

CHAPTER: IV

Socio-economic Profile of the Sample and Choice of Health Care Service

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4.1 Introduction

Since, no secondary data is available, to get an insight into the health care utilization behavior among the people of rural Goalpara, the study undertook a survey of a few sample patients of rural Goalpara to satisfy some of the objectives and research questions mentioned in Chapter I. First part of this chapter is on the methodological issues and the rest part gives an idea about the socio-economic profile of the sample patients and how it affects the choice of health care service separately for in-patient treatment and out-patient treatment.

4.2 Methodological Issues in the Field Study

4.2.1 Cause of Selecting Goalpara district for Field Study

In order to study the utilization of health care in rural Assam, Goalpara district has been selected for field study as the district is a representative district of Assam. This district is multi-ethnic, multi-religious, multi-lingual and multi-caste one, which reflects the demographic pattern of Assam to a greater extent. A large number of ethnic groups like Rabha, Rajbangsi, Garo, Bodo, Hajong, Banai, Dalu etc. are in the district. Again, a large number of people of Scheduled castes and other backward community live in the district. Further, along with the hindus, a large number of muslims also live in the district.

Another important cause which leads to select Goalpara is its rural health care system which is quite similar with rural Assam. As already discussed in Chapter III, regarding rural health care system, there is similarity between Assam and Goalpara as the average number of population served by each Sub-centre and PHC is almost same. In case of CHCs, both Goalpara and Assam are overburdened.

4. 3.2. Sampling Design and Data Collection Tool

The sample has been selected using a multistage design. At the first stage, entire Blocks of the district has been classified in to three categories: developed, moderately developed and less developed on the basis of total number of villages having PHCs within 0-5km distance, 5-10km distance and 10km and above distance as per Census 2001. In the second stage, three Development Blocks of the district have been selected for field study. These three blocks are of different status in regard of available health care facilities as the Balijana development block is developed one, Khormouza development block is moderately developed and the Rongjuli development block is less developed. In the third stage, villages of the sampled blocks are again classified into three categories as: villages having PHC/CHC within 0-5 km, villages having PHC/CHC within 5-10 km and villages having PHC/CHC within 10 km & above. In the next stage, three villages has been selected at a random from each from of the three blocks, subject to the condition that at least one village from each village group is included. From the Balijana block, three villages namely, Kalapani, Dorapara and Kurowa Bhasa are selected on that basis. From Rongjuli block, three villages, namely, Kothalmuri Palsa, Kayasthpara and Dhupdhora Pt-II are selected. Finally, from Kharmouza block, three villages, Nij Satrapur, Pandoba and Nalonga Pahartoli have been selected. Finally, 30% households from each of the villages are selected with utmost care to capture variation in socio-economic background of the households. So, a total of 845 households from rural Goalpara have been selected for the field survey.

The study dealt with both in-patient and out-patient treatments. In-patient treatment was considered on the basis of 365 days reference period. Here, among the people of 845 households, 132 ailment cases found during 365 days reference period where patients have utilized in-patient health care. Hence, in this case, sample size is 132 in case of in-patient care. For analysing the in-patient health care utilization behaviour, health care institutions were clubbed under two heads: (i) *Rural Primary Health Care (RPHC)* Institution which includes dispensaries, PHCs, CHCs etc basically located in rural areas of Goalpara and the nearby areas of the district and (ii) *Urban Secondary Health Care (USHC)* Institution include Goalpara Civil Hospital, all the five nursing homes and the two trustee hospital located in Goalpara town.

Out-patient treatments cases are considered in 30 days reference period. Among the people of 845 households, 245 ailment cases found for 30 days reference period, where out-patient treatment was used. So, in case of out-patient health care utilization, sample size is 245. In this case, types of health care utilized by the people are clubbed into three groups: (i) *Informal Health Care (IHC)* which includes self medication without health personnel's advice, treatment by village *kabiraj*, *vadya* etc, (ii) *Rural Primary Health Care (RPHC)* institution which includes dispensaries, PHCs, CHCs etc and (iii) *other than IHC and RPHC* institution which include the health care provided by Urban Secondary Health Care Services (*USHC*) available in Goalpara town and the local private practitioners located in both rural and urban areas of Goalpara.

