

## 6

# Chapter Utilisation of Healthcare services and Out-of-pocket Healthcare Expenditure in Siliguri Municipal Corporation Area (SMCA)

## 6.1 Introduction to Utilisation of Healthcare Services

The utilisation of healthcare services has multifaceted and multi-dimensional features. However, health seeking behaviour of the individual or household can better be understood by the healthcare utilisation pattern which is indicated by several factors such as use of type of healthcare facility, source of healthcare facility and system of medicine utilised during any particular period. Here, utilisation indicates the visit to any healthcare facility by a person during the reference period of twelve months (i.e. one year). On the other hand, utilisation rate refers to the number of time a person use healthcare facilities during reference the period. The health seeking behaviour of a community reflects how healthcare services are utilised by them. This chapter describes how healthcare utilisation pattern varies according to change in demographic and socio-economic background and disease burden of the people of Siliguri Municipal Corporation Area (SMCA). Further, this chapter discusses about the magnitude of out-of-pocket healthcare expenditure (OOPHE) made by the households during their different illness episodes. Finally, chapter deals with the issues such as how OOPHE of the people varies as category of disease, severity of disease, nature of disease, duration of illness episode, pattern of utilisation, sources of treatment and use of system of medicine varies in the study area.

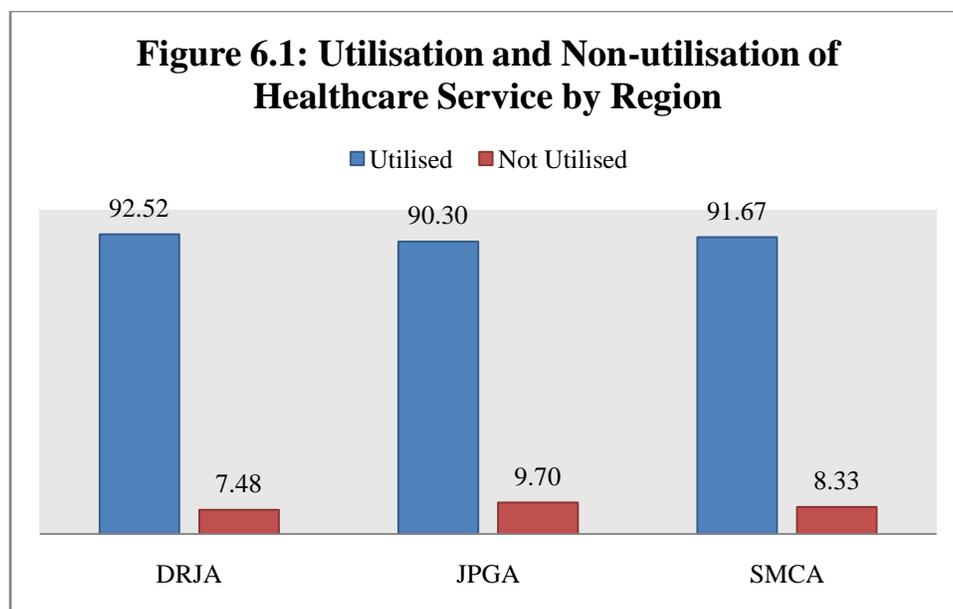
### 6.1.1 Utilisation of Healthcare Services of the sick people of SMCA

Table 6.1 reveals that out of total 696 illness episodes in SMCA, for 638 illness episodes (i.e. 91.67 percent) people utilised at least one healthcare facility and for rest of 58 illness episodes (i.e. 8.33 percent) people did not contact any healthcare facility during the reference period of twelve months (i.e. one year). Further, out of total 638 illness episodes of SMCA for which healthcare facilities were utilised, for 396 illness episodes (i.e. 92.52 percent) of Darjeeling district area and for 242 disease episodes (i.e. 90.30 percent) (DRJA) of Jalpaiguri district area (JPGA) utilised healthcare services respectively. It indicates that in SMCA, all illness episodes were not utilised the healthcare services by the sick people as depicted in figure 6.1.

**Table 6.1: Distribution of Illness Episodes by utilisation and non-utilisation of Healthcare Services**

Place of Residence	Number of Households	Population Surveyed	Number of disease episodes	Number of visits	n	%	n*	%
DRJA	238	1033	428	1757	396	92.52	32	7.48
JPGA	162	651	268	719	242	90.30	26	9.70
SMCA	400	1684	696	2476	638	91.67	58	8.33

Source: Self-elaboration with survey data, Note: n = number of illness episodes utilised healthcare service, n\* = number of illness episodes not-utilised healthcare service, DRJA = Part of SMCA falling under the jurisdiction of Darjeeling district, JPGA = Part of SMCA falling under the jurisdiction of Jalpaiguri district, SMCA= Siliguri Municipal Corporation Area.



Note: DRJA = Part of SMCA falling under the jurisdiction of Darjeeling district, JPGA = Part of SMCA falling under the jurisdiction of Jalpaiguri district, SMCA= Siliguri Municipal Corporation Area.

### 6.1.2 Nature of Utilisation of Healthcare Services of the sick people of SMCA

Nature of utilisation such as Out Patient Department (OPD) (e.g. outpatient visits or visiting chambers or clinics or non-hospitalised cases etc.) and IPD (Indoor Patient Department) (e.g. hospitalised cases in public, private and others healthcare facilities etc.) may be influenced by several factors such as category of disease, nature of disease, duration of illness episode, severity of disease of the sick person etc. Table 6.2 shows distribution of total illness episodes between OPD and IPD services. It shows that percentage of utilisation of OPD services was higher in Jalpaiguri district area but percentage of utilisation of IPD facility was comparatively higher in Darjeeling district area. For SMCA as a whole, OPD services were utilised for 570 illness episodes (i.e. 89.34 percent) and IPD facilities were utilised for 68 illness episodes (i.e. 10.66 percent). Therefore, results indicate that majority of the visits in healthcare institutions were for non-hospitalisation cases (i.e. OPD services) and hospitalisation rate was quite low.

**Table 6.2: Distribution of Illness Episodes by Nature of utilisation of Healthcare Services**

Nature of utilisation	DRJA		JPGA		SMCA	
	Total episodes	Percent of Utilisation	Total episodes	Percent of Utilisation	Total episodes	Percent of Utilisation
OPD	349	88.13	221	91.32	570	89.34
IPD	47	11.87	21	8.68	68	10.66
Total	396	100	242	100	638	100

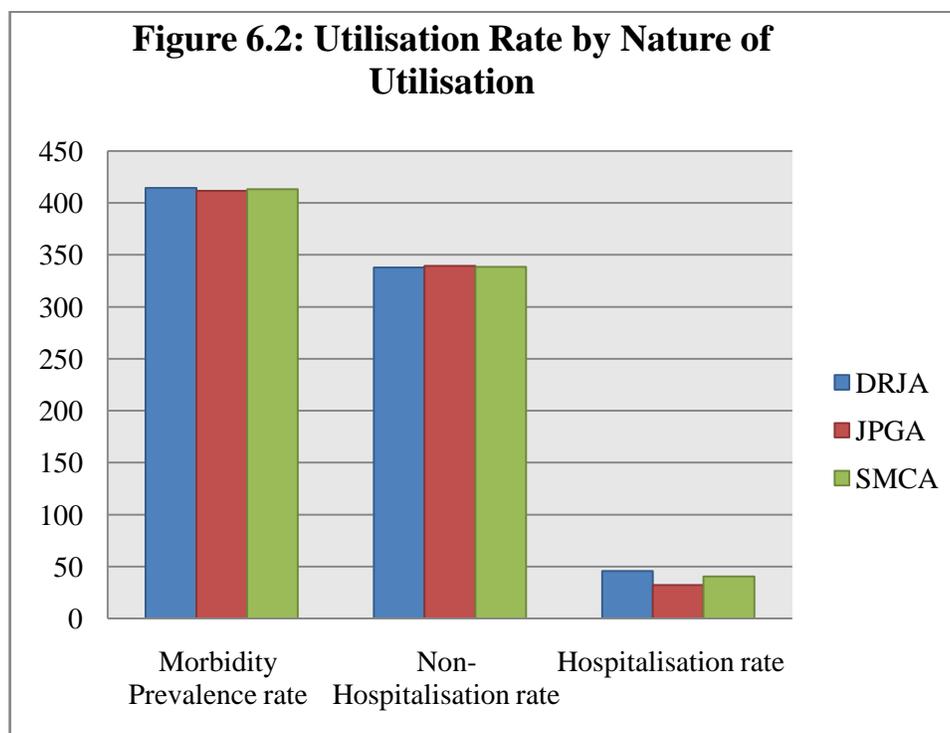
Source: Self-elaboration with survey data, Note: OPD= Non- Hospitalisation cases, IPD =Hospitalisation cases, DRJA = Part of SMCA falling under the jurisdiction of Darjeeling district, JPGA = Part of SMCA falling under the jurisdiction of Jalpaiguri district, SMCA= Siliguri Municipal Corporation Area.

