self-employed (04.88%). Literacy rate was very high (98.00%). However, education level up to intermediate was high (63.65%) at PHC Nachangaon under Deoli block as compared to PHC Talegaon(Ta) under Wardha block (18.51%) at a significance level of p<0.001. No one at both PHCs belonged to socio-economic status - I and V. (Table 1)

Awareness about free referral transport services among study participants: Table 2 revealed that overall awareness about free referral transport services among study participants were (44.17%); highest being at PHC Nachangaon in Deoli block (57.58%) and Talegaon (Ta) in Wardha block (27.77%). The differences in awareness between two PHCs was highly significant (p<0.001).

Among the mothers who were aware, 84.21% demanded for the free referral transport services from PHC Nachangaon in Deoli block and (100.00%) PHC Talegaon (Ta) in Wardha block. Out of which minimal

Particulars			Block A (n=66)		Block B (n=54)		Total study participants(n=120)	
		No.	%	No.	%	No.	%	
Age in years	15-19	0	0	3	5.55	3	2.77	
	20-24	47	71.21	35	64.81	82	68.03	
	25-29	13	19.69	15	27.77	28	23.73	
	30-34	6	9.09	1	1.85	7	5.47	
Occupation	Housewives	51	77.27	48	88.88	99	83.07	
	Farm labourer	11	16.66	4	7.40	15	12.05	
	Self employed*	4	6.06	2	3.70	6	4.88	
Education	Illiterate	0	0	1	1.85	1	0.925	
	Primary school (I-V standard)	0	0	9	16.66	9	8.33	
	Middle school (VI-VII standard)	3	4.54	14	25.92	17	15.23	
	High school (VIII-X standard)	18	27.27	18	33.33	36	30.3	
	Intermediate (XI-XII standard)	42	63.63	10	18.51	52	41.07	
	Graduation & above	3	4.54	2	3.70	5	4.12	
Socio-economic	I	0	0	0	0	0	0	
status**	II	36	54.54	18	33.33	54	43.93	
	III	22	33.33	22	40.74	44	37.03	
	IV	8	12.12	14	25.92	22	19.05	
	V	0	0	0	0	0	0	

#### Table 1: Socio-demographic profile of study participants under the study

\*Tailor, Shop caretaker, tuitions at home, child caretaker.

\*\* Socio-economic status as per Modified B .G .Prasad classification 2013 Total study participants = Block-A + Block -B

## Table 2: Utilization of Free Referral transport services by the study participants (mothers)

Particulars		PHC Nachangaon (n=66)		PHC Talegaon (Ta) (n=54)		Total (n=120)		
			No.	%	No.	%	No.	%
Awareness *		Yes	38	57.58	15	27.77	53	44.17
		No	28	42.42	39	72.23	67	55.83
			n=38		n=15		n=53	
Demanded transport for referral		Yes	32	84.21	15	100.00	47	88.68
		No	06	15.78	00	0	06	11.32
			n=32		n=15		n=47	
Pick up facility availed by mother	From Home to health institution	Yes	09	28.12	04	26.66	13	27.65
		No	23	71.88	11	73.34	34	72.35
			n=16		n=10		n=26≠	
	Transfer to higher level facility for complication (if needed)	Yes	03	18.75	02	20.00	05	19.24
		No	13	81.25	08	80.00	21	80.76

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# Table 2: (Continued)

Particulars			PHC Nachangaon (n=66)		PHC Talegaon (Ta) (n=54)		Total (n=120)	
			No.	%	No.	%	No.	%
			n=66		n=54		n=120	
Drop back t (mothers)	to home *	Yes	58	87.87	21	38.88	79	65.83
		No	08	12.13	33	61.12	41	34.17
			n=32		n=15		n=47	
Pick up fa- cility availed by sick	From Home to health institu- I tion	Yes	0	0	0	0	0	0
		No	32	100.00	15	100.00	47	100.00
newborns			n= 04		n=04		n=08≠	
	Transfer to higher level facility for complication (if needed)	Yes	02	50.00	02	50.00	04	50.00
		No	02	50.00	02	50.00	04	50.00
			n=32		n=15		n=47	
Drop back to home (Sick newborns)		Yes	0	0	0	0	0	0
		No	32	100.00	15	100.00	47	100.00
			n=66		n=54		n=120	
Paid for the transport*		Yes	16	24.24	41	75.92	57	47.50
		No	50	75.76	13	24.08	63	52.50
			n=16		n=41		n= 57	
Amount re-imbursed		Yes	00	00	00	00	00	00
		No	16	100.00	41	100.00	57	100.00

n=number of study participants (Beneficiaries)

 $\neq$  = number of complicated cases

\* P<0.001 (Highly significant)

(28.12%) and (18.75%) PHC Nachangaon in Deoli block & (26.66%) and (20.00%) PHC Talegaon (Ta) in Wardha block availed pick up facility from home to health institution and transfer to higher level facility for complications respectively.