4.3 Description of the Study Area

Balijana Block is located in the midst of the district. The Balijana block is the nearest block so far distance from the district head quarter is concerned. The demography of the block is multi-ethnic, multi-caste, multi religious. The number of Muslim inhabitants in the block is also high. A good number of Rabha and Garos have been living in the block. Further, along with Kalita, a large number of Jogi have been

living in the Balijana Block. Comparing to other blocks of the district, communication system particularly condition of the road is better in the block. Still, there is large number of villages without all weather road communication. The socio-economic condition of the people is not so satisfactory. Along with agriculture, wage earning as labor is their main sources of livelihood. A few service holders and business men are also there.

Among the Development Blocks, the Kharmuja block is located in the western part of the district. The block is almost 25 KM from the district head quarter i.e. Goalpara. The largest part of the population of the block is socio-economically backward. Along with cultivation, people of the block earned their livelihood as wage labour, carpenter, labour in rubber plantations. A small number of people are engaged in government jobs and small business. The river Brahmaputra is flowing in the north side of the Kharmuja block. The 37 National Highway and the foothills of Meghalaya is the southern boundary of the Kharmuja block. Good number of inhabitants of the block has been the victim of seasonal flood and riverbank erosion. The block is inhabited by people of different religion and ethnic groups. Along with Muslims of East Bengal origin, people from Other Backward Community i.e. Jogi, Scheduled Tribes i.e. Garo, Rabha, Hajong, Koch and Scheduled Castes like Harijan have been living in the block. Among the different religious groups, the Muslims are the largest, whereas a good number of Christians and Hindus are also living in the block. The communication system of the block is not satisfactory. A large number of villages of the block have no provision of all weather roads.

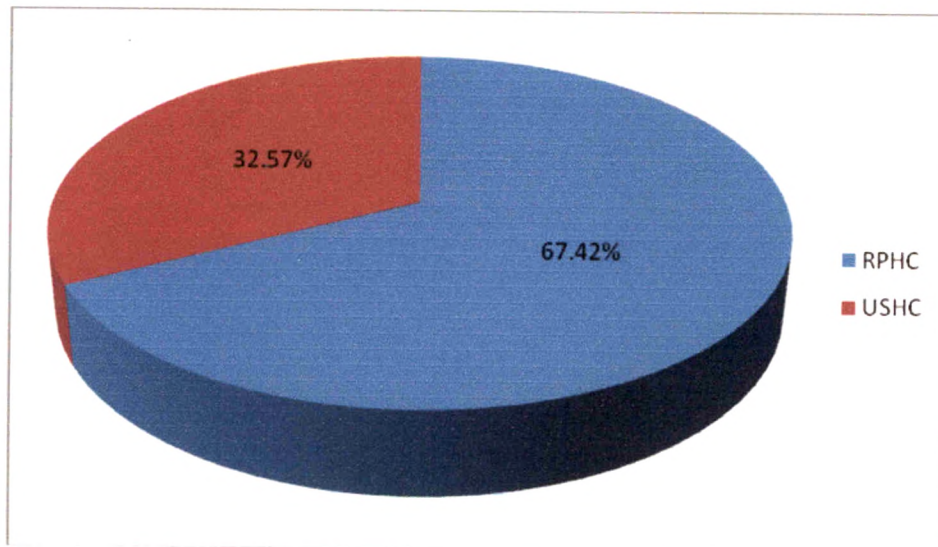
Rongjuli Block is the eastern most block of the Goalpara district. The block is bordering Garo Hills in the southern side and in the eastern side, it shares border with Kamrup district. The demography of the block is multi-ethnic, multi-caste, multi religious. Besides, the general caste population and the OBC population, a good number of Rabha and Garos have been living in the block. The number of Muslim inhabitants in the block is marginal. There is large number of Scheduled castes

population in the block. Economic condition of the household surveyed in the block is better in comparison to the Kharmouza block. The communication system is not bad in the surveyed village as there is all weather road facility in them.

