

Assessment of service provided in implementation of Janani Shishu Suraksha Karyakram service in Pune, Maharashtra

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Abstract

Health schemes such as Janani Shishu Suraksha Karyakram (JSSK) was introduced with the main objective to reduce infant and maternal death and high institutional delivery. The real challenge lies in the implementation of JSSK scheme in a diverse region where the geographical and background characteristics of beneficiaries varies considerably. The question arises, is there any constraints faced by service providers in implementing the JSSK service? In this paper, we evaluate the health schemes from the perspective of provider side and examine the constraints and difficulties in implementing JSSK service. The major objective of this study is to evaluate the functioning of the JSSK scheme and to understand the views and constraints of the health personnel about the implementation of JSSK in Pune district of Maharashtra. Findings suggest referral cases have considerably increased due to the availability of transport service resulting in a high number of referral cases in DH, SDH and WH. Hence, adequate measure should be in place to provide the services at the referring facilities itself as well as upgrade the infrastructure at the facilities referred. The condition of drivers needs to be addressed as in most of the visited facilities only one driver is available and is expected to be on duty 24 hours. Network issues are a hindrance in seeking health service in difficult to reach areas. Mechanism to identify availability of network beforehand and if possible, under CSR the network provider should be encouraged to provide free service and app for efficient networking of facilities in providing timely transport service.

Keywords: Janani Shishu Suraksha Karyakram, Health facilities, Service Providers, Transport

Introduction

In view of the difficulty being faced by the pregnant women and parents of sick newborn along with high out of pocket expenses incurred by them on delivery and treatment of sick- new-born, Ministry of Health and Family Welfare (MoHFW) has taken a major policy initiative to provide completely free and cashless services to pregnant women including normal deliveries and caesarean operations and to sick new born (up to 30 days after birth) in Government health institutions in both rural & urban areas.

One of the purposes of health financing schemes, as stated by WHO, is to ensure that individuals have access to effective public health and personal health care.^(2,6) The JSSK scheme has five important components: Transport, Drugs, Diagnostics, Diet and free user charges. This scheme is intended to provide cashless delivery, and improved health care delivery.

Government of India has launched the new scheme Janani Shishu Suraksha Karyakram (JSSK) on 1st June, 2011 and all the states have rolled out the scheme immediately. The initiative entitles all pregnant women delivering in public institutions for absolutely free and no-expense delivery, including caesarean section besides to and fro transport. Similar entitlements have been put in place for all sick newborns accessing public health institutions for health care till 30 days after birth. This has now been expanded to cover infants. They would also be entitled to free treatment besides free transport, both ways and between facilities in case of referral.

Evaluating how the health system responds to newly introduced health schemes, enables policy and decision makers to better understand the scheme, so that midcourse corrections can be made in a timely and effective manner. In addition, evidence derived from assessing the system's responsiveness helps guide allocation of resources, by showing which domains are most important and critical to improve, at the same time as allowing policy development specific to national, regional, or population group needs.⁽⁵⁾

The real challenge lies in the implementation of JSSK scheme in a diverse region, wherein the geographical and background characteristics of beneficiaries varies considerably. The highlight of the JSSK scheme is free transport and with the availability of free transport will invariably lead to an increase in demand of institutional delivery as well as drop back to home. With an increase in demand for transport service there may be an increase in referral cases, especially when public health institutions are facing shortage of specialist and limited infrastructure. How well the service provider are meeting these challenges in implementing the JSSK service? Does JSSK scheme require flexibility, modification and changes as per region to region? In this paper, we evaluate the JSSK scheme from the perspective of provider side and examine the constraints and difficulties in implementing JSSK scheme.

Objective

The objective of the study is to evaluate the implementation of the JSSK service with respect to all its dimensions in Pune district of Maharashtra. The specific objectives are: to evaluate the adequacy of the infrastructure under JSSK; to understand the views/opinion of the health personnel about the implementation of JSSK and the issues faced by them and any other constraint in the timely implementation of JSSK service in Pune district; and to identify the gaps, if any, in implementation of JSSK, and suggest the measures to improve the same.

