Implementation status of Janani Shishu Suraksha Karyakram in Ahmedabad district

Divya B Barot¹, Bhagyalaxmi A²

¹Department of Community Medicine, Dr. M. K. Shah Medical College and Research Center, Ahmedabad, Gujarat, India, ²Department of Community Medicine, B. J. Medical College, Ahmedabad, Gujarat, India

Correspondence to: Divya B Barot, E-mail: divyabarot1404@gmail.com

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ABSTRACT

Background: The government has launched various schemes for reduction in maternal mortality rate and neonatal mortality rate. The Janani Shishu Suraksha Karyakram (JSSK) was launched to increase the institutional delivery by providing the entitlements for mother and infants by government. **Objectives:** The objectives of the study were to assess the implementation status of JSSK and to identify the beneficiaries and provider perspective. **Materials and Methods:** The cross-sectional study was carried out during January 2014-December 2015. A total of 19 primary health centers (PHCs) and 10 community health centers (CHCs) were selected to study the implementation status of JSSK in Ahmedabad district. **Results:** All the PHCs and CHCs had basic infrastructure facilities. In 50% PHCs and the entire CHCs provider perceived that there was overload in the work after the implementation of scheme. Provider perceives that there was lack of awareness of entitlements among beneficiaries. **Conclusion:** All the PHCs and CHCs have the required infrastructure facilities to provide maternal and child health services. The laboratory services were available in all health centers, but it was inadequate.

KEY WORDS: Janani Shishu Suraksha Karyakram; Provider; Primary Health Center; Community Health Center

INTRODUCTION

Every day approximately 800 women die globally from preventable causes related to pregnancy and childbirth. Most maternal deaths occur in developing countries and almost one-third occur in South Asia.^[1] Despite the long history of well-intentioned family welfare policies and some recent progress, maternal and child mortality in India remain high. Maternal mortality ratio has fallen from 398 deaths/100,000 live births in 1997–1998 to 212 deaths/100,000 live births in 2007–2009 and 178 in 2010–2012.^[2] India aims to bring down the maternal mortality ratio to 109/100,000 live births

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by 2015. Similarly, it aims to reduce the infant and child mortality to 28 and 42/1000 live births, respectively.^[3]

Maternal and child morbidity and mortality stand out as huge challenges in India. To address this challenge, the Government of India launched the National Rural Health Mission in 2005 with the sole aim of protecting and promoting the health, well-being of its citizens.^[4] It aims at reducing maternal and childhood morbidity and mortality through timely interventions such as engagement of Accredited Social Health Activists at village levels, Rogi Kalyan Samiti, Janani Suraksha Yojana (JSY), and training for skilled attendant at birth to name a few.^[5] Appropriate medical attention at the time of delivery can prevent 75-80% of total maternal deaths.^[6] Although after launch of JSY the Institutional delivery increased up to 25% the pregnant women still hesitate to access health facilities.^[7] Promotion of institutional deliveries is an important strategy for reducing maternal morbidity and mortality.

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To reinforce the strategy, the Government of India had launched Janani Shishu Suraksha Karyakram (JSSK) on June 1, 2011, to ensure that each and every pregnant woman and sick neonates up to 30 days get timely access to healthcare services including transport free of cost. The initiative includes free and no expense delivery including cesarean section for all pregnant women delivering in public health institutions and no user charges would be levied. Entitlements for pregnant women would include free transport from home to the facility, to higher facility in case of referral, and drop back home from health institution to home. It also includes free drugs and consumables, free diagnostics, free blood wherever required, and free diet during stay in the facility.^[7] The initiative is estimated to benefit more than 1 crore pregnant women and increase access to health care for over 70 lakh women delivering at home.^[7] Similar entitlements have been put in place for all sick newborns accessing public health institutions for health care until 30 days after birth.^[7] To understand the extent of implementation of JSSK and beneficiaries, providers perspective regarding the program this study on assessment of the implementation status of JSSK was undertaken.

MATERIALS AND METHODS

The present study was conducted in the Ahmedabad district which is the seventh most popular district in India and the central part of Gujarat in Western India.^[8] The Ahmedabad district has a population of 7,045,314 among them 19.82% of people live in rural area according to the 2011 census.^[8] Ahmedabad district has eight talukas excluding corporation area and there are 37 primary health centers (PHC) and 10 community health centers (CHCs). All government centers were esteemed provider for this program.

