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Maternal Health Financing in Gujarat: Preliminary Results from a Household Survey of Beneficiaries under Chiranjeevi Scheme

Abstract

The objective of this paper is to provide preliminary analysis of information collected at household level from beneficiaries of the Chiranjeevi scheme and from those who have not used the scheme (non-user group). The key findings have been discussed. Some of the questions which have guided this exercise are: understanding the socio-economic profile and differences of the households who have used the scheme and those who have not used the scheme, ability of scheme to target the poor and out-of-pocket expenditures incurred both users and non-users of the scheme. We have discussed this by analysing education, land holding, number of earning members in the family, possession of specific assets, age of women at the time of delivery, ANC services received, place of delivery, distance and time taken to reach the facility, status (normal or complication) of delivery, complications experienced, and cost incurred during the process.

The total sample size consists of 656 respondents from 3 talukas of Dahod District. Of these total 656 respondents, 262 (40 per cent) are Chiranjeevi clients and 394 (60 per cent) comprise the non-user group. Key findings of the study are:

- The Chiranjeevi scheme is being used by relatively younger mothers and having lesser number of children at the time of index delivery.
- Most of the Chiranjeevi users have income levels less than Rs. 12,000 per annum indicating the scheme is able to target the poor families in these three blocks of the district,
- The expenditure incurred by non-user group on index (recent) delivery at a private facility is Rs. 4000.
- The average expenditure incurred by the Chiranjeevi beneficiary on their previous delivery was Rs. 3070. On index delivery a Chiranjeevi client has spent out-of-pocket on an average Rs. 727 per delivery on medicine (self Rs. 297, child Rs. 358) and transportation Rs. 72 indicating that the delivery is not really cash-less. However, the average amount saved by the Chiranjeevi client by availing the benefit of the scheme is Rs 3273 (Rs. 4000 minus Rs. 727).
- The average distance travelled by a Chiranjeevi client to reach the health care facility is 13.79 kms and the average time taken is 44 minutes.
- The average expenditure on transportation using mostly private transport by a Chiranjeevi client is Rs. 272 as compared to Rs. 200 which the Chiranjeevi client is reimbursed,
- Private doctors have conducted 41 per cent of deliveries where as rest of the deliveries have been conducted by staff at the private health care facility under the Chiranjeevi scheme,
- ANMs have been the source of information to 55 per cent of Chiranjeevi scheme users. Anganwadi workers provided information to 17 percent of the clients and Female Health Workers to 10 per cent of the Chiranjeevi clients. Thus, 82 per cent of the total beneficiaries of the Chiranjeevi scheme were provided information by the community health workers.

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Maternal Health Financing in Gujarat: Preliminary Results from a Household Survey of Beneficiaries under Chiranjeevi Scheme

1. Introduction

It is estimated that in the state of Gujarat about 1.2 million children are born each year. These include both institutional and domiciliary deliveries. It is estimated that about 4600 of these mothers do not survive at the time of delivery because of several reasons. The maternal mortality rate for the state is 389 per 100,000 live births. Primary reason for these maternal deaths is that majority of the deliveries are domiciliary and are conducted by untrained persons in unhygienic conditions. It is argued that most of these maternal deaths are avoidable if adequate interventions are undertaken. Among the groups, Below Poverty Line (BPL) families are the most vulnerable since they face significant risk owing to their poor socio-economic status and limited access to healthcare services.

The Chiranjeevi Yojana implemented by the Government of Gujarat aims at encouraging the BPL families to improve access to institutional delivery. This is done by providing financial protection to these families and covering their out-of-pocket costs incurred on travel to reach the healthcare facility. The scheme also provides for financial support to the accompanying person for loss of wages. The scheme uses several mechanisms to target the BPL family. Among them, the main mechanism being used is the BPL card.

The scheme was launched as a one year pilot project in December 2005 in five backward districts viz., Banaskantha, Dahod, Kutch, Panchmahals, and Sabarkantha and covered all BPL families. The scheme has now been extended to the entire state. When the scheme was initiated the pilot districts were selected based on remoteness and included regions facing highest infant mortality and maternal mortality. The private medical practitioners (mainly gynaecologists) in these regions were empanelled in the scheme to provide maternity health services. These providers are reimbursed a fixed rate for deliveries carried out by them. The details of Chiranjeevi costing package are given in Table 1. The scheme envisages involvement of health functionaries at various levels and their roles are described in Table 2.

The objective of this paper is to provide preliminary analysis of information collected at household level including both beneficiaries of the scheme (defined as Chiranjeevi Group) and those who were eligible to use the scheme but have not used it (non-user group). The key findings have been elaborated upon. For guiding this exercise, some key questions were framed, some of them being: What is the socio-economic profile of the households who have used the scheme? Has the scheme been able to target the beneficiary group? What are the socio-economic differences between the groups who have used the scheme and those who have not used the scheme? What are out-of-pocket expenditures incurred by both user and non-user groups? We have discussed this by

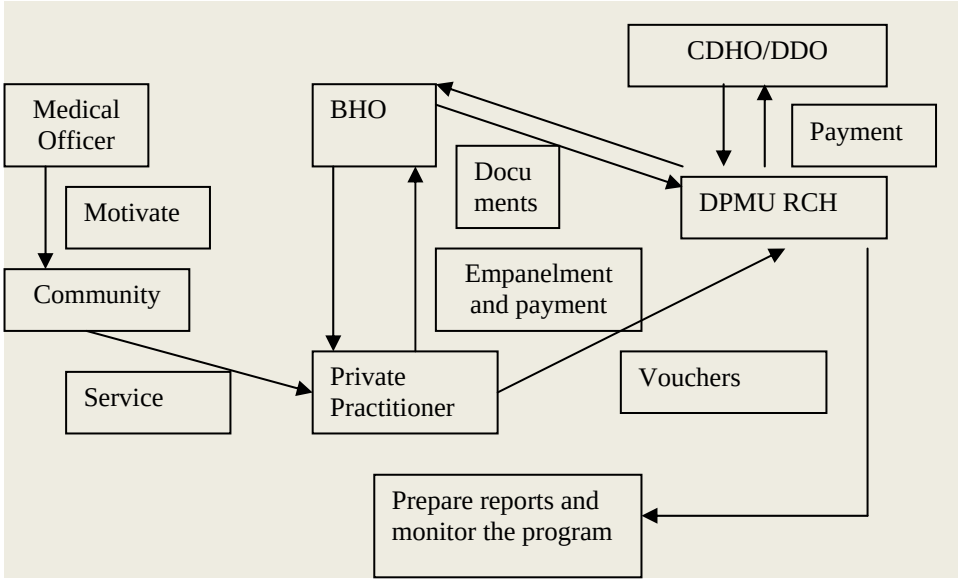
analysing education, land holding, number of earning members, possession of certain assets, age of women at the time of delivery, ANC services received by different groups, place of delivery, distance and time taken to reach the facility, nature of delivery among the two groups, complications experienced, and costs incurred during the process.

2. Implementation in Dahod

In this section we discuss the key features of the implementation of the scheme in Dahod, the district where we carried out the household survey. The scheme was implemented on pilot basis in this district.

The scheme involved creating a panel of private providers which could be referred by the families covered under the scheme. Identification and empanelment of the private gynaecologists was done by the Block Health Officer (BHO). After the private practitioner agrees to join the scheme, a Memorandum of Understanding is signed between him/her and the district health authorities. District Project Management Unit for RCH (DPMU) handles all documentation work for the scheme and they are also custodians of all the documents. The DPMU RCH is also responsible for reporting the progress of the scheme to the State Health Directorate and for making the payments to the empanelled Gynaecologists through the CDHO and Drawing and Disbursement Officer (DDO). The broad scheme of implementation is described in the following diagram.

Scheme of Implementation of the Chiranjeevi Scheme in Dahod



The Medical Officers and the Auxiliary Nurse and Midwife (ANM) of the respective Sub-Centres undertake the responsibility of motivating the community (BPL families) to take the benefit from the scheme. The client avails the services of the scheme from the empanelled practitioners (empanelled Gynaecologists). Every month, the empanelled

providers present their filled in vouchers and claim their reimbursement. The entire document for the reimbursement is submitted at DPMU RCH, which initiates the process of payment. Payment is made after the approval of CDHO and DDO.

DPMU compiles the monthly reports and submits it to the state health directorate. Total number of deliveries conducted in the district between December 2005 and 28th March 2007, were 9854, out of which 7584 were normal, 391 LSCS, and 1879 complicated (see Figure 1 and Table 3).

On an average more than 650 deliveries are being conducted under the Chiranjeevi Yojana in Dahod district per month. The total number of deliveries in Dahod district was about 41,500 per annum during the year 2006 (CBR 23.7 SRS, 2005). The BPL population in the district is about 23 per cent (District Level Household and Facility Survey on RCH II 2002-04). Using this as the basis, the estimated number of BPL deliveries is about 9545 per annum. During the year 2006, 7735 deliveries were conducted under the Chiranjeevi scheme (see Figure 2). Hence, the number of Chiranjeevi deliveries accounts for about 81 per cent of all BPL deliveries. The percentage of Chiranjeevi deliveries to overall deliveries in the district is about 18.6.

3. Methodology of the study

As discussed, the Chiranjeevi Yojana was implemented in 5 pilot districts of Gujarat State. These districts were Panchmahals, Dahod, Kutch, Sabarkantha, and Banaskantha. All these 5 districts have poor indicators on the maternal and child health and are also considered as the remotest districts in the State.

All the five districts were put in three groups based on their geographical proximity and location. Dahod and Panchmahals in group 1, Banaskantha and Sabarkantha in group 2 and Kutch in group 3.We selected Dahod district from group 1 for the purpose of the study as the average number of deliveries per provider was the highest in this district (see Table 4).Rest of the groups are to be covered in subsequent studies. A multi stage hierarchical cluster sampling procedure was adopted to collect the household data. The secondary data for the number of Chiranjeevi deliveries conducted in all the seven talukas of the district from the period of January to December 2006 was obtained from the DHO of the district. Overall sampling process is shown in Fig. 3. The broad features of the process in sampling the households are as follows:

First Stage Sampling: The taluka-wise secondary data of the number of Chiranjeevi deliveries conducted between January and December 2006 was obtained. All the seven talukas of the district were then classified into 3 clusters namely: low, moderate and high. This classification was based on the number of Chiranjeevi deliveries being conducted in each of the seven talukas during this period.

Of the seven talukas, Limkheda, Dhanpur and Garbada were classified as low Chiranjeevi delivery cluster type as the numbers of deliveries conducted in each of these 3 talukas

were less than 500 deliveries during the period. Dahod and Devgarh Bariya were classified as moderate cluster type as the number of deliveries conducted in each of these talukas was in the range of 1000-1200. Again in the same period, the number of deliveries conducted in Fatehpura and Zalod talukas each were between 1900-2500. Thus, these two talukas were classified as high cluster type (see Table 5)

From these 3 cluster types, one taluka each was selected at random. Garbada Taluka from the low cluster type, Dahod Taluka from the Moderate Cluster type and Zalod Taluka from the High Cluster type were the 3 randomly selected talukas for the study.

The total number of Chiranjeevi deliveries in these three talukas work out to be 3921. It was decided to take a sample size of about 250 households from this group. This forms about 6.4 per cent of the total number of CC deliveries in the three selected talukas. The size of the sample was decided based on the time required to complete the survey and available resources. Sample size to be selected per taluka was worked out by proportionately dividing the sample size within the three talukas. The proportionate sample was also implemented in selection of the non-user group sample as indicated in the Table 6.

Second Stage Sampling: Using the information on Chiranjeevi deliveries done in each village in the 3 selected talukas, the villages were arranged in ascending order. These villages were then classified into 3 clusters namely low (1-5 deliveries), moderate (6-12 deliveries) and high (above 13 deliveries). We took 20 per cent of the sample from the low cluster villages, 30 per cent from the moderate cluster villages and 50 per cent from the high cluster villages.

Within each group the sample village was selected randomly. If the selected village did not have any Chiranjeevi or non-user clients, then it was replaced by a nearby village. Details of the cluster and group in the sample taluka are given in Table 7.

In the village, the list of the Chiranjeevi and non-user clients was obtained from the ANM or the Anganwadi worker. The total number of deliveries in the list was divided by the sample size and then at equal interval, the sample household was selected. This method was adopted for both, Chiranjeevi as well as the non-user clients.

If the selected sample respondent was missing or not present, the preceding or succeeding name of the sample clients in the list were taken as a replacement. Around 30 per cent of the households were replaced. It was observed that this being a tribal region the population consisted largely of migrant workers or labourers. The actual sample distribution for the Chiranjeevi and the non-user clients for each taluka are given in Table 8.

The number of respondents chosen from Garbada are 110 (16.8 per cent), of which 28 (25.45 per cent) are Chiranjeevi clients and 82 (74.55 per cent) are non-user clients. The respondents chosen from Dahod are 218 (33.2 per cent), of which 74 (33.94 per cent) are

Chiranjeevi clients and 144 (66.06 per cent) are non-user clients. From Zalod 328 (50.0 per cent) respondents are chosen, of which the Chiranjeevi clients and non-user clients are 160 (48.79 per cent) and 168 (51.21 per cent) respectively.

The total sample size consists of 656 respondents, covered from these 3 talukas of Dahod district. Of these total 656 respondents, 262 (39.9 per cent) are Chiranjeevi clients and 394 (60.1 per cent) are non-user clients (see Table 9).

4. Sample Characteristics

4.1 Demographic profile of Dahod district

Dahod district is situated on the eastern part of Gujarat State. The district is surrounded by the Panchmahals and Vadodara districts of Gujarat towards its West and South. It also shares its border with the Jhabua district of Madhya Pradesh towards its East and Banswara districts of Rajasthan towards the North.

