



# STUDY OF SERVICES PROVIDED TO BENEFICIARIES OF CHIRANJEEVI YOJANA IN URBAN SLUM OF AHMEDABAD CITY OF GUJARAT

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## ABSTRACT

**Background:** For achievement MDG goal of reduction of Maternal mortality Government of Gujarat has taken an initiative "Chiranjeevi Yojana"(CY) with the help of Public Private Partnership (PPP). Objective of the study was to assess health services provided by private obstetricians & perceptions of beneficiaries regarding scheme amongst the beneficiaries registered under CY.

**Method:** A cross-sectional study by purposive sampling was conducted in 2011 in Ahmedabad Municipal Corporation among 74 beneficiaries registered under CY who delivered in February 2011 by interview method.

**Results:** Beneficiaries in the age group of 21 to 30 were 86%. ANC visits were chargeable in 13.5% beneficiaries and 86.5% beneficiaries paid for USG examinations. In most cases IFA tablets, TT injections and Laboratory investigation were provided by nearby urban health centre (UHC) and not by the private provider. More than half (52.7%) of beneficiaries were charged for deliveries. Charge of CS deliveries was 100% with CS rate of 9.5%. Transportation charge was not provided to 98.6% beneficiaries.

**Conclusion:** Poor awareness in beneficiaries was observed regarding what services they are entitled under CY.

**Keywords:** Chiranjeevi Yojana beneficiaries, Chiranjeevi Yojana

## INTRODUCTION

India has the second largest population in world with the largest number of births (27 million). Maternal deaths estimated at about 1, 17, 100 per year. <sup>1</sup> Below Poverty Line (BPL) families are the most vulnerable since they face significant risk owing to their poor socio-economic status & limited access to healthcare services. <sup>2</sup>

Maternal Mortality Ratio (MMR) has gone down in India over the last 50 years, but the progress has been much slower as compared to other

countries. <sup>3</sup>Besides the poor socio-economic status, there are several other reasons for high MMR in India like low female literacy, lack of investment in public health by the government. <sup>4</sup> MMR of Gujarat is 122 per 1 lac live births<sup>5</sup>, for reduction of MMR Government of Gujarat initiated an scheme in public private partnership (PPP). This scheme was called "Chiranjeevi Yojana" - a local name meaning "Eternal life" (of mothers and babies) to provide delivery care to the poor & underprivileged in rural areas.

Implementation of Chiranjeevi Yojana<sup>6</sup>: In 2005, Gujarat government, in collaboration with academic institutions Indian Institute of Management, Ahmedabad (IIMA), Sewa Rural, Jhagadia (NGO) and GTZ (Infosys company) implemented this scheme.

The government GR on Chiranjeevi Yojana<sup>6</sup>: The committee of various stakeholders was formed to decide on the empanelment of the Nursing homes / Gynecologist for enrollment in the scheme as per the checklist. Enrolled obstetricians have to provide deliveries under CY free of cost in their own hospital which included medicines, laboratory investigations, drugs, operation charges, operative materials and anesthesia. A detailed package of 100 deliveries was formulated with inclusion of indirect cost of transportation charge Rs 200 which has to be given by Obstetrician.

The package of 100 deliveries for private practitioners who provide services at his/her nursing homes was initially Rs. 1,69,500 and later it was raised to Rs. 3,80,000. If a private practitioner provides his services at government setup, the package cost is Rs 86, 500 which was raised to Rs 2,50,100 per 100 deliveries. <sup>6</sup> Beneficiaries were BPL families and Schedule caste (SC) and Schedule Tribe (ST) families. Now due to newer policy changes only BPL and ST families are the only beneficiaries.<sup>6</sup>

Women not having BPL card can also avail benefit of the scheme provided her pregnancy is registered at the Anganwadi with satisfactory cross-verification by health workers and the medical officer of the UHC. The pregnant women must also visit at least 3 times to the urban health center for routine ANC. New amendments were made after evaluation of the scheme.<sup>7</sup> Objectives of the study was to assess the benefits & health services provided to the beneficiaries under CY and to know perceptions of beneficiaries regarding the scheme.