The cross-sectional study was carried out during January 2014-December 2015 among providers and beneficiaries of JSSK in Ahmedabad district. Necessary permission was obtained from higher authorities in district before the beginning of the study. The proportion of deliveries conducted under JSSK from government institutional deliveries was 65% in 2012–2013 and 55% in 2013–2014. Considering the average 60% deliveries under JSSK, the sample size was calculated using the following formula, sample size = 4pq/L2considering allowable error was 10%. The calculated sample size was 256. There were 10 CHCs in Ahmedabad district and all are included for the study. The study was also undertaken in the PHCs in every taluka of Ahmedabad district. There were 37 PHCs in eight talukas of Ahmedabad district. Of 37 PHCs in the district, every alternate PHC was selected. A total of 19 PHCs were selected for the study. All providers of CHCs and selected PHCs were interviewed.

For the selection of the beneficiaries, the mothers who were delivered and were present at the time of visit were included

Health services	PHC (<i>n</i> =19)		CHC (<i>n</i> =10)	
	Number	%	Number	%
HB	19	100	10	100
Blood group	9	47.37	8	80
Urine routine and micro	3	15.79	7	70
HIV	15	78.95	8	80
RBS	5	26.32	6	60
TC/DC	1	5.26	4	40
Serum Widal	6	31.58	3	30
VDRL	2	10.53	2	20
HBsAg	10	52.63	5	50
Serum creatinine	2	10.53	1	10
P/S for MP	17	89.47	8	80
Urine pregnancy test	19	100	10	100

VDRL: Venereal disease research laboratory, RBS: Red blood cells, HBsAg: Hepatitis B surface antigen, HB: Hemoglobin, PHC: Primary health center, CHC: Community health center, TC: Total count, DC: Differential count

 Table 2: Services provided at health centers

Health services	PHC (<i>n</i> =19)		CHC (<i>n</i> =10)		
	Number	%	Number	%	
Antenatal services	19	100	10	100	
Natal services	19	100	10	100	
Postnatal services	19	100	10	100	
Treatment of sick infants (medicines)	19	100	10	100	
Treatment of complications	1	5.26	4	40	
Other services					
Food for pregnant women	19	100	10	100	
Food for relative	5	26.32	4	40	
Newborn kit	16	84.21	7	70	
IEC	15	78.95	8	80	

PHC: Primary health center, CHC: Community health center,

IEC: Information, education and communication

and interviewed regarding their perception. The satisfaction was judged on the basis of predesigned questionnaire and solely subjective perception of the beneficiary. The study included 235 beneficiaries (190 beneficiaries from PHCs and 45 beneficiaries from CHCs) and 29 providers. The permission for data collection was taken from district health authority and consent of all providers and beneficiaries taken before the interview for the study. Confidentiality and privacy were assured to all participants.

The data collection of the providers done by the predesigned and pretested questionnaire. The provider's questionnaire contains the sociodemographic information of provider, logistics and facilities available at health center for the successfully carrying out antenatal, intranatal, and postnatal care of mother, the care of newborn, and the treatment of complications. The provider was assessed for all the aspects and entitlements to check how properly the program got implemented. It also contains the difficulties and benefits for successfully running of the program. Data were scrutinized for completeness and consistency. Data were entered and analyzed using Microsoft Excel and Epi-Info software.

RESULTS

A total of 19 PHCs and 10 CHCs were selected to study the implementation of JSSK in Ahmedabad district. Selected PHCs and CHCs were assessed for infrastructure facilities and logistics. Twenty-nine providers were interviewed in these PHCs and CHCs for assessing the quality of services provided under JSSK. The 235 beneficiaries were interviewed for the perception regarding implementation status of program in the community.

The JSSK was implemented on June 1, 2011. Out of studied 19 PHCs and 10 CHCs, more than 60% of the PHCs and 90% of the CHCs, the JSSK was implemented during March-April 2012. More than 80% of PHCs had <10 beneficiaries per month under JSSK among them 7 PHCs had <5 beneficiaries per month. Moreover, 80% of CHCs had 20–40 beneficiaries while the highest beneficiaries were seen in only one CHC, in which there were 85–90 deliveries per month. Out of total deliveries conducted in Ahmedabad district for the year 2012–2013 and 2013–2014, it was observed that deliveries conducted under JSSK were increased from 17.01% to 20.4% in the past 2 years.

