

CHAPTER: VII

Summary of the Findings and Conclusion

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7.1. Introduction

This chapter is the concluding chapter of the study. Before drawing final conclusion from the study, it would be instructive to go through the principal findings of the study which is presented in the section 7.2. Based on the principal findings, the conclusions drawn are presented in section 7.3 and suggestive policy measures in section 7.4.

7.2. Principal Findings

The principal findings of the study are presented under following heads:

7.2.1 Health Status and Health Care in Rural Assam

* Acute illness like diarrhoea, acute respiratory infection (ARI), all types of fever, tuberculosis, asthma, arthritis are more prevalent in rural Assam than the urban counter parts.

* As per Annual Health Survey Bulletin (2011-12) of RGI, along with other nine states of India, in rural Assam, children are more vulnerable to infant mortality. As per NFHS-3, in rural Assam, IMR is 67 against 58 in the urban Assam.

*As per Annual Health Survey 2010-11(Assam), disparity exists regarding rate of neonatal, post neonatal, infant and under- five mortality rates between urban and rural areas in Assam. Neonatal mortality rate, post neonatal rate and infant mortality rate in rural Assam is little bit less than double of urban Assam. In case of under five mortality rates in rural Assam, it is exactly double that of the urban Assam.

*Most of the cases of IMR occurred in rural Assam are actually preventable through simple and low cost techniques like vaccination against six major childhood illnesses. But, it is a matter of serious concern that in rural Assam, only 58.2% of children of age 12-23 months are fully immunized in contrast to 63.7% fully immunized in case of urban Assam (Annual Health Survey 2010-11, Assam).

* According to Annual Health Survey 2010-11(Assam), in rural Assam, 19.2% children were suffered from ARI whereas in case of urban Assam, it is 15.8%. But, in rural Assam, during Annual Health Survey 2010-11, 85.3% of the infected children are taken to a health facility or provider as against 88.7% in urban areas. Diarrhea is also more prevalent in rural Assam (8.5%) than in urban Assam (7.2%).

* In rural areas of Assam, 32.9% children suffered from fever whereas in case of urban Assam, 26.5% children were affected from any kind of fever. Unfortunately, as per Annual Health Survey 2010-11, only 83.2% affected children have under gone treatment in rural Assam. Prevalence of anemia among children is higher in rural areas (70%) as against urban areas (60%) (NFHS-3).

* MMR, in Assam, is the highest all over India followed by states like Bihar, Uttar Pradesh etc (Sample Registration System 2007). In contrast to that states like Karala, Maharastra, Tamilnadu have achieved the target of the Millennium Development Goal (MDG). States like Andhra Pradesh, West Bengal, Gujarat and Haryana are in closer proximity to the MDG target.

* Bulletin of Sample Registration System on maternal mortality in India (1997-2003) have strongly recommended for institutional delivery, because, the pattern of maternal mortality in India especially in rural Assam reinforces rapid expansion of institutional and skilled birth attendance.

* As per Annual Health Survey 2010-11, Assam, percentage of women who receives any ante natal care in rural areas is 90%. But, in case of percentage of women who received three or more ante natal checkups, the percentage come down in rural areas

by almost 32 points. Only 10.5% pregnant women in rural Assam, actually, receive full antenatal care.

*Rural mothers are more dependent on government health care facilities as 70.9% mothers in rural areas received ante natal care (ANC) from government institutions against 62.1% in urban areas. Again, only 53.9% deliveries happen to institutional framework in rural Assam against 76.4% deliveries in case of urban areas.

*According to NFHS-3, in rural Assam, among the people of the age group 15-59, number of person per lakh population, those are infected by tuberculosis is 849 as against which 784 are medically treated tuberculosis cases. With the increase in the age, number of persons affected by tuberculosis also increases both in rural and urban areas; but the rate of increase is higher in rural areas. Besides, goitre is another more prevalent disease in rural areas of Assam.