Materials and Method

Allocation of the sample size & identification of the sample-units: The study was conducted during February-March 2016 in three blocks in Pune districts viz Ambegaon, Baramati and Daund blocks with an average, high and low utilization of JSSK service respectively.

The target group of our study was mainly the service providers such as Specialist, Medical officer, Staff Nurse, Sister in charge, ANM (Auxiliary Nurse Midwife), ASHAs (Accredited Social Health Activists) and supporting staff Drivers who are directly involved in the health care needs and providing JSSK service to the beneficiaries. Taking into account these target-groups of the district, after the selection of blocks three PHCS from each block were selected based on PPS method. The nearest first referral unit from these PHCs such as RH(Rural Hospital), SDH (Sub District Hospital), WH (Women Hospital) and DH (District Hospital) whichever nearer was visited for our study. Overall three PHCs (Primary Health Centres) from 3 blocks; 3 each of SDHs and RHs, and one each of WH and DH were visited. Health service providers consisting of 22, MO/ (Medical Officer) Specialist, 12

Staff Incharge/Staff Nurse/ Matron, 19 ANM/LHV, and 16 Drivers were interviewed in our study.

Findings from Health Facilities: The delivery of facility-based health services requires service providers, health infrastructure, and a complex system that varies from facilities to facilities. The provision of timely, quality free of cost, health services is a challenge itself. Based on the analysis of key factors of health service provision at facilities this paper focuses on the availability of the following services:

Infrastructure: Facilities with adequate human resource and infrastructure are important to provide timely treatment to patients. The unavailability of either of these, leads to high referrals and at times fatal to patients.

Except for WH (Women Hospital) all the other health facilities have access to neonatal and infant care. Considering the high number of deliveries Intensive care unit for neonates and sick infants is very much required in WH. In addition, there is no Blood bank (BB) in WH and has a substantial number of referring patients for emergency cases. Ambulance JSSK service of 102 is available in all the facilities visited except in RH (Rural Hospital) Supa where it is not available for the past 2 years.

The driver available in WH is on a contractual basis and receives a daily salary of Rs 200. The sanctioned posts of drivers are filled at all the facilities except in RH (Rural Hospital) Godegaon wherein the only driver available is under NRHM.

Apart from DH (District Hospital) which has four, 102 ambulances and drivers the rest of facilities have one ambulance and driver each. In spite of SDH Manchar having a load of high delivery it has only one 102 ambulances. NGO ambulance is available in PHC Peth and RH Ghodegaon. Except in WH Baramati and PHCs Murti and Mhalunge where JSSK service is provided to only mothers, in other facilities JSSK services are provided to both mothers and sick infants.

Table 1: Availability and Nonavailability of JSSK Service in Visited Health Facilities, Pune, Maharashtra

JSSK Components	Facilities
Blood if required (Available)	DH Pune, SDH Manchar and Baramati
Diet for sick infants (Available)	DH Pune, SDH Manchar, RH Supa, PHCs: Mhalunge Padval, Morgaon, and Taleghar
Pickup for mother not available	WH Baramati, PHCs Rahu and Kurkumbh, RH Ghodegaon and Yavat, WH Baramati
Referral, Diet and drop back not available	PHC Kurkumbh and Rahu
Pick up for the sick infants not available	WH Baramati

Transport Service: One of the important components of JSSK is free transport service. Call Centre is the first level of contact in seeking free transport service. All the facilities visited have an access to call Centre. Record maintenance seems to be an uphill task in many of the facilities visited and varies by facilities and by persons handling it. In every facility there is a provision of a log book the maintenance of which need to be upgraded.

In general, 108 vehicles are provided in RHs, SDHs, WH and DH for referral and drop back service. The number of pickup as shown in Fig. 1 reflects not only the awareness of pick-up service, but also the demand in seeking the transport service and institutional delivery. There is considerable difference in the utilization of transport

service from only 3 cases of pick- up service in PHC Peth and RH Supa to 310 cases in PHC Morgaon. On further probing it was revealed that patients prefer to deliver at PHC Morgaon instead of RH Supa.