Drop back home transport facility was availed by majority (87.87%) in PHC Nachangaon in Deoli block as compared to (38.88%) PHC Talegaon (Ta) in Wardha block. The difference was statistically highly significant (P<0.001). Nearly (50.00%) sick newborns availed free referral transport facility from transfer to higher level facility for complication in both the blocks and neither of them availed free referral transport facility from Talegaon (Ta) PHC in Wardha block paid for the transport service as compared to 16 (24.24%) in PHC Nachangaon under Deoli block which was highly significant (P<0.001).Re-imbursement of

money was not given to study participants who paid charges for referral transport service at both the PHCs.

#### JSSK Service Providers

A total 16 health professionals were aware about free referral transport services for pregnant womens and sick newborns (upto 30 days).

a) Free referral transport services under JSSK available in Wardha District as reported by JSSK service providers and beneficiaries (Mothers):

JSSK service providers in study area reported that there were total 37 ambulances /referal district vehicles in the district. None of them were fitted with GPS. The district level call centre number was 102. NO EMRT/EMTS, PPP and Other ambulances /referal vehicles were used for Free Referral transport services in the district. Occasionally JSSK service providers hired private vehicle. As reported by JSSK service providers at selected public health facilities 47.00-95.46% to pregnant women and 10.00- 12.54% sick newborns availed free referral transport services from home to health institutions: 20.00-37.78% to pregnant women and 40.00-55.42% sick newborns availed free referral transport services from transfer to higher level facility for complications; 87.75-99.46% pregnant women and 10.00-64.16% sick newborns availed free referral transport services to drop back home but study revealed that only 27.65% pregnant women and none of the sick newborns availed free referral transport services from home to health institutions; 19.24% pregnant women and 50.00% sick newborns availed free referral transport services from transfer to higher level facility for complications; 65.83% pregnant women and none of the sick newborns availed free referral transport services to drop back home.

## DISCUSSION

#### **Socio-demographic profile**

Socio-demographic profile of study participants (mothers) revealed that maximum (68.33%) belonged to age group of 20-24 yrs, occupation wise 83.07% housewives and literacy rate was 98.00%. UNICEF's coverage evaluation survey report for India (2010) reported a figure of 75.80  $\%^{(2)}$  However, literature search for JSSK in India did not show any community based studies for socio-demographic profile.

#### Awareness about free referral transport services under JSSK

All health professionals (100.00%) were aware about free entitlements for pregnant women and sick newborns (upto 30 days).

This study showed awareness about free referral transport services among study participants before or at the time of delivery was 57.58% at PHC Nachangaon in Deoli block as compared to 27.77% at PHC Talegaon (Ta) in Wardha block. The findings were statistically significant (p < 0.001). The poor JSSK awareness at Wardha block might be due to inadequate dissemination of information about the services. Gayatri Rathore observed that there was good awareness about free entitlements among pregnant women. <sup>(3)</sup> However, low awareness was observed by Jhimly Baruah in 2012 at Punjab, Haryana, UP, Bihar <sup>(4)</sup>.

#### **Free entitlements displayed**

JSSK services providers in selected public health facilities reported that free entitlements were displayed at all health facilities in Wardha district. Similar findings were reported by many authors from different parts of India.  $_{\scriptscriptstyle (4-13)}$ 

Although all health functionaries had reported the display of free entitlements but it was observed that 50.00% of the sub - centres did not displayed the free entitlements charts. However, mothers from the study area also reported that none of the sub- centres in PHC Talegaon (Ta) under Wardha block displayed free entitlements.

## Availability of free referral transport services provided under JSSK

As reported by District health officials there were a total 37 ambulances /referal district vehicles in the district for free referral transport services. Neither of them was fitted with GPS. Similar findings were reported by MOH&FW Maharashtra (2011-2012)<sup>(12)</sup>, Department of Health & Family Welfare Meghalaya (2012)<sup>(9)</sup>, NRHM West Bengal (2012)<sup>(7)</sup>, NHSRC (Q<sub>1</sub> 2012-2013) <sup>(10)</sup>. NRHM Nagaland (2012)<sup>(8)</sup> reported that 66 state owned referral vehicles were fitted with GPS facility.

NO EMRT/EMTS, PPP referral vehicles were utilized. Similar findings were reported by NRHM Nagaland (2012)<sup>(8)</sup>, Department of Health & Family Welfare, Meghalaya (2012)<sup>(9)</sup>, NRHM West Bengal (2012)<sup>(7)</sup> except NRHM Uttarakhand report showed that No EMRT/ EMTS referral vehicles were utilized <sup>(11)</sup>

#### Utilization of free referral transport facility

The present study revealed that nearly 28.00 % pregnant women and none of the sick newborn availed free referral transport services from Home to Health institutions; 19.24% pregnant women and 50.00% sick newborns availed free referral transport services from transfer to higher level facility for complications; 65.83% pregnant women and no sick newborns availed free drop back home transport facility in the study area. The utilization of drop back home transport facility was found to be more because information was given at the time of delivery or immediately after delivery the pregnant women about free referral transport. The reason for low utilization was poor awareness.