*Rural areas of districts like Sonitpur, Nalbari, Morigaon, Karimganj, Jorhat, Golaghat, Dhubri are facing serious problem with the Neo-natal Mortality Rate more than the state average in case of rural areas (42). But, in case rural areas of districts like NC Hills, Karbi Anglong, Hailakandi, Dhemaji, Darrang, Bongaigaon, Barpeta, situation is better than rural Assam average.

*In case of Post Neo-natal Mortality Rate, all Assam average is 22 in case of rural areas whereas in case of urban Assam, it is 12. In rural areas of districts like NC Hills, Nagaon, Morigaon, Kokrajhar, Darrang, Post Neo-natal Mortality Rate is higher than state average whereas in rural areas of districts like Tinsukia, Nalbari, Lakhimpur, Jorhat, Goalpara, Golaghat, Dibrugarh, Dhemaji, Barpeta, situation is quite better than state average regarding Post Neo-natal Mortality as per Annual Health Survey 2010-11, Assam.

* Under Five Mortality Rate in rural Assam is exactly double of urban Assam. Under Five Mortality is quite higher is among the girl child of rural areas of many districts like NC Hills, Kokrajhar, Nalbari, Nagaon, Morigaon, Karimganj, Karbi Anglong, Golaghat, Dhubri, Darrang etc. In case of male child, highest Under Five Mortality

has been observed in case of Rural Hailakandi. Next to that rural areas of Kokrajhar, Morigaon, Dhubri, Darrang are also facing higher rate of Under Five Mortality than all Assam average for male babies; still it is lesser than in case of girl child.

* In regard of percentage of institutional delivery in rural areas, all most all districts of upper like Dhemaji, Dibrugarh, Golaghat, Jorhat, Sibsagar, Tinsukia are performing quite well than rural Assam average. Again, in lower Assam, only Kamrup and Nalbari are performing above all Assam average in that matter. But, in Barak valley, districts are not doing well in that matter.

*In rural areas of districts like Cachar, Dibrugarh, Golaghat, Jorhat, Karimganj, Kokrajhar, Nagaon, Tinsukia, number of persons suffering from acute illness are quite higher where as in the rural areas of Barpeta, Bongaigaon, Dhubri, Kamrup, Lakhimpur, NC Hills and Lakhimpur, it is lower than all Assam average.

*Another important dimension is that there is gender disparity regarding the number persons suffering from acute illness in rural Assam. Except a few districts like Cachar, Dhubri, Kamrup, NC Hills, in all other districts, number female suffered acute illness is more than the number of male.

*In rural Jorhat, number of persons suffered from any kind of symptom of chronic illness is highest among the rural areas of the districts of Assam. Again, along with rural Nagaon, in rural Jorhat also, gender disparity in this regard is highest. In all most all the districts of upper Assam, percentage of people suffering from any kind of symptom of chronic illness is quite higher than other parts of the state. In lower Assam, condition of rural Nalbari is worse than all Assam average both for male and female. Kokrajhar is all most same situation as all Assam average. Among Barak valley districts, in rural areas of Cachar district, more people are suffering from any kind of symptoms of chronic illness. But, other districts in this valley are in better situation than all Assam average in that context.

* In Assam, underdeveloped infrastructure is another reason for poor health status. This refers not just to facilities for established medical care, but also the inadequacy

of good, all weather transportation and communications. The inability to move basic medicines easily, especially at certain times of the year, and the frequent occurrence of natural calamities such as floods, are impediments to better health service provisioning (Human Development Report, Assam, 2003).

7.2.2. Supply Side of Public Sector Health Care in Rural Goalpara

*In rural Assam, during the eleventh plan, total number of PHCs and CHCs is 975 and 109 respectively.

*Regarding average population served by each of the Sub-centre, position of rural Assam is better than states like Kerala, Bihar and worse than states like Goa, Tamilnadu and even Orissa. In case of rural Goalpara, with 5762 persons serving by each of the Sub-centre, its condition is weaker except in case of state like Bihar.