Dahod district is widespread with the total land area being 3,646 sq. km. It has a population of 1.8 million (District Level Household and Facility Survey on RCH II 2002-04), with a population density of 449 people per sq. km. The population of the district is mostly rural and a majority, 72.3 per cent amongst them are Tribals (Bhils). The urban population of the district is only 9.56 per cent. Thus, Dahod is also considered to be one of the Tribal districts of Gujarat. The percentage decadal population growth rate for 1991-2001 is 28.35 and it shows a declining trend. The population density of the district is much higher compared to the State average. The BPL population of the district is 23 per cent (District Level Household and Facility Survey on RCH II 2002-04).

The district has seven Talukas, namely, Limkheda, Dhanpur, Garbada, Dahod, Devgadh Bariya, Fatehpura and Zalod. The city of Dahod is the administrative headquarters of the district. The total number of households in the district is 244,009. The average household size is 7 members which is higher in comparison to the state average.

The district is considered to be the second most backward district in Gujarat State. The literacy rate of the district is 45.65 per cent which is quite low compared to the State average. The male literacy rate is 58.9 per cent and the female literacy rate is 31.3 per cent in the district (see Table 10).

The work participation rate is 49.8 per cent, which is also the total percentage of workers in the district, of which, 30.36 per cent are main workers and 19.47 per cent are marginal workers and 50.2 per cent are non-workers. The proportion of cultivator to the total number of workers is 60.8 per cent and the proportion of agricultural labourers to the total workers is 21.9 per cent.

4.2 Health profile

According to the (District Level Household and Facility Survey on RCH II 2002-04) the crude birth rate of the district is 25.9 and crude death rate is 8.1, which is almost similar to the State average. The IMR of the district is 64 and the MMR is 4.1, which is again close to the State average. The total fertility rate of the district is 5.63, which is much higher than the State average. The number of girls married below age 18 is 32.3 per cent. The percentage of women receiving full ANC is only 12.8 per cent.

The percentage of institutionalized deliveries being conducted in the district are 45.5 per cent. The deliveries being conducted in Government institutions is 12.9 per cent and that at home is 51.3 per cent. The percentage of safe deliveries being assisted by skilled person at home or institution is 49.6 per cent (see Table 10).

The percentage for complications during pregnancy is 46.4 per cent and that for delivery related complications is 26.7 per cent. Post delivery complications occur for 39.8 per cent of the cases.

As per the DLHS Survey 70 per cent of PHCs are having adequate infrastructure and all PHCs were found having adequate staff. The survey also found that 83 per cent and 73 per cent of PHC have adequate supplies (including Essential Obstetric Kit) and equipments respectively.

This district is considered to be one of the remotest districts of Gujarat. Most of the population of the district resides in rural areas and has a significant percentage of persons living below poverty line. Therefore, it is not always feasible for the people there to avail healthcare facilities or to bear the transportation costs in order to access health services.

4.3 Household profile

The mean age at marriage for the Chiranjeevi client (CC) is 17.98 years, and 18.12 years for the non-user client (NC). Mean age at the time of previous delivery was 22.5 years for CC and 24.55 years for NC.

The average annual income for CC and NC clients was Rs. 7440.46 and Rs.7365.93 respectively (see Fig 5). Percentage of people living below an annual income (per family) of Rs. 12,000 was 93.89 per cent and 96.45 per cent for CC and NC clients respectively. Average number of earning members per family for CC and NC clients was 2.08 and 2.39 respectively (see Fig 6). About 68 per cent of families from both the groups lived in a kuchcha (not cemented) dwelling (see Fig 7). The average land holding for both groups were almost same (see Fig 8 and Fig 9).

4.4 Education

Percentage of respondents without any kind of formal education was 65.73 per cent for CC and 66.68 per cent for NC. As per the census 2001 this figure for Gujarat state stands at 41.40 per cent and for India it is 45.72 per cent (see Fig 10).

5. Key Findings

This section provides comparison of CC and NC on various parameters. The summary of these comparisons is provided in Table 11.

5.1 Demographic differences between users and non-user groups

Age at the time of previous delivery: For CC the mean age at the time of previous delivery is 22.5 years, and for NC it is 24.55 years. For CC the mean age at the time of indexed delivery is 24.53 years. The difference between the age at indexed and the previous delivery is about 2 years for CC. This reflects that Chiranjeevi clients are coming in contact of a healthcare institution for delivery at an early age.

The number of deliveries after marriage for Chiranjeevi clients is 2.53 as compared to the figure of 2.84 for the NC group.

Earning members: The average earning members in Chiranjeevi family are 2.08, and for NC group the number is 2.39. In spite of this being significant, percentage of families with annual income below Rs. 12,000 in Chiranjeevi group is 93.89 per cent, whereas for NC the figure is 96.45 per cent. The average incomes for the two groups are also more or less same and are not statistically significant.

5.2 Targeting based on Population and Household

About 94 per cent of the Chiranjeevi beneficiaries interviewed belong to an income stratum of less than Rs. 12,000 per annum (see Table 12). The remaining 6 per cent of the clients belong to the income range of Rs.12000-25000 per annum. Government in 2005 has defined a person living below poverty line as one whose monthly income is less than Rs. 368 (or Rs. 4416 per person per capita) for rural and Rs 559 (or Rs. 6708 per person per capita) for urban (Guruswamy and Abraham, 2006)[1]. At the same time World Bank keeping in view purchasing power parity suggests a dollar a day as indicator to classify a person below poverty line.

In our study, 94 per cent and 97 per cent from CC and NC groups respectively had an annual income below Rs. 12,000. This is approximately Rs. 33 per day, which is less than the rate of a dollar, which stood at Rs. 40.36 (18 July 2007 Time of India). Hence, going by the World Bank norm, targeting is not an issue with this scheme. Proportion of people living below an annual income of Rs. 12000 is more or less similar in both the groups.

The identification of a BPL individual is done based on the BPL card issued by the district revenue authorities. This brings in the issue of interrelation between different

[1] Guruswamy M, and Abraham,R.J., 2006. The poverty line is a starvation line, Infochange agenda

public departments. Targeting here is dependent upon the manner in which the BPL cards are issued.

Poverty Index: We also used parameters such as profession, educational qualification, household assets, nature of dwelling, land holding, and earning members in the family to assess the economic well-being of the family. The questionnaire had collected specific information on these dimensions (see Table 13). These were used to create a poverty index. Other studies on BPL families take into account 18 parameters while creating a poverty index and 13 criteria's were used in the BPL survey in Rajasthan 2002-03 (Bajpai and Dholakia, 2006)[2]

We use six parameters and these have been given scores on a scale from 0-4. The score 0 has been awarded in case the respondent possesses the minimum of a particular parameter and maximum 4 points are awarded on having the most of it, as found in our survey. The overall scale ranges from 0-24. The mean score for Chiranjeevi and NC groups are 7.28 and 7.73 (see Figures 11 and 12) and with a standard deviation of 2.64 and 2.75 respectively. On performing the t test (t = 2.08), the difference between the group means was found to be statistically significant at 5 per cent. While testing for each parameter, land holding (t = 2.58) and number of earning members (t = 3.03) were found to be significantly different in the two groups.

The Chiranjeevi population based on this analysis is poorer as compared to the NC population. Therefore, it can be deduced that the scheme is catering to poor groups of population as compared to those who were eligible but have not used the scheme.

5.3 Expenditure

Expenditure on delivery

The survey collected information on expenditures incurred by the CC and NC clients. These expenditures were further analysed in terms of expenditure incurred on self and child's medicine, transportation costs and other out of pocket expenditure. We have information on expenditure incurred on previous and index delivery by CC, and (ii) expenditure incurred by NC group on the index delivery.

Chiranjeevi clients on an average incurred an expenditure of Rs. 1658 on their previous delivery. The clients availing Chiranjeevi scheme were expected not to incur any expenditure. However, 80 per cent of the Chiranjeevi clients indicated spending money on buying medicines for the child and self. The data suggest that they paid cash for cost of medicines for self (Rs. 296.49) and child (Rs. 357.80), which works out to be about Rs. 654 on an average (see Fig 13). This expenditure on medicine is about 36 per cent of the cost of the Chiranjeevi package i.e., Rs. 1795 paid to the provider per case basis.

[2] Bajpai, N., and Dholakia, R.H., 2006. Scaling up primary health services in rural Rajasthan: Public investment requirements and policy reforms, CGSD working paper No. 32

For NC group we collected the data of their recent delivery and the average expenses incurred by this group works out to be Rs. 1440 per delivery (see Tables 14 and 15). About 51 per cent of NC clients indicated spending cash on buying of medicine for the child and self. The amount of expenditure made by the NC group is mainly in terms of the consultancy charges (Rs. 595) paid to the doctor and the amount paid for transportation (Rs. 177). In addition to Rs. 1440 the NC has spent Rs. 771 on medicines (Rs. 408.45 self and 362.31 child) making the total expenditure equal to Rs. 2211.

The CC group has incurred an average expenditure of Rs. 654 on medicines as against Rs. 771 incurred by the NC group. In the absence of Chiranjeevi scheme CC would have spent Rs. 1658 plus Rs. 654. Hence, the amount that the current Chiranjeevi client is saving by availing the benefit of the scheme is Rs. 1004 (Rs 1658 minus Rs. 654).

The average cost of medicines on self for the CC comes out to be Rs. 296.49 and for NC it is Rs. 408.45 (see Fig 13). These were statistically significant (see Tables 16 and 17). The NC paid more for medicines.

Question on transportation expenses was asked to the CCs only. The average cost incurred in transportation is approximately Rs. 272 (see Fig 14). This is higher than Rs. 200 reimbursed for transportation in the Chiranjeevi package. After including the transportation cost the total out-of-cost expenditure is Rs. 726 for CCs.

The above mentioned average expenditure analysis incurred on delivery by both type of clients include expenditure on deliveries conducted at home, in public institutions and private institutions. Therefore for NC group the average costs are very low. In order to understand the benefit that the Chiranjeevi client actually avails as compared to a NC client, we will have to look at the expenditure incurred on delivery by the NC client group at a private facility. The table below compares the average expenditure incurred at a private facility by the CCs on its previous delivery and by NC client on its recent delivery. This is compared against the CC cost structure.

Items of Expenditure and Average Cost	CC Index	CC Previous		NC Current	
	Package	N	C	N	C
Consultation Charges	1795	1057	6267	1102	9375
Medicine Costs	655	336	1278	331	2138
Bed Charges	included in 1795	26	144	47	50
Transport (out-of-pocket)	72 (272 – 200)	257	329	276	369
Other charges		110	0	35	111
Average cost	727	2135	8373	2319	13524
Overall average cost	2522	3070@		4000@	
N: normal delivery, C: complicated delivery @ the average has been worked using Chiranjeevi assumptions of 85 per cent normal and 15 per cent complications					

These two average expenditures have been compared with the cost of index under Chiranjeevi delivery. Overall average cost of delivery to a CC in its previous delivery at a

private facility is Rs. 3070, whereas the same cost for a NC client comes out to be Rs. 4000. The additional out of pocket expenditure borne by the CCs in their index delivery is Rs. 727, which when added to Rs. 1795 brings the average cost of Chiranjeevi delivery to Rs. 2522. Amount saved by the CC by availing the benefit of the scheme is Rs. 3273 (Rs 4000 minus Rs 727). Hence the actual saving by the CC is much higher than Rs. 1004, as it doesn't take into account the fact that about 21 per cent of deliveries in NC clients are being conducted at home.

5.4 ANC and Maternal Health Care

Out of all the clients who took benefit of the scheme, 96 per cent had gone for ANC services. The average number of ANC visits made by the clients was 2.84. ANM provided the ANC services to 61 per cent of the clients. For 16 per cent of the clients the private doctors were the ANC providers, while the Government doctors provided ANC services to only 2 per cent of the clients. Others like the Female Health Workers, Anganwadi workers, Nurses and in some cases the other women in the family of the clients were the ones that provided ANC services. About 17 per cent of the clients received ANC services from more than one source (see Fig 15 and 16).

Almost 49 per cent of the clients using Chiranjeevi scheme had ANC complications as compared to 53 per cent in the NC group. ANC complications were less in Chiranjeevi clients. Also, for half of the cases it was the mother who faced the complication and rest of the complications were either faced by the child or by both the mother as well as the child.

Intervention Provider during ANC Complication: In 78 per cent of the cases the Chiranjeevi clients with ANC complications were referred to a Private Doctor. Nurses provided intervention to 18 per cent of the clients facing Ante Natal complications and about 1 per cent of the clients were attended by a pharmacist/chemist. About 3 per cent of the clients, who faced ante-natal complications, did not seek any intervention for the same (see Fig 17).

Place of Intervention: During the ante-natal complications, 71 per cent of the clients went to a private hospital/clinic to seek intervention for the same and 16 per cent of the clients went to a government hospital. In case of 7 per cent of cases, the client was referred to an Anganwadi worker. Only 2 per cent of the clients received intervention for the ANC complication at home, while 3 per cent did not seek intervention for the ANC complications faced by them. Figure 18 presents the various places of intervention for the clients during ANC complications.

Diet: As per the Chiranjeevi package designed, there is a provision of Rs. 100 for providing diet to the clients. This cost for food is paid to the empanelled doctor who is supposed to provide either diet to the beneficiary or reimburse Rs. 100 to the client. Through our survey we found that only 23 of the 262 Chiranjeevi clients were provided diet during their stay in the healthcare facility.

Transportation: The most common mode of transportation used by the Chiranjeevi client to reach the healthcare facility for delivery is the rickshaw. This is followed by jeep and chhakdo (which is an indigenous mode of transportation). All the modes of transportation are motorized and are mostly private in nature. About 93 per cent of the respondents used private mode of transportation. It is important to note that no government ambulance was used for transportation (see Table 19).