The number of pick up cases were in the range of 100-170 cases in SDHs and the highest number of pick up cases of 865 during the reference period was reported from DH. The number of drop back service was much higher than number of pick-up. The highest number of drop-back services of 1276 services in DH implies a high number of women admitted for delivery and not accessing pick up service but also high referral cases to DH. The highest number of 200-250 referred cases was observed in DH during the reference period. The number of referral cases of mothers during the reference period was less than 50 cases in PHCs: Mhalunge Padval, Morgaon, Murti, Sangvi and WH which implies availability of services within the facilities.

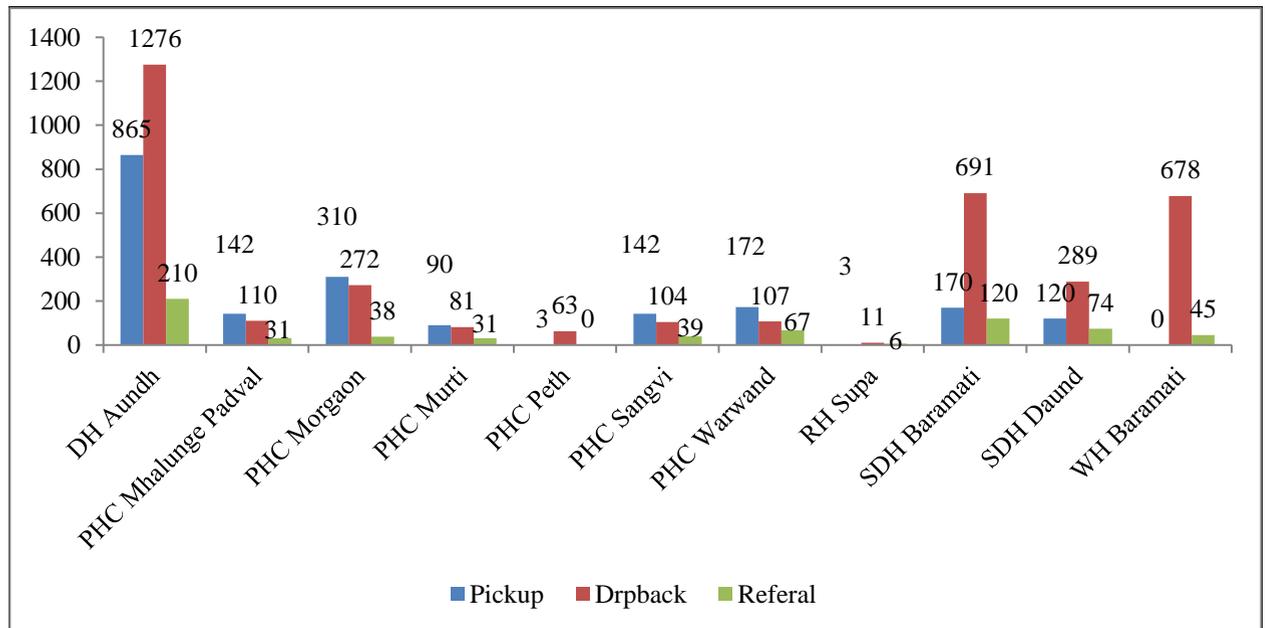


Fig. 1: Number of Women Provided Transport Service under JSSK Service in Visited Health Facilities, Pune, Maharashtra

The highest number of pick- up service of infants with 340 cases and highest number of drop back service of 550 during the reference period was reported from DH as shown in Fig. 2. Drop back service of infants was provided in SDH and RHs. The number of referral cases was highest in DH with 81-90 cases during the reference period and 31-40 in WH. This reflects that although pick up and drop back service is provided the sick infant treatment needs to be established. In addition, except for DH, SDH Baramati the drop back cases of infants are nil this reflects overdependency on DH as reflected from high number of referral cases. Hence, the emphasis should on provision of health care facilities in RHs, WH, SDHs and PHCs.