Moreover, table 6.3 presents the morbidity prevalence rate, hospitalisation rate, non-hospitalisation rate and utilisation rate per 1000 persons of the people of SMCA. Figures reveal that morbidity prevalence rate per 1000 persons for DRJA, JPGA and combined area (i.e. SMCA as a whole) are 414.33, 411.67 and 413.30 respectively, but healthcare facility utilisation rates per 1000 persons were worked out to be 383.35 for DRJA, 371.74 for JPGA and 378.86 for combined area (i.e. SMCA). On the other hand, hospitalisation rate and non-hospitalisation rate per 1000 persons for SMCA were worked out to be 40.38 and 338.48 respectively. In short, for SMCA as a whole, morbidity prevalence rate per 1000 person is 413.3 (i.e.  $696/1684 \times 1000$ ) and healthcare service utilisation rate per 1000 persons is 378.86 (i.e.  $638/1684 \times 1000$ ), so non-utilisation rate per 1000 persons is 34.44 (i.e.  $413.3-378.86$ ). Finally, variation of these rates in different regions is depicted in figure 6.2.

**Table 6.3: Distribution of Utilisation rate, Hospitalisation and Non-Hospitalisation rate**

Place of Residence	Prevalence rate of (Acute and Chronic) diseases per 1000 persons	Non-Hospitalisation rate per 1000 persons (OPD)	Hospitalisation rate per 1000 persons (IPD)	Utilisation rate per 1000 persons
DRJA	414.33	337.85	45.50	383.35
JPGA	411.67	339.48	32.26	371.74
SMCA	413.3	338.48	40.38	378.86

Source: Self-elaboration with survey data, DRJA = Part of SMCA falling under the jurisdiction of Darjeeling district, JPGA = Part of SMCA falling under the jurisdiction of Jalpaiguri district, SMCA= Siliguri Municipal Corporation Area.



Findings indicate that higher utilisation of healthcare services occurred due to awareness, early perception of the disease, availability of healthcare institution at a nearer distance, high literacy rate and other socio-economic conditions of the sick people of SMCA. On the contrary, low socio-economic and cultural background, low severity disease, lack of perception and perceived risk etc. of the households could be the possible reasons for non-utilisation of healthcare facilities. Moreover, hospitalisation takes place when the disease crosses tolerance limit or in other words, illnesses are perceived as high severe by the sick person or his or her family members. Moreover, hospitalisation is comparatively expensive phenomenon. Therefore, it is not possible to afford the hospitalisation costs for all segments of society for all illness episodes. In that case outpatient visits or OPD is preferred by the sick person or household member for treatment of illness episodes. So, sick people of Jalpaiguri district area of SMCA which is characterised by low socio-economic background probably reported less number of IPD episodes or hospitalisation cases than the other counterpart. In this regard, it can be said that availability of healthcare facility at reachable distance is not only the criteria for healthcare service utilisation or seeking treatment for curing illness, some other factors must be there which influence the sick person or household to utilise the healthcare facilities.

### 6.1.3 Description of number of Visit to the Healthcare Facilities by the sick people of SMCA

Table 6.4 shows the distribution of illness episodes according to the number of visit made by sick people of SMCA for seeking treatment at the available healthcare facilities during the reference period of twelve months or one year. It is clear from the figures that people of Darjeeling district region visited the healthcare facilities or institutions more number of times than the people of Jalpaiguri district region of SMCA during their illness episodes. However, for SMCA as a whole, a majority of sick people (i.e. 60.38 percent) visited 1 to 2 times, followed by 3 to 4 times (i.e. 17.89 percent), more than 6 times (i.e. 12.16 percent) and 5 to 6 times (i.e. 9.57 percent).

**Table 6.4: Distribution of Illness Episodes by Number of Visit to the Healthcare Facilities**

Region	Number of visit								Total
	1 to 2	%	3 to 4	%	5 to 6	%	More than 6	%	
DRJA	246	62.12	55	13.89	42	10.61	53	13.38	396
JPGA	139	57.58	59	24.48	19	7.79	25	10.15	242
SMCA	385	60.38	114	17.89	61	9.57	78	12.16	638

Source: Self-elaboration with survey data, DRJA = Part of SMCA falling under the jurisdiction of Darjeeling district, JPGA = Part of SMCA falling under the jurisdiction of Jalpaiguri district, SMCA= Siliguri Municipal Corporation Area

#### 6.1.4 Utilisation of Healthcare Facilities by Demographic and Socio-economic characteristics of the sick people of SMCA

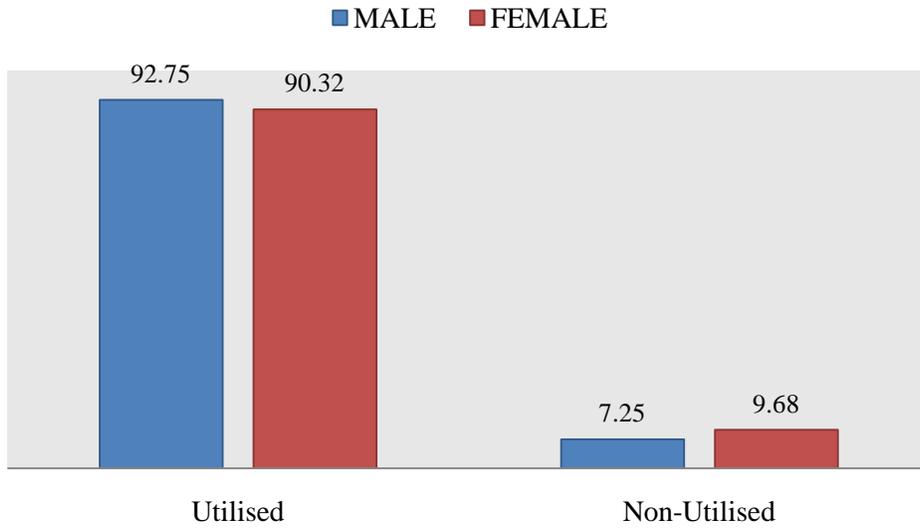
Table 6.5 reveals that out of total 638 illness episodes for which healthcare facilities were utilised by sick people of SMCA, healthcare service utilisation by males and females were 92.75 percent and 90.32 percent respectively. On the contrary, non-utilisation of healthcare facility by males and females were worked out to be 7.25 percent and 9.68 percent respectively (as shown in figure 6.3a). Results highlight that utilisation of healthcare services by females was comparatively less than that of for males though morbidity prevalence rate for females was higher than males, indicating the existence of gender inequality regarding the use of healthcare facility in SMCA. Further, data show that percentage of healthcare facility utilisation was highest (i.e. 97.14 percent) for children having less than 5 years old and that was lowest (i.e. 81.58 percent) for 61 and above age group (i.e. 36.2 percent) (as depicted in figure 6.3c). In addition, it is generally perceived that educated people are more conscious and aware about their health so their reporting to the healthcare facilities is higher than the other groups. It is also seen from the table that while utilisation of healthcare facility by illiterates was lowest (i.e. 67.65 percent), the same was highest by post graduates (i.e. 100 percent) (as shown in figure 6.3c), indicating that all the sick people with post graduate degree contacted the available healthcare services during the reference period of twelve months.

**Table 6.5: Distribution of Illness Episodes with utilisation or non-utilisation of Healthcare Services by Gender, Age and Education of the sick people of SMCA**

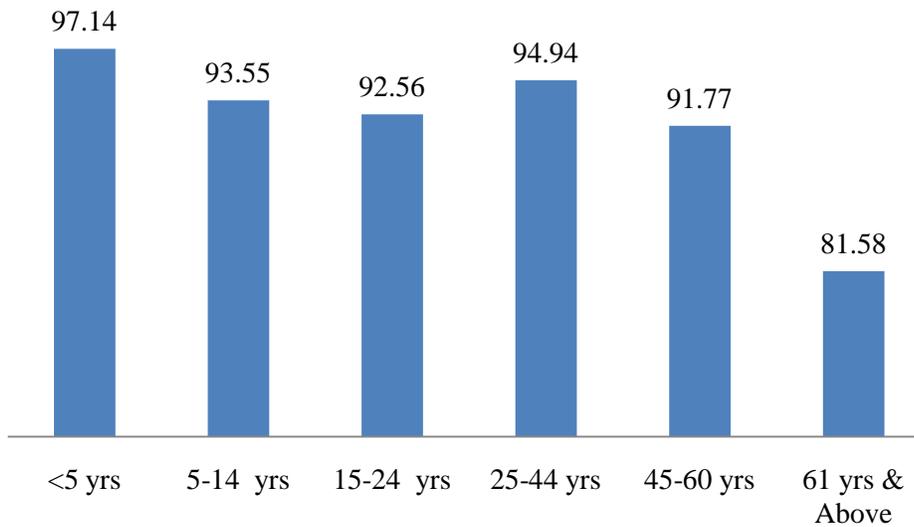
Characteristics of sample	Illness Episode	Illness Episodes Utilised Healthcare services	Percent of Utilisation	Percent of episodes with non-utilisation of Healthcare services
<b>Gender</b>				
Male	386	358	92.75	7.25
Female	310	280	90.32	9.68
Total	696	638	91.67	8.33
<b>Age</b>				
<5 yrs	35	34	97.14	2.86
5-14 yrs	31	29	93.55	6.45
15-24 yrs	121	112	92.56	7.44
25-44 yrs	237	225	94.94	5.06
45-60 yrs	158	145	91.77	8.23
61 yrs & Above	114	93	81.58	18.42
Total	696	638	91.67	8.33
<b>Education</b>				
Illiterate	34	23	67.65	32.35
NASA	34	33	97.06	2.94
Up to Primary level	71	62	87.32	12.68
Primary to Secondary	181	158	87.29	12.71
Secondary to HS	144	140	97.22	2.78
HS to Graduate	199	189	94.97	5.03
Post Graduate	33	33	100.00	0.00
Total	696	638	91.67	8.33

Source: Self-elaboration with survey data Note: HS= Higher Secondary; \* NASA indicates children not attaining school age, they cannot be treated as illiterate though their education level is nil. Here, preparatory school qualification is not considered, SMCA= Siliguri Municipal Corporation Area.

