Panacea Journal of Medical Sciences 2024;14(3):680–685

Content available at: https://www.ipinnovative.com/open-access-journals

Panacea Journal of Medical Sciences

Journal homepage: http://www.pjms.in/

Original Research Article

A study on service utilization of janani shishu shuruksha karyakram among beneficiaries of rural areas of Jabalpur District, India

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ARTICLE INFO

Article history:
Received 09-08-2023
Accepted 06-02-2024
Available online 21-12-2024

Keywords:
JSSK
Pregnant mother
Utilization
Benefits
Maternal mortality

ABSTRACT

Introduction: Despite drop in maternal deaths in India, state's MMR is still high at 173 per 100000 live births. Maternal and child health programme in India had change a lot since last decade. But target is still far to achieve. **Objective**: To determine the utilization of JSSK scheme among Pregnant women and various reasons for the non utilization of the above service.

Materials and Methods: It was a descriptive Cross sectional study done in the rural areas of Jabalpur district. A sample of 400 was acquired. Multistage random sampling was used for selection of study participants. House to house visit was conducted to collect data using predesigned, pretested semi-structured questionnaire. Collected data was checked for its completeness and correctness before analysis.

Result: Out of 400 study participants only 80 (20%) study participants were fully benefitted during hospitalization under JSSK. only 28 % of the study participants who were more than 25 years old had fully utilized JSSK related services. The association between age of the study participants and full utilization of JSSK services was statistically highly significant (P<0.001). The most common reason cited for not using free transport from home to health institutions was delay in reaching 108 vehicles by 71.65% of participants who had not used the transportation.

Conclusion: Unawareness about the scheme and unavailability of services in the health facilities add up the problem which eventually increased their out of pocket expenditure.

1. Introduction

Maternal health indicators reveal not only how well the health system is operating, but also the utilization of services, degree of equity in public service delivery, and the social status of women. The high amount of maternal mortality in some parts of the world reveals disproportions in access to health services, and display the gap between rich and poor.[1] As per global report of WHO, the number of females dying due to complications of pregnancy has been reduced by 34% in the last two decades.[2] Despite this global drop in maternal deaths, maternal mortality was high in the developing countries like Afghanistan, Bangladesh, India, Indonesia, Pakistan etc.[3] India is one of the five countries that accounted for half of the maternal deaths worldwide.[3,4]

Government of India has launched the Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011. The scheme is to benefit pregnant women who access Government health facilities for their delivery. Moreover, it motivates those who still choose to deliver at their homes to opt for institutional deliveries. All the States and UTs have initiated implementation of the scheme.[4]

The Government of India's Janani Shishu Shuraksha Karyakram scheme providing various free entitlements and services to Pregnant Women and infants with an aim to improve maternal and child health services utilization at public health facilities and reduce MMR (maternal mortality rate) and IMR (infant mortality rate) in the

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https://doi.org/10.18231/j.pjms.2024.121

country.[4] According to SRS 2016-18, MMR in India was 113 maternal deaths per 100000 live births.[5] Although the country's MMR has dropped but the Madhya Pradesh MMR remains 173 maternal deaths per 100000 live births.[5] These SRS data compels the researcher to further explore into the health system to expose the gaps and lacunas. Till date no studies on JSSK have been undertaken in the Jabalpur division of the state of Madhya Pradesh. With this aim, the present study on JSSK in rural area of Jabalpur district carried out to determine the utilization of JSSK scheme among Pregnant women and various reasons for the non utilization of the above service.

2. Material and Methods

It was a descriptive Cross sectional study done in the rural areas of Jabalpur district. Study started from March 2019 to Feb 2020. A sample of 400 was acquired using the formula z^2pq/l^2. Where p was the prevalence of institutional delivery in rural area of Jabalpur District that was 79%.[6]