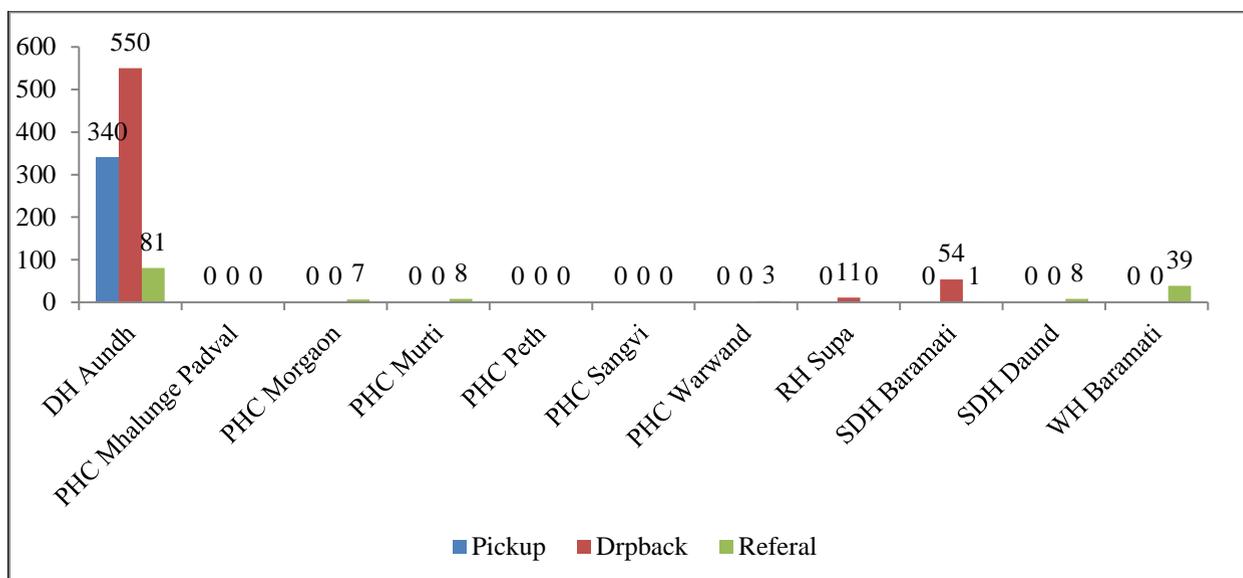


Fig. 2: Number of Infants Provided Transport Service under JSSK Service in Visited Health Facilities, Pune, Maharashtra

When probed for the reasons for not providing/timely pick up and drop back service for infants, the reasons were vehicle not available on time (PHC Mhalunge), Time taken for the pick up, drop back and referrals are only maintained in log books, etc. Vehicle condition was not good in RH Supa; driver was not available in PHC Rahu; and the area was inaccessible as reported by PHC Taleghar and Murti.

Some of the difficulties in providing JSSK service were High demand for the service (RH Supa), Limited funds (PHC Murti), Funds not available on time (PHC Murti), drivers not available on time (PHC Warwand) etc.

Facilities PHC Kurkhumbh, Murti, Rahu, Peth, RH Yavat, Ghodegaon, WH Baramati reported that the POL fund is not enough for diesel and the minimum amount required for diesel per year ranges from Rs 100000 in PHC Rahu, RH Yavat and WH Baramati to Rs 40000 in RH Ghodegaon.

Facilities PHCs: Peth, Taleghar, Moregaon, Warwand; RH Supa; SDH Manchar and Baramati; DH Aundh make alternative arrangement of vehicle by reimbursing for private vehicles. PHC Peth and Taleghar, request other facilities and free of cost vehicle which is provided by Sharad Bank.

Requirement of ambulance varies from facilities to facilities. Out of the visited 17 facilities, ambulance is adequate in only nine facilities. Facilities PHC Rahu, RH Yavat and Supa, SDH Daund and WH Baramati require an additional ambulance for smooth functioning of JSSK service. Except for facilities PHC Mhalunge, Taleghar and RH Ghodegaon all the other facilities require additional drivers to provide pick up and drop back services.

Referral Services: This section as depicted from Table 2 provides the reason for patient's referral by facility

wise. Patients were not referred to PHCs hence three each of RHs, and SDHs, one each of DH and WH constitutes our sample of 8 facilities.

When patients are referred to a facility, it reflects the availability of specialist and infrastructure to treat the patients. It also reflects the non-availability or limited availability of both or either of human resource and infrastructure in the referring facility. Hence, facilities were asked about the type of facilities from where patients are referred to the present facility as well the type of facilities they are referred.