**Figure 6.3a: Utilisation and Non-Utilisation of Healthcare Services by Gender of people of SMCA**



**Figure 6.3b: Utilisation of Healthcare Services by Age of people of SMCA**



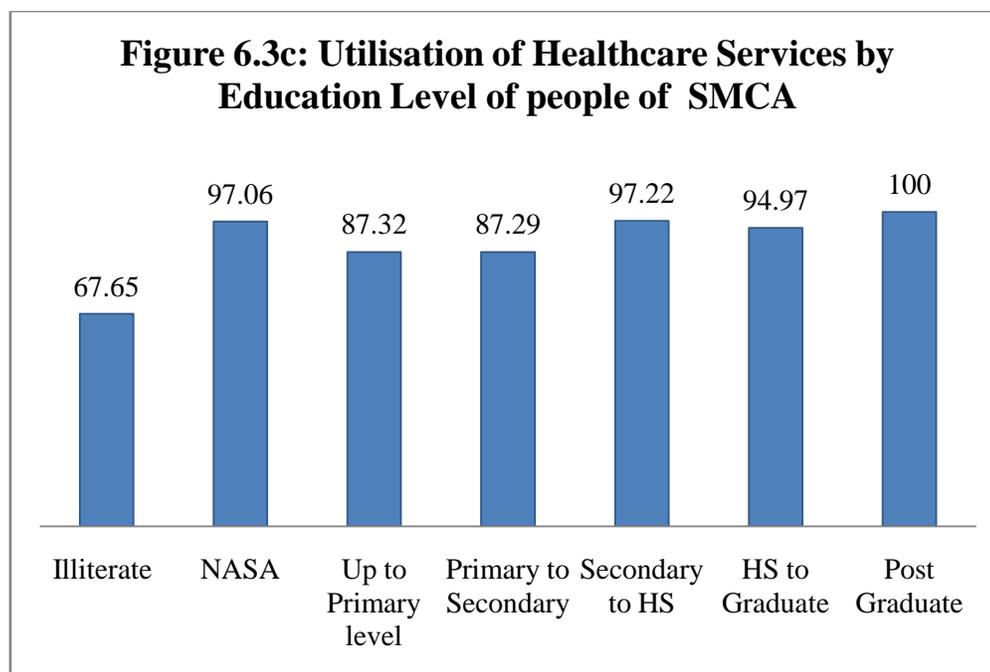


Table 6.6 shows the health seeking behaviour of the people according to social backgrounds such as caste, religion and marital status of the sick people of SMCA. The data reveal that out of the total disease episodes, sick people belonging to general caste utilised majority of the illness episodes (i.e. 92.25 percent), followed by OBC category people (i.e. 91.56 percent) and SC/ ST people (i.e. 89.92 percent) as presented in Figure 6.4a. Further, the table presents that Hindu people utilised healthcare facilities for 93.98 percent of illness episodes, Muslim community utilised for 76.53 percent of illness episodes, and rest of the communities utilised the healthcare services for almost all the illness episodes during the reference period as presented in Figure 6.4b. In addition, sick people with different marital status exhibits different healthcare service utilisation patterns. Data clearly reveal that non- utilisation of healthcare facility by widowers was highest (i.e. 20 percent), followed by widows (i.e.14.29 percent), divorcees (i.e. 12.50 percent). On the other hand, utilisation of healthcare facilities was highest by the unmarried persons and lowest by the widowers as depicted in the figure 6.4c. In addition, analysis of utilisation behaviour by occupation depicts that unemployed reported the highest percentage of non- utilisation cases (i.e. 47.37 percent), followed by wage earner category (i.e. 35 percent), pensioners (i.e. 17.65 percent), old people having no income (i.e. 17.02 percent) and so on. On contrary, students and NASA category reported comparatively higher percentage of utilisation of healthcare service than the other categories during the reference period.

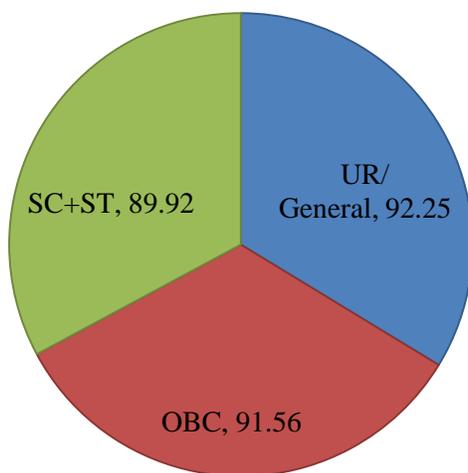
**Table 6.6: Distribution of Illness Episodes with utilisation or non-utilisation of Healthcare Services by Caste, Religion and Marital status of the sick people of SMCA**

Characteristics of sample	Illness Episode	Illness Episodes Utilised Healthcare services	Percent of Utilisation	Percent of episodes with non-utilisation of Healthcare services
<b>Caste</b>				
UR/ General	413	381	92.25	7.75
OBC	154	141	91.56	8.44
SC+ST	129	116	89.92	10.08
Total	696	638	91.67	8.33
<b>Religion</b>				
Hindu	581	546	93.98	6.02
Muslim	98	75	76.53	23.47
Jain	10	10	100.00	0.00
Others	7	7	100.00	0.00
Total	696	638	91.67	8.33
<b>Marital Status</b>				
Married	468	429	91.67	8.33
Unmarried	181	169	93.37	6.63
Widow	21	18	85.71	14.29
Divorce	16	14	87.50	12.50
Widower	10	8	80.00	20.00
Total	696	638	91.67	8.33
<b>Occupation</b>				
Self-employed	37	34	91.89	8.11
Student	115	113	98.26	1.74
Housewife	208	190	91.35	8.65

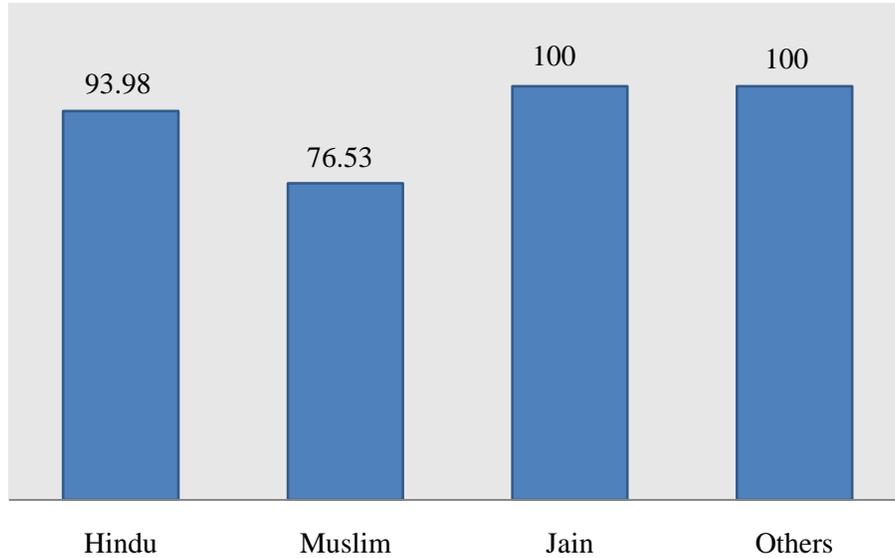
Service	105	100	95.24	4.76
Business	94	87	92.55	7.45
Retired/ Pensioner	17	14	82.35	17.65
Wage earner / Rickshaw or Van puller/ Casual Labour/others	20	13	65.00	35.00
Stopped working due to old age (No Earning)	47	39	82.98	17.02
NASA	34	33	97.06	2.94
Unemployed	19	10	52.63	47.37
Total	696	638	91.67	8.33

Source: Self-elaboration with survey data, UR= Unreserved category, OBC = other backward Classes, SC= Schedule caste, ST= Scheduled Tribe, NASA indicates children not attaining school age, they cannot be treated as illiterate though their education level is nil, SMCA= Siliguri Municipal Corporation Area.