The women who were permanent resident, had delivered live child in public health facility in the past 1 year or who had registered in Anganwadi centre as well as sub health centres of that area were included in the study. Women who did not found at home or house was found locked on two repeated visits were excluded from the study. Multistage random sampling was used for selection of study participants. Out of the 7 blocks in Jabalpur district 2 blocks were purposively selected based on the past year performance, in terms of Institutional deliveries in public health facilities to total deliveries. One was best performing block- Sihora and other was low performing block – Panagar. Then from each block, 2 sub health centre was selected, from each sub health centre 2 village were selected randomly. After the selection of village 20 eligible participants were selected using lottery method after getting the list from anganwadi worker of the village. House to house visit was conducted to collect data using predesigned, pretested semi-structured questionnaire having information on the following points - Sociodemographic details of study participants, Details of antenatal, intranatal and post-natal period, Services availed through JSSK and reasons for not availing JSSK. Data obtained was coded and entered using Microsoft office excel 2016. Collected data was checked for its completeness and correctness before analysis. Data was finally tabulated, analysed and interpreted by using IBM Statistical software for Social sciences (SPSS 20). Chi-square test was applied to find out the association between different variables. Statistical significance was evaluated at 5% level of significance. p value less than 0.05 was considered statistically significant. Ethical Permission was taken from the ethical committee of Institution. Purpose of the study was clearly explained to the study participants before commencing interview and Informed Verbal Consent was obtained from study participants.

3. Results

In the present study the full utilization of JSSK means study participants received benefit of all JSSK entitlements during stay in hospital. Out of 400 study participants only 80 (20%) study participants were fully benefitted during hospitalization under JSSK. As shown in table.1. 70.25% of the beneficiaries were availed free admission and stay. Out of those who were advised lab investigations at the time of delivery 83.96 % availed free. While 70.75% mothers availed free drugs and consumables. Among all beneficiaries, 15 required blood at the time of delivery and 10 of the beneficiaries availed free blood transfusion services. 42% of the study participants received both way free transport facility. All 9 study participants who required transport in case of referral from one health facility to other health facility utilized it free of cost. 92% of the study participants availed free diet during stay. Out of 347 who underwent normal delivery only 67(19.25%) utilized all services free of cost. Similarly, for LSCS out of 53 only 13(24.50%) study participants utilized all services free of cost.

shows that only 28 % of the study participants who were more than 25 years old had fully utilized JSSK related services.The association between age of the study participants and full utilization of JSSK services was statistically highly significant (P<0.001).

Also it was observed that 17% of illiterate study participants had utilized full JSSK benefit whereas 36% study participants who were educated up to high school and above had fully utilized the services under JSSK. When full utilization of JSSK services was compared with current working status of study participants, it was observed that 19% of housewives utilized full services as compared to the 27% of working mothers. When full utilization of JSSK services was compared among various caste, Half of study participants who belonged to General caste utilized fully JSSK service than other study participants of other caste (OBC/SC/ST). It was observed that 15 % of mothers belonging to nuclear family utilized full JSSK services as compared to 24 % among mothers belonging to joint family. In the present study it was observed that 38 % of mothers who belonged up to class II utilized fully services when compared with 32 % of the mothers who belonged to class III and 33% of below classes. This difference was statistically highly significant (P<0.001).

As shown in table.3. as far as parity is concerned, JSSK full utilization rate was 21% in multiparous mothers and 18 % in primiparous mothers this difference was statistically significant (0.05%). Also 27 % of study participants who were hospitalized in rural health centres for delivery fully utilized services under JSSK While 18% of study participants hospitalized in tertiary centres utilized all services under JSSK. 24.50% of the study participants who underwent LSCS utilized all services under JSSK while for

Table 1: Distribution of study participants according to utilization of different entitlements free of cost provided under JSSK

S.No.	Entitlements utilization	Yes Frequency (%)	No Frequency (%)
1	Free normal delivery (n=347)	67 (19.30)	280 (81.70)
2	Free C-Section (n=53)	13 (24.50)	40 (75.50)
3	Free drugs and consumables	283 (70.75)	117 (29.25)
4	Free diagnostics (n=293)	246 (84)	47 (16)
5	Free diet during stay in health facility (n=392)	360 (92)	32 (8)
6	Exemption from user charges (n=400)	281 (70)	119 (30)
7	Free provision of blood (n=15)	10 (67)	5 (33)
8	Free transport between facilities in case of referral (n=9)	9 (100)	0
9	Free transport from home to health institution	340 (85)	60 (15)
10	Free drop back from health institution to home	183 (45.75)	217 (54.25)
11	Availed both way free transport facility (n=400)	167 (42)	233 (58)
12	Beneficiaries utilized all services under JSSK during hospitalization (n=400)	80 (20)	320 (80)

Table 2: Association between socio-demographic variables with services utilization status under JSSK.