* In regard of number of PHCs, condition of Goalpara district is not just better than rural Assam; even quite better than those states like Kerala, Tamilnadu etc. Regarding the availability of CHCs, situation of rural Goalpara is worst with 4, 35,060 people to be served by each of the CHC which is at least four times larger than the national norm.

*In rural Assam, regarding the accessibility of Sub-centre, 83.2% villages of Assam have a Sub-centre within 3 kilometers as against 71.4% villages of all India. In case of accessibility of a PHC, only 68.3% of the villages have PHC within 10 kilometer distance against 71.2% villages at all India level.

*Regarding accessibility of sub-centre relative position of rural Goalpara is better than Assam. As per India Development Indicators (2012), in rural Goalpara 84.4% villages have sub-centre within 3km. Districts like Golaghat, Lakhimpur, Sonitpur, Morigaon, Dibrugarh, Karbi Anglong, Sivsagar, Dhemaji, Nagaon, Dhubri, Kamrup(m), Karimganj, Hailkandi are in better position whereas Dima Hasao, Udalguri, Baksa, Jorhat, Tinsukia, Kokrajhar, Nalbari, Kamrup(r), Darrang, Barpeta,

Bongaigaon, Cachar, Chirang are in worse condition than the Goalpara district in that matter.

*As per the Facility Survey of Public Health Institution, in Goalpara, 77.3% Sub-centres have one ANM whereas 19.8% have two ANMs. But, male Multi-purpose Health Worker (MPHW) is available only in 27% Sub-centres which is actually a vital component for smooth functioning of a Sub-centre. Again, voluntary worker is existed in 89.7% of the Sub-centres of rural Goalpara.

*In case of Block PHC, in Goalpara district, 100% of the PHCs have two or more than medical officers whereas in case of all Assam, only 79.2% of the Block PHCs have two or more doctors. Regarding the availability of Lady Doctors and staff nurses also, condition of the Block PHCs of rural Goalpara is better than rural Assam. Again, in 100% Block PHCs of rural Goalpara, laboratory assistants and ophthalmic assistants are available in all the PHCs whereas in rural Assam, laboratory technician and ophthalmic assistants are available in 86.6% and 64.9% of Block PHCs respectively which are, actually, very much crucial for any PHC. There is shortage of Male Health Assistant and Female assistant in the Block PHCs of rural Goalpara.

*In case of Mini PHCs of rural Goalpara, 93.7% of them have one doctor against 69.5% of Mini PHCs of rural Assam possess one doctor. There is no Mini PHCs having two or more doctors in rural Goalpara whereas in case of rural Assam, 16.1% of the Mini PHCs have two or more doctors. Regarding staff nurse, laboratory technician, ophthalmic assistant, male health assistant, female health assistant, position of the district is weaker than all Assam level.

*Subsidiary Health Centre (SHC) of rural Goalpara has two or more doctors and pharmacists but virtually, Lady Doctor in those SHCs is non-existent. In regard of availability staff nurse and laboratory technician, condition of the district is better than the state; but posts of ophthalmic Assistant, male health assistant and female health assistant are vacant. In case of State dispensary (SD), condition of the district is weaker than all Assam regarding all most all the positions except male health assistant.

* According to Facility survey, in Public Health Institutions in Assam, in the CHCs of the rural district, there is no surgeon, no physician whereas in case of rural Assam, 14.7% and 6.9% of the CHCs have surgeon and physician respectively. In rural Goalpara, there is no radiographer at all. But, in rural Assam, a total of 39.2% CHCs have radiographers. Only 33.3% of the CHCs of rural Goalpara have specialist of gynecology and obstetrics and pediatrics of each. Percentage of CHCs having eye specialist is same in Rural Goalpara and rural Assam. General Duty Medical Officer (GDMO) is available in 100% CHCs of rural Goalpara.

* According to Facility survey in Public Health Institutions in Assam, 2007, regarding the availability of ANM, laboratory technician and pharmacist, condition of the district is satisfactory. But, only 66.7% CHCs have at least seven nurses which is actually required for each CHC. Except Kokrajhar, Karimgang and Cachar, all the district of Assam is in better than rural Goalpara in that aspect.