**Figure 6.4a: Utilisation of Healthcare Services  
by Caste of people of SMCA**



**Figure 6.4b: Utilisation of Healthcare Services by Religion of people of SMCA**



**Figure 6.4c: Utilisation of Healthcare Services by Marital Status of people of SMCA**

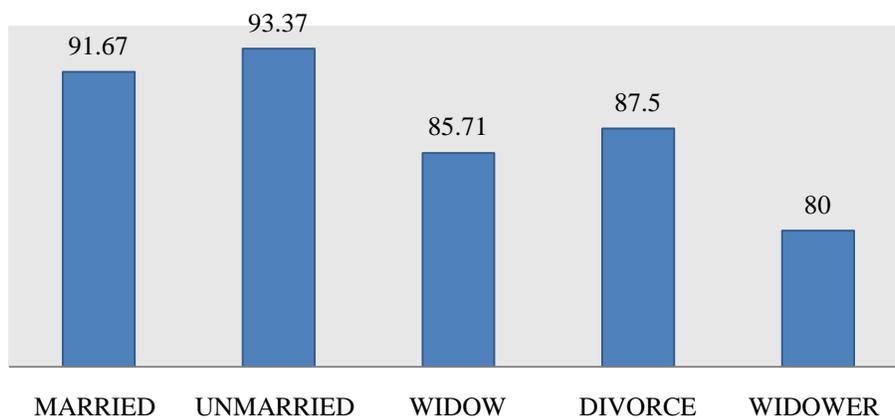


Table 6.7 presents the utilisation behaviour of the sick people according to some household characteristics such as major source of household income, households' monthly income, economic class and household size. Data reveal that families having salary as their major source of household income reported highest utilisation of healthcare services (i.e.95.96 percent), followed by self-employed/ professionals and others (i.e. 94.29 percent), business (i.e. 91.22 percent), pension (i.e. 83.33 percent) and wages (i.e. 81.82 percent). It was further worked out that utilisation of healthcare services by households belonging to monthly income less than Rs. 10,000 was lowest (i.e. 80.61 percent of illness episodes) and same was highest by households having monthly income more than Rs. 50,000 (i.e. 100 percent of illness episodes), indicating that utilisation of healthcare services by higher income groups is comparatively higher than the other counterparts. On the other hand, economic class-wise analysis reveals that out of total illness episodes for which healthcare services were utilised by sick people of SMCA, 81.73 percent were by the BPL category and 95.59 percent were by the APL category (as shown in figure 6.5a). Finally, table depicts that household of SMCA having 4 members or less contributed 93.27 percent and the households having 5 members or more contributed 86.34 percent of healthcare service utilisation during the reference period. It demonstrates that small families utilised the healthcare services more than the large families (as shown in figure 6.5b).

**Table 6.7: Distribution of Illness Episodes with utilisation and non-utilisation of Healthcare Services by major source of household income, Monthly Household Income, Economic Class and Household size of the sick people of SMCA**

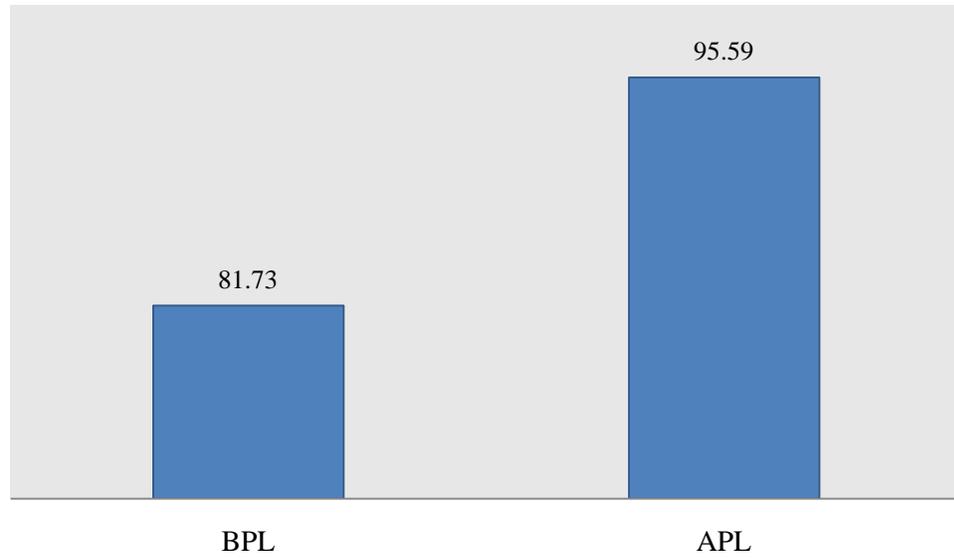
Characteristics of sample	Illness Episode	Illness Episodes Utilised Healthcare services	Percent of Utilisation	Percent of episodes with non-utilisation of Healthcare services
<b>Major Source of Household Income</b>				
Salary	223	214	95.96	4.04
Wages	77	63	81.82	18.18
Business	296	270	91.22	8.78

Pension	30	25	83.33	16.67
Professionals/Self -employed and others	70	66	94.29	5.71
<b>Total</b>	<b>696</b>	<b>638</b>	<b>91.67</b>	<b>8.33</b>
<b>Household's Monthly Income (Rupees)</b>				
Less than Rs.10,000	196	158	80.61	19.39
Rs. 10, 001- 20,000	144	134	93.06	6.94
Rs. 20, 001- 30,000	100	97	97.00	3.00
Rs.30, 001- 40,000	96	93	96.88	3.13
Rs.40,001-50,000	75	71	94.67	5.33
More than 50,000	85	85	100.00	0.00
Total	696	638	91.67	8.33
<b>Economic Class</b>				
BPL	197	161	81.73	18.27
APL	499	477	95.59	4.41
Total	696	638	91.67	8.33
<b>Household Size</b>				
Less than or equal to 4	535	499	93.27	6.73
5 and above	161	139	86.34	13.66
Total	696	638	91.67	8.33

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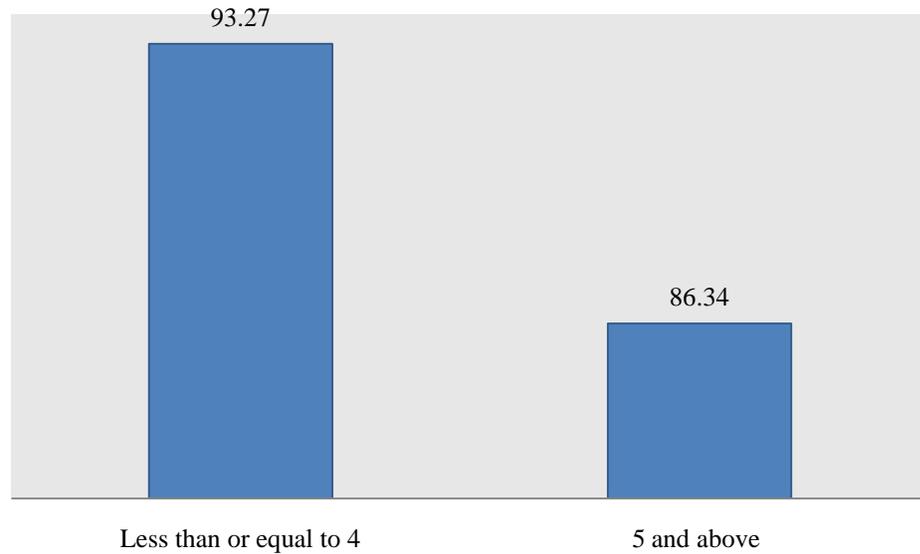
Source: Self-elaboration with survey data, APL: Above Poverty Line; BPL: Below Poverty Line, Authentication is not verified, categorisation is based on type of ration card household holding. SMCA= Siliguri Municipal Corporation Area.

