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# **Research Article**

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# A study to assess the knowledge and utilization of Janani Suraksha Yojana among postnatal mothers attending the urban health centre of Bangalore medical college and research institute

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# **ABSTRACT**

**Background:** Mothers and children's comprise greater portion of the population. Hence they are the major beneficiaries of health services, and also considered as vulnerable group or special risk group. The Government of India had launched Janani Suraksha Yojana (JSY) on April 12, 2005 as a part of the National Rural Health Mission (NRHM), to ensure safe motherhood and to reduce maternal and neonatal mortality. The objective of the study was to assess the knowledge regarding JSY among postnatal mothers registered and delivered in the Urban Health Training Centre (UHTC) of BMCRI and assess the utilization of JSY among postnatal mothers.

**Methods:** A cross sectional study was conducted among 120 postnatal mothers at UHTC of Bangalore Medical College and Research Institute (BMCRI), Bangalore during period of 2 months from 1<sup>st</sup> May to 30<sup>th</sup> June 2015. All the postnatal mothers who had registered and delivered in an UHTC BMCRI, Bangalore. Pretested, predesigned and a semi structured questionnaire was used for interviewing the study group of postnatal mothers.

**Results:** Out of 120 postnatal mothers, 78.3% were aware of JSY scheme among which the majority (63.3%) came to know through the local ANM. 76.7% had attended ≥4 ANC visits, 82.9% had received cash assistance under JSY and only 58.3% women consumed hundred IFA tablets.

**Conclusions:** The awareness and utilization of JSY in the study area was found to be satisfactory.

Keywords: Knowledge, Utilization, Institutional delivery, JSY

# INTRODUCTION

Maternal and Child Health issues still continue to be a national and global health issue. Around eight million women suffer pregnancy-related complications and over half a million die every year. Almost 99 per cent of all maternal deaths occur in developing countries and around two-thirds of maternal deaths in 2000 occurred in 13 of the worlds' poorest countries with India alone accounted for one quarter of all maternal deaths. Worldwide, Maternal mortality ratio (MMR) ranges from 8/100,000 live births in developed countries to 500/100,000 live

births in developing regions. There is gradual improvement in the scenario. In India, the MMR declined from about 520/100,000 live births in 1990 to nearly 254/100,000 in 2004-2006 and to 212/100,000 in 2007-2009. Despite this, the numbers of maternal deaths remained high, accounting nearly 56,000 pregnancy related deaths in the year 2010, the main cause being large number of deliveries were conducted at home by untrained persons.<sup>3</sup>

Concerned particularly with the maternal and neonatal health, the Government of India (GOI) launched various

schemes to promote institutional deliveries from time to time.<sup>4</sup> One such new maternity benefit scheme is Janani Suraksha Yojana - JSY (In Hindi Language, Janani = Mother, Suraksha = Protection, Yojana = Scheme). JSY was formally launched by central government on April 12, 2005 under National Rural Health Mission. The main objectives of JSY scheme were to reduce Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) through encouraging institutional deliveries; particularly in below poverty line families. Under this scheme cash incentives are given to women who opt for institutional deliveries and also to the local health functionary who motivates the family for institutional delivery and helps them in obtaining ante-natal and post-natal services.<sup>2</sup> The main components of the programme are mobilizing the community with the help of intervention worker and providing cash assistance as an incentive for institutional delivery<sup>5</sup> as a mean to reduce maternal and neonatal death.

In this scheme, the states where there is a low rate of Institutional deliveries is classified as 'Low Performing States(LPS)( the states of Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam, Rajasthan, Orissa and Jammu and Kashmir), whereas the remaining states are termed as High Performing States(HPS).<sup>6</sup> The beneficiaries of JSY includes all women in both rural and urban areas, belonging to below poverty line aged 19 years and above, up to first two live births, SC/ST in high performing states, whereas in low performing states, all women, including those from SC and ST families delivered in health centres, government or accredited private health institutions will get the benefit.<sup>7</sup>

Since the launch of JSY, the numbers of institutional deliveries have started increasing. Against the 27.61 Lakh beneficiaries in 2006- 07, the number of beneficiaries increased to 53.13 Lakh in 2007-08.<sup>2</sup> The number of skilled birth attendant and institutional deliveries has increased from 26.1% and 33% in 1992 to 73.1% and 90% in 2012.<sup>8</sup> But it is not only the mere establishment of a physical facility, also a combination of factors such as distance, availability and quality of skills, adequacy of infrastructure and access to alternative sources of care that seem to influence health-seeking behavior. The program provides a continuum of care package that includes antenatal care (ANC), institutional delivery, postpartum care, and family planning, coordinated by the health care functionary.<sup>2</sup>

Mere provision of a community health worker and cash incentives are not sufficient conditions for women to be motivated towards institutional delivery. There are several other interacting factors which may play a role in creating a positive environment towards utilizing the services of the community worker and the hospitals. Some of the important factors like awareness, knowledge, attitude, utilization pattern and the satisfaction of the beneficiaries influence any program's success. These

factors need to be studied for successful implementation of the programme.