SIHFW Rajasthan (2012-2013) found that nearly (59.50%) pregnant women and (01.79%) sick newborns availed free referral transport services from home to health institution. pregnant women (71.26%) and (03.06%) sick newborns availed free referral transport services from health institution to home. <sup>(14)</sup> Gayatri Rathore (2012) concluded that there was 88.00 % achievement in provision of referral transport facility for pregnant women. <sup>(3)</sup>

IIHMR (2012) concluded that there was 88.00 % achievement in provision of drop back transport facility for pregnant women (From Hospital to Home).<sup>(5)</sup> MOH&FW Maharashtra reports (2011-2012) stated that (18.34%) PW and delivered mothers; (01.00%) sick neonates availed free referral transport services from home to health institutions, (16.21%) pregnant women and delivered mother; (01.80%) sick neonates availed free referral transport services from health institutions to high level health institution for any complication, (40.00%) pregnant women and delivered mothers; (04.00%) sick neonates availed free referral transport services from health institutions to home. <sup>(12)</sup> NHSRC (Q1:- 2012-2013) found that Referral Transport vehicle was used for 50% of pregnant women in Orissa. Transport for pregnant women from home to hospital was good at Bihar, Andra-Pradesh, Gujarat, Haryana, and Maharashtra. However, drop back transport facility was poor at all the places largely because of poor awareness. <sup>(10)</sup>

## **CONCLUSION:**

Although JSSK had been started in Wardha district in September 2011; however, the awareness and utilization of free referral transport services were not to the fullest extent. Gaps were found between the reported figures by health professionals & actual responses of study participants (mothers). This has resulted due to poor information dissemination across the health facility.

#### **Recommendations**

After careful analysis of the data the following recommendations were suggested:

- 1. Awareness at the community level should be enhanced through wider dissemination of IEC materials in local language, by undertaking awareness camps, during ANC check-up using print and electronic media and at the facility level by organizing workshops for all the health care professionals.
- 2. All the JSSK free entitlements to be displayed at all health care facilities.
- 3. The free referral transport service with GPS facility to be provided to one and all at right place and right time. Public private partnership can also be worked out for providing transport.

#### **Limitation:**

The limitation of the study was that the study could not be extended to all 08 Blocks, 02 Sub District Hospitals, 08 Rural Hospitals, 27 Primary Health Centres, 180 Sub-Centres, because of time constraints.

## REFERENCES

- 1. Ministry of Health and Family Welfare. Guidelines for Janani-Shishu Suraksha Karyakram (JSSK). National Rural Health Mission, Maternal Health Division, Government of India, Nirman Bhavan, New Delhi, June 2011.
- Ministry of health and Family Welfare, UNICEF & Government of India (2009). Coverage evaluation survey 2009 All India report 2010; PP: 68,73. (Available at- http://www.unicef.org/india/health.html)
- Gayatri Rathore. Janani-Shishu Suraksha Karyakram: Rajasthan Experience, National Rural Health Mission, Rajasthan 2012.
- 4. Jhimly Baruah. Janani Shishu Suraksha Karyakram-Progress and challenges (10states). Public health planning, National Health Systems Resource Centre.Government of India, Nirman Bhawan, New Delhi 2012.
- 5. Indian Institute of Health Management and Research. Janani Shishu Suraksha Karyakram- Report; Rajasthan Oct 2011 to March 2012.
- 6. Himanshu Bhushan. Janani- Shishu Suraksha Karyakram-Review. Ministry of Health and Family Welfare, Government of India, Nirman Bhawan, New Delhi, September 2012.
- National Rural Health Mission. Implementation status of JSSK Report. Government of West Bengal. West Bengal 2012.
  (1) Line and Line and Line and Cherry Computer (Computer States)

(Availableat-www.wbhealth.gov.in/NRHM/pdf/JSSKReport )

- National Rural Health Mission. Implementation status of JSSK Report. Government of Nagaland, Nagaland 2012 (Available at-www.wbhealth.gov.in/NRHM/pdf/JSSKReport)
- 9. Department of health and Family Welfare. Implementation status of JSSK Report. National Rural Health Mission, Government of Meghalaya, Meghalaya 2012. (Available athttp://meghealth.nic.in/NRHM/pdf/JSSK Report/)
- 10. National Health System Resource Centre. Janani-Shishu Suraksha Karyakram- Review New Delhi, Quarter report 2012-2013.
- 11. National Rural Health Mission. Implementation status of JSSK (District level) Report, Goverment of Uttarakhand , Tehri Garhwal Uttarakhand 2013.
- Ministry of health and family welfare. Implementation status of JSSK Report; National Rural Health Mission (2011-2012) Maharashtra. (Available at- www.nrhm.maharashtra.gov.in/schjssk.html)
- 13. Rakesh Kumar. Maternal Health: Review meeting of state mission directors: Janani-Shishu suraksha karyakram. Ministry of Health and Family Welfare, Government of India Oct 2012.
- 14. State Institute of Health & Family Welfare. Implementation status of JSSK Report. Jaipur Sep 2012- July 2013. (Available at-www.sihfwrajasthan.com/ppt/full/JSSY.pdf)