**Figure 6.5a: Utilisation of Healthcare Services by Economic Class of people of SMCA**



Note: APL: Above Poverty Line; BPL: Below Poverty Line

**Figure 6.5b: Utilisation of Healthcare Services by Household Size of people of SMCA**



### 6.1.5 Utilisation of Healthcare Facilities by Category of disease

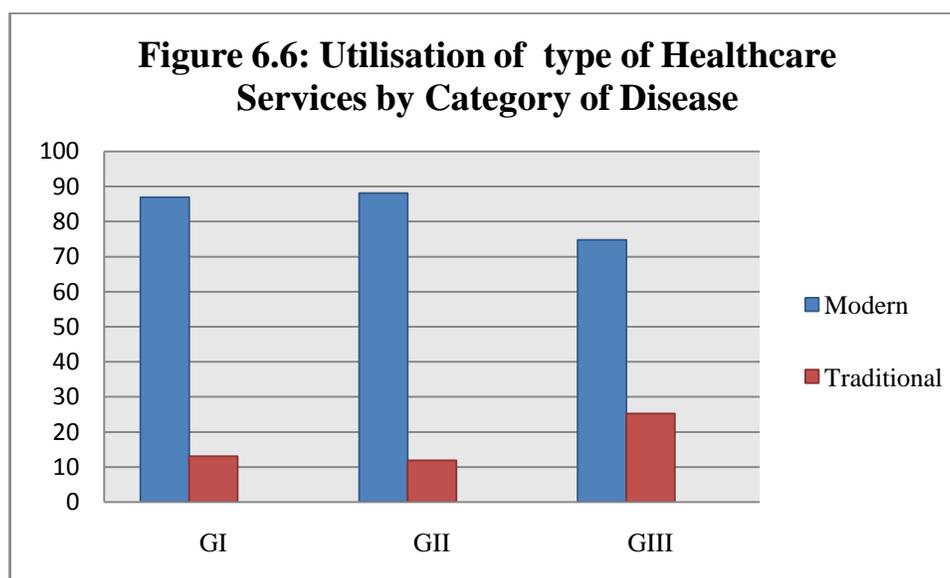
Tables 6.8 present the distribution of utilisation of healthcare services for different category of illness episodes experienced the by the people of SMCA. Table 6.8 highlights that modern type of healthcare facilities were utilised for majority of all three category (viz. GI, GII and GIII) illness episodes experienced the by the people of SMCA, whereas traditional type of healthcare were followed for comparatively small number of illness episodes. Data reveal that traditional type of healthcare services were utilised for 13.04 percent of GI category and 11.88 percent of GII category illness episodes respectively, but for GIII category episodes, utilisation of traditional healthcare was comparatively higher (i.e. 25.22 percent). On the other hand, it was found that public healthcare services were utilised for 18.63 percent of GI category of diseases, 8.29 percent of GII category of diseases and 11.3 percent of GIII category of diseases respectively. On the contrary, private healthcare facilities were utilised for curing 64.60 percent of GI disease episodes, 80.86 percent of GII illness episodes and 69.57percent for GIII related illness episodes respectively. Results indicate that private healthcare facilities are more popular for the treatment of all category illness episodes than the other counterparts. The figures also reveal that practice of self-medication or family advice for GI, GII and GIII illness episodes were 4.97 percent, 3.04 percent and 6.96 percent respectively. It is also seen from table that for the treatment of all category of illness episodes, allopathy system of medicine was mostly preferred, followed by homeopathy, and others. Particularly, physiotherapy was practiced for GIII related diseases etc. in SMCA. It is to be mentioned that some of the illness episodes were treated with more than one system of medicine. Combinations may be allopathy - homeopathy, homeopathy-ayurveda, allopathy–physiotherapy and others. Data show that combination of any two or more systems of medicine were adopted for 9.20 percent of GI disease episodes, 3.32 percent of GII illness episodes and 7.02 percent of GIII illness episodes respectively.

**Table 6.8: Distribution of Illness Episodes by Category of disease and Utilisation Pattern of the sick people of SMCA**

	GI		GII		GIII	
	Utilised	%	Utilised	%	Utilised	%
<b>Pattern of healthcare</b>						
<b>facilities utilised</b>						
Modern	140	86.96	319	88.12	86	74.78
Traditional	21	13.04	43	11.88	29	25.22
<b>Total</b>	<b>161</b>	<b>100</b>	<b>362</b>	<b>100</b>	<b>115</b>	<b>100</b>
<b>Sources of healthcare</b>						
<b>facilities utilised</b>						
Public	30	18.63	30	8.29	13	11.30
Private	104	64.60	292	80.66	80	69.57
Self-medication/ family advice	8	4.97	11	3.04	8	6.96
Chemist's shop	12	7.45	13	3.59	12	10.43
others	7	4.35	16	4.42	2	1.74
<b>Total</b>	<b>161</b>	<b>100</b>	<b>362</b>	<b>100</b>	<b>115</b>	<b>100</b>
<b>System of medicine</b>						
<b>utilised</b>						
Allopathy	124	77.02	301	83.15	85	73.91
Homeopathy	17	10.56	27	7.46	5	4.35
Ayurveda and related	4	171.43	7	1.93	3	2.61
Yoga	0	0.00	7	1.93	3	2.61
Physiotherapy	0	0.00	8	2.21	12	10.43

combination of any two or more	16	9.94	12	3.31	7	6.09
<b>Total</b>	<b>161</b>	<b>100.00</b>	<b>362</b>	<b>100</b>	<b>115</b>	<b>100</b>

Source: Self-elaboration with survey Data, Note: GI: Communicable, maternal, perinatal and nutritional conditions; GII: Non-communicable diseases; GIII: Injuries and accidents, DRJA = Part of SMCA falling under the jurisdiction of Darjeeling district, JPGA = Part of SMCA falling under the jurisdiction of Jalpaiguri district, SMCA= Siliguri Municipal Corporation Area. Public includes Urban Health centre, Govt. Hospital, Medical etc., Private includes Chambers, Clinics or Private Nursing Homes), Others include NGOs, Charitable Organisations and others.



The above figure 6.6 indicates that modern type of healthcare facilities was more popular than the traditional type for the treatment of all categories of diseases prevailing among the sampled population of SMCA. It is also clear from the findings that private healthcare facilities were mostly utilised, followed by public healthcare services, buying medicines from chemists' shop and other sources available in the region. Further, use of public healthcare services was more for curing communicable, maternal, peri-natal and nutritional conditions, followed by injuries and accidents and non-communicable diseases. It may be due to the availability of community medicine for communicable diseases at free of costs at public health facilities, emergency service, high use by low income groups particularly for maternal and peri-natal conditions and long duration high severe diseases etc. The figures also reveal that allopathy

system of medicine was mostly followed for most of illness episodes and some of the illness episodes were also treated with more than one system of medicine.

#### 6.1.6 Utilisation of Healthcare Facilities by Nature of disease

It is generally assumed that utilisation pattern of the sick person changes as the change in nature of disease (such as acute diseases and chronic diseases) as shown in table 6.9. Data clearly depict that 82.70 percent acute illness episodes were treated by modern type of healthcare services and rest of 17.30 percent illness episodes were treated by traditional healthcare services. On the other hand, 86.53 percent chronic illness episodes availed modern healthcare services and balance 13.47 percent episodes utilised the traditional healthcare facilities. Results indicate that majority of the acute diseases as well as chronic illness episodes utilised the modern healthcare facilities and utilisation of traditional care was comparatively higher for acute diseases than for chronic diseases in SMCA. Further, it was also observed that a majority of the illness episodes (both acute diseases and chronic diseases) contacted the available private healthcare facilities than the other types, but utilisation of public sources is little higher for chronic illness episodes (i.e. 11.04 percent) than that of acute illness episodes (i.e. 12.43 percent). On the other side, data indicate that self-medication or family advice and purchasing medicines from chemists' shop (not going to doctor or any health institution) were more practiced for acute diseases than the other type. Further, data reveal that majority of the treated acute disease episodes (i.e. 78.38 percent) and chronic disease episodes (i.e. 80.57 percent) were treated with allopathy, followed by homeopathy and other systems of medicines available. Further, utilisation of homeopathy was comparatively higher for acute illness episodes (i.e. 9.73 percent) than for chronic illness episodes (i.e. 6.84 percent). Further, while ayurveda system was followed for 3.78 percent of acute diseases and 1.55 percent of chronic illness episodes respectively, physiotherapy was adopted for 2.16 percent of acute illness episodes and 3.53 percent of chronic diseases.

**Table 6. 9: Distribution of Illness Episodes by Nature of disease and Utilisation Pattern of the sick people of SMCA**

	Acute	%	Chronic	%
<b>Pattern of healthcare facilities utilised</b>				
Modern	153	82.70	392	86.53
Traditional	32	17.30	61	13.47
<b>Total</b>	<b>185</b>	<b>100</b>	<b>453</b>	<b>100</b>
<b>Sources of healthcare facilities utilised</b>				
Public	23	12.43	50	11.04
Private	130	70.27	346	76.38
Self-medication/ advice	9	4.86	18	3.97
Chemist's shop	16	8.65	21	4.64
others	7	3.78	18	3.97
<b>Total</b>	<b>185</b>	<b>100</b>	<b>453</b>	<b>100</b>
<b>System of medicine utilised</b>				
Allopathy	145	78.38	365	80.57
Homeopathy	18	9.73	31	6.84
Ayurveda and related	7	3.78	7	1.55
Yoga	4	2.16	6	1.32
Physiotherapy	4	2.16	16	3.53
combination of any two	7	3.78	27	5.96
<b>Total</b>	<b>185</b>	<b>100</b>	<b>453</b>	<b>100</b>

Source: Self-elaboration with survey data, Note: Acute Disease: Suffering for less or equal to 30 days; chronic Disease: Suffering for more than 30 days continuously SMCA= Siliguri Municipal Corporation Area, Public includes Urban Health centre, Govt. Hospital, Medical etc., Private includes Chambers, Clinics or Private Nursing Homes), Others include NGOs, Charitable Organisations and others.