## METHODS

A cross sectional study was conducted among the beneficiaries registered under Chiranjeevi Yojana in Ahmedabad City during January-December 2011. Ahmedabad city is divided in 6 zones with the population of 5.5 millions (Census 2011). At the time of study there were 57 wards provided with UHC in each ward. List of only total number of deliveries in February month from all UHCs was collected from the office of

the Family Welfare Officer. From the available data of each zone, 6 wards / UHCs were purposefully selected on the basis of highest number of deliveries under Chiranjeevi Yojana in February 2011.

For the purpose of data collection, month of February 2011 was finalized. List of names with address of the beneficiaries at the UHC is prepared from the list of deliveries from the obstetricians. From that list all beneficiaries of the same UHCs were selected.

Beneficiaries were personally interviewed with informed consent as well as due written permission of appropriate authority as in this case permission was taken from Medical Officer of Health (MOH) and Family Welfare Officer (FWOs). A total of 74 beneficiaries were interviewed personally with partial help of link worker of particular area. Visits to the houses of beneficiaries were planned and carried out from 9:30 am to 1:00 pm on working days. Information was collected with pre tested semi structured questionnaire which contains not only socio demographic profile but also qualitative feedback of the beneficiaries. Data analysis was done using EPI-Info statistical software package. Suitable statistical tests were applied wherever necessary.

## RESULTS

Wide variation of service utilization by beneficiaries was observed; it was 28 (37.8%) from Vasna and the lowest 1 (1.4%) from Ranip. In more than 80% of cases informant was beneficiaries. As it is mentioned in table no I, 86.5% beneficiaries were in age group of 21-30 years. Literacy rate of beneficiaries was 59.9%. Background characteristics of beneficiaries is given in table no 2 in which information of birth order of beneficiaries, number of visits to UHC, Anganwadi registration, benefits availed on the basis of Anganwadi, taken benefit of CY and Janani Suraksha Yojana is provided. Utilization rate of CY in previous deliveries was only 28.9% (out of 45 eligible beneficiaries only 13 received benefit).

**Services provided to beneficiaries during antenatal period at nursing home:** A total of 3(4.1%) beneficiaries neither visited private nursing home for antenatal check-up nor undergone USG even once during pregnancy. A total of 53 (71.6%) beneficiaries visited nursing home >3 times during their antenatal period. In spite of eligibility for free services under the Chiranjeevi Yojana only 7 (9.5%) beneficiaries received free

USG check-up, whereas remaining 64 (86.5%) beneficiaries were charged for the USG. Most beneficiaries underwent USG once 25 (33.7%), or twice 24 (32.4%). About 10 (13.5%) beneficiaries were charged for ANC visits. Iron folic acid (IFA) tablets were prescribed in 15 (20.3%) of beneficiaries and not provided by single nursing home. This was due to the fact that pregnant women regularly receive IFA from the fieldworkers of the UHC. All beneficiaries except one (73, 98.6%) received TT injection from the UHC/ Mamta camps, whereas one beneficiary received it from private obstetrician under CY. It was noteworthy that she was charged Rs. 100 for the TT injection.

The registration under Chiranjeevi Yojana can only be completed when a pregnant woman completes at least 3 visits at the UHC, when all the necessary laboratory investigations are carried out. This is the reason why laboratory investigations are not carried out (repeated) at the private nursing home of the Chiranjeevi Obstetrician. But if required repeat testing obstetricians were sending beneficiaries to UHC. About 73 (98.6%) beneficiaries had no major illness / complications during the pregnancy.