All the PHCs and CHCs had basic infrastructure facilities such as outpatients department (OPD) room, labor room (delivery room), vaccination center, indoor ward, and laboratory. There was no blood bank associated with any health center although three CHCs have blood storage facilities. Essential medicine was available in all health centers. All the PHCs and CHCs had required facilities to perform normal delivery while four PHCs and seven CHCs were also had equipment required to perform cesarean section. Only two of 10 CHCs had ultrasonography (USG) facility.

Medical officers were available in almost all the PHCs and CHCs. Specialist services were also available in few (30%) of the PHCs as gynecologists and pediatricians were on visit in six of 19 PHCs, whereas anesthetists were on visit in only two PHCs. More than 60% of PHCs have staff nurse. No specialists were available in three out of 10 CHCs and gynecologists were available in only four CHCs. The pediatricians and anesthetists were either on visit or on call in seven CHCs for delivery. About 90% of CHCs have staff nurses.

Only hemoglobin and pregnancy test were done in all PHCs and CHCs. Basic investigations such as blood group and hepatitis B surface antigen (HBsAg) done in 50% of the PHCs [Table 1].

The interview of the providers observed that in all of the health centers, there was provision of providing food for pregnant mother, but only in five PHCs and four CHCs, there was provision of food for one person or relative accompanying the delivered mother. In more than 80% of PHCs and 70% of CHCs, they also provide the newborn kit consisting of two pairs of clothes for baby and baby items such as baby soap, sponge, and powder. The information, education and communication material enlisting the information about the entitlements related to pregnant mothers and children up to 1 year were displayed in 15 PHCs and 8 CHCs [Table 2].

The Gujarat government has introduced a "Khilkhilat" ambulance with inbuilt global positioning system (GPS) tracking system for the transport facility under JSSK program. The Khilkhilat ambulances were available in seven CHCs and two PHCs. There was an alternative form of transport like rickshaw; private vehicle was available in 16 PHCs and all the CHCs [Table 3].

Another important component of the program was Grievance Redressal System. It was observed from the interview with the providers and beneficiaries that there was very less development for this system. Only in few centers, there was a display of address and phone numbers of the authority. Majority of the beneficiaries were not aware of this system and did not utilize the facility.

DISCUSSION

Maternal and child morbidity and mortality stand out as huge challenges in India. The JSSK provides cashless services during pregnancy and in postpartum mothers up to 42 days to each and every pregnant mother regardless of age, caste,

Table 3: Transport facility at health centers

Transport facility	PHC (<i>n</i> =19)		CHC (<i>n</i> =10)	
	Number	%	Number	%
Government ambulance	17	89.47	10	100
108 EMRI	19	100	10	100
Private vehicle	2	10.53	0	0
Khilkhilat ambulance	2	10.53	7	70
Vehicle fitted with GPS	2	10.53	7	70
Free transportation assured from home to health institute for delivery	10	52.63	8	80
Free transportation assured between facilities in case of further referral?	16	84.21	10	100
Free transportation assured for drop back from institutions to home?	15	78.95	9	90
Alternative arrangement	16	84.21	10	100
Private tie up for transport	13	68.42	7	70

GPS: Global positioning system, PHC: Primary health center, CHC: Community health center

Table 4:	Perception	of provider	regarding JSSK
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Variables	PHC (<i>n</i> =19)		CHC (<i>n</i> =10)	
	Number	%	Number	%
Receiving regular fund	19	100	10	100
Work overload due to scheme	9	47.37	10	100
List of doctors in emergency	10	52.63	9	900
List of doctors for referral	18	94.74	10	100
List of referral centers	19	100	10	100
Training sessions for health workers by medical officer	19	100	10	100

PHC: Primary health center, CHC: Community health center

 Table 5: Perception regarding JSSK services among beneficiaries

beneficiaries						
Variable	PHC (<i>n</i> =190)		CHC (n	=45)		
	Number	%	Number	%		
Satisfactory	147	77.37	41	91.12		
Not satisfactory	43	22.63	4	8.89		
Total	190	100	45	100		