In RHs patients are mainly referred from PHCs. In SDH Daund patients are mainly referred from PHCs. In SDH Manchar and Baramati patients are referred from SCs, PHCs, RHs, and Private facilities. Interestingly, in SDH Baramati, the patients are referred from WH and in DH as well. This reflects, the availability of specialist and infrastructure in SDH, Baramati to treat the patients. In WH patients are referred from SCs, PHCs, RHs, SDHs, and Private hospitals. DH gets referred patients from SCs, PHCs, UHPs, RHs, SDHs, and Private hospitals. Overall, SDH, WH and DH are the most preferred facility for referral patients reflecting availability of specialist and infrastructure. Based on this a mapping of preferred facilities can be thought of for easy and timely transportation.

In all the visited facility's register of the patients who were referred are maintained. Health service providers, such as ANM, Nurse and MO refer the patients. The number of patients admitted as against the number of patients referred by causes reflects not only the need to strengthen the infrastructure and human resources of the referring facility but also highlights the need to examine cases of unnecessary referrals.

The major causes of referral were Bleeding, delayed labour, twin/ multiple pregnancies, APH,

severe anaemia; Obstructed labour, Pre-eclampsia and Abnormal presentation. In SDH, WH, and DH hypertension or pre-eclampsia/eclampsia in previous pregnancy, and premature birth were some of the major causes.

In the case of neonates Sepsis was the major cause of referrals in all the facilities and LBW (Low Birth Weight) was also the major cause except in DH. Gestation < 34 weeks and asphyxia were also the major causes as well as Respiratory distress (rate>60/min, or grunt retraction), convulsion and feeding problem.

PHCs usually refer the emergency cases to RHs Godegaon and Yavat whereas SDHs Daund and Manchar refer to Sassoon Hospital. RHs refer the emergency cases to Sassoon hospital or SDH Baramati and in rest of facilities, Medical college Sassoon hospital is the place of first referral. Nearly all the cases of referrals were provided with referral slip and free transport service.

Treatment for stabilization is provided to all the mothers in all the facilities. The major cause of the referral for sick mothers was bleeding and obstructed and delayed labour and is surprisingly observed in all the facilities. Premature birth and treatment for fertility were the prominent clinical reason for referral of sick mothers from RHs. Birth weight less than 1800 gm and severe jaundice were the prominent reason for referrals of sick infants in PHC, SDH, and RH. Respiratory distress was the major cause of referral of sick infants in the RH. Convulsion and respiratory distress were the major causes of referrals of sick infants in SDHs, RHs and PHCs. Sepsis was the major cause of referrals of sick infants in DH whereas Asphyxia, LBW (low birth weight) and severe jaundice was the prominent causes of referrals of sick infants in WH.

In PHC Murti, RH Yavat, SDH Baramati and WH Baramati no one accompanies the referred patient as the patients are mainly referred in 108 vehicles which has adequate health care facilities.

Table 2: Reasons for in referral and out referral in Visited Health Facilities, Pune, Maharashtra

Type of facilities	Reason for referring in	Reason for referring out
CHCs	<ul style="list-style-type: none"> • Delayed labour • Bleeding • Twin/Multiple pregnancies • APH • Abnormal presentation • Height less than 140 cm 	<ul style="list-style-type: none"> • Premature births • Admitted for hypertension • Surgery for reproductive tract • Treatment for infertility • Others
SDHs	<ul style="list-style-type: none"> • Severe Anemia* • Bleeding* Delayed labour • Obstructed labour • Premature birth • Twins or multiple pregnancies • Congenital anomaly • Treatment for infertility • RH negative in previous pregnancy • Preclampsia/eclampsia • APH 	<ul style="list-style-type: none"> • Bleeding* • Severe anemia* • Weight of previous baby less than 2.5kg
DH	<ul style="list-style-type: none"> • Admitted for hypertension • Delayed labour • Obstructed labour • Twins or multiple pregnancies • Severe anaemia • Congenital anomaly • Abnormal presentation • Preclampsia/eclampsia • APH 	<ul style="list-style-type: none"> • Bleeding • Tuberculosis • Others
WH	<ul style="list-style-type: none"> • Stillbirths or neonatal loss* • Three or more spontaneous abortions. • Height <140cm • Abnormal presentation • APH* • Preclampsia/Eclampsia • Severe anaemia • RH negative in previous pregnancy* • Spinal deformities • Treatment for infertility 	<ul style="list-style-type: none"> • Known heart disease • APH* • RH negative in previous pregnancy* • Bleeding • Stillbirth, or neonatal loss*