Distance Travelled: Range of distance travelled by beneficiaries to avail this service is between 1 and 72 kms with the average distance being about 13.79 kms per client. This distance varies and is dependent on the distribution of empanelled practitioners within the district (see Fig 19).

Time taken: The time taken by the clients to reach the facility ranged from 10 minutes to 9 hours. Average time taken to reach the facility for the Chiranjeevi clients is about 44 minutes. There were only 3 clients who took 9 hours to reach the facility.

5.5 Delivery and Child Birth

Parameters looked in this section are age of the women at the time of marriage, age of women at the time of previous delivery, age at the time of indexed delivery, service provider, nature of delivery, place of delivery, complications occurring during the course of delivery, decision maker for choosing the place of delivery and the number of persons accompanying the client to the facility.

The average age of the population at the time of marriage is 18.06 years. The average age for Chiranjeevi clients is 17.98 years and for NC it is 18.12 years. Age at the time of previous delivery for Chiranjeevi and NC was 22.5 years and 24.55 years respectively.

The difference in mean age at last birth is statistically significant, indicating that women are availing the services under Chiranjeevi scheme at a slightly younger age as compared to the women in the NC group. Age of the women in Chiranjeevi and NC group at the time of their delivery was 24.53 and 25.05 years respectively.

Only one delivery under the Chiranjeevi scheme was conducted at home and 2.67 per cent were conducted in a Government Institution. All the other deliveries were conducted at a private health facility. As far as the non user group (NC) is concerned 21.07 per cent deliveries were conducted at home, 22.84 per cent in a Government institution and less than 50 per cent of the deliveries were conducted at private institutions.

About 93.66 per cent of the deliveries conducted in the Chiranjeevi group were normal; in case of NC group this figure was 97.2 per cent.

ANM/ FHW were the one to decide the place of delivery for 43 per cent of the clients that delivered under the scheme (see Fig 20). The decision maker for choosing the place

of delivery for almost 1/3rd of the clients was their respective spouse. For 7 per cent of the clients, their own mothers-in-law decided upon the place of delivery. Doctors helped 2 per cent of CC group to choose the place of delivery. PRI members helped 4 per cent of CC cases to choose the place of delivery. Anganwadi workers helped 10 per cent of clients to choose the place of delivery.

One important thing to note here is that none of the clients themselves took the decision for choosing the place of delivery under the scheme. Number of persons accompanying the client ranged from 1 to 9. On an average 4.69 persons accompanied the Chiranjeevi client to the facility (see Fig 21).

5.6 Service Provider

Percentage of deliveries conducted by private doctors was 41 in case of Chiranjeevi and 32 in case of NC deliveries. Nurses and other trained attendants at a private facility conducted deliveries in 48 per cent of the CC cases. This percent for the NC group is 43 per cent. In only 38 per cent of the cases a private qualified doctor attended in CC case. This figure is much lower at 21 per cent in case of the NC group (see Fig 22).

The key difference here lies in the deliveries conducted by trained and untrained attendants. In case of CCs, 1 per cent of the deliveries were conducted by traditional birth attendants (TBA's), whereas in case of NC clients, 20 per cent of the deliveries were conducted by TBA's .

5.7 Knowledge and practice of Chiranjeevi Yojana

Awareness Generation: Various initiatives were taken by the Government to create awareness about the scheme. Awareness generation activity enabled the target group to gain knowledge about the scheme and take the benefit of the same. Amongst those clients who took the benefit of the scheme, 55 per cent reported that they were informed about the Chiranjeevi Yojana by the ANM. Thus, ANM proved to be the most effective source of providing information about the scheme. Anganwadi and female health workers were reported as a source of information by 17 per cent and 10 per cent of the clients respectively. Thus, all 3 types of community workers played an instrumental role in providing knowledge about the scheme to 82 per cent of the beneficiaries (see Fig 24). One important thing to note here is that since these women (ANM/AWW/FHW) are from within the community or are known to the villagers, they can easily influence the target group. Once the doubts of the prospective clients are cleared and they become aware of the scheme they are prepared to take the benefit of the same.

Public Health facilities, which include the Sub-Centre, PHC, CHC and the district hospital, were reported as source of information by 6 per cent of the clients. Friends/neighbours were source of information in case of 4 percent of the cases. The printed material and pamphlets were source of information to only 1 per cent of the clients. Only 1 per cent of the beneficiaries were informed about the scheme by the

Traditional Birth Attendants (TBA). Others like PRI members, balwadi teachers, doctors, and nurses provided information to 6 per cent of cases.

BPL Cards: All the clients that took benefit of the scheme were aware about the requirement of the BPL card/certificate for availing the services. All the beneficiaries mentioned that they did possess a BPL card. Also, 98.47 per cent of the beneficiaries reported that their BPL card was inspected at the healthcare facility, prior to availing the services under the scheme. Around 71 per cent were inspected by the doctor for the possession of the BPL cards/certificates and the rest were inspected by the other staff members present at the healthcare facility.

Factors influencing the clients to choose the place of delivery: For all the clients that took benefit of the Chiranjeevi scheme, the deliveries had taken place at a private healthcare facility. Based on the suggestion given by the ANM, 53 per cent of the clients chose the place of delivery (see Fig 25). Availability of services like EmOC, emergency services and good services being rendered at a facility influenced 39 per cent of the respondents to choose a particular facility for delivery under the scheme. Suggestions given by friends/neighbours prompted another 4 per cent of the clients, while only 2 per cent of the clients attributed their decision to the popularity of the hospital/doctor. Other reasons like suggestion given by a PRI member, suggestion by a balwadi (Pre-primary) teacher or proximity to the facility from the residence of the clients each influenced about 2 per cent of the population while choosing the place of delivery. Hence, it is evident that the suggestions given by the ANM influenced a majority of the clients to get benefit of the scheme and also to choose a particular facility for delivery.

5.8 Client Satisfaction

Satisfaction with the service: About 89 per cent of the Chiranjeevi clients and 87 per cent of the NC group reported satisfaction with the services provided at the health facility (see Fig 26).

Availability of the Doctor: For Chiranjeevi clients, 86 per cent reported that the doctor was available at the time of reaching the facility and only 1 per cent reported that the doctor was not available. In case of the NC group the doctor was available 86 per cent of the times and the doctor was never unavailable (see Fig 27).

Reasons for satisfaction and availability of medicines (Chiranjeevi **clients):** In case of 66 per cent of the Chiranjeevi clients good quality of services was the main reason for their satisfaction. About 18 per cent of CCs felt satisfied because of good facilities. Good behaviour of staff and prompt services accounted for 7 per cent and 5 per cent of the client's satisfaction respectively. Sixty per cent of CCs group found that medicines were always available and for 30 per cent they were available most of the times (see Fig 30 and 28)**.**

In both CC and NC cases 87 per cent of the respondents expressed that the staff was courteous (see Fig 29).

Respondents who utilised Chiranjeevi scheme were asked to provide suggestions for improving the scheme. These suggestions have been presented in Table 20.

Availability of medicines has been identified as one important factor to improve services. Around 1/4th of the clients suggested that medicines should be provided to the beneficiaries under the Chiranjeevi scheme in order to improve it (see Table 20). About 12 per cent of clients suggested that the compensation paid for transportation which is Rs. 200 should be increased. Around 5 per cent of the clients also reported that the transportation expenses are not being provided to them and so effective monitoring of the scheme is required. About 4 per cent of the clients suggested that the nurses at the health facility ask for money and this should be addressed. Another suggestion was to improve proximity to the healthcare facility.

6. Implications

6.1 Role of the Health workers

It can be inferred from the data that the ANM, along with the FHW and the AWW has proved to be the most effective source of providing information and building awareness about the Chiranjeevi scheme. It should also be noted that all these health workers have acted as the most essential 'link' between the health care delivery system and the beneficiaries. The health workers have not only made the services available to the beneficiaries but also guided them on how to access these services.

The decision for choosing the place of delivery for majority of the Chiranjeevi clients has also been taken by the ANM. The health workers are either from the community itself or are well known to the community and therefore the community places a lot faith in them. The health workers can be developed as a more important link in the healthcare delivery system.

Younger mothers attracted to Chiranjeevi scheme: For about 90 clients who took benefit of the Chiranjeevi scheme, it was their first delivery. Since the risk involved in the first delivery is comparatively greater, the women come in contact with a healthcare institution at an earlier age, thereby, reducing the risk of maternal as well as infant mortality. This can be related to the fact that they come in contact with an institution early as compared to NC group and were provided with some kind of information on reproductive health.

Improved health seeking behaviour: The scheme instils in the women a positive health seeking behaviour, while cutting down the risk for mother and infant mortality. So, we can ensure a more positive approach for the next delivery of the women and also inform them about the family planning measures. In this manner, not only is adequate supervised care received by the BPL women, but the fertility rate of the group can also be controlled in the long run.

6.2 Financial Protection

Based on the information collected in the study, it is evident that the BPL family availing the benefit of the scheme were able to save Rs. 1004 as compared to the expenditure incurred in their previous delivery. This financial protection helps them not only to save money but also provides them with an opportunity to bear the extra expenditure of other healthcare requirements (including medicines for themselves and for the child). This assures greater healthcare protection to both the mother and the child.

6.3 Expenditure

The additional expenditure incurred by the Chiranjeevi client, on medicines for self and child on average is Rs. 654, which is about 36 per cent of the Chiranjeevi package. This raises certain issues regarding the pricing of the scheme such as whether Rs. 1795 per case is adequate, and does it incorporate the cost of medicines prescribed to the client till the time she is discharged from the facility. There is also an issue of quality of care, i.e., whether these medicines prescribed, are required or not

6.4 Targeting

Possession of BPL Cards was the criteria for selection of the beneficiaries. All the Chiranjeevi clients had a BPL card and 98.47 per cent also reported that they were inspected for the same. As per the data, 93.89 per cent of the Chiranjeevi Clients have an annual income of below Rs. 12,000 which comes to Rs. 32.90 a day, which is much less than the World Bank rate of a dollar a day (equivalent to Rs. 40.36 as on 18th July 2007). This implies that the scheme was rightly targeted, as about 94 per cent of the Chiranjeevi clients are below the poverty line.

6.5 Distance

On an average the Chiranjeevi clients travelled a distance of about 13.79 kms, in order to reach the health care facility for delivery. This suggests that availability of private providers is not adequate and more providers should be included in the scheme to improve access. The geographical distribution of the service provider is directly related to the distance the clients need to travel to avail the services. Shorter the distance higher would be the probability of reducing the maternal and infant mortality.

6.6 PNC

This needs to be strengthened in the scheme. Only about 28 per cent of the clients went in for PNC, the corresponding percentage for the NC group is around 30 per cent. Post delivery institutional linkages need to be established, which as of now does not seem to be adequately established. One reason for this may be that after the delivery is conducted the clients as well as the service provider consider their job to be done. The scheme just takes into account the episode of delivery, the empanelled practitioner is just reimbursed for the delivery he/she conducts and as no monetary benefits are attached to PNC, it is overlooked by them. From the client perspective PNC means some extra expenditure, hence overlooked from their side too**.**

7. Summary and conclusion

This paper discusses the key findings from a preliminary analysis of information collected at household level from beneficiaries of the Chiranjeevi scheme and those who have not used the scheme (non-user group). Some questions which have guided this exercise pertain to the socio-economic profile of the households who have used the scheme, its abiltiy to target the poor, the socio-economic differences between the groups who have used the scheme and those who have not used the scheme and the out-of-pocket expenditure of both user and non-ser groups. We have discussed this by analysing education, land holding, number of earning members in family, possession of specific assets, age of women at the time of delivery, ANC services received, place of delivery, distance and time taken to reach the facility, status (normal or complication) of delivery, complications experienced, and cost incurred during the process. The total sample size consists of 656 respondents from 3 talukas of Dahod District. Of these total 656 respondents, 262 (40 per cent) are Chiranjeevi clients and 394 (60 per cent) are non-user group.

During the first year of scheme implementation 81 per cent of the total BPL deliveries in the district have been covered by the Chiranjeevi Scheme. For more than one-thirds of clients using the Chiranjeevi scheme, this was their first delivery. This indicates that a large number of clients using the scheme are young and therefore this has implications for improving the health seeking behaviour for future health needs. The scheme has not only provided a linkage between the BPL community and the institution but has also provided financial protection to the marginalised section of the population. In the study it was seen that the Chiranjeevi client almost saves around Rs. 3273 by availing the services of the scheme when the costs are compared to private costs. The scheme is not 100 per cent cash less for BPL family. It has been observed that the BPL spends about 36 per cent of the Chiranjeevi package towards the cost of medicine. The government spends Rs. 1795 on each delivery. The findings suggest that the scheme needs to be strengthened by improving the availability of required medicines. Given the quality of care and involvement of private providers and absence of protocols, future studies need to understand whether the prescribed medicines are really required. There are also issues of costing of the package. The private providers should collaborate with institutions to develop appropriate costing framework to implement this scheme and develop an understanding of whether all components of the programme are incorporated adequately. The private providers have been reluctant to share their cost information to develop adequate understanding of the issues.

This study findings suggest that given the demographic characteristics of this district and the economic profile of the clients using this scheme, targeting is not a major issue. About 94 per cent of the Chiranjeevi clients earn much less than a dollar a day. The government health employees such as ANMs have been found effective in building awareness and guiding the clients to utilise the services. Their role in the process has been found quite important and needs to be strengthened. The ANC and PNC services need further strengthening. Neo natal care should also be included in the package.

The practice of utilizing the BPL cards for providing the healthcare services for the beneficiaries is the main basis used in the scheme. The respondents indicated that the BPL cards were examined by private providers in almost all cases. This can be seen as a positive point, but what needs to be examined further is whether all 'poor' families have the BPL card or not. It is also important to find out how many families who are actually below poverty line could not utilise the services because they did not have a BPL card.