**Services provided to beneficiaries during delivery and after delivery at nursing homes:** Out of all deliveries rate of Normal deliveries was 66 (89.2%) while caesarean section (CS) rate was 7 (9.5%). In Gujarat, caesarean sections are higher among private facilities (18%) compared with public facilities (14%).<sup>89</sup> If this CS rate of Gujarat in private facilities (18%) compare with CY deliveries (9.5%) of current study, it is 8.5% low. There was only 1 suction delivery. Reasons for CS given by beneficiaries were previous CS, breech presentation; cord around neck of foetus no induction of labour. About 37 (52.7%) beneficiaries informed that they were charged for deliveries at nursing home; rest had a delivery free of cost. Mean charge taken by obstetricians from all beneficiaries was Rs. 1734 ± 707. All CS were charged with mean of Rs. 8000 ± 4500. During interview with beneficiaries it was come out that charges of deliveries were taken in the name of medicines, anaesthesia charges and hospital stay. Transportation charges were not given to 73 (98.6%) beneficiaries. At least 24 hour observation is necessary after delivery In about 64 (86.5%) beneficiaries were discharged from hospital within 24 hours, 4 stayed for about 25 to 48 hours, and 6 (8.1%) were stayed for more than 48 hours. From babies born under CY about 44 (59.5%) were male child and 30 (40.5%) were female child. Sex ratio is 682

per 1000 males which is low as compared to sex ratio 903 of Ahmedabad.

From the babies born under CY, 2 (2.7%) were low birth weight babies, 71 (95.9%) babies had a weight more than 2.5 kg. In one baby weight was not available.

Data of beneficiaries was collected after 4 months so for the completeness of vaccination for age babies who vaccinated up to DPT 3 was taken into consideration for completeness.

In spite of the fact that these are the deliveries under Chiranjeevi Yojana where completeness of vaccination was expected to be high about 35 (47.2%) babies were found to be incompletely vaccinated for their age (35, 47.2%). Whereas most babies were simply late in the vaccine schedule, Only 1 baby was unvaccinated because of false belief that vaccination can cause harm to baby.

Most of the beneficiaries were satisfied with the delivery done due to less charges of delivery in private setup and under CY compare to high charges in non CY private delivery. This same finding was observed in study of Amarjit Singh et al.<sup>10</sup> Out of 74 deliveries, no maternal mortality was observed but there was also one incident of death of female newborn baby during current pregnancy under Chiranjeevi Yojana. Birth weight of baby was 2.5 kg and this woman under Chiranjeevi Yojana had never visited for ANC check-up during her pregnancy. (Illiterate female)

**Table 1: Background characteristics of beneficiaries of the Chiranjeevi Yojana (n=74)**

Characteristics	Frequency (%)
<b>Age (in years)</b>	
15 to 20	7 (9.5)
21 to 25	42 (56.8)
26 to 30	22 (29.7)
31 to 35	3 (4.1)
<b>Occupation</b>	
Working	0 (0.0)
Housewife	74 (100.0)
<b>Religion</b>	
Hindu	69 (93.2)
Muslim	5 (6.8)
<b>Caste</b>	
Other	55 (74.3)
Schedule Caste (SC)*	18 (24.3)
Schedule Tribe (ST)	1 (1.4)

\* According to new guidelines of Government of Gujarat SC category has been removed from the list of beneficiaries.<sup>7</sup>

**Table 2: Background characteristics and services utilization at UHC (n=74)**

Various characteristics	Frequency (%)
<b>Number of children/ Birth order</b>	
1	26 (35.1)
2	26 (35.1)
≥3	22 (29.8)
<b>Number of antenatal visits at Urban Health Centre</b>	
3	45 (60.8)
4	12 (16.2)
≥5	17 (23.0)
<b>Chiranjeevi Yojana benefit availed on</b>	
Anganwadi card	55 (74.3)
Caste Certificate	10 (13.5)
BPL card	9 (12.2)
<b>Anganwadi Registration of beneficiaries</b>	
Registered	72 (97.3)
Not registered	2 (2.7)
<b>Taken benefit of CY in previous deliveries</b>	
Yes	13 (17.6)
Eligible but not taken benefit in previous delivery	32 (43.3)
Not eligible (1 <sup>st</sup> pregnancy before implementation of CY)	3 (4.0)
Not eligible (Primi)	26 (35.1)