4.4 Socio-economic Background and Choice of Health Care of the In-patient Sample

Regarding in-patient treatment, people in the study area rely upon RPHC institution mostly as 67.42% of the patients choose it for in-patient treatment. Only 32.57% of the patients from the study area opt for USHC institution for in-patient care as shown in fig 4.1.

Figure: 4.1: Choice of Health Care Institution for In-patient Care



Source: Primary data collected from field survey.

This type of choice of in-patient health care depends upon the socio-economic background of the sample to a greater extent.

4.5.1. Social Composition of the In-patient Sample and Choice of Health Care

Total population of the study area has been classified in to SC/ST and Others. Out of 132 in-patient sample, 31.81% of SC/ST group and the remaining 68.18% are from Others group (other than ST/SC).

Table 4.1 will reflect the choice of these social groups between RPHC institution and USHC institution for in-patient treatment. In case of ST/SC group, 70.58% have utilized RPHC institution and remaining 29.41% have utilized USHC institution for in-patient treatment.

Table 4.1: Social Composition and Choice of In-patient Health Care

Category	RPHC institution	USHC institution
ST/SC	70.58%	29.41%
Others	59.52%	40.48%

Source: Primary data collected from field survey

One important point observed from table 4.1 is that patient from Others group are less dependent upon RPHC institution than the ST/SC group. ST/SC group of population are more dependent on the RPHC than the Others group as 40.47% from Others group have been chosen USHC institution against 29.41% of the ST/SC group. This is because ST/SC inhabitants in the district are living in remote areas whereas others are living in better areas.

4.5.2. Gender Profile of the Sample and Choice of In-patient Health Care

In the study area, 53% of patients who has undergone in-patient treatment are male whereas 47% are female. Here, female patients has shown greater preference for RPHC institution than the male patients. 63.23% of the male patients preferred RPHC for in-patient treatment whereas 73.43% female patients choose the same for in-patient health care in the study area. As per the respondents, USHC facilities are

located in further area which makes it difficult to utilize the USHC service for the female patient. Again, 36.76% of the male patients have chosen USHC institution for in-patient treatment against 26.56% of the female patients. So, gender dimension has influence in determining people's choice regarding in-patient health care to some extent.

4.5.3. Economic Condition and Choice of In-patient Health Care

For both in-patient and out-patient treatment, economic condition of household has been measured in two ways: (i) Monthly Per Capita Consumption Expenditure (MPCE) of the household to which the patient who has under gone in-patient treatment belongs to and (ii) Cost of health care in terms of the distance from the patient's residence to the particular kind of health care utilized by the patient assuming other cost constant.

(a) Monthly Per Capita Consumption Expenditure (MPCE)

Average MPCE of the households to which in-patient samples belong to is Rs 400.19. Depending upon the MPCE, households are categorised into different groups as shown in table 4.2. From the column (ii) of the table 4.2, it has been observed that maximum patients that is 47.72% of the in-patient sample belong to household having lowest MPCE group i.e.,0-300.

Another important point observed from the table 4.2 is that percentage of sample of in-patients treatment declines for higher and higher MPCE group and ultimately, in case of highest MPCE group, it is just 2.27%. So, patients belonging to household having lower MPCE are more vulnerable to disease whereas higher MPCE are less vulnerable.

Table 4.2: MPCE of the Household to which In-patient Sample belongs to and Their Choice

MPCE (i)	In-patient cases (% of the total 132 in-patient sample) (ii)	RPHC institution (% of the column ii) (iii)	USHC institution (% of the column ii) (iv)
0-300	63(47.72)	50(56.17)	13(43.83)
300-600	43(32.57)	24(26.96)	19(73.14)
600-900	23(17.42)	15(16.85)	8(83.14)
900 & above	3(2.27)	0(0.00)	3(100.00)

Source: Primary data collected from field survey

From Column (iii) and (iv) of the table 4.2, it has been observed how MPCE of the household to which a patient belongs influences in-patient health care utilization behaviour in the study area. From column (iii), it is clear that patients' belonging to household having lowest MPCE prefer RPHC institution mostly for in-patient care. But, as the MPCE increases, percentages of patients choosing RPHC institution for in-patient treatment decreases. In case of USHC institution, 43.83% patients belonging to household having 0-300 MPCE prefer that whereas gradually, utilization percentage increases to 100% for the patients belonging to highest level of MPCE group as observed from column (iv) of table 4.2.