The district has a low literacy rate as is evident from the demographic profile of the district. This was also indicated through our study as the majority of the women in the district are having low literacy rates. This may have implications on the health seeking behaviour as well as the decision-making ability of the clients.

LIST OF TABLES

Table 1 Detailed Chiranjeevi Package

Detailed Financial Package for Chiranjeevi Yojana			
Procedure	Cases per 100 deliveries	Cost (Rs.) Per procedure	Total (Rs.)
Normal Delivery	85	800	68000
Complicated Cases			
Eclampsia/Forceps/ Vacuum/ Breech	3	1000	3000
Septicemia	2	3000	6000
Blood Transfusion	3	1000	3000
Caesarean	7	5000	35000
Pre delivery visit	100	100	10000
Other Costs			
Investigation	100	50	5000
Sonography	30	150	4500
NICU Support	10	1000	10000
Food	100	100	10000
Dai	100	50	5000
Transport	100	200	20000
Total	100		179500

Source: Bhat, Ramesh, Singh Amarjit, Maheshwari, Sunil, and Saha, Somen, 2007. Maternal Health Financing-Issues and Options: A Study of Chiranjeevi Yojana in Gujarat, IIM-Ahmedabad. In complicated cases Episiotomy has also been taken into account and cost per procedure is Rs. 800; Eclampsia is different from Forceps/Vacuum/Breech delivery, since cost per procedure is same has been clubbed together.

Table 2 Role of District health authorities in the implementation of the Chiranjeevi scheme

Level	Person responsible	Activities
District Level	District Development Officer (DDO) as Chairperson of Executive Committee, District RCH Society	Overall implementation of the scheme in the district
	Chief District Health Officer (CDHO)	Identification and enrolment of the gynaecologist, Orientation about the scheme and Coordination.
	RCH Officer (RCHO) and District Project Coordinator (DPC)	Payment to the Chiranjeevi doctors Documentation Technical aspects of the scheme (RCHO) Management aspects of the scheme (DPC)
	District Project Management Unit (DPMU)	Compilation of information
	District IEC Officer (DIECO)	IEC activity related to the scheme in the district
	District Public Health Nurse (PHN)	Monitor the technical part of the scheme
Block Level	Block Health Officer	Handling billing and reporting Forward bills to the District RCH Society, and Overall supervision of the scheme in the block.
	Block IEC Officer	IEC activities related to the scheme in the block
PHC Level	Medical Officer (PHC)	Overall supervision of the scheme in the PHC area
	FHW, ANM and AWW	Identification of ANC cases to be registered under the scheme as beneficiaries, Explanation of the scheme to BPL, Preparation of birth micro plan, Selection of nearest provider for the identified case, Accompany the mother to the doctors for delivery (if possible), Follow up of the case after the delivery

Source: Bhat, Singh, Maheshwari and Saha, 2007[3]

[3] Bhat, Ramesh, Singh Amarjit, Maheshwari, Sunil, and Saha, Somen, 2007. Maternal Health Financing-Issues and Options: A Study of Chiranjeevi Yojana in Gujarat, IIM-Ahmedabad.

Table 3 Progress of Chiranjeevi scheme in Dahod district (Dec 2005-28th March 2007)

Nature of Deliveries				
Month	**Normal**	**LSCS**	**Complicated**	**Total**
Dec-05	83	20	31	134
Jan-06	158	16	53	227
Feb-06	356	20	117	493
Mar-06	423	23	167	613
Apr-06	325	2	30	357
May-06	402	19	65	486
Jun-06	592	21	95	708
Jul-06	623	26	146	795
Aug-06	529	26	98	653
Sep-06	575	31	154	760
Oct-06	592	24	130	746
Nov-06	745	35	184	964
Dec-06	764	55	114	933
Jan-07	693	45	183	921
Feb-07	348	20	164	532
up to 28th March 2007	376	8	148	532
Grand Total	**7584**	**391**	**1879**	**9854**
%	**76.96**	**3.97**	**19.07**	**100**

Source: DPMU RCH, Dahod

Table 4 Deliveries conducted (as on 30th November 2006)

District	Geographical Group	Total Specialist (OB/GY) in the District	Specialist empanelled under Chiranjeevi scheme	Total No. of Deliveries conducted under Chiranjeevi scheme	Average no. of Delivery per provider
Panchmahals	Group 1	29	29	10450	360
Dahod		18	15	6750	450
Banaskantha	Group 2	50	58	5945	103
Sabarkantha		73	10	4584	458
Kutch	Group 3	47	21	3912	186
Total		**217**	**133**	**31641**	**238**

Source: Ministry of Health and Family Welfare, Government of Gujarat, Gandhinagar

Table 5 Taluka wise number of Chiranjeevi deliveries in Dahod (Dec 2005 - Nov 2006)

Taluka	No. of Chiranjeevi Deliveries	Cluster Type
Limkheda	318	Low
Dhanpur	358	Low
Garbada	413	Low
Dahod	1099	Moderate
D-Bariya	1128	Moderate
Fatehpura	1990	High
Zalod	2409	High
Total	7715	

Table 6 Sample selection in the chosen talukas

Taluka	Cluster Type	Total Chiranjeevi Delivery	Sample delivery	NC Group
Garbada	Low	413	26	26*3 = 78
Dahod	Moderate	1099	70	70*2 = 140
Zalod	High	2409	154	154*1 = 154
Total		3921	250	372

Table 7 Distribution of sample as per Taluka cluster

Type of Cluster	LOW Cluster Sample		MODERATE Cluster Sample		HIGH Cluster Sample		Total Sample		Total Of Sample
Name of Taluka	Chiran-jeevi	Non user	Chiran-jeevi	Non user	Chiran-jeevi	Non user	Chiran-jeevi	Non user	
GARBADA	05	15	09	27	12	36	26	78	104
DAHOD	14	28	21	42	35	70	70	140	210
ZALOD	31	31	46	46	77	77	154	154	308
TOTAL	**50**	**74**	**76**	**115**	**124**	**183**	**250**	**372**	**622**

Table 8 Status of selected samples

Name of Taluka	Village Cluster	Status of client Chiranjeevi Client Original	Chiranjeevi Client Replaced	Total	Status of client Control Client Original	Control Client Replaced	Total	Total Sample Original	Total Sample Replaced	Grand Total of sample
Dahod	low	12	3	15	33	18	51	45	21	66
	Moderate	25	7	32	29	15	44	54	22	76
	High	19	8	27	33	16	49	52	24	76
	Taluka Total	**56**	**18**	**74**	**95**	**49**	**144**	**151**	**67**	**218**
Zalod	low	16	7	23	13	8	21	29	15	44
	Moderate	39	11	50	37	11	48	76	22	98
	High	60	27	87	71	28	99	131	55	186
	Taluka Total	**115**	**45**	**160**	**121**	**47**	**168**	**236**	**92**	**328**
Garbada	low	3	1	4	12	3	15	15	04	19
	Moderate	10	1	11	17	14	31	27	15	42
	High	8	5	13	21	15	36	29	20	49
	Taluka Total	**21**	**7**	**28**	**50**	**32**	**82**	**71**	**39**	**110**
GRAND TOTAL		**192**	**70**	**262**	**266**	**128**	**394**	**458**	**198**	**656**

Table 9 Distribution of Chiranjeevi and Non-user clients in the sample

Taluka	Cluster Type	Chiranjeevi Clients	%	Non user Clients	%	Total Clients	%
Garbada	Low	28	25.45	82	74.55	110	16.77
Dahod	Moderate	74	33.94	144	66.06	218	33.23
Zalod	High	160	48.79	168	51.21	328	50.00
Total		262	100.00	394	100.00	656	100.00

Table 10 Profile of Dahod district

Population	17,51,000
Sex Ratio	926
Density (per sq. km)	449
% of BPL Population	23
% of urban Population	9.56
Literacy rate	45.65
% of main workers	30.36
% of marginal workers	19.47
% of total workers	49.83
Total Fertility Rate	5.63
Girls married below age 18 (%)	32.3
Full ANC	12.8
Institutional Delivery %	45.51
Delivery at Govt. Institution (%)	12.9
Delivery at home (%)	51.3
Attended by skilled person (%)	49.6
Birth Order 3+ (%)	56.5
PHC with adequate Infrastructure (%)	70
PHC with adequate Staff (%)	100
PHC with adequate Supplies (%)	83.3
PHC with adequate Instruments (%)	73.3
Essential Obstetric Kit	80
Population served per allopathic medical institution.	23,701

Source: District Level Household & Facility Survey on RCH (Round 2, 2002-04), India and Statistical Abstract of Gujarat State 2002, Government of Gujarat.

Table 11 Comparative analysis of Chiranjeevi and Non user clients

Indicators	Chiranjeevi client (n= 262)	Non user client (n= 394)	t value
Population and household profile			
Mean age at marriage	17.98	18.12	-1.039
Mean age at the time of previous delivery**** (avg)	22.5	24.55	-6.079
Age at delivery* (avg)	24.53	25.05	-1.443
Average annual income (in Rs.)	7440.46	7365.93	0.672
Annual Income below Rs 12,000(%)	93.89	96.45	
Earning members(average)****	2.08	2.39	-2.915
Dwelling(Kuchha or hut) in %	68	68	1.115
Expenditure incurred in previous delivery (In Rs.)*	1658.20	1440.07	1.63
Exp on medicine (in Rs.)**	296.5	408.45	-1.772
Expenditure on child medication in Rs.	357.87	362.31	-0.029
Average land holding (in hectares)	1.071	1.055	0.579
Land holding(upto 5 hectares) in %	94.74	95.56	
Education			
Education (% without formal education)	65.73	66.68	-0.263
Maternal and Child health			
ANC at public institution	50	57.36	-1.059
ANC provider (public)	61.9	70	-0.440
ANC provider (private)	38.1	30	
ANC complication (in %) ****	48.80	52.70	-5.65
Number of deliveries after marriage***	2.53	2.84	-2.251
Place of delivery (Public institution) (%)	2.67	22.84	-0.430
Place of delivery (Private and other institutions) (%)	97.32	77.15	
Home Delivery (%)	0.38	21.07	
Delivery conducted by private practitioner (%)	39.30	32.23	-0.629
Delivery conducted by TBA's/ANM (%)	49.6	42.63	
% of live births	98.85	98.47	-0.333
% of still births	1.15	1.53	
% of live births , still living	96.56	98.47	-0.29
% of normal delivery	94.6	97.2	-0.291
% taken PNC	28.24	30.71	-0.694
Complications during PNC (%)	10.30	26.14	-0.538

* Significant at 10%, ** Significant at 5%, *** Significant at 2.5%, **** Significant at 0.5% (1 tail test)

Table 12 Household income

Income of the household						
Household Income	**Chiranjeevi clients**	**%**	**Non user clients**	**%**	**Total**	**%**
Upto 12,000	246	93.89	380	96.45	626	95.43
13001-25000	16	6.11	11	2.79	27	4.12
25001-50000	0	0	1	0.25	1	0.15
50001-75000	0	0	1	0.25	1	0.15
Above 100000	0	0	1	0.25	1	0.15
	262	100	394	100.00	656	100.00

Table 13 Parameters, scores/criteria for calculating poverty index

Parameter	**Scores/criteria**				
	0	1	2	3	4
Profession	Agricultural/unskilled labour /house wife	Cultivator/casual labour	Skilled worker/Petty business	Artisan	Services
Educational qualification	No formal education	Primary Education	Secondary education	Higher secondary education	Graduate/Postgraduate
Household assets	None	Any one	Any two	Any three	More than three
Nature of dwelling	No house	Hut	Kachcha	Semi pucca	Pucca
Land holding	< 1 hectares	1-5 hectares	6-10	11-15	16+
Earning members in the family	1	2	3	4	5+

Table 14 Expenditure incurred by Chiranjeevi clients (previous delivery) in Rs.

	Range	**Mean**	**Median**	**Std Dev.**	**Skewness**	**Frequency**
Consultancy Charges	6500	802.30	750.00	925.37	2.37	141
Medicine Charges	4000	258.26	175.00	478.68	5.18	141
Per day bed charges	2000	32.50	0.00	204.00	8.32	140
Transportation Charges	2000	208.26	200.00	238.76	3.46	141
Other Charges	8000	98.64	0.00	661.95	11.81	151
Total Mandays Loss	4500	369.21	100.00	755.78	3.22	147
Total Expenses	6500	1658.20	1300.00	1489.01	1.87	153

Table 15 Expenditure incurred by the Non user clients in Rs.