**Table 3: Services provided to beneficiaries before delivery at nursing home (n=74)**

Provided services	Frequency (%)
<b>ANC visits of beneficiary at nursing home</b>	
0	3 (4.1)
1 to 3	18 (24.3)
4 to 6	43 (58.1)
>6	10 (13.5)
<b>Ultrasonography done free of cost</b>	
USG not done	3 (4.1)
Yes	7 (9.6)
No	64 (86.5)
<b>Ultrasonography done during pregnancy</b>	
0	3 (4.1)
1	25 (33.7)
2	24 (32.4)
3	17 (23.0)
> 3	5 (6.8)
<b>Iron &amp; folic acid tablets given to beneficiaries</b>	
No	59 (79.7)
Prescribe by obstetrician	15 (20.3)
<b>TT injections given at nursing home</b>	
Yes	1 (1.4)
No	73 (98.6)
<b>Laboratory investigation done at nursing home</b>	
Yes	0 (0)
No	74 (100)

## DISCUSSION

To promote institutional deliveries of BPL and poor families by providing financial protection was major objective of Chiranjeevi Yojana. The

present study showed wide variation in the reason poor utilization of CY in previous delivery was due to unawareness regarding scheme and even if they were aware didn't know how proceed and procedure about registration under scheme. No maternal morbidity (2.4% had jaundice during ANC period) and mortality was observed in beneficiaries of CY. One neonatal death was reported during survey was due to no ANC visit at all in either of private or government hospital. Proportion of low birth weight as very low, 71 (95.9%) babies had a weight more than 2.5 kg. As all deliveries under were institutional about half of children were not immunized for their age.

## CONCLUSION

Low awareness and literacy were the major factors in beneficiaries regarding poor knowledge of what kind of free services they are entitled to after getting registered under CY. Wide variation in utilization of services was observed in different area of the city which may be due to variable development in the area, different socioeconomic status or improper IEC regarding the scheme. A large number of babies were found to be incompletely vaccinated for their age. The variation in sex ratio of babies born under CY may be due to chance. Awareness regarding vaccination was poor in community which was seen in result.

## RECOMMENDATIONS

Community awareness and education by health workers should be strengthened. Routine immunization should be strengthened as it was expected to be high in institutional delivery. Regular monitoring of the facilities and services provided at the private Chiranjeevi nursing homes should be carried out to ensure the quality of services. Authorities should promote Chiranjeevi like schemes once improved and its performance kept up to the mark. Low Caesarean section rate under Chiranjeevi Yojana is definitely one of the major secondary benefit which helps uncover the issue of unnecessary surgical intervention in form of Caesarean section during delivery.

## REFERENCES

1. J. Kishore's National Health Programs of India 9<sup>th</sup> edition, century publication, page no136.
2. Social determinants of health <[www.wpro.who.int/NR/rdonlyers/07\\_chapter2Socialdeterminantsofhealth.pdf](http://www.wpro.who.int/NR/rdonlyers/07_chapter2Socialdeterminantsofhealth.pdf)>

3. Acharya Akash and Paul McNamee 2008 "Can Public Private Partnership reduce Maternal Mortality? Assessing efforts made by the 'Chiranjeevi' scheme in Gujarat".
4. Elizabeth et al 'Study on training of traditional birth attendant in clean delivery does not prevent postpartum infections, health policy and planning".
5. Government of Gujarat, Health and Family welfare department, GR FPW/102005/614/ Gandhinagar, 8.9.2006.
6. Government of Gujarat, Health and Family welfare department, GR FPW/102013/73/B-1, Gandhinagar dated 29.7.2013.
7. Letter on Chiranjeevi Yojana/private obstetricians/2008, Commissioner of Health, Dr Jivraj Mehta Bhavan, Gandhinagar July 2008.
8. Parvathy S Raman, Dileep Mavalankar DrP H, Veena Iyer MPH, Kristi Sydney MPH, Rajesh Mehta MD, K Vora PhD, Impact of a public-private performance-based financing partnership on the proportion of caesarean section deliveries: a cross-sectional study. IIMA Research and publications,
9. Dileep Mavalankar, Amarjit sikh et al "Saving mothers and newborns through an innovative partnership with private sector obstetricians: Chiranjeevi Scheme of Gujarat" international journal of gynecology and obstetrics 2009, 271-276.