(b) Distance

Distance from the patient's residence to a particular kind of health care service chosen by the patient provides the mirror image of cost of health care utilization as it reflects the travel cost in terms of time and money keeping other cost constant. Higher the distance, higher will be the cost of health care utilization and vice-versa. Again, cost of health care utilization is the proxy of capacity to pay for health care. In the study area, average distance travelled by the sample for in-patient treatment is 11.59 km. In table 4.3, it has been observed that 40.15% of the sample patients have chosen health care institution within 0-5km from his residence for in-patient health

care. Again, 23.48% and 36.36% of the in-patient sample have chosen the health care institution within 5-10km and 10km & above distance respectively.

Table 4.3: Relation between Capacity to Pay and In-patient Health Care Utilization

Distance (i)	Total In-patient cases (ii)	RPHC institution (% of row total) (iii)	USHC institution (% of row total) (iv)
0-5km	53(40.15)	53(100.00)	0 (0.00)
5-10km	31(23.48)	21(67.74)	10(32.25)
10km & above	48(36.36)	16(33.33)	32(66.66)

Source: Primary data collected from field survey

Another important point is that 100% of the in-patient samples from lowest capacity to pay group (proxy 0-5km distance) have chosen RPHC institution for in-patient treatment. When the capacity to have improved, percentage of sample patients choosing RPHC institution for in-patient treatment has been declining and ultimately, for highest capacity to pay group of the sample, it became only 33.33%. In case of USHC institution, when the capacity to pay improved, percentage of sample patients choosing USHC institution for in-patient treatment has been increasing and ultimately, became 66.66% for the highest capacity to pay group (proxy 10 km & above group).

4.5.4 Age Composition and Choice of In-patient Health Care

Patients from different age are categorized under two groups: dependent age group and independent age group for both in-patient and out-patient treatments. Patients between 0-15 year age and 60 years and above are categorized as dependent age group whereas patients above 15 years to below 60 years age are categorized as independent age group. Patients from dependent age group are dependent due to economic reason and physical reason.

In the study area, among 132 the sample patients, 58% are from independent age group whereas 42% are from dependent age group. Although, patients from both age group preferred RPHC Institution; but, patients from dependent age group have preferred it mostly. Among the patients of independent age group, 66.23% went to RPHC Institution, whereas 76.36% of the patients of dependent age group have chosen RPHC Institution for in-patient health care. In case of USHC, 33.76% of the patients from independent age group went there whereas 23.63% of the patients of the dependent age group preferred USHC Institution for in-patient health care.

4.5.5. Educational Attainment of In-patient Sample and Choice of Treatment

Average years of education in study area of the in-patient sample is 4.57 years. In the study area, 22.72% of the in-patient samples are from the group 0 years of education. Then, 21.21%, 47.72% and 9.09% of the in-patient samples are from 0-4years of education, 4-10 years of the education and 10 years & above respectively.

Table 4.4: Educational Attainment and Choice of In-patient Treatment

Years of Education (i)	In-patient cases (% of total 132 in-patient cases) (ii)	RPHC institution (% of column ii) (iii)	USHC institution (% of column ii) (iv)
0 years	30 (22.72)	24(80.00)	6(20.00)
0-4years	28 (21.21)	19(67.85)	9(32.15)
4-10years	63 (47.72)	42(66.66)	21(33.33)
10years & above	12 (9.09)	7(58.33)	5(41.66)