Objectives of the study are to assess the knowledge of JSY among postnatal mothers registered and delivered in an Urban Health Training Centre (UHTC) of BMCRI and to assess the utilization of JSY among them.

# **METHODS**

A Cross sectional study was conducted for a period of 2 months from 1st May to 30th June 2015 among all the postnatal mothers who had registered and delivered in the UHTC BMCRI, Bangalore. All postnatal mothers aged 19 years and above who had registered ANC and delivered in the UHTC and those mothers who came for their postnatal visits to UHTC having at least one under five child which implied that she/he was born in the post implementation phase of JSY in the time period of 2 months from 1st May to 30th June were included in the study. Women who had a still birth or abortion were excluded. A total of 120 mothers were included in that time period. The potential beneficiaries were explained the purpose of the study, assured regarding the confidentiality of the information obtained and an informed written consent was obtained before proceeding with the interview.

After getting clearance from the ethical committee, information was obtained on the socio-demographic details (name, age, religion, education, income, socio-economic status), obstetric history (place of antenatal check-ups, number of check-ups), place of delivery (home/ institutional), awareness of the services provided by health workers during last pregnancy, and extent of utilization of JSY including cash benefits, Antenatal visits, Iron Folic acid tablets (IFA), Tetanus toxoid vaccination and transportation facilities have been collected using an interview based Pretested, predesigned semi structured questionnaire.

The data collected were entered in a Microsoft excel sheet and analysed using Epi info version 7 and descriptive statistics and the results were presented in the form of tables, figures and bar diagrams.

#### RESULTS

Among the 120 postnatal mothers, 45%, 40% and 15% belongs to the age group of 19 to 25years, 26-30 years and 31-35 years respectively. Majority of the mothers belongs to Hindus 70 (58.3%), followed by Muslims 40 (33.3%), and Christians 10 (8.4%).

Around 35.8% of the respondents had schooling up to high school level, (16.7%) respondents are illiterate and only (3.3%) respondents are graduate. Majority of the respondents 64 (53.3%) were found to be housewife with only 3 (2.5%) respondents were professional. Out of 120

postnatal mothers only 28.3% (34) belongs to SC/ST and the rest 71.7% (86) belongs to other category.

Around of half the postnatal mothers (55%) belongs to BPL category.

Table 1: Demographic characteristics of study subjects.

Socio demographic factors		Numbers (120)	Percentage (%)
Age group (years)	19-25	54	45
	26-30	48	40
	31-35	18	15
Education	Illiterate	20	16.7
	Primary	15	12.5
	Middle	24	20
	High school	43	35.8
	Diploma/ PUC	14	11.7
	Graduate	04	3.3
Occupation	Professional	03	2.5
	Shop owner	00	0
	Skilled	17	14.2
	Unskilled/ Labourer	36	30
	House wife	64	53.3
Religion	Hindu	70	58.3
	Muslim	40	33.3
	Christian	10	8.3
Caste	Scheduled caste	26	21.7
	Scheduled tribe	08	6.6
	Other categories	86	71.7

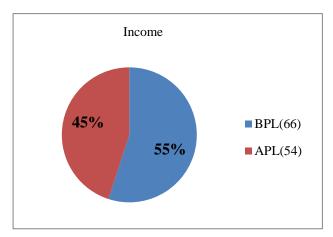


Figure 1: Categorization based on income among study subjects.

All postnatal mothers belonging to Below Poverty Line, aged 19 years and above, SC/ST who have up to 2 live births are considered eligible for getting cash assistance.

Out of 66 BPL mothers 18 belongs to SC/ST and rest (48) belongs to other category. Among 34 SC/ST, 22 postnatal mothers were eligible for getting cash assistance under the JSY scheme and from other category 48 were eligible for getting cash benefit under the scheme.

Table 2: Eligible JSY beneficiaries of postnatal mothers.