* According to Facility survey in Public Health Institutions in Assam, 2007, in Goalpara, only 48.4% of the total Sub-centres are functioning in their own building, only 14.4% of the Sub-centres in rural Goalpara have electricity provision, 5.2% Sub-centres in rural Goalpara have piped water facility and 30.0% have hand pump facility, only 20.9% of the Sub-centres have flush toilet facility. Besides, residential facility is available in 29.4% of Sub-centres of Goalpara; but ANM stays regularly only in 8.5% Sub-centres.

* All the Block PHCs, in rural Goalpara, have the electricity facility whereas only 60% of them have generator provision. Although, 60% of the Block PHCs in rural Goalpara have the flush toilet facility; limited numbers are functional as because only 20% of the Block PHCs have the piped water facility. Further, telephone and ambulance facility are available in 60% and 40% Block PHCs respectively. Again, weighing machine, deep freezer, Ice lined Refrigerator (ILR) are available in all the Block PHCs. Medical Termination of Pregnancy (MTP) suction aspirator is totally nonexistent.

* In rural Goalpara, separate ward for male and female and labour room are available in all CHCs. But, only 66.7% of those CHCs have emergency/casualty service and operation theatre. According to DLHS-3 survey, 50% CHCs in Goalpara have the blood storage facility. Although, electricity is available in all CHCs in rural Goalpara, generator power back up is available in 33.3% CHCs. In Goalpara, no CHC has Incinerator facility.

* As per Population wise Basic Health Unit Index (PBHUI) calculated by dimension index technique of UNDP on the basis of secondary data, rural Goalpara stands at 11th position among the districts of Assam. In that regard, Kamrup (Metro), Dima Hasao, Dhemaji, Kokrajhar, Nalbari (*PBHUI*), Kamrup (Rural) are in better position than the Goalpara district while districts like Dhubri, Bongaigoan, Morigaon, Nagaon, Karbi anglong are in weaker position. By attaining 7th position in case of Population wise Bed Index (PBI) calculated by same method that has been followed in calculating PBHUI, Goalpara stands in a better position in comparison to PBHUI. Still, Kamrup(M), Darrang, Dima Hasao are in quite satisfactory position than Goalpara. Area wise Basic Health Unit Index (ABHUI) has been used to capture the regional imbalances in regard of accessibility of health care by the same dimension index technique. In that regard, position Goalpara district is relatively satisfactory as only Kamrup (metro), Dhubri, Nalbari, Karimganj districts are in better position than the district.

*The overall position regarding access to health care of Goalpara district will be clear from Basic Rural Health Infrastructure Index (BRHUI) which is the simple average of PBHUI, PBI and ABHUI. Among the districts of the Brahmaputra valley, Kamrup(m), Nalbari, Dhemaji, Darrang and Dima Hasao and Karbi Anglong in Barak valley are in better position than Goalpara district regarding BRHU index while other districts are worse off.

7.2.3 Socio-economic Profile of the Patients and its impact on Health Care Choice

* Regarding in-patient treatment, people in the study area rely upon Rural Public Health Care (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 Urban Secondary Health Care (USHC) institution for in-patient care.

* In case of ST/SC group, 70.58% have gone to RPHC institution and remaining 29.41% have gone to USHC institution for in-patient treatment.- Patients from ST/SC group of population are more dependent on the RPHC than the Others group as 40.47% from Others group have been chosen Urban Secondary Health Care (USHC) institution against 29.41% of the ST/SC group.

*In the study area, 53% of patients who has undergone in-patient treatment are male whereas 47% are female. 63.23% of the male patients preferred Rural Public Health Care (RPHC) for in-patient treatment whereas 73.43% female patients gone to the same for in-patient health care.