Source: Primary data collected from field survey

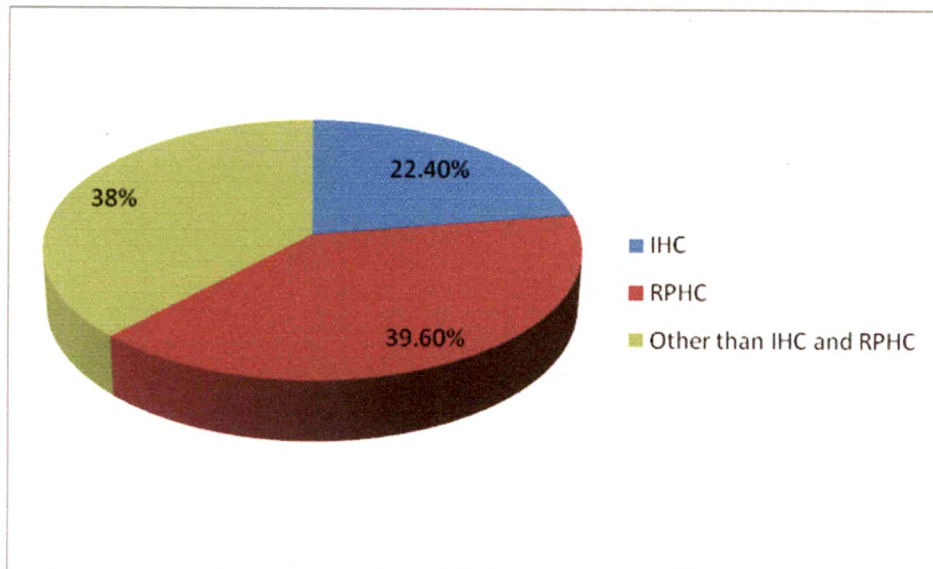
Of the total in-patient sample from the group 0 years of education, 80% have utilized RPHC institution for in-patient treatment whereas remaining 20% have utilized USHC institution for the same type of treatment. As the years of education increases, percentage of sample patient from each group (group based on years of education) who have chosen RPHC institution for in-patient treatment decreases and ultimately,

become 58.33% at 10 years & above level of education. In case of USHC institution, reverse has happened as with the increase in the years of education. Percentage of sample patient from each group choosing USHC institution for in-patient treatment increases and ultimately, became 41.66% for the highest group.

4.6. Socio-economic Background and Choice of Health Care of the Out-patient Sample

Regarding out-patient health care utilization, Rural Public Health Care (RPHC) institution plays significant role as 39.60 % patients of the study area choose it. Again, 22.40% patients went to Informal Health Care (IHC). Remaining 38% have used Other than IHC and RPHC (i.e., USHC or private practitioners service) for out-patient care in the study area.

Figure 4.2: Choice of Health Care Institution for Out-patient Treatment



Source: Primary data collected from field survey

4.6.1. Social Composition of the Out-patient Sample and Their Health Care Choice

Like in-patient health care, in case of out-patient treatment also, total population of the study area has been classified into SC/ST and Others. Out of 245 out-patient sample, 31.83% of SC/ST group and the remaining 68.16% are from Others group (other than ST/SC). From the table 4.5, it has been clear that of the SC/ST out-patient sample, 39.74% that is the highest percentage of patients go for RPHC institution whereas in case of the Others group, 40.11% that is highest percentage of patient have utilized Other than IHC and RPHC institution for out-patient care.

Table 4.5: Social Composition and Choice of Health Care of the Out-patient Sample

Category (i)	Out-patient cases(% of total out-patient cases) (ii)	IHC (% of column ii) (iii)	RPHC institution(% of column ii) (iv)	Other than IHC and RPHC (% of column ii) (v)
ST/SC	78(31.83)	18(23.07)	31(39.74)	29(37.17)
Others	167(68.16)	38(22.75)	62(37.12)	67(40.11)

Source: Primary data collected from field survey

4.6.2. Gender Profile of the Sample and Choice of Out-patient Health Care

Among the out-patient sample, 44.89% are male whereas 55.10% are female. There is some influence of the gender dimension regarding out-patient health care choice as observed from table 4.6.