	Range	Mean	Median	Std Dev.	Skewness	Frequency
Consultancy Charges	7070	595.87	300.00	940.79	3.71	375
Medicine Charges	6500	193.51	100.00	544.97	8.75	376
Per day bed charges	1800	14.80	0.00	110.73	12.98	375
Transportation Charges	2000	177.08	140.00	204.14	2.59	375
Other Charges	500	54.63	0.00	96.59	2.22	377
Total Man-days Loss	9000	405.36	150.00	876.59	5.08	375
Total Expenses	16200	1440.07	1050.00	1660.26	3.51	376

Table 16 Expenditure incurred by Chiranjeevi client, (Indexed delivery) in Rs. on medication

Expenses	Range	Mean	Median	Std Dev.	Skew ness	Frequency
Transportation Expense	900	271.61	250.00	182.54	0.88	262
Expense on Medicines (Self) till discharge	3980	296.50	200.00	408.61	5.59	211
Expense on Medicines (Child) till discharge	9978	357.87	150.00	1153.97	7.82	79

Table 17 Expenditure incurred by Non user in Rs. on medication

	Range	Mean	Median	Std Dev.	Skew ness	Frequency
Expense on Medicines (Self) till discharge	6495	408.45	200.00	818.05	5.46	204
Expense on Medicines (Child) till discharge	2990	362.31	200.00	557.47	3.70	67

Table 18 Additional out of pocket expenses incurred by Chiranjeevi clients in Rs. (Index delivery)

	Range	Mean	Median	Std Dev.	Skewness	Frequency
Doctor	3750	957.59	800.00	741.13	2.15	29
Nurse	350	167.24	150.00	82.20	0.96	58
Ayah/Attendant	290	124.15	100.00	69.24	0.41	65
Peon	350	126.92	100.00	111.08	1.66	13
Others	650	350.00	325.00	273.86	0.49	4

Table 19 Type of vehicles used for transportation by Chiranjeevi clients

Type of Vehicle	Chiranjeevi	%
Bus	3	1.15
Jeep	67	25.57
Chhakdo	53	20.23
Matador	2	0.76
Rickshaw	122	46.56
Truck	2	0.76
Others	13	4.96
Total	262	100.00

Table 20 Suggestions of the Chiranjeevi clients for improving the scheme

Suggestions	Frequency	%
Medicines should be provided by CC facility	66	25.19
Transportation expenses should be more	30	11.45
Nurses at CC facility should stop taking money	13	4.96
Transportation expenses not been given and its monitoring	11	4.20
Related services should be included in the scheme	9	3.44
CC hospital should be near	8	3.05
Both APL and BPL should get the benefit of the scheme	1	0.38

8. TABLE OF FIGURES

Figure 1 Chiranjeevi Deliveries in Dahod

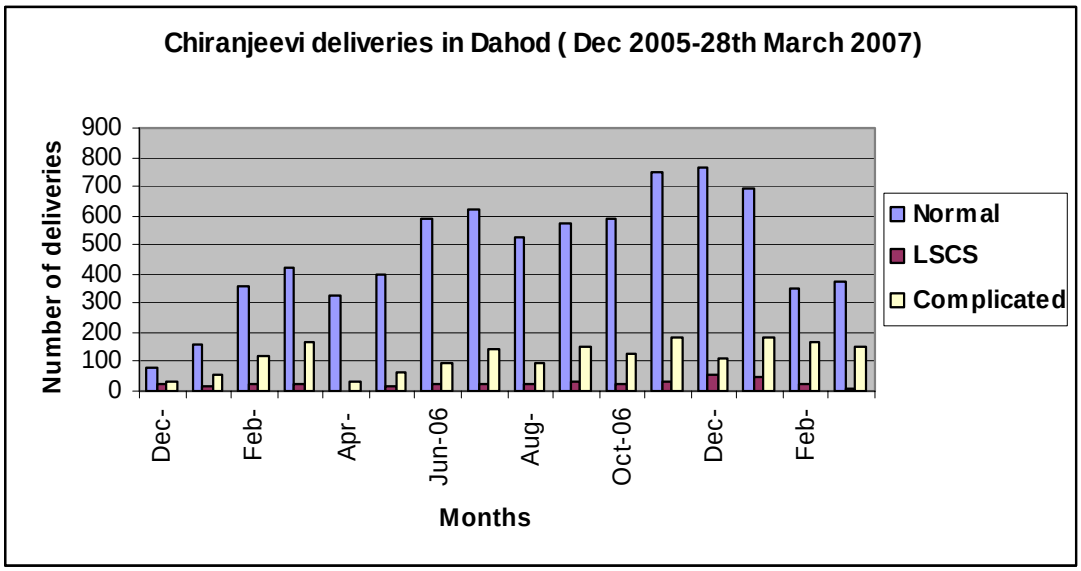


Figure 2 Details of Deliveries in Dahod

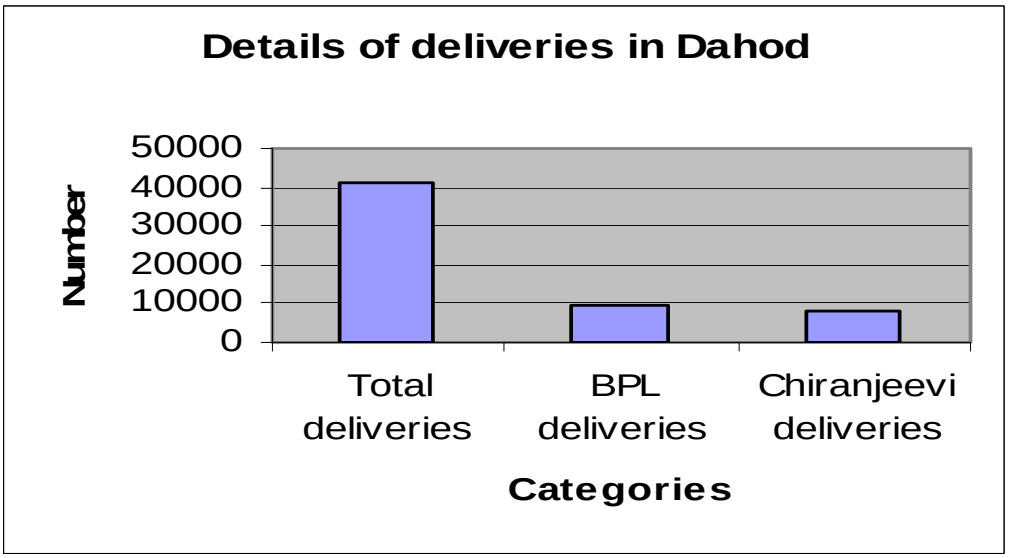


Figure 3 Sampling Process

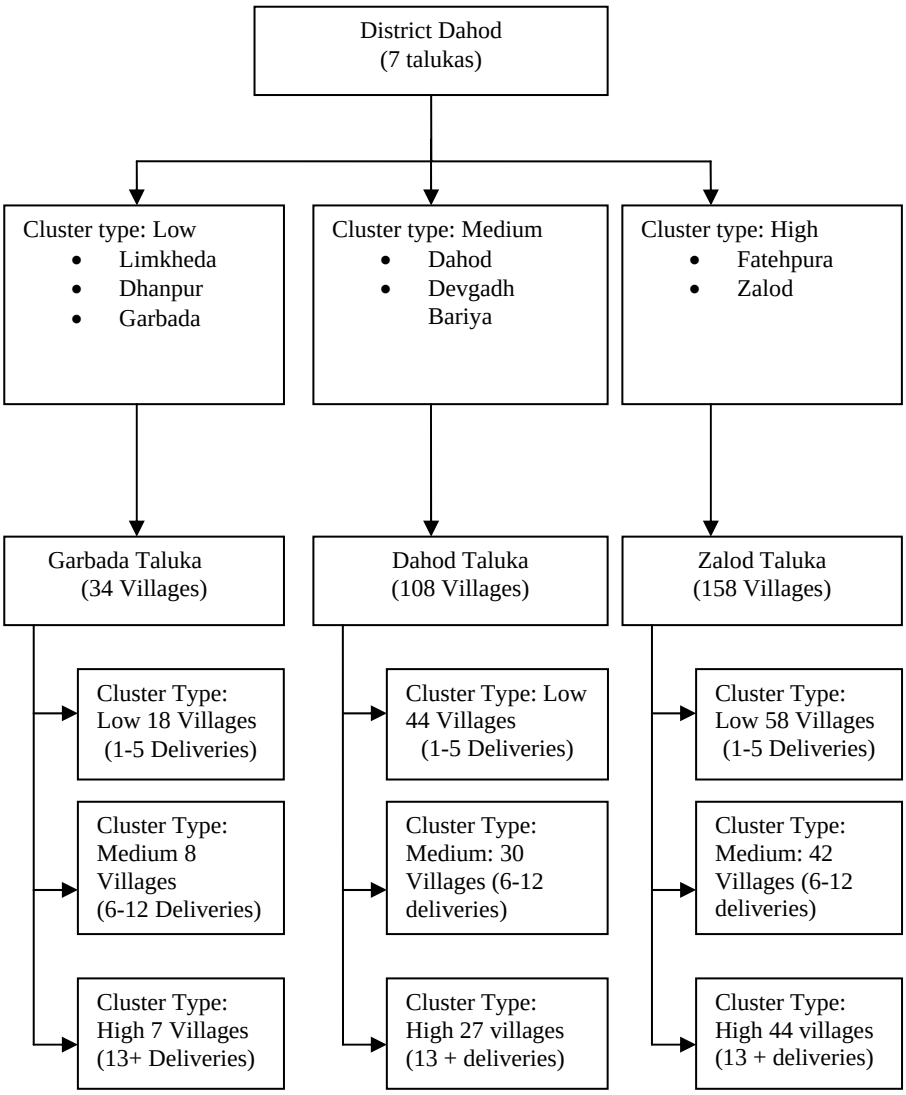
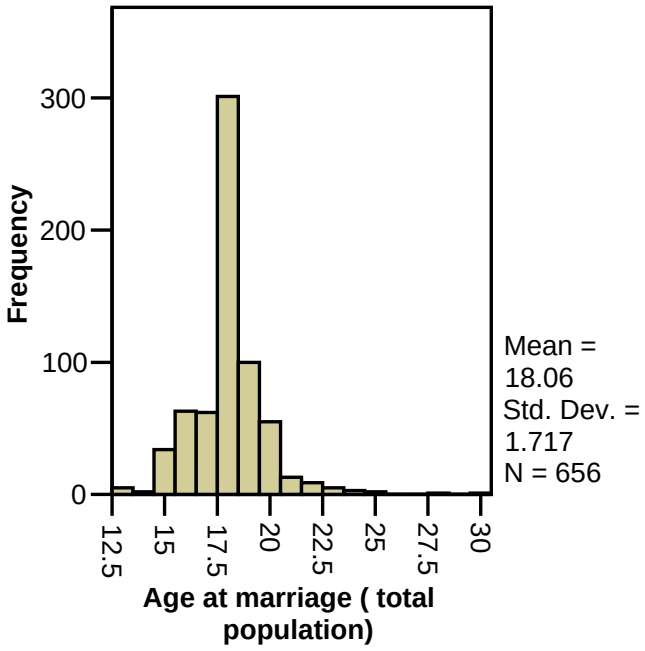