*Average MPCE of the households to which in-patient samples belong to is Rs 400.19. 47.72% of the in-patient sample belong to household having lowest MPCE group i.e.,0-300. Percentage of sample patients declines for higher and higher MPCE group and ultimately, in case of highest MPCE group, it is just 2.27%. Patients' belonging to household having lowest MPCE prefer RPHC institution for in-patient care mostly. But, as the MPCE increases, percentages of patients choosing RPHC institution for in-patient treatment decreases. In case of USHC institution, only 43.83% patients' belonging to household having 0-300 MPCE prefer it and gradually, increases to 100% for the patients belonging to highest level of MPCE group.

*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. 100% of the inpatient samples from lowest capacity to pay group (proxy 0-5km) 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 (proxy 10km & above group).

*58% of in-patient samples are from independent age group whereas 42% are from dependent age group. 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. 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 utilized the same for in-patient health care.

*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 illiterate. Then, 21.21%, 47.72% and 9.09% of the in-patient samples are from 0-4 years of education, 4-10 years of the education and 10 years & above respectively.

*Of the total in-patient sample from the illiterate group, 80% have utilized RPHC institution for in-patient treatment whereas remaining 20% have utilized USHC institution. As the years of education increases percentage of sample patient from each group (group based on years of education) who have chosen RBHC institution for in-patient treatment decreases and ultimately, become 58.33% at 10 years & above level of education. In case of USHC institution, reverse is happened.

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

*Out of 245 out-patient sample, 31.83% of SC/ST group and the remaining 68.16% are from Others group. Among 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 i.e., Urban Secondary Health Care (USHC) institution and private practitioners service for out-patient care.

*Among the out-patient sample, 44.89% are male whereas 55.10% are female. 28.88% of the female patients in the study area have chosen IHC for out-patient treatment whereas 19.09% of the male patients go to the same for out-patient care. Again, female patients, generally, prefer RPHC mostly for out-patient treatment.

*Average MPCE of the households to which out-patient samples belong to is Rs 403. 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.

*As the MPCE increases, percentage of out-patient sample choosing IHC fall 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. From the MPCE group 600-900, 86.11% patients have utilized such kind of health care services.

*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 have chosen the health care institution within 5-10km. Remaining 28.97% have gone to health care institution at a distance of 10km & above respectively.

* 34.59% of the out-patient samples from lowest capacity to pay group (proxy 0-5km distance travelled) have chosen Informal Health Care (IHC) and ultimately, for highest capacity to pay group of the sample, it declines to 4.22%. Almost same

percentage of patients (approximately 53%) from both group 0-5km and 5-10km, have utilized Rural Primary Health Care (RPHC) institution for out-patient treatment. But, when the capacity to pay improves (10km & above distance), percentage of sample patients choosing RPHC institution for out-patient treatment has been decreased to 0%. For Other than IHC and RPHC category i.e., Urban Secondary Health Care institution or private health care service, percentage of sample availing out-patient health care increases as from 11.94% to 95.77% as capacity to pay improves.

*Out of the total out-patient sample, 56% are from independent age group whereas 44% are from the dependent age group. Utilization of IHC services is higher (35.18%) among the sample from dependent age group where as among the sample of independent as group, it is just 14.59%. In case of RPHC institution, slightly more percentage of patients from dependent age group have choosen it for out-patient treatment than the patients from independent age group. But, the patients from independent age group have shown more preference for USHC institution or private health care service 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.

*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. Utilization of RPHC decreases from 30.55% in 0 years of education to 15% in 10years & above level of education. In case of Urban Secondary Health Care and private health care service, as the years of education increases from 0 years to 10 years & above, out-patient health care utilization increases from 20.83% to 85.00%.

7.2.4 Choice of Health Care Institution for In-patient Treatment in Rural Goalpara

* The study reveals that Monthly Per Capita Consumption Expenditure (MPCE) does not have any impact on people's choice regarding utilization of in-patient treatment in rural Goalpara.

*As per the result of the study, if somebody has more capacity to incur health expenditure, more likely she will go for Urban Secondary Health Care instead of Rural Primary Health Care for in-patient health care even for those ailments where Rural Primary Health Care Institution is sufficient for treatment in the rural areas of Goalpara.