Highest percentage of the male patients (45.45%) go to other than IHC and RPHC for out-patient care. In case of female patients, there is higher utilization for RPHC among for out-patient health care with 40.75% female patients using it. 28.88% of

the female patients, in the study area, have chosen IHC for out-patient health care whereas 19.09% of the male patients go to the same for out-patient care.

Table 4.6: Gender Dimension and Choice of Out-patient Health Care

Gender (i)	Out-patient cases(% of total 245 out-patient cases) (ii)	IHC (% of column ii) (iii)	RPHC institution (% of column ii) (iv)	Other than IHC and RPHC (% of column ii) (v)
Male	110(44.89)	21(19.09)	39(35.45)	50(45.45)
Female	135(55.10)	39(28.88)	55(40.75)	41(30.37)

Source: Primary data collected from field survey

4.6.3. Economic Condition and Choice of Out-patient Health Care

(a) Monthly Per Capita Consumption Expenditure (MPCE)

Average MPCE of the households to which out-patient samples belong to is Rs 403. From table 4.7, it has been observed that out of the total 245 sample cases 38.56% cases are from MPCE group 0-300. Highest percentage of out-patient cases that is 44.89% cases are from the next MPCE group 300-600 and the lowest percentage of out-patient sample cases that is 2.04% are from highest MPCE group.

Table 4.7: MPCE of the Out-patient Sample and Health Care Choice

MPCE (i)	Out-patient cases (% of total out-patient sample) (ii)	IHC (% of column ii) (iii)	RPHC institution (% of column ii) (iv)	Other than IHC & RPHC (% of column ii) (v)
0-300	94(38.36)	27(28.72)	58(61.70)	9(9.57)
300-600	110(44.89)	24(21.81)	31(28.18)	55(50.00)
600-900	36(14.69)	1(2.77)	4(11.11)	31(86.11)
900 & above	5(2.04)	0(0.00)	1(20.00)	4(80.00)

Source: Primary data collected from field survey

As the MPCE increases, percentage of out-patient sample who have chosen IHC as a mode of health care falls down and ultimately, become 0% for the highest MPCE group. In case of RPHC institution, 61.70% of the 0-300 MPCE group have chosen it for out-patient care. But, for higher MPCE group, less percentage of people have gone to RPHC institution for out-patient care. Actually, the out-patient samples from higher MPCE group mostly prefers the health care services from Other than IHC and RPHC as observed in table 4.7. From the MPCE group 600-900, 86.11% patients have utilized such kind of health care services. But, in case of the next MPCE group, percentage of out-patient sample who have utilized health care services from Other than IHC and RPHC has come down to 80.00%.

b)Distance

In the study area, average distance travelled by the sample for out-patient treatment is lesser than in case of in-patient sample that is 8.08 km. In table 4.8, it has been observed that 64.89% of the sample patients have chosen health care institution within 0-5km from his residence for out-patient health care. 6.12% of the out-patient sample patients have chosen the health care institution within 5-10 km. Remaining 28.97% have gone to health care institution at a distance of 10 km & above respectively.

Table 4.8: Capacity to Pay of the Out-patient Sample and Health Care Utilization

Distance (i)	Total Out-patient cases(% of total cases) (ii)	IHC (% of column ii) (iii)	RPHC institution (% of column ii) (iv)	Other than IHC and RPHC (% of column ii) (v)
0-5km	159 (64.89)	55 (34.59)	85 (53.45)	19 (11.94)
5-10km	15 (6.12)	1 (6.66)	8 (53.33)	6 (40.00)
10km & above	71 (28.97)	3 (4.22)	0 (0.00)	68 (95.77)

Source: Primary data collected from field survey

From table 4.8, it has been observed 34.59% of the out-patient samples from lowest capacity to pay group (proxy 0-5km distance travelled) have chosen IHC for treatment. When the capacity to pay of the sample has improved, percentage of sample patients choosing IHC for out-patient treatment has been declining and eventually, for highest capacity to pay group of the sample, it became only 4.22%. Almost same percentage of patients (approximately 53%) from both group 0-5km and 5-10km, have utilized RPHC institution for out-patient treatment. But, when the distance increased to 10 km & above (in other words, when capacity to pay of the out-patient sample is highest) percentage of sample patients choosing RPHC institution for out-patient treatment has been decreased to 0%. In case of out-patient health care service from the category Other than IHC and RPHC, percentage of sample availing out-patient health care increases from 11.94% to 95.77% as distance increases from 0-5km to 10km & above.