Demographic variables	Utilization status		Total (N=400)	Chi-square value & P value
	Full Utilized (n=80)	Under-utilized (n=320)		
Age (in years)	**Frequency (%)**	**Frequency (%)**	**Frequency (%)**	
18-25	49 (17)	239 (83)	288 (100)	χ2=5.732 df =1, P*= 0.01
>25	31 (28)	81 (72)	112 (100)	
Education of Study participant				
Illiterate	3 (17)	15 (83)	18 (100)	
Primary school	22 (15)	123 (85)	145 (100)	χ2=14.98 df =3 P*=0.001
Middle school	28 (17)	134 (83)	162 (100)	
High school and Above high school	27 (36)	48 (64)	75 (100)	
Education of study participants husband				
Illiterate	2 (50)	2 (50)	4 (100)	
Primary school	14 (21)	46 (79)	66 (100)	χ2=5.506, df =3, P =0.138
Middle school	29 (16)	158 (84)	181 (100)	
High school & above	35 (23)	114 (77)	149 (100)	
Occupation				
Housewife	64 (19)	276 (81)	340(100)	χ2=1.961, df =1, P =0.161
Unskilled worker	16 (27)	44 (73)	60(100)	
Caste				
General	5 (50)	5 (50)	10(100)	
Other backward class	39 (19)	167 (81)	206(100)	χ2=6.327, df =3, P = 0.096
Scheduled caste	19 (22)	68 (78)	87(100)	
Scheduled tribe	17 (18)	80 (82)	97(100)	
Type of family				
Nuclear	30 (15)	165 (85)	195(100)	χ2=5.066, df =1, P*= 0.024
Joint	50 (24)	155 (76)	205(100)	
Socioeconomic status				
Upper middle Class (II)	9 (38)	15 (62)	24(100)	
Middle Class (III)	18 (32)	39 (68)	57(100)	χ2=11.67, df = 3, P*=0.008
Lower middle Class (IV)	31 (16)	158 (84)	189(100)	
Lower Class (V)	22 (17)	108 (83)	130(100)	

Table 3: Association of study participants according to place and type of delivery with utilization status of services under JSSK

Parameter		Utilization status		Total (%)	Chi-square value & P value
		Full Utilized n=80 (%)	Under Utilized n=320 (%)		
Place of delivery	SHC ,PHC & CHC	30 (27)	81(73)	111(100)	χ2=4.8366 df = 2 P =.08
	SDH	23 (16.5)	116 (83.5)	139 (100)	
	DH and Medical college hospital	27 (18)	123 (82)	150 (100)	
Type of delivery	Normal	67 (19.30)	280(80.70)	347 (100)	χ2 = 0.783 df = 1 p-value = 0.37
	LSCS	13 (24.50)	40 (75.50)	53 (100)	
Parity	1	28 (18)	125 (82)	153 (100)	χ2=4.893, df =1 P*=0.026
	>1	52 (21)	195 (79)	247 (100)	

* Statistically Significant

Table 4: Distribution of study participants according to reason for underutilization of different entitlements provided under JSSK

S.N o	Reason for underutilization of entitlements	Frequency	%
1.	**Reason for not using free transport from home to health institutions**	**N=60**	**%**
	Not called	10	16.67
	Called but no response	06	10
	Delay in reaching 108 vehicle	43	71.67
	Not aware of 108 service	1	1.66
2.	**Reason for not availing free drugs and consumables***	**N=117**	**%**
	Not aware of free drugs and consumable	74	63
	Required drugs and consumables were not under govt. supply in hospital	48	41
	Required drugs and consumables were not available during that time	33	28
3.	**Reason for not availing free diagnostics ***	**N=47**	**%**
	Advised test was not available in health facility	**30**	64
	Advised test was not conducted at that time in health facility	**19**	40.5
	Not aware of free testing facility	**36**	76.50
4.	**Reason for not availing free diet during stay in the health institutions**	**N=32**	**%**
	Quality of food was not good	14	43.75
	Preferred home food	18	56.25
5.	**Reason for not availing free blood transfusion service**	**N=5**	**%**
	Free testing facility was not available at that time in hospital	5	100
6.	**Reason for non exemption from user charges ***	**N=119**	**%**
	Admission charge was mandatory in that health facility	60	50
	Not aware of the free admission provision	83	70
7	**Reason for not using free transport from health institutions to home**	**N=217**	**%**
	Not called	113	52
	Called but no response	30	13.82
	Delay in reaching 108 vehicle	48	22.12
	Not aware of 108 drop back service	26	11.98