*This study shows that if somebody capable to bear travel cost and time more likely choose Urban Secondary Health Care institution for in-patient treatment than Rural Primary Health Care institution for even for those ailments where Rural Primary Health Care institution is sufficient for in-patient treatment in rural Goalpara.

* The study shows a positive social picture as there is no gender differential among the patients regarding utilization of in-patient health care in rural Goalpara.

*Another important dimension reflected by this study is that when the ailment is not serious more likely patients prefer Rural Primary Health Care institution for in-patient treatment in rural Goalpara district. Oppositely, if the ailment is serious, there is more possibility of utilizing Urban Secondary Health Care institution for in-patient care in rural Goalpara district.

* This study reflects that whether a patient is from dependent age group or independent age group; it has nothing to do with the choice between Rural Primary Health Care institution and Urban Secondary Health Care institution for in-patient treatment in rural Goalpara.

*This study shows that if the road is all weather not motorable, more likely patients prefer Rural Primary Health Care institution for in-patient treatment in rural areas of

Goalpara district. On the other hand, if the road is all-weather motorable, there is more possibility of utilizing Urban Secondary Health Care institution for in-patient care even for that ailment where Rural Primary Health Care institution is sufficient for treatment.

7.2.5. Choice of Health Care Service for Out-patient Treatment Rural Goalpara

*According to this study, capacity to pay in terms of Monthly Per Capita Consumption Expenditure (MPCE) has impact on choice out-patient health care facility in rural Goalpara. When the capacity to pay is more, there is lesser possibility of using Informal Health Care service for out-patient health care than Urban Secondary Health Care or any other private health care service and vice-versa. Again, in case of choice between Rural Public Health Care and Urban Secondary Health Care or any other private health care service, when the capacity to pay is more there is more possibility of using Urban Secondary Health Care or any other private health care service for out-patient health care than Rural Public Health Care for even some such ailment where Rural Public Health Care Institution is sufficient for treating such ailment.

*This study shows if somebody can bear more health care expenditure, less likely he/she will go for Informal Health Care instead of Urban Secondary Health Care or any other private health care service for out-patient health care in rural Goalpara. In case of choice between Rural Public Health Care and Urban Secondary Health Care or any other private health care service, if somebody is capable bear health care expenditure, more likely she will go for Urban Secondary Health Care or any other private health care service instead of Rural Public Health Care for out-patient health care in rural Goalpara for even some such ailment where Rural Public Health Care is sufficient for treating such ailment.

*This study reveals that if somebody capable to bear travel cost and time more likely choose Urban Secondary Health Care or any other private health care service than

Informal Health Care for out-patient treatment instead of in rural Goalpara. On the other hand, when somebody is to choose between Rural Public Health Care and Urban Secondary Health Care or any other private health care service, more likely he will choose Urban Secondary Health Care or any other private health care service for out-patient treatment provided that he is capable to bear higher amount of travel cost and time for those ailments where Rural Public Health Care is enough.

*The study reveals that in rural Goalpara, there some differential in between the ST/SC groups and the non-ST/SC group regarding choice of utilization of out-patient health care. In case of choosing between Informal Health Care and Urban Secondary Health Care or some other private health care service for out-patient treatment, there is more possibility of choosing Urban Secondary Health Care or some other private health care service by the non-SC/ST people. Again, in case of choosing between Rural Public Health Care and Urban Secondary Health Care or some other private health care service for out-patient treatment also, probability of choosing Urban Secondary Health Care or some other private health care service is more among the non-SC/ST people.

* This study shows that in rural Goalpara, when the ailment is not serious more likely patients prefer Informal Health Care for out-patient treatment than Urban Secondary Health Care or some other private health care service and vice versa.

* As per this study, location of the health care service has some influence on the choice regarding utilization of health care service between Informal Health Care and Urban Secondary Health Care or some other private health care service for out-patient treatment in rural Goalpara. So, when the Informal Health Care is available in the near by area from the residence of the patient, there is possibility of using it to large extent and vice versa.