4.6.4. Age Composition and Choice of Out-patient Health Care

Out of the total out-patient sample, 56% are from independent age group whereas 44% are from the dependent age group. Utilization of IHC service for out-patient treatment is quite high (35.18%) among the sample from dependent age group where as among the sample of independent as group, it is just 14.59%.

Table 4.9: Age Composition of the Out-patient Sample and Health Care Utilization

Type (i)	Total Out-patient Cases (% of total cases) (ii)	IHC (% of column ii) (iii)	RPHC institution (% of column ii) (iv)	Other than IHC and RPHC (% of column ii) (v)
Independent Age	137(56)	20(14.59)	48(35.03)	69(50.36)
Dependent Age	108(44)	38(35.18)	41(37.96)	29(26.85)

Source: Primary data collected from field survey

In case of RPHC institution, slightly more percentage of patients from dependent age group have chosen it for out-patient treatment than the patients from independent age group. But, the patients from independent age group have shown more preference for the category Other than IHC and RPHC for out-patient treatment as 50.36% have utilized this kind of health care for out-patient health care. But, in case of the patients from dependent age group only 26.85% have utilized it.

4.6.5. Educational Attainment of the Sample and Choice of Out-patient Treatment

Average years of education for out-patient treatment are 4.38 years. In the study area, 29.38% of the out-patient samples are from the group 0 years of education. Then, 24.08%, 38.36% and 34.69% of the out-patient samples are from 0-4years of education, 4-10 years of the education and 10 years & above respectively. As the years of education increases, utilization of IHC decreases from 30.55% in 0 years of education to 0% in 10years & above level of education. Again, regarding utilization of RPHC institution also, more or less similar trend has been observed as utilization of RPHC decreases from 30.55% in 0 years of education to only 15% in 10 years & above level of education as shown in table 4.10.

Table 4.10: Educational Attainment of Out-patient Sample and Choice of Health Care

Years of Education (i)	Out-patient cases (% of total in-patient cases)(ii)	IHC (% of column ii) (iii)	RPHC institution (% of column ii) (iv)	Other than IHC and RPHC (% of column ii) (v)
0 years	72 (29.38)	22 (30.55)	35 (48.61)	15 (20.83)
0-4years	59 (24.08)	13(22.03)	26 (44.06)	20 (33.89)
4-10years	94 (38.36)	22(23.40)	26(27.65)	46(48.93)
10 years & above	85 (34.69)	0(0.00)	3(15.00)	17(85.00)

Source: Primary data collected from field survey

An opposite trend has been observed in case of the utilization of the Other than IHC and RPHC category of health care. In this case, as the years of education increases from 0 years to 10 years & above, out-patient utilization of health care increases from 20.83% to 85.00%.

4.7. Conclusion

This chapter is the presentation of the socio-economic profile of the sample in-patient and out-patient cases of the study area corresponding to the reference period. Besides, this chapter tries to focus how the various socio-economic characteristics of the sample patients influence their health care utilization behaviour in terms of choice among different kind of health care for both in-patient and out-patient health care. Ultimately, from this chapter, it has been observed there is diversity among the in-patient and out-patient samples regarding several socio-economic parameters like age, gender, caste, educational attainment, capacity to pay etc. Although, Rural Public Health Care service plays a significant role in meeting the demand for health care among the sample patients for both in-patient and out-patient treatment and especially in case of in-patient treatment, still socio-economic diversities among the sample cases have some influence on the choice of health care service both in case of in-patient and out-patient care. Generally, socio economically disadvantaged group are more dependent on Rural Public Health Care than the rest.