*Multiple response

normal delivery it was 19.30% of study participants who utilized all services under JSSK.

depicts the reason for component wise underutilization of various entitlement of JSSK byparticipants, the most common reason cited for not using free transport from home to health institutions was delay in reaching 108 vehicles by 71.65% of participants who had not used the transportation. Similarly, for not availing free drugs and consumables the most common reason was not aware of free drugs and consumables (63%) and secondly required drugs and consumables were not under govt. supply in hospital (41%). Reason for not availing free diagnostic facility was not aware of free testing facility (76.50%). reason regarding not availing diet component was, preference of home food which indirectly gave hint towards quality of food provided in hospital. Most common reason cited by 5 study participants who did not availed free blood transfusion service was testing charge was mandatory at that time in that health facility and lack of awareness among them. Reason for non exemption from user charge was that admission charge was mandatory in one tertiary health facility.

4. Discussion

The present study was carried out in the rural areas of Jabalpur district to find out the utilization of JSSK scheme. Only 20% of the study participants had fully utilized the JSSK scheme in our study which was in contrast to this finding of Tyagi et al who reported 60% participant mother received all JSSK benefits during hospitalization while Barua K et al stated that 83.2% participant mothers fully utilized free services under JSSK.[7,8] It shows weak execution of the JSSK scheme in our study area.

In our study utilization of free diagnostics, drugs, diet where similar to the previous studies done by Tyagi et al and Chellaiyan VG et al. as this was may be due to better awareness of participants regarding this component of the Scheme.,[8,9] while a contradicting finding was found in study done by Mitra S et al. who reported low utilization of free referral transport, free diet, free drugs and free diagnostics.[10] This was may be due to the fact their study design had more study participants far from the health facility. The association in age group and utilization might be due to the study participants who are more than 25 years old were mostly multiparous and had utilized JSSK services in previous delivery and which in turn increased their awareness regarding JSSK entitlements utilization in present delivery compared to study participants of age 18-25 years who were mostly primiparous. It was also validated when we most that mostly multiparous study participant fully utilized the JSSK service as compare to primiparous. Parity of mother had a statistically significant influence on the awareness level regarding JSSK as it was also reported by Chatterjee S et al.[11] full utilization of JSSK services gradually increases as the education status of the study participant increases. This association might be due to study participants who were more educated had more awareness compared to low educated study participants and this awareness might be helping them to utilize more services. It was also observed in the present study that, as socioeconomic status increases education status of the study participants also increases in present study, which in turn increased their awareness and helped in utilization of JSSK services during hospitalization. Most important reason for underutilization of different entitlements provided under JSSK was may be due to lack of awareness among study participants as well as in family members. Secondly malpractice, poor infrastructure, and corruption in the public health facilities are also important obstacles in achieving the aim of safe motherhood and healthy child. As it was observed in our study that the user charges were not exempted in the public health facilities. It was also reported by the Sharma p et al. in their study that 31.1% of the participant mothers had spent extra money to avail the benefits which was free under JSSK.[12] Studies from UP, Odisha, West Bengal also found that many of the Community health centres do not have essential medicine, blood banks and storage facility.[13–16] Moreover, they do not find gynaecologist in many community health centres or they had adequate facilities for C-section. These lacunas in the health system compel the participants mother to pay extra money to get the services or go to private facilities which leads to increase in out of pocket expenditure, which ultimately effecting the main goal of the programme.

5. Conclusion

The full utilization of the JSSK scheme in present study was very low, although some components of JSSK schemes were utilized successfully. The main reason for not utilizing the full benefit was definitely low awareness among the pregnant mothers and relatives. Although they were using the free consumables, diet but were unaware of the fact that these benefit were given to them under JSSK scheme. Unawareness about the scheme and unavailability of services in the health facilities add up the problem which eventually increased their out of pocket expenditure.

6. Source of Funding

None.

7. Conflict of Interest

None.

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Cite this article: Jain AK, Rai N, Thakur A, Kasar PK. A study on service utilization of janani shishu shuruksha karyakram among beneficiaries of rural areas of Jabalpur District, India. *Panacea J Med Sci* 2024;14(3):680-685.