7.2.6. Direct Burden of Health Care in Rural Goalpara

* This study shows that no one is free from direct burden of health care whether it is a case of in-patient treatment or out-patient treatment and whether the patient belongs to higher MPCE group or lower MPCE group as in the study area health care insurance is virtually non-existent.

* The overall average direct burden for in-patient treatment in the rural Goalpara is 15.78. In-patient health care creates more burdens for low MPCE group where as lesser burden to high MPCE group. In 80% of the ailment cases in the study area where in-patient treatment was utilized, households to which those patients belongs to had been indebted and some of them sold their assets and cattle for meeting up the cost.

*This study shows average direct burden arises for in-patient treatment for the lowest Monthly Per Capita Consumption Expenditure (MPCE) group is highest in rural Goalpara. Actually, for them in-patient health care is quite expensive in comparison to their MPCE. For this income group average direct burden arises from a single episode of in-patient treatment during the reference period is 24.95 in rural Goalpara. From the next MPCE group, average direct burden for in-patient treatment comes down and again it goes up at higher level MPCE.

*The study reflects that in-patient treatment is much more burdensome as the overall direct burden from single episode of in-patient treatment is more than six times larger than the overall direct burden from single episode of out-patient treatment in rural Goalpara.

*Unlike in case of in-patient treatment, average direct burden of out-patient health care is lowest for the lowest MPCE group. Then, it becomes highest for the next MPCE group. Thereafter, decreases and continued to be almost same from the middle MPCE group.

7.3. Conclusions

Health status of the people of rural Assam is quite poor in comparison urban Assam even after nine years of launching the NRHM programme in which Assam is also one of the high focused states. The rural areas of the state have encountered the burden of acute illness and various kinds of child mortality and maternal mortality at a higher rate than the urban counterpart. Secondary data from various sources show that poor health care utilization is the cause behind such health scenario in rural Assam. So, this study aimed to examine about the supply side of health care and the factors behind the health care utilization in the rural areas of Goalpara district which is a representative district of Assam.

So, this study is induced by two research questions:

1. Whether the existing health care facilities in rural Goalpara are adequate to support the health care needs of the people?
2. Whether economic and non-economic factors have any influence on people's choice regarding utilization of health care in rural Goalpara?

*The study shows that the health care system of rural Goalpara has failed to maintain the national norm regarding average population served by each Sub-centres and CHCs. In case of CHCs, situation of rural Goalpara is worst as each CHC in the district has to serve more than four times larger population than the maximum capacity limit. In regard of number of PHCs, condition of Goalpara district is even quite better than states like Kerala, Tamilnadu etc. Even in the existing health care facilities also, there is shortage of some basic health care infrastructure and manpower. So, it is really difficult for the existing health care units to function smoothly without adequate provision of man power and infrastructure.

In case of Population wise Basic Health Unit Index (PBHUI), rural Goalpara stands at 11th position among the districts of Assam. By attaining 7th position in case of

Population wise Bed Index (PBI), Goalpara stands in a better position. Area wise Basic Health Unit Index (ABHUI) which captures the regional imbalances in regard of accessibility of health care shows that position Goalpara district is relatively satisfactory as only Kamrup (metro), Dhubri, Nalbari, Karimganj districts are in better position than it. Relative position of rural Goalpara in terms of Basic Rural Health Infrastructure Index (BRHUI) which is the average of PBHUI, PBI and ABHUI is worse than districts like Kamrup (metro), Nalbari, Dhemaji, Darrang in Brahmaputra valley and Dima Hasao and Karbi Anglong in Barak valley.

So, it can be concluded the existing health care facilities in rural Goalpara are yet to be adequate to support the health care needs of the people.

*Regarding the utilization of in-patient health care, economic factors like health care expenditure and travel cost influence the health care utilization of the people of rural Goalpara. If the patient is capable to bear more health care expenditure and travel cost and time, more likely he/she will go to Urban Secondary Health Care institution for in-patient health care instead of Rural Primary Health Care institute even for those ailment cases where Rural Primary Health Care institute is sufficient to provide health care service.