Figure 4 Age at Marriage and mother's age at the time of birth



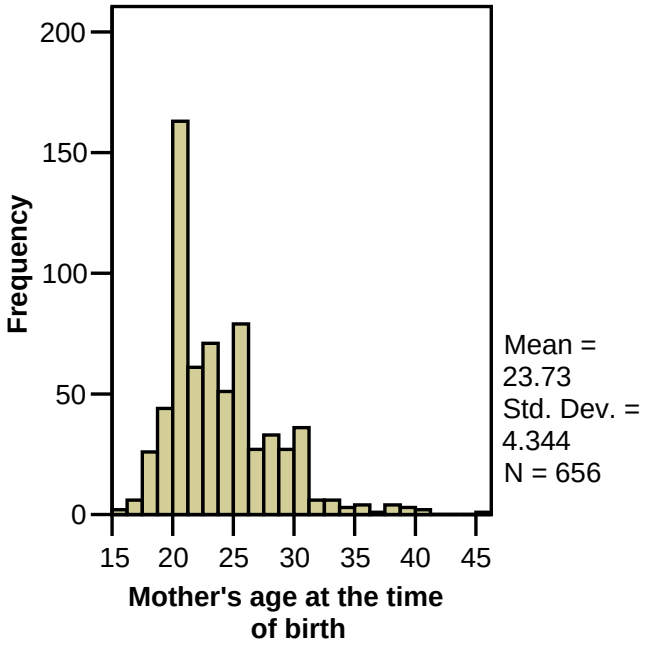


Figure 5 Annual income of the population

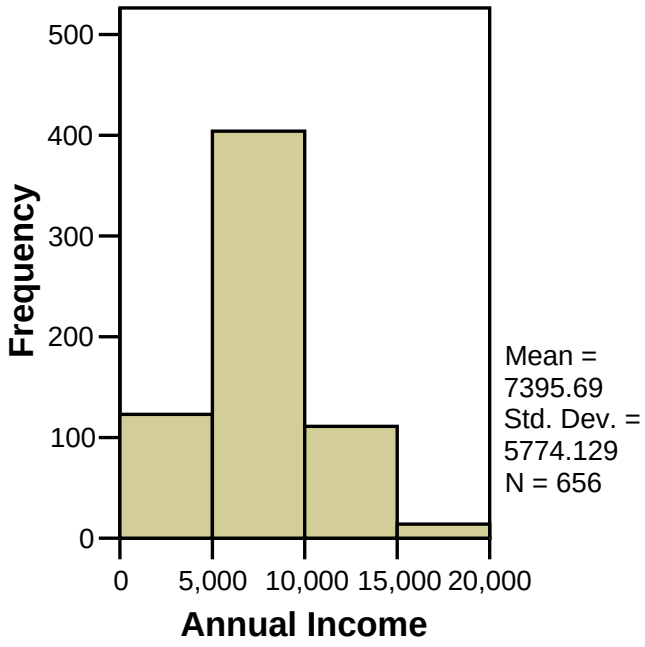


Figure 6 Number of earning members per family in the population

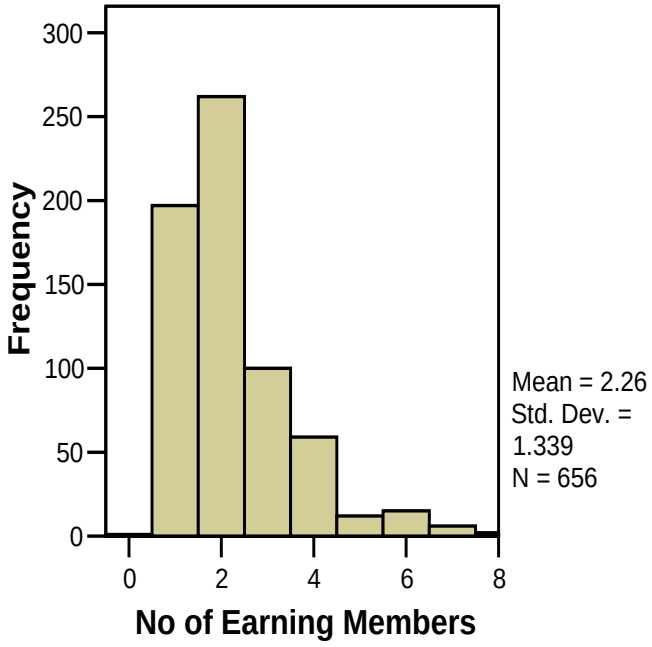


Figure 7 Type of Dwelling amongst the population

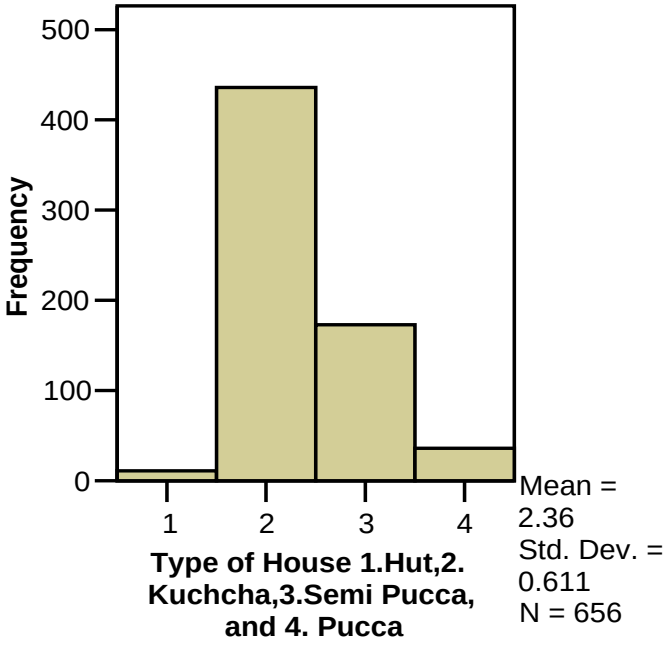


Figure 8 Landholding of the population

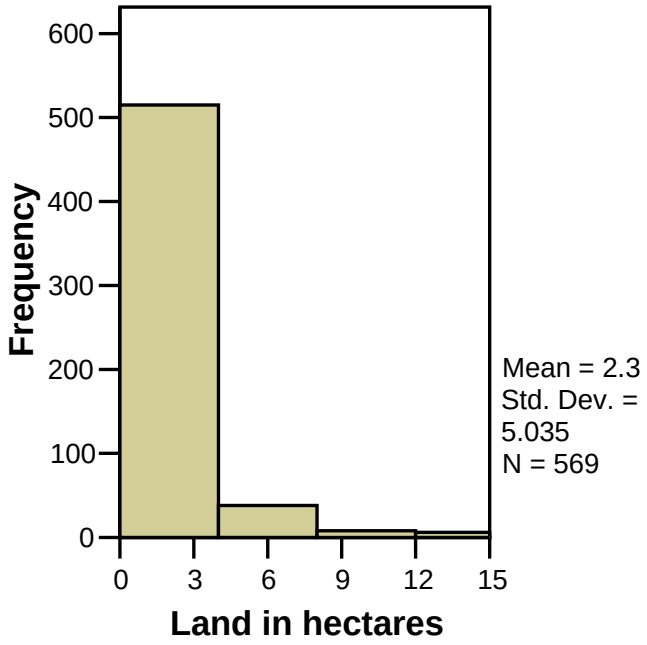
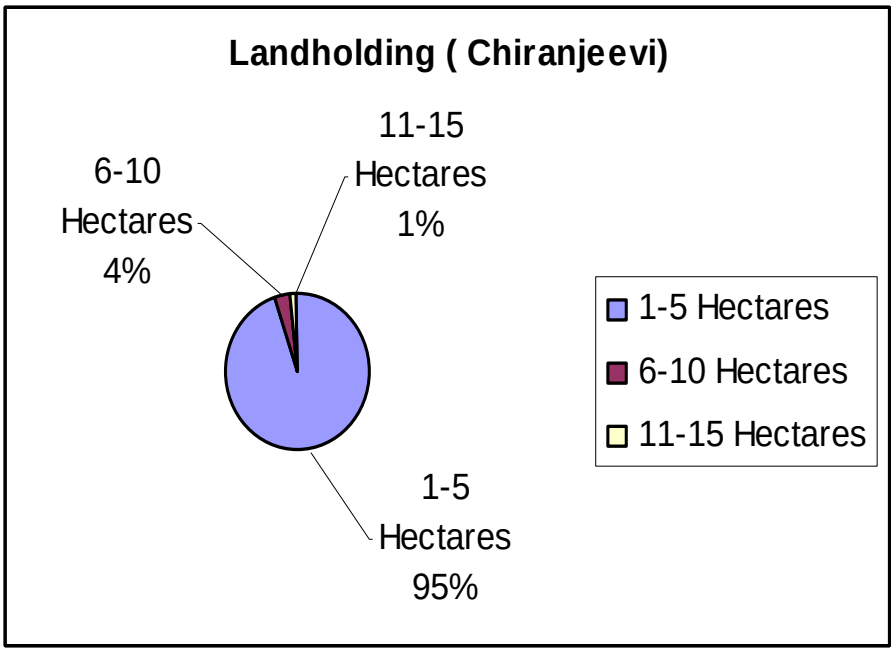


Figure 9 Landholding amongst Chiranjeevi and NC clients



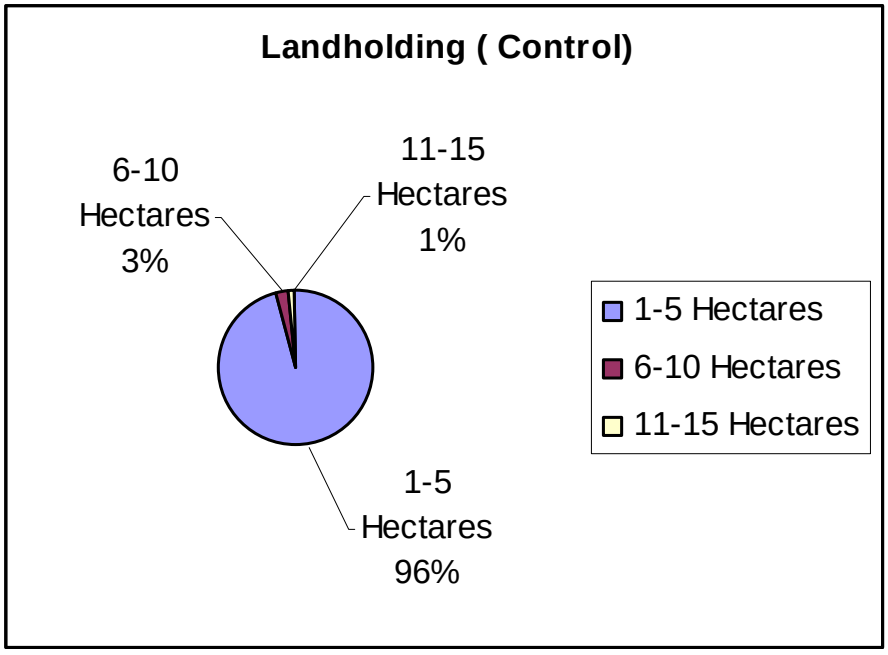


Figure 10 Educational Status of Chiranjeevi and NC clients

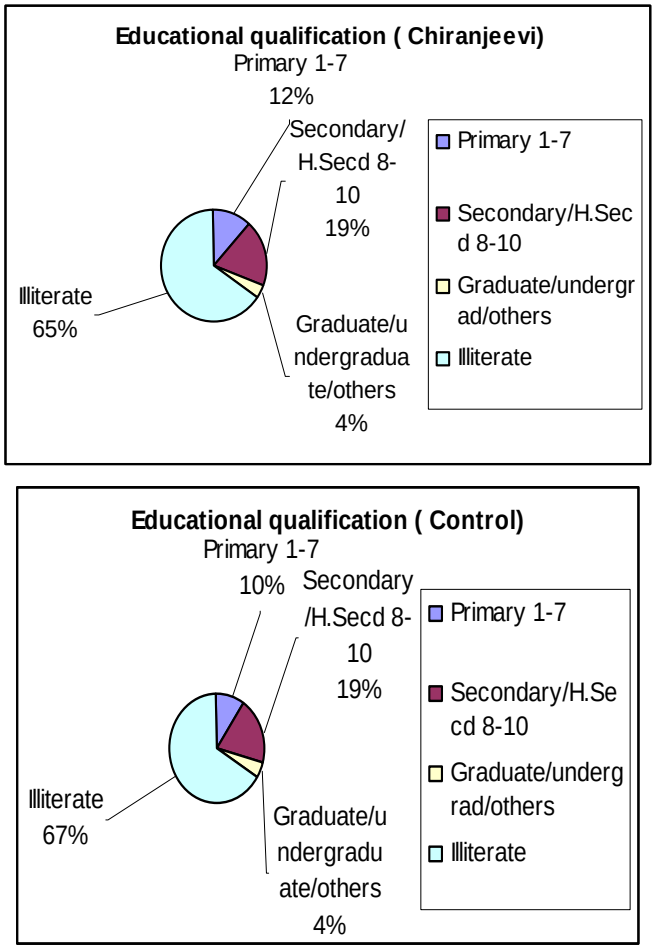
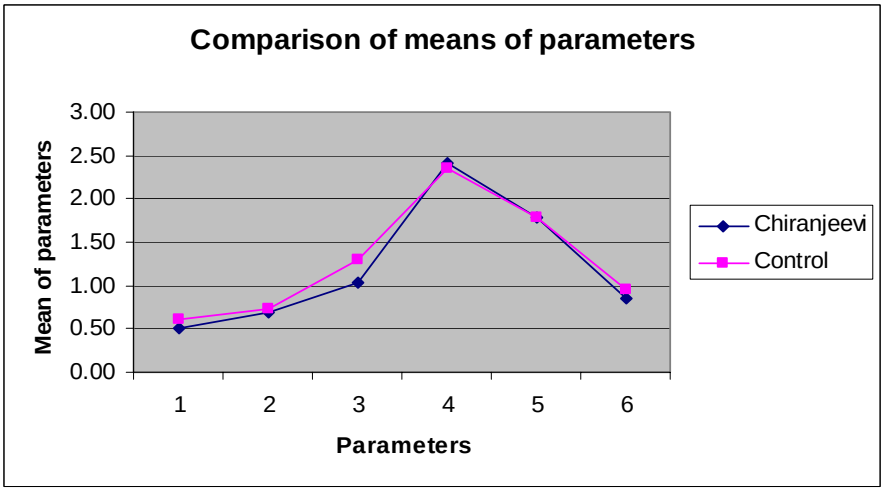


Figure 11 Comparison of means for both the clients of six parameters



Parameter 1: Profession, 2: Education, 3: Number of earning members in the family 4: Nature of dwelling, 5: Household assets, and 6: Land holding