PHC: Primary health center, CHC: Community health center

social status, and economic condition of the family.^[7] In the year 2013-2014, 20.4% of the total deliveries were conducted under JSSK in rural Ahmedabad. All the PHCs and CHCs have the required infrastructure facilities such as OPD room, labor room, vaccination center, indoor ward, and laboratory services to provide maternal and child health services. The laboratory services were available in all health centers, but it was inadequate as basic investigations such as HIV, HBsAg, and blood group were done in only half of the centers. Even USG facilities were not available in most of the health centers. The blood storage facility was found in one-third of CHCs although there was no blood bank available at any health centers. Medical officers and trained staff were available in most of health centers, but specialists such as gynecologist, pediatrician, and anesthetist were available in only few of the health centers. Basic antenatal, natal, and postnatal services were provided in all centers, but complicated cases were managed in only one PHC and few of the CHCs. There was very good transport system in every health center in association with 108 services. In seven CHCs and two PHCS, there was the presence of Khilkhilat ambulance with inbuilt GPS tracking system. The referral system was good in case of emergency. All health centers were providing the free and cashless health-care services to beneficiaries. Providers also feel that there was lack of awareness among beneficiaries. It was observed that Grievance Redressal System was less developed and beneficiaries were not aware of the system. More than 90% and 70% of the beneficiaries were satisfied with the services provided at CHC and PHC, respectively.

The deliveries conducted in government health-care facilities were gradually increasing and it was reflected in the average

deliveries per month in each and every health center. This may be due to better public awareness, no charges for normal deliveries, cesarean section, referral, and drop back facility. A study by Kakkad et al.^[9] reported that institutional deliveries increased by 20.32% and registered deliveries by 20.77% after launch of JSSK. The USG facilities were not available in most of the health centers so majority of the beneficiaries had to get it done from private facility. One of the big hurdles for implementation of the program was lack of human resources at the health-care facilities; medical officers and trained staffs were available in most of health centers in this study, but specialists such as gynecologist, pediatrician, and anesthetist were available in only few of the health centers. This has led to more referral to higher centers, whenever there was a complication. The beneficiaries had difficulty to avail transport services in emergency and also had to spend money for transportation due to the distance to health facility.^[10] In the present study, only 50% of the beneficiaries were provided the transport service from home to facility. The probable reason could be lack of awareness and non-availability of an ambulance at the time of labor or that the family arranged a vehicle on its own. In contrast, majority of them were provided transport facility for referral and drop back. The utilization of drop back transport facility was found to be more because provider has given information at the time of delivery or immediately after delivery. Similar findings were observed in a study by Jan et al.[11] that 51.7% of recently delivered women were provided free ambulance services from home to the facility and 68% were provided free service from facility to the home and money by cheque was also provided to 2.8% of the women only who had hired a vehicle. More numbers of beneficiaries of CHCs were satisfied as compared to beneficiaries who availed services from PHC. This could be due to the availability of better facilities and specialist services at CHCs. The reason was that beneficiaries had to avail services from private set up either due to lack of awareness or individual choice due to the previous experiences with the government facility.

Another important component considered for the satisfaction with the program is Grievance Redressal System.^[12] Under JSSK, the government has provided all the health centers to set up a desk to take feedback, suggestions, and also to address issues related to complaints and grievances related to free entitlements. The health centers also have to display the name, addresses, numbers, and email of the authorities so the people could get benefit from the system. In the present study, it was observed from the interview with the providers and beneficiaries that system was not fully implemented. Only in few centers, there was a display of address and phone numbers of the authority. Majority of the beneficiaries were not aware of this system and did not utilize the facility. Similar finding was seen in the 7th Common Review Mission report on JSSK that appropriate mechanisms for Grievance Redressal require strengthening across all states.^[13]

Strength and Limitations of Study

A study completely covers all the facets from provider perspective required to ensure services under program which was the strength of the study, whereas perception regarding satisfaction of beneficiaries under JSSK was a subjective matter that is the limitation of this study.

CONCLUSION

JSSK was a good scheme for maternal and child health; however, due to lack of infrastructure facilities, transports facilities, and non-availability of specialists complicated cases had to be referred and there was also expenditure incurred by the beneficiaries. More rigorous implementation of JSSK and increasing awareness among people regarding program may further reduce the financial hardships faced by households, improve access, and utilization of institutional deliveries and contribute toward the reduction of maternal and infant mortality.

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