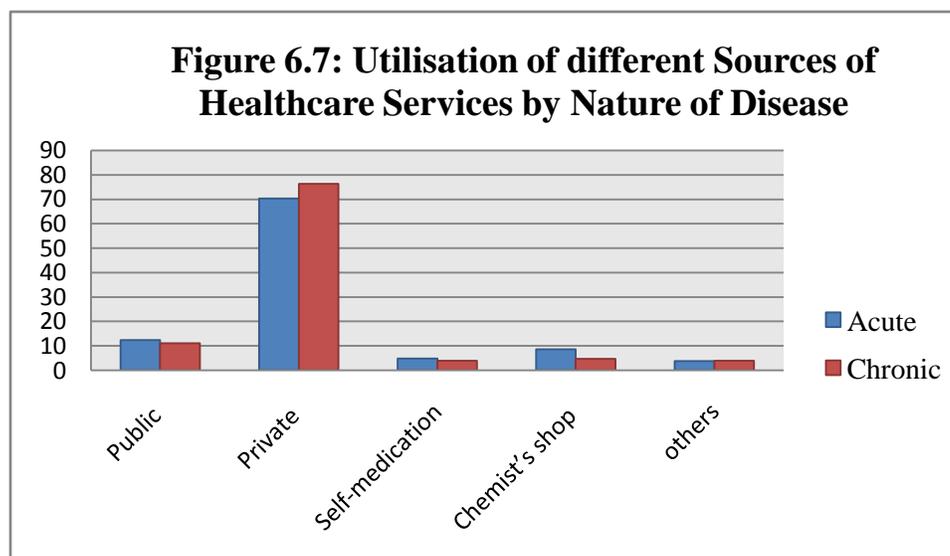


Figure 6.7 presents that utilisation pattern of the sick person changes with the change in nature of disease. Utilisation of traditional healthcare services was comparatively higher for acute diseases than the chronic diseases. Public healthcare sources were more utilised for acute illness episodes than for chronic disease episodes. Use of self-medication and purchasing medicines from chemists' shop, homeopathic system of medicine were comparatively higher for acute illness episodes than for chronic disease episodes. It may be explained by the fact that acute diseases are more controllable, less risky and can be prevented with proper medication, but on the other hand, for the treatment of long duration chronic diseases private sources and allopathy system of medicine were mostly followed by the sick people of SMCA.

### 6.1.7 Utilisation of Healthcare Facilities by Severity of disease

Along with category of disease and nature of disease, health seeking behaviour of the sick person may also be influenced by severity of disease or perceived risk of the disease. If the sick person perceives the seriousness of the disease, he or she takes the explicit decision such as which type of facility to be suitable, which source of facilities to be adopted, which system of medicine to be followed for the treatment etc. Table 6.10 presents how health seeking behaviour of the sick person varies according to change in severity of disease of the sick people of SMCA. Data highlight that modern healthcare services were followed for 73.68 percent of low severity, for 88.34 percent of medium severity, and for 98.81 percent of high severity disease episodes. On the contrary, traditional healthcare facilities were utilised for majority of the low severity illness episodes (i.e. 26.32 percent), followed by medium severity illness episodes (i.e. 11.66 percent) and high severity illness episodes (i.e. 1.19 percent). Results indicate that utilisation of modern healthcare services increases with the change in severity of diseases from low to high.

Further, it was worked out that when severity of disease was low 7.29 percent episodes utilised the public healthcare services, but when severity of disease was high 14.88 percent episodes utilised the same. On the other hand, 66.80 percent of low, 77.13 percent of medium and 82.74 percent of high severity illness episodes accessed the private healthcare services, indicating that utilisation of both the public as well as private source of healthcare services increases as the

severity of disease increases from low to high via medium severity of diseases. It was, further, observed that mainly for low severity disease episodes practice of self-medication, purchasing medicines from chemists' shop, visiting to the charitable organisations were prominent.

In addition, it was reported that allopathy system was adopted for majority of illness episodes irrespective of any severity of diseases. It was worked out that 78.54 percent of low severity, 78.92 percent of medium severity and 92.26 percent of high severity illness episodes were treated by allopathy system of medicine. On the contrary, it was worked out that homeopathy medicines were utilised for 13.77 percent of low severity, for 5.83 percent of medium severity and for 1.19 percent of high severity illness episodes. Further, it was worked out that 3.64 percent of low severity, 7.17 percent of medium severity and 2.98 percent of high severity illness episodes were treated by combination of any two or more systems of medicine. Results also show that self-medication, purchasing medicines from chemists' shop and homeopathy system of medicine were highly utilised for low severity diseases, but for the treatment of high severity illness following allopathy system of medicine at private healthcare facilities was preferred by the sick people of SMCA.

**Table 6.10: Distribution of Illness Episodes by Severity of disease and Utilisation Pattern of the sick people of SMCA**

	Low	%	Medium	%	High	%
<b>Pattern of healthcare facilities utilised</b>						
Modern	182	73.68	197	88.34	166	98.81
Traditional	65	26.32	26	11.66	2	1.19
<b>Total</b>	<b>247</b>	<b>100.00</b>	<b>223</b>	<b>100.00</b>	<b>168</b>	<b>100.00</b>
<b>Sources of healthcare facilities utilised</b>						
Public	18	7.29	30	13.45	25	14.88
Private	165	66.80	172	77.13	139	82.74

Self-medication/family advice	23	9.31	4	1.79	0	0.00
Chemist's shop	28	11.34	9	4.04	0	0.00
others	13	5.26	8	3.59	4	2.38
<b>Total</b>	<b>247</b>	<b>100.00</b>	<b>223</b>	<b>100.00</b>	<b>168</b>	<b>100.00</b>

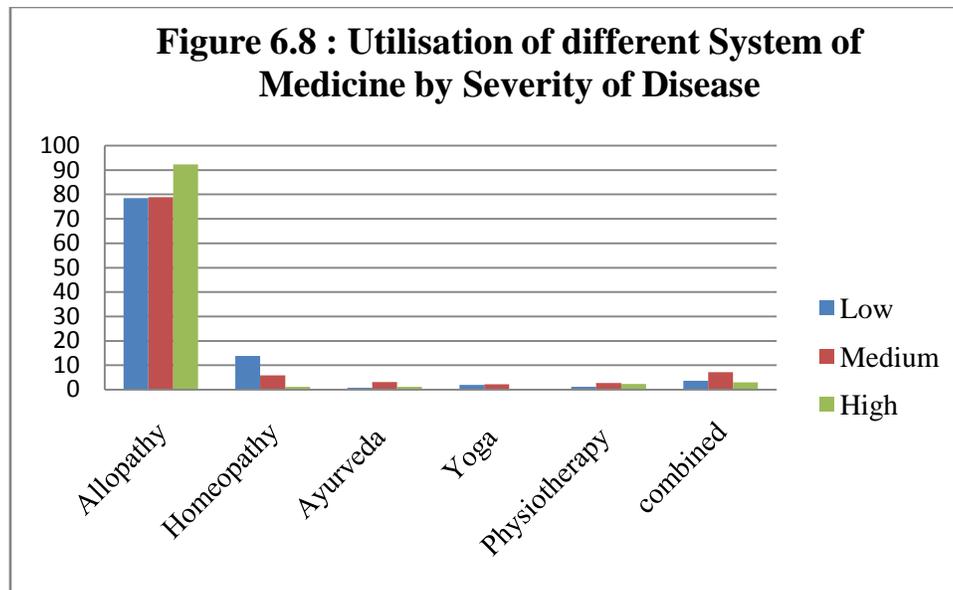
### System of medicine

#### utilised

Allopathy	194	78.54	176	78.92	155	92.26
Homeopathy	34	13.77	13	5.83	2	1.19
Ayurveda	2	0.81	7	3.14	2	1.19
Yoga	5	2.02	5	2.24	0	0.00
Physiotherapy and others	3	1.21	6	2.69	4	2.38
Combination of any two or more	9	3.64	16	7.17	5	2.98
<b>Total</b>	<b>247</b>	<b>100.00</b>	<b>223</b>	<b>100.00</b>	<b>168</b>	<b>100.00</b>

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Source: Self-elaboration with survey data, Low: = Normal activity with symptoms; Medium = Impairment of activities; High = Bed ridden for seven days or more, SMCA= Siliguri Municipal Corporation Area, Public includes Urban Health centre, Govt. Hospital, Medical etc., Private includes Chambers, Clinics or Private Nursing Homes), Others include NGOs, Charitable Organisations and others.