	<ul style="list-style-type: none"> • Congenital anomaly • Admission for hypertension • Weight of previous baby <2.5kg • Bleeding • Twin or multiple pregnancies • Premature birth • Obstructed labour • Delayed labour 	
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Note * = common causes for referring in and out

Summary, Conclusion and Recommendations

The major highlight of JSSK transport service will be adversely affected if the condition of drivers is not improved in most of the visited facilities only one driver is available and is expected to be on duty 24 hours. Network issues are a hindrance in seeking health service in difficult to reach areas.

Referral cases have considerably increased due to the availability of transport service resulting in high number of referral cases in DH, SDH and WH. With increase in demand adequate measure should be in place to provide the services at the referring facilities itself as well as upgrade the infrastructure at higher level of facilities. Considering the high number of deliveries Blood bank (BB) and intensive care unit for neonates and sick infants is not available in WH. Overall, SDH Baramati, WH and DH are the most preferred facility for referral patients reflecting availability of specialist and infrastructure. Based on this a mapping of preferred facilities can be thought of for easy and timely transportation.

Table 3 gives the summary of findings and recommendation by facility wise.

Table 3: Summary of Observation and Recommendation to Improve JSSK Service in Pune, Maharashtra

Transport Service in DH/WH/SDH	
Output in terms of Patient services	Low pick up; High cases of Inreferral and drop back
Process	<ul style="list-style-type: none"> • Recruitment: Driver appointment through contractual agency; Meagre salary (salary for 11 months in place of 12 months); delay of salary for months. • Referred cases, hence low pick up and prefer 108 vehicles due to complicated/emergency cases
In practise	<ul style="list-style-type: none"> • In most of the facilities only one driver expected to be on duty 24 hours • Mainly use 108 transport service due to complicated/ emergency cases. • Nonuniformity in maintenance of log book
Recommendation	<ul style="list-style-type: none"> • Direct appointment of drivers and strict guidelines in appointment and payment • Guidelines for proper maintenance of log books. <p>Incentives</p> <ul style="list-style-type: none"> • A Supportive system for drivers in terms of provision of free training/higher education/coaching class if served for a minimum period, especially for drivers recruited in difficult to reach areas. • Incentives for the family in terms of affordable through Public Private Partnership • Conducive atmosphere to stay with family in terms of school, provision of part time/full time employment to spouse. • Rewards /Media coverage for best health staffs • Complaint cell to be in place. • Mechanism for social networking among villagers/and higher authorities • No. of vehicles and drivers based on demand and supply • Availability of landline service
Transport Service in CHC	
Output in terms of Patient services	Low pick up; High number of cases are outreferred
Process	Same as DH/WH/SDH
In practise	Transport facilities, mainly for referral cases driver expected to be on duty 24 hours
Recommendation	<ul style="list-style-type: none"> • Same as DH/WH/SDH except that no. of cases are less • Mechanism to identify availability of network before hand
Transport Service in PHC	

Output in terms of Patient services	<ul style="list-style-type: none"> • No. of cases varies by PHC wise from high to low • Caesarean section and emergency cases are referred out
Process	Same as DH/WH/SDH
In practise	Transport facilities, mainly for referral cases driver expected to be on duty 24 hours
Recommendation	<ul style="list-style-type: none"> • Same as DH/WH/SDH except that no. of cases are less • Mechanism to identify availability of network before hand
Recommendation	<p>Transport Service in Difficult to reach areas</p> <ul style="list-style-type: none"> • Social networking/availability of vehicle and driver at the epicentre. • Skilled training /landline connection • Special incentives • Same as DH/WH/SDH except that no. of cases are less • Mechanism to identify availability of network beforehand and provide the same network. If possible, under CSR the network provider should be encouraged to provide free service and app and very importantly the networking of facilities for efficient and timely transport service.

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