Beneficiaries	Number(70)	Percentage (%)
SC/ST	22	31.4
Others	48	68.6

# Knowledge

When the respondents were asked whether they were aware about the JSY scheme and possible institutional care and cash benefits, majority of respondents responded positively.

Table 3: Knowledge about JSY among study subjects.

Are you aware of JSY	Number(120)	Percentage (%)
Yes	94	78.3
No	26	21.7
Are you aware of the possible benefits of JSY		
Institutional delivery	82	68.3
Cash assistance	72	60.0

Table 3 shows that out of 120 mothers only 94(78.3%) mothers were aware of Janani Suraksha Yojana scheme and around 82(68.3%) mothers were aware of Institutional Delivery benefits.

# Utilization

Extent of utilization of JSY among the mothers during antenatal period were assessed by asking about the time of registration to ANC clinic, number of ANC visits, IFA tablets, Tetanus Toxoid Vaccination and utilization of cash benefits.

Out of 120 postnatal mothers only around 48 (40%) of the mothers had registered early in the first trimester whereas around 72 (60%) mothers were registered only after 12 weeks of pregnancy at the health facility with majority of respondents 92 (76.7%) had attended four or more ANC visits. However only 70 (58.3%) mothers had consumed 100 Iron Folic Acid tablet properly and the

most remarkable part being all the 120 mothers had received both the doses of tetanus toxoid vaccination.

Majority of the mothers 76 (63.3%) were getting benefit of JSY through ANM and only 44 (36.7%) of mothers were getting benefits through Anganwadi workers (25%) and Link workers (11.7%) respectively.

Table 4: Utilization of antenatal care services by study subjects.

Components of ANC	Number(120)	Percentage (%)
Month of registration		
<12 wks	48	40.0
>12wks	72	60.0
No. of ANC visits		
<4	28	23.3
≥4	92	76.7
100 IFA tablets taken		
Yes	70	58.3
No	50	41.7
Tetanus toxoid		
vaccination		
Yes	120	100
No	00	00

Table 5: Distribution of acceptors of JSY according to source of information about JSY.

Source of information for benefit from JSY	Number(120)	Percentage (%)
ANM	76	63.3
AWW	30	25.0
Link worker	14	11.7

Table 6: Received cash assistance among JSY eligible beneficiaries.

Did you receive 600 Rs for institutional delivery	Number (70)	Percentage
Yes	58	82.9
No	12	17.1

Among 120 postnatal mothers only around 70 were found to be eligible for getting cash assistance under the JSY scheme. Out of 70 eligible mothers only 58 (82.9%) had received the cash assistance. This includes 18 out of 22 mothers from SC/ST and 40 out of 48 mothers from other category belonging to Below Poverty Line.

#### DISCUSSION

In our present study around 78.3% were aware about the scheme. Though around 4/5<sup>th</sup> of the respondents were aware about the scheme a considerable amount of mothers were not aware about it. However among them only 68.3% were aware about the possible benefits of

institutional care, cash assistance and transportation under JSY. And the main source of knowledge about the scheme is from ANM (63.3%). Other sources being link workers and Anganwadi workers.

Regarding utilization only 40% of the women were registered within 12 weeks of pregnancy with health personnel in our study as compared to a study by Ramakant Sharma in Rajasthan where a greater percentage (85%) of women has registered early within 12 weeks of pregnancy<sup>9</sup> and only 19.3% has registered in another study in Orissa by Bella Patel Uttekar et al.<sup>10</sup>

Around 76.7% women had four or more ANC visits and 23.3% had less than 4 visits as compared to a lower percentage (32.1%) of women went for four or more ANC visits in a study in Andhra Pradesh by K. Mallikharjuno Rao.<sup>11</sup>

In the present study, only 58.3% women consumed hundred IFA tablets as compared to study by Ramakant Sharma, where 86.5% received hundred IFA tablets.<sup>10</sup>

A smaller proportion of women in our nation consumed IFA tablets for more than 90 days as per NFHS-III data i.e. 22.3%. 12

Though around 82.9% of the eligible women had received cash assistance, few didn't receive due to lack of proof of belonging to SC, ST or BPL status and lack of proper knowledge about the scheme.

# **CONCLUSION**

Although Majority of respondents knew about the scheme regarding monitory benefit for institutional delivery, the name of the scheme is known to a very small proportion. Majority of the eligible women did not have any proof of belonging to SC, ST or BPL status and a few lack proper knowledge about the scheme.

IEC activities (Information, Education and Communication) via various channels including print, electronic, traditional, personal communication should be strengthened to increase the awareness among antenatal mothers and to achieve safe motherhood and child health.

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