Note: Low = Normal activity with symptoms; Medium = Impairment of activities; High = Bed ridden for seven days or more

Figure 6.8 depicts that how health seeking behaviour of the sick people of SMCA varies according to change in severity of disease or perceived risk of the disease. Further, results indicate that majority of the cases, particularly, for high severe illness episodes modern healthcare services were preferred, it could be due to expectation of quick relief, easy availability of modern services in the study area. Further, traditional healthcare facilities were more utilised for majority of the low severity illness episodes than the others could be due to low perceived risk attached to it. Thus, it may be tested econometrically, in the next chapter, that whether utilisation of modern healthcare services increases with the change in severity of diseases from low to high. Results also indicate that choice of source of healthcare services varies with the change in severity of disease of the sick person. On the other hand, failure to meet the high expenditure at modern private healthcare for long duration high severe diseases could be probable reason of high utilisation of public sources by the low income groups. Further, utilisation of both the public and private sources of healthcare services tends to increase as the severity of disease changes from low to high via medium severity of diseases. In addition, for few low severe disease episodes practice of self-medication, purchasing medicines from chemists' shop, visiting to the charitable organisations were adopted may be due to low perceived risk by the sick people. Lastly, allopathy system of medicine was preferred for all severity of disease episodes for quick relief, easy availability, and proper diagnosis process etc.

though it is relatively costlier than other system of medicines for low income groups. In addition, combination of any two or more systems of medicine was adopted mainly sick people who are not satisfied with the system of medicine they were following, so when severity is low homeopathy and other systems of medicines are followed, but the same sick person start receiving allopathy system of medicine when diseases become high severe. Interestingly, it was observed in the study that for some illness episodes, particularly, for injury cases (orthopaedic) self-medication or allopathy system of medicine was followed, later on when diseases went out of control sick person shifted to traditional or primitive system of medicine such as such as baidhji, ojha, kabiraj, fakir, sadhus and others.

## **6.2 Introduction to Out-of-Pocket Healthcare Expenditure (OOPHE)**

In common parlance, healthcare expenditure is defined as the total expenditure (both direct and indirect) incurred by any individual or household on restoration of physical or mental health status during a particular period of time. However, study considered out-of-pocket healthcare expenditure (OOPHE) as the total payments made by household for the treatment of diseases directly from their own resources, which is not covered by the any health insurance or other similar types of benefit. This section analyses how OOPHE of the people varies according to change in demographic and economic conditions, burden of disease and healthcare seeking behaviour of the people of SMCA.

### **6.2.1 Components of Out-of-Pocket Healthcare Expenditure (OOPHE)**

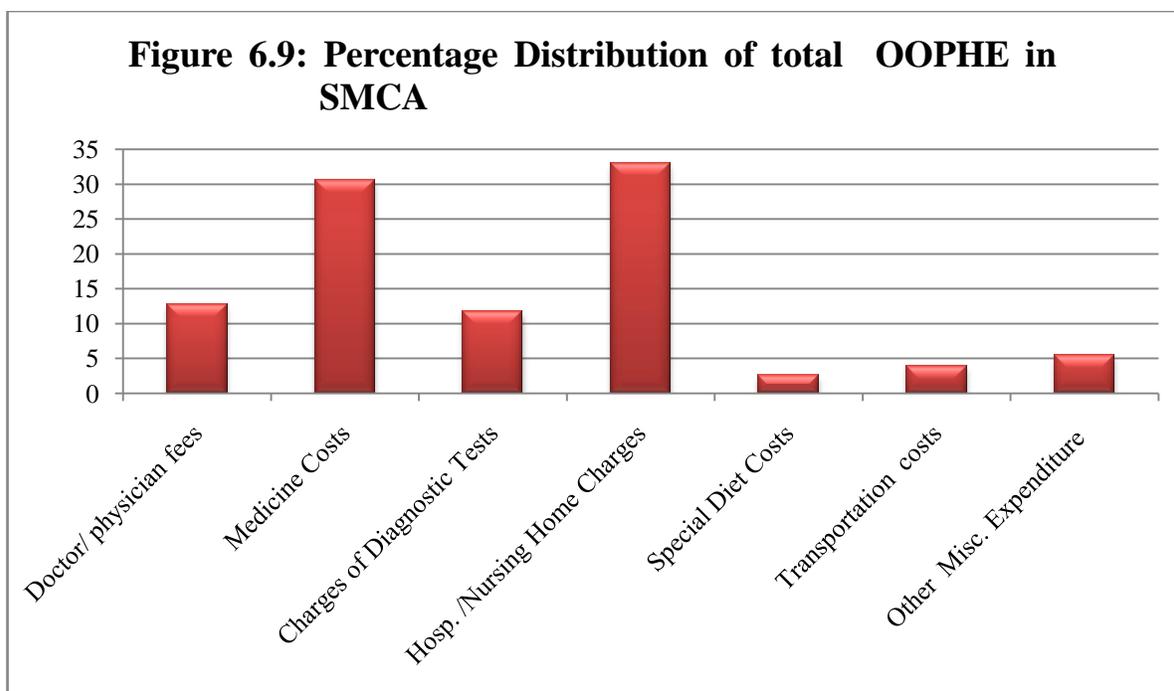
The study calculated the total OOPHE by summing up the payments made by households for all the sick members of the family on different components of healthcare expenditure (i.e. public hospital card/ registration fees, doctors'/consultation fees, diagnostic test charges, medicine costs, hospital or nursing home charges including surgery not covered by any health insurance benefits, special diets taken as per the advice by the doctors, transportation costs for visiting the

healthcare facilities including ambulance fares, other miscellaneous expenditure such as tips, rituals, helper costs, food taken outside etc.) during the reference period of one year. Table 6.11 displays how total OOPHE is distributed among the different components of healthcare expenditure incurred by the households of SMCA. Data expectedly reveal that maximum OOPHE was spent on making hospital or nursing home bills. Beside hospitalisation charges, expenditure on medicine constituted major part of OOPHE, followed by doctor/ physician fees, payments for diagnostic tests, other miscellaneous expenditure, transportation costs and special diet costs. Further, it is to be noted that OOPHE is also largely affected by the payments for diagnostic tests. On the other hand, miscellaneous expenditure (e.g. registration fees, tips, rituals, helper costs, costs for food taken outside etc.) incurred during the different phases of treatment had also considerable role for high average annual OOPHE. Figure 6.9 depicts the percentage distribution of total OOPHE under the different heads. Therefore, study indicates that hospitalisation is an expensive phenomenon and medicine costs played crucial role for high OOPHE in SMCA.

**Table 6.11: Distribution of different components of OOPHE**

Components of OOPHE	Avg. Annual OOPHE (in Rs.)	Percent to total annual OOPHE
Doctor/ physician fees	1264.80	12.70
Medicine Costs	2645.64	30.55
Charges of Diagnostic Tests	1412.78	11.74
Hospital /Nursing Home Charges ( Excluding other payments)	26655.51	32.97
Special Diet Costs	725.89	2.60
Transportation cost	427.46	3.97
Other Misc. Expenditure	823.66	5.47
<b>Total (All)</b>	<b>8618.23</b>	<b>100.00</b>

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure



## 6.2.2 Analysis of OOPHE according to Demographic and Economic characteristics of the people of SMCA

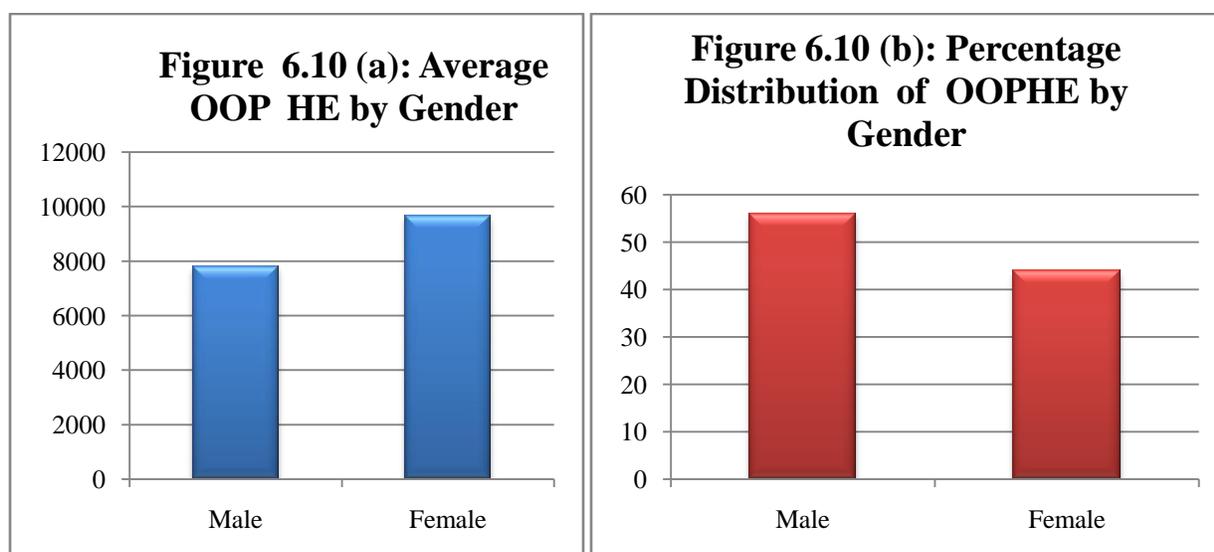
### 6.2.2.1 OOPHE and Gender

Table 6.12 presents the average annual OOPHE and percentage of healthcare expenditure to total OOPHE according to gender. Data reveal that out of total OOPHE, 56.1 percent healthcare expenditure was incurred on sick males and 43.9 percent was incurred on sick females. On the other hand, it was worked out that average annual OOPHE for male was Rs. 7806.19 and that of for females was Rs.9655.20. Results highlight that though average annual OOPHE for female is higher than for males, percentage of healthcare expenditure to total OOPHE by females was less than that of for males as depicted in the figure 6.10 (a) and figure 6.10 (b). Low annual average OOPHE for male may be due to the number of illness episodes experienced by male was more than that of by female during the reference period. In addition, hospitalisation in private nursing home for child delivery by females could be another reason for high average annual OOPHE for female.