Figure 12 Poverty Index of both the clients on six parameters

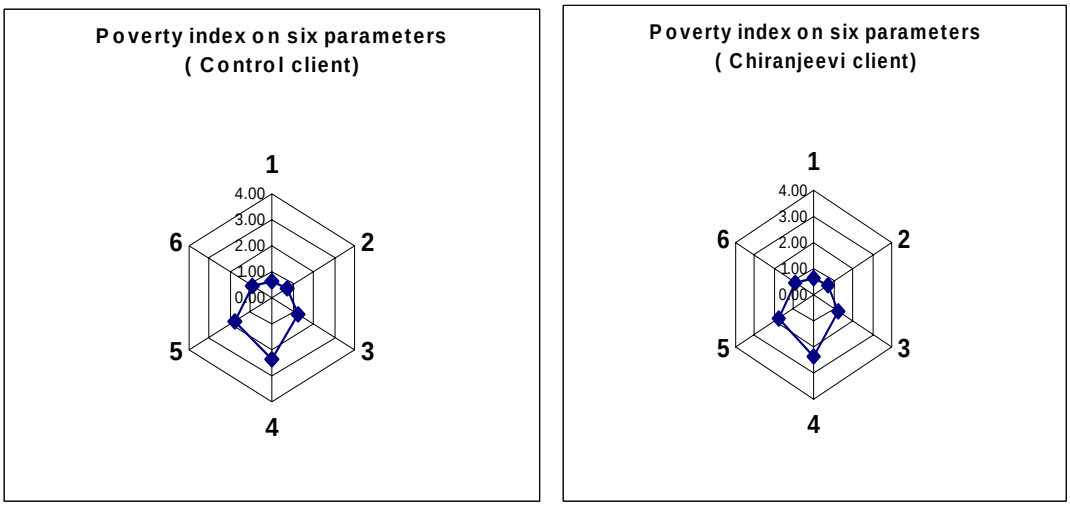


Figure 13 Expenditure incurred on medicine for self and child

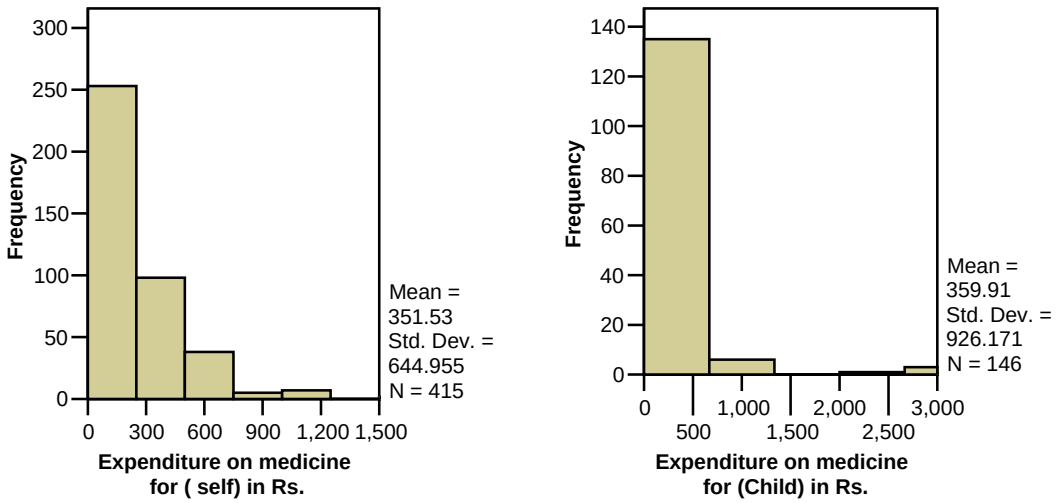


Figure 14 Expenditure incurred on Transportation

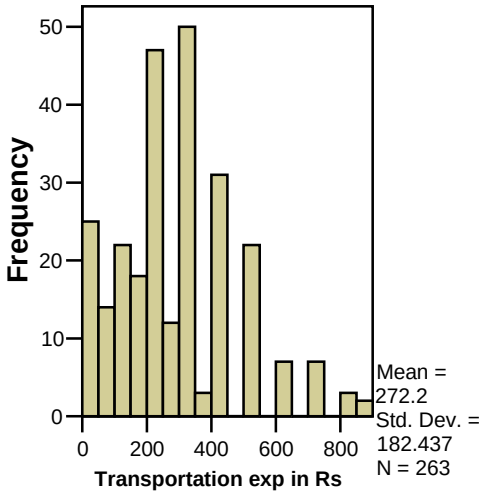


Figure 15 ANC Provider for Chiranjeevi clients

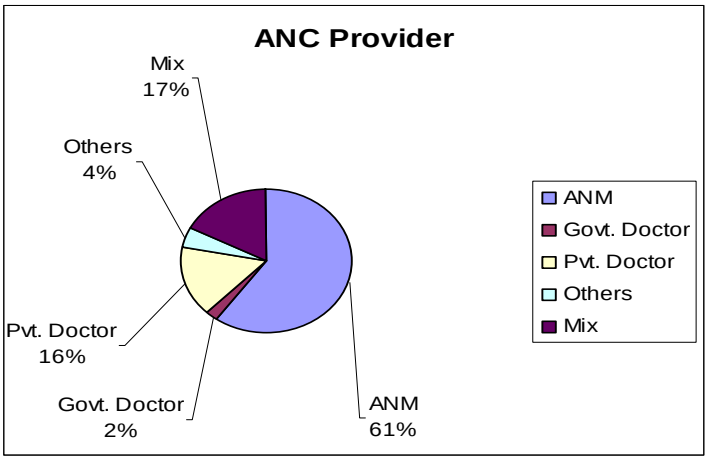


Figure 16 Place of receiving ANC for Chiranjeevi clients

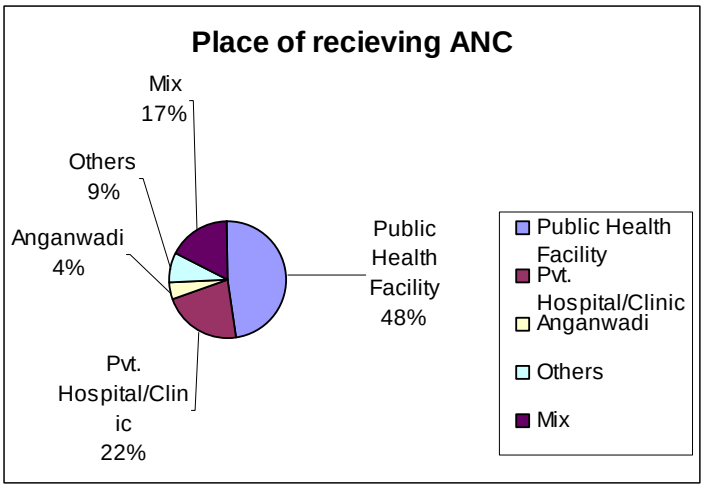


Figure 17 Intervention Provider during Ante Natal complication for Chiranjeevi clients

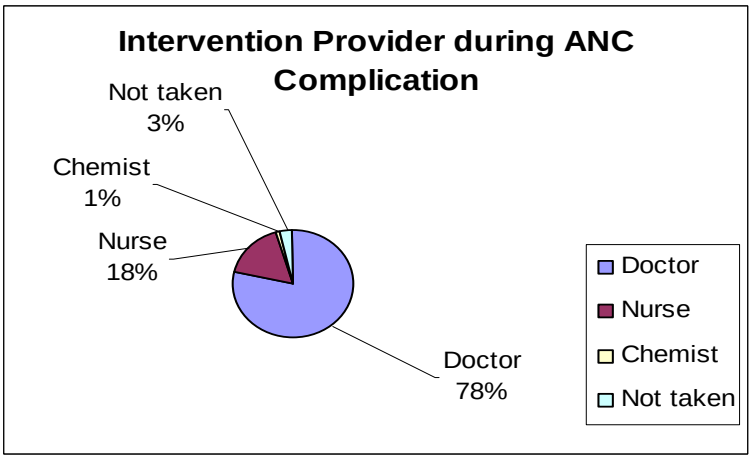


Figure 18 Place of intervention during Ante Natal complications

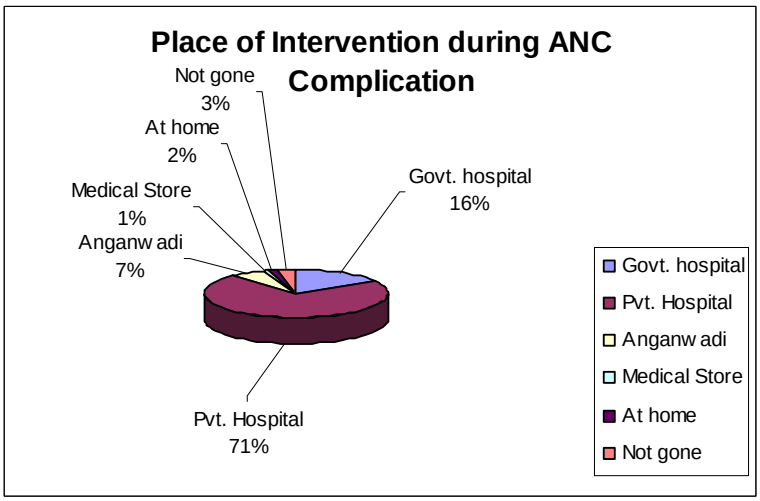


Figure 19 Distance of the facility from the residence (in kms) and time taken in hrs

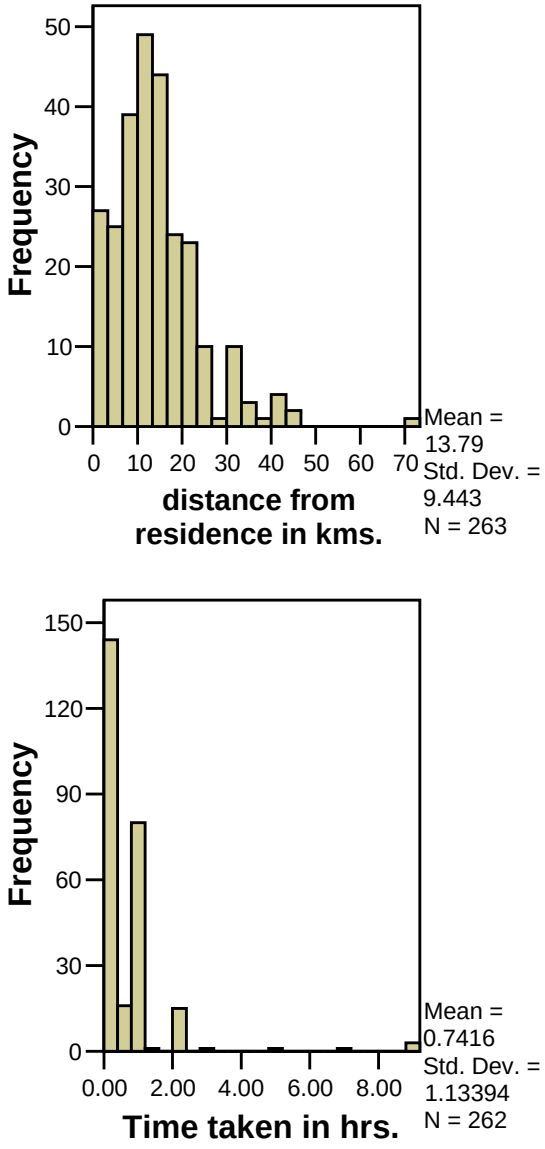


Figure 20 Decision maker for the place of delivery for Chiranjeevi clients

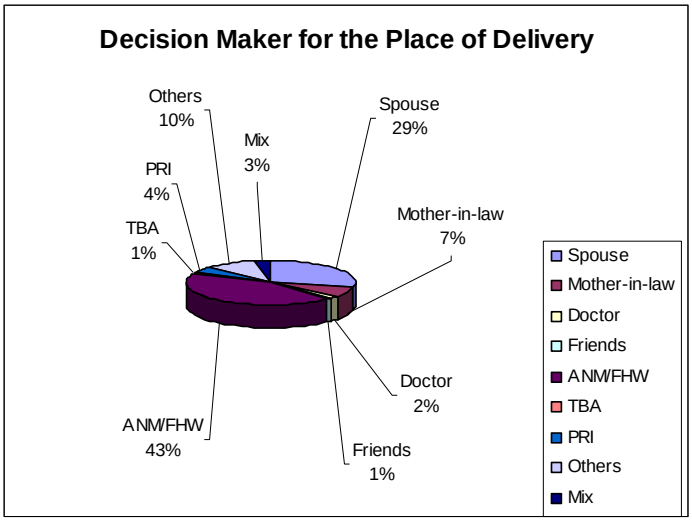


Figure 21 Number of people of accompanying the Chiranjeevi client to the facility

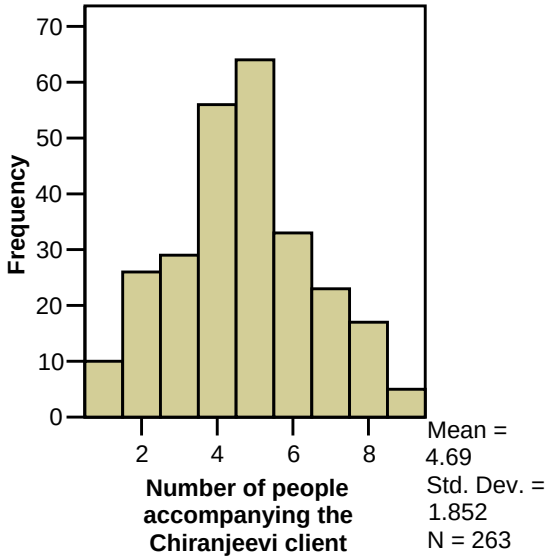
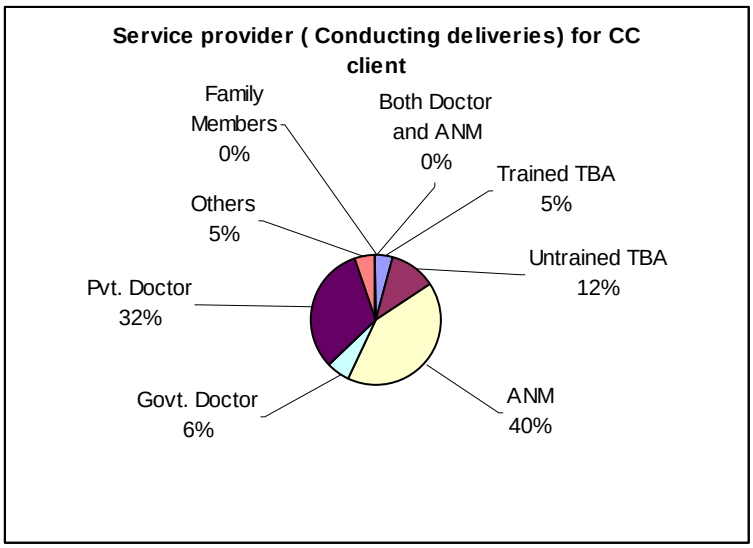


Figure 22 Service provider (conducting deliveries) for Chiranjeevi and NC clients