Non-economic factors like educational attainment of the patient, severity of ailment, road condition from the patient's residence to the chosen health care facility has much influence on the in-patient health care utilization behavior of the people in rural Goalpara. If the patient is more educated or if his/her ailment more serious more likely he/she will prefer Urban Secondary Health Care institution for in-patient health care instead of Rural Primary Health Care institute even for those ailment cases where Rural Primary Health Care institute is sufficient to provide health care service. Besides, if the road condition is also better, there is more possibility of preferring Urban Secondary Health Care institution for in-patient health care institution which generally exists at a higher distance.

* In case of out-patient health care utilization also, both economic and non-economic factors influence the people's choice regarding health care utilization behaviour in rural Goalpara. Economic factors like Monthly Per Capita Expenditure of the household to which the patient belongs to, health care expenditure, the travel cost influence the people's choice regarding health care utilization. If Monthly Per Capita Expenditure of the household to which the patient belongs to is higher, there is more possibility of choosing Urban Secondary Health Care or any other private health care than Informal Health Care. While choosing between Urban Secondary Health Care or any other private health care and Rural Primary Health Care, higher the Monthly Per Capita Expenditure of the household to which the patient belongs to, higher the possibility of choosing Urban Secondary Health Care or any other private health care than Rural Primary Health Care even when Rural Primary Health Care is enough for treatment. Besides, if somebody is capable to bear more health care expenditure or travel cost for availing health care, there is more possibility of choosing Urban Secondary Health Care or any other private health care over Informal Health Care and over Rural Primary Health Care for out-patient treatment in rural Goalpara.

Among the non-economic factors, caste stratification has influence on choosing health care facilities for out-patient treatment in rural Goalpara. In case of non SC/ST patients, there is more possibility of choosing Urban Secondary Health Care or any other private health care over Informal Health Care and Rural Primary Health Care for out-patient treatment in rural Goalpara for those ailments where Rural Primary Health Care is enough. Again, when the ailment is less serious, there is more probability of using Informal Health Care than Urban Secondary Health Care or any other private health care for outpatient care in rural Goalpara. When the Informal Health Care is available in the near by area from the residence of the patient, there is possibility of using it to large extent and vice versa in rural areas of Goalpara district.

So, besides access to health care, there are some other economic and non-economic factors which influence the health utilization behaviour of the people of rural Goalpara.

7.4. Suggestive Policies

*Economically and socially better off people of rural areas generally prefer Urban Secondary Health Care facilities even for those ailments which are curable through the Rural Public Health Services. This happens mostly because of lack of faith on Rural Public Health Services among majority of people. Again, this puts extra pressure on the Urban Secondary Health Care facilities especially on the public health sector and wastage of public sector investment in rural areas. So, in order to attract all section of people towards Rural Public Health Care Services, qualitative improvement of Rural Public Health sector is essential. For that strict vigilance is necessary so as to make the Rural Public Health sector more efficient.

* Majority of the rural people particularly those who are economically weaker people and socially underprivileged like ST/SCs and women are using the Rural Primary Health Care service for both inpatient and outpatient health care. So, government should take steps to improve the rural health care facilities both in terms of increasing number of rural health care institutions as well as strengthening the internal infrastructure facilities and manpower in those institutions.

* Investing on physical infrastructure and employing more manpower is a necessary but not sufficient condition for successful implementation of NRHM programme. In order to improve the rural health care system, policies should be adopted to overcome the problem of absenteeism, irregularity on side of health personnel and to ensure 24 hours service in all rural health care institutions.

*Government should ensure compulsory practicing for the health personnel in rural and remote areas. Besides, extra incentives should be provided for those who are willing to serve in those areas.

*Government should provide health care insurance facilities at minimum cost especially for the economically and socially underprivileged group for both inpatient and outpatient treatment.