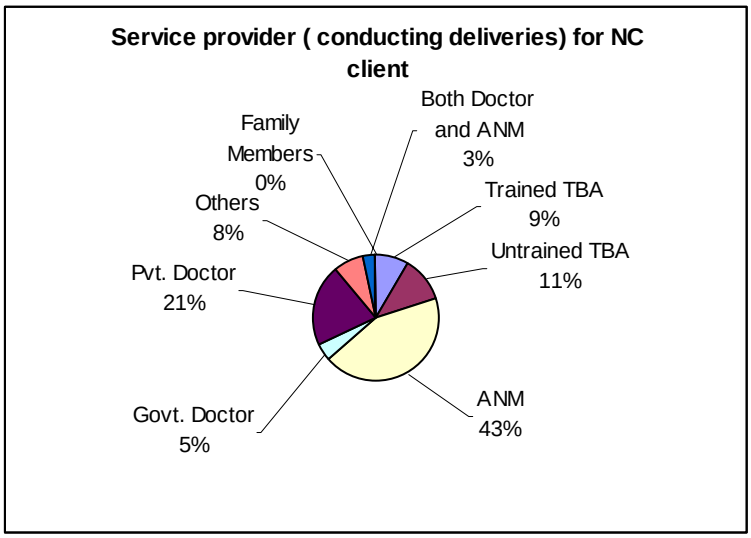
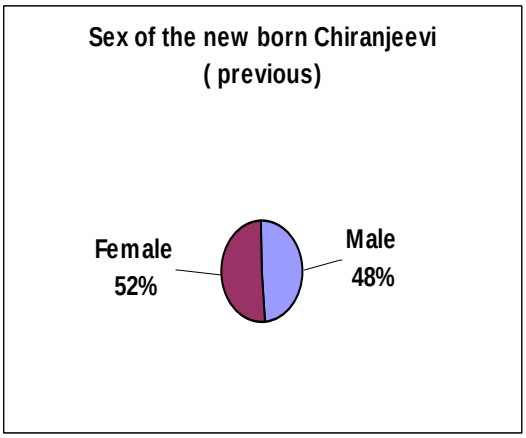
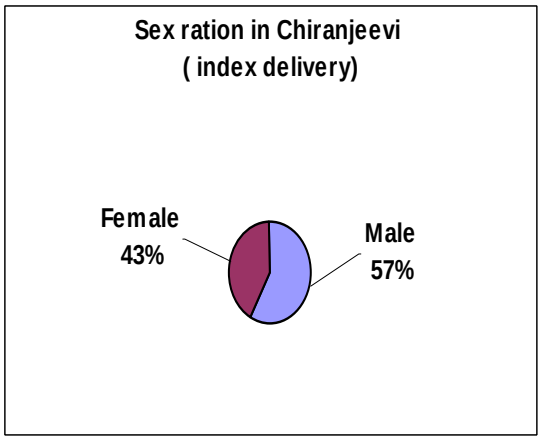


Figure 23 Sex Ratio for Chiranjeevi and NC clients





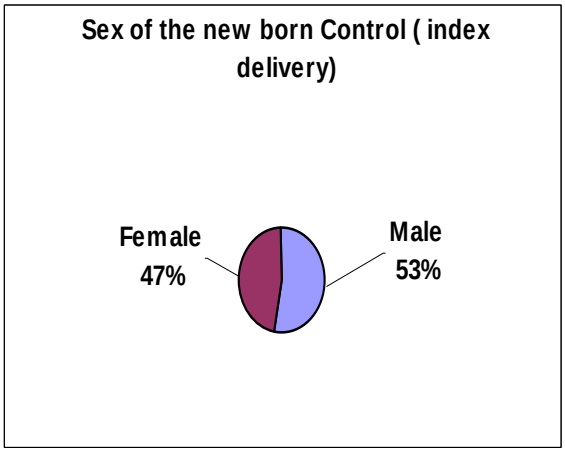


Figure 24 Sources of information about the Chiranjeevi scheme

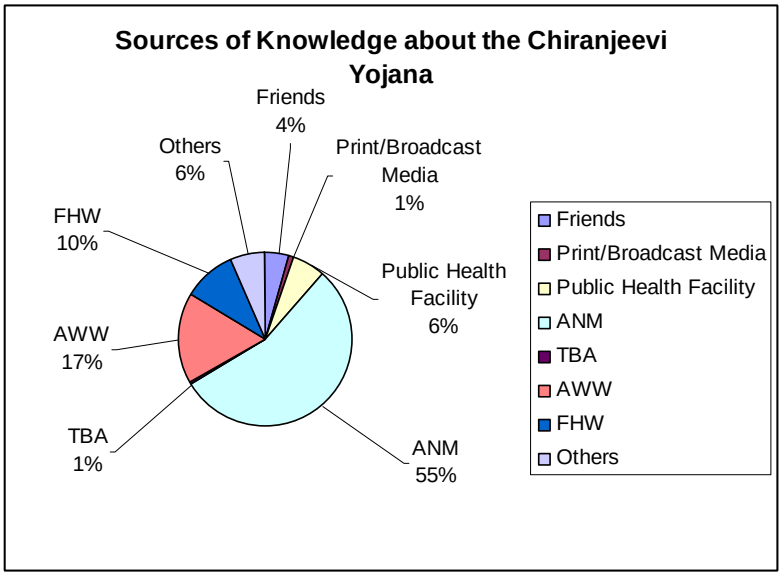


Figure 25 Factors influencing the clients to choose the Place of Delivery

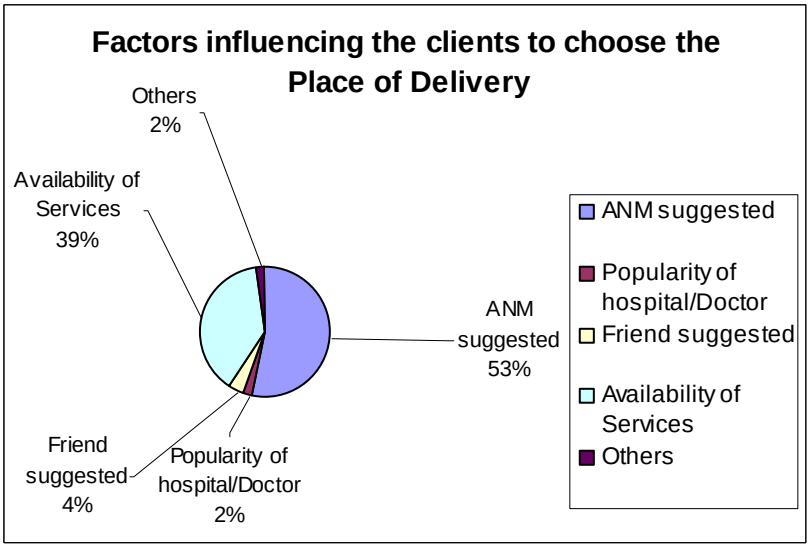


Figure 26 Satisfaction with the service for Chiranjeevi and NC clients

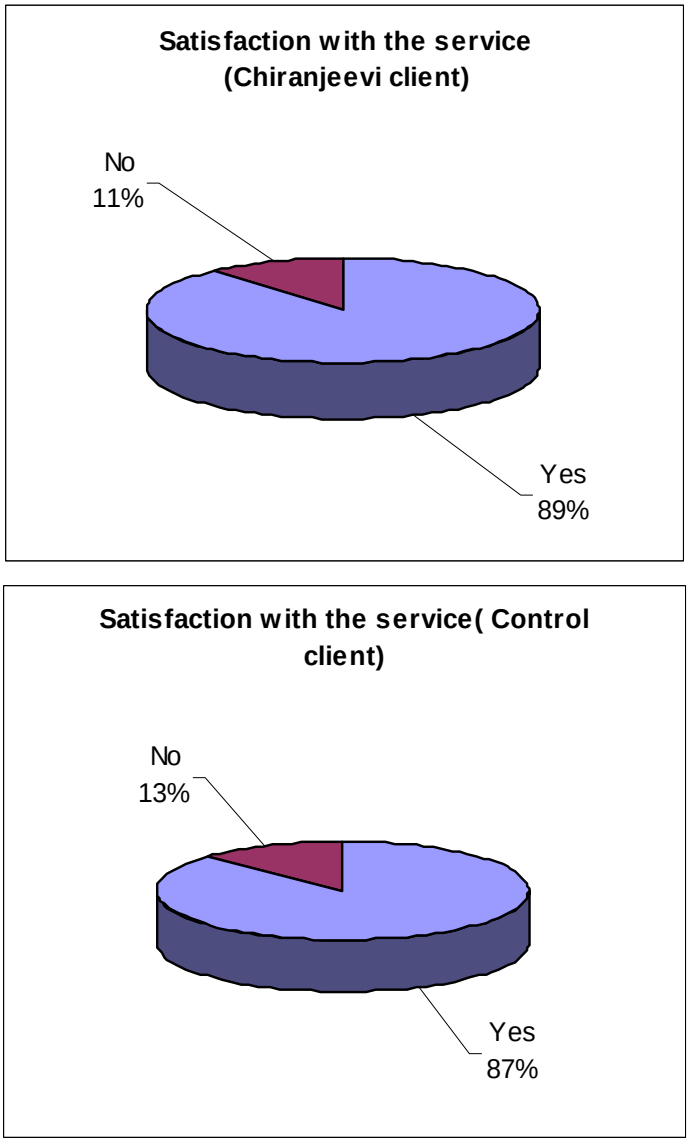
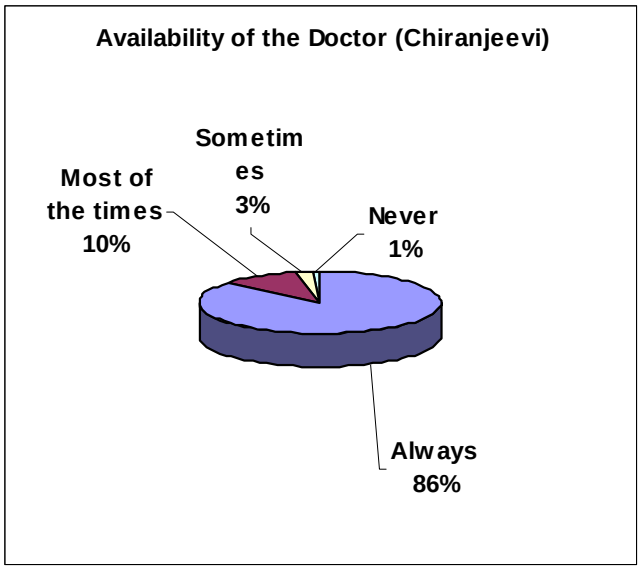


Figure 27 Availability of Doctor



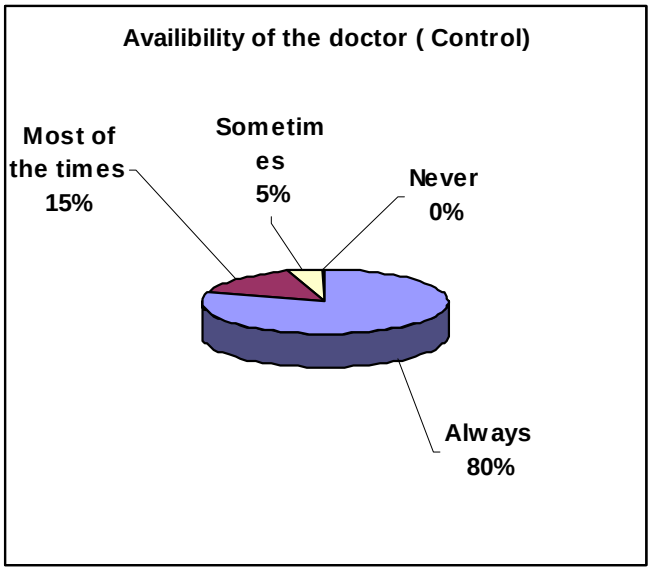


Figure 28 Availability of medicines for Chiranjeevi clients

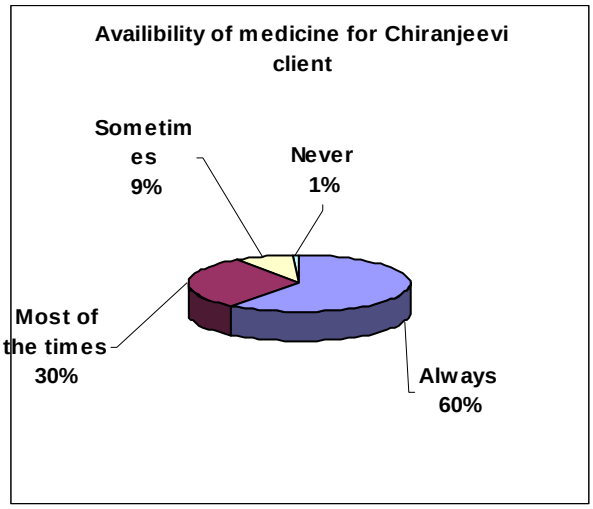
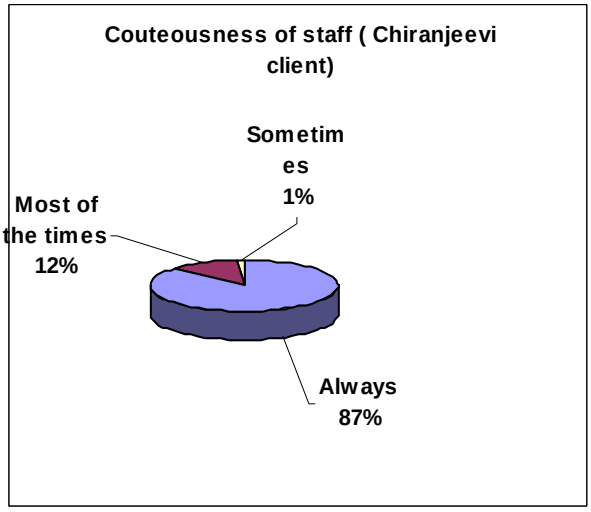


Figure 29 Courteousness of the staff for Chiranjeevi and NC clients



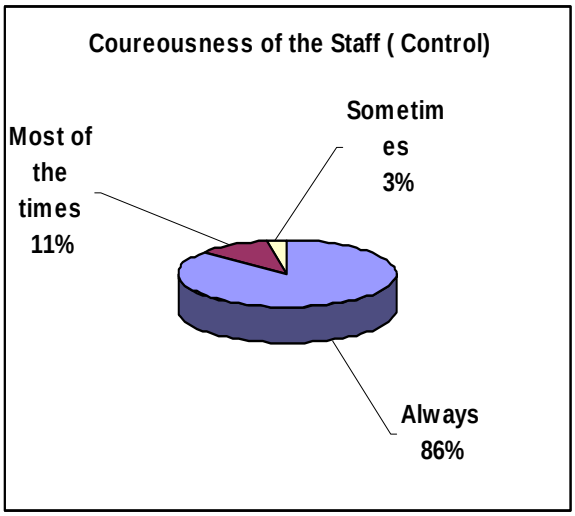


Figure 30 Reasons for satisfaction with the scheme