**Table 6.12: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Gender of the sick people of SMCA**

Gender	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Male	7806.19	56.1
Female	9655.20	43.9
Total (All)	8618.23	100

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure



#### 6.2.2.2 OOPHE and Age level

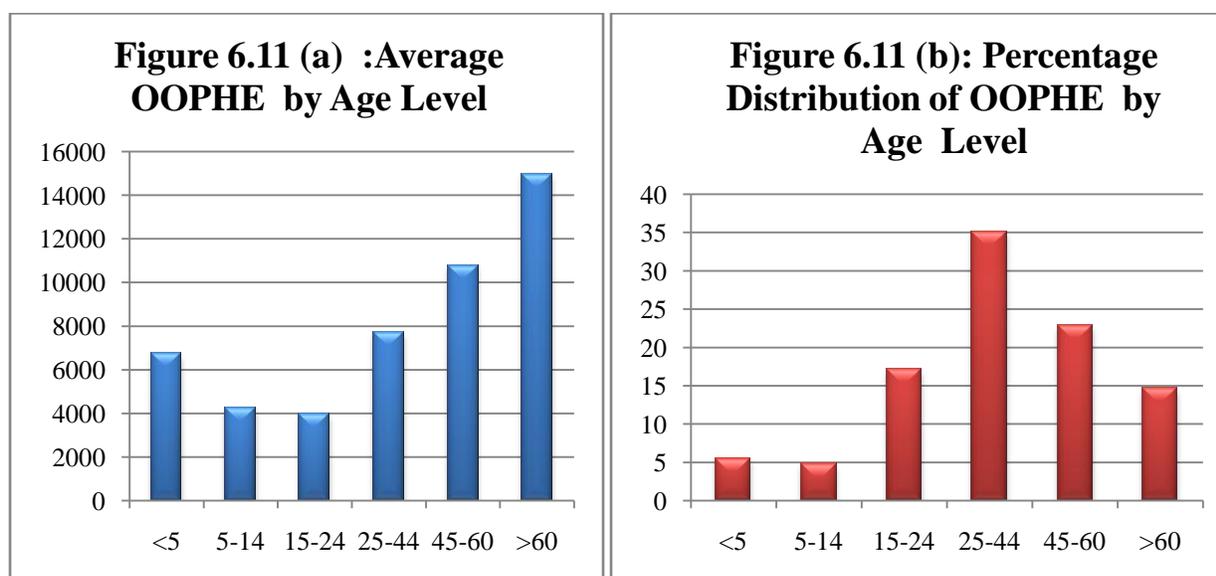
OOPHE may also differ as the age of the sick person changes because children below 5 years age and people above 60 years are more vulnerable to different types of diseases. Therefore, it is expected that healthcare expenditure for these two groups will be higher than the other age groups. Variation in OOPHE is observed among the sick people with different age groups as presented in the table 6.11 (a). Data expectedly and clearly show that people aged above 60 years reported highest average annual OOPHE (i.e.Rs.14994.77) and children below 5 years age reported comparatively higher average annual OOPHE ( i.e. Rs.6728.14) than the other age groups such as 5-14 years and 15-24 years. Figure 6.12 presents that as age-group of the sick people changes from

5-14 to 15-24, average annual OOPHE decreased and thereafter same expenditure increased at a high rate, and reached maximum for people aged above 60 years old. On the other hand, percentage figure reveals that major part of OOPHE was spent for the 25-44 year age group ( i.e. 35.1 percent), followed by 45-60age group ( i.e. 22.9 percent), 15-24 age group ( i.e. 22.9 percent) and others as shown in figure 6.11 (b) .

**Table 6.13: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Age level of the sick people of SMCA**

Age ( In Years)	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
<5	6728.14	5.5
5-14	4259.67	4.7
15-24	3928.69	17.1
25-44	7705.41	35.1
45-60	10776.90	22.9
>60	14994.77	14.7
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure



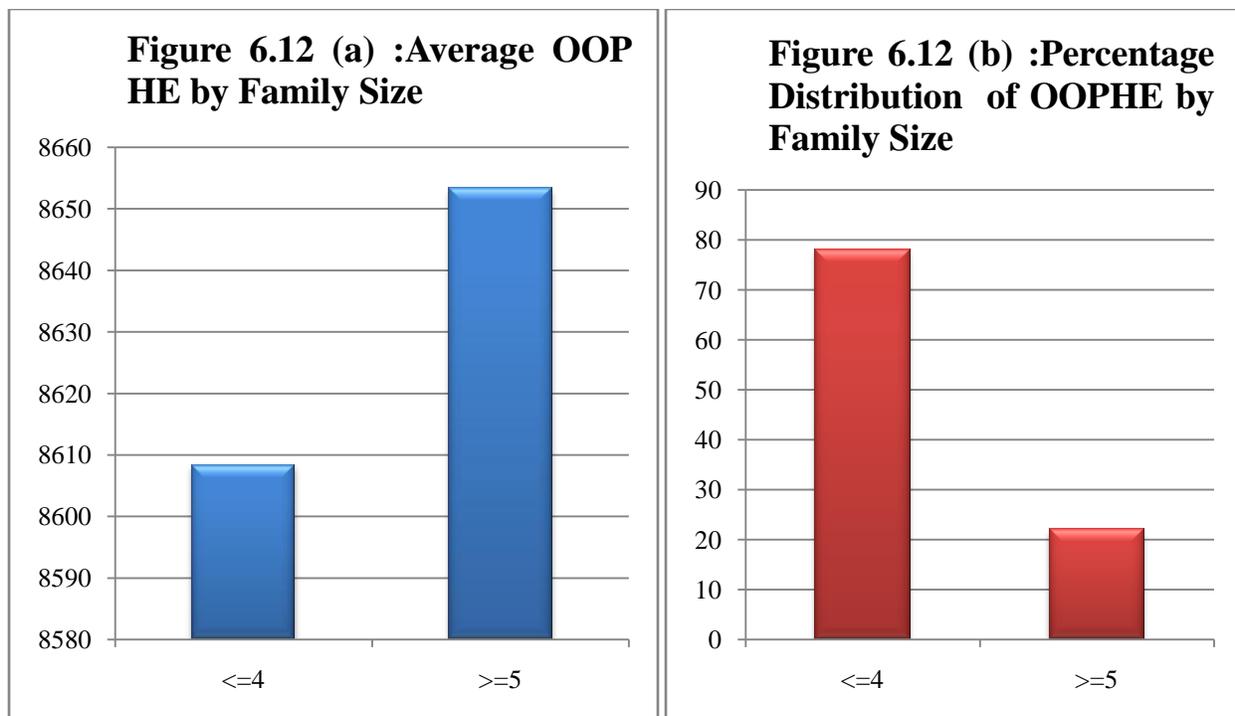
### 6.2.2.3 OOPHE and Family Size

Table 6.14 and displays how OOPHE varies as the number of family member of the household changes. As it is assumed that small sized family can pay more attention on each and every member of the family regarding the health issue, whereas large sized family cannot do so in that way. So, reporting to the healthcare facilities by the small sized family is comparatively higher than the other counterpart as evident in the study. Data show that while small sized households spent 78 percent, large sized households spent 22 percent of total OOPHE during the reference period of one year. On the contrary, it was worked out that while annual OOPHE per illness episode for small sized family was Rs. 8608.35, same expenditure for large sized family was Rs. 8653.35. Variation of average and percentage OOPHE are depicted in figure 6.12 (a) and figure 6.15 (b). Less number of reported illness episodes from large sized families could be the probable reason for higher average annual OOPHE for the households having equal to or more than five members than others.

**Table 6.14: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Family Size of the sick people of SMCA**

Family size	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
<=4	8608.35	78
>=5	8653.35	22
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure



#### 6.2.2.4 OOPHE and Marital Status

Table 6.13 shows that marital status of the sick person is also an important determinant of healthcare expenditure. For the analysis of OOPHE according to marital status, individuals were divided into two groups such as currently married and single (not currently married). Currently married individuals are those who are at present in marital relation, but singles (not currently married) are those individuals who are at present not in any marital relation such as unmarried, widows, separated, widowers and divorcees etc. Data reveal that currently married sick people spent Rs. 8880.77 and not currently married spent Rs.8077.93 per disease episode during the reference period of one year. On the other hand, currently married sick persons spent around 67 percent and single sick people spent around 33 percent of total OOPHE during the reference period.

**Table 6.15: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Marital Status of the sick people of SMCA**

Marital Status	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Singles (Not currently married)	8077.93	32.7
Currently married	8880.77	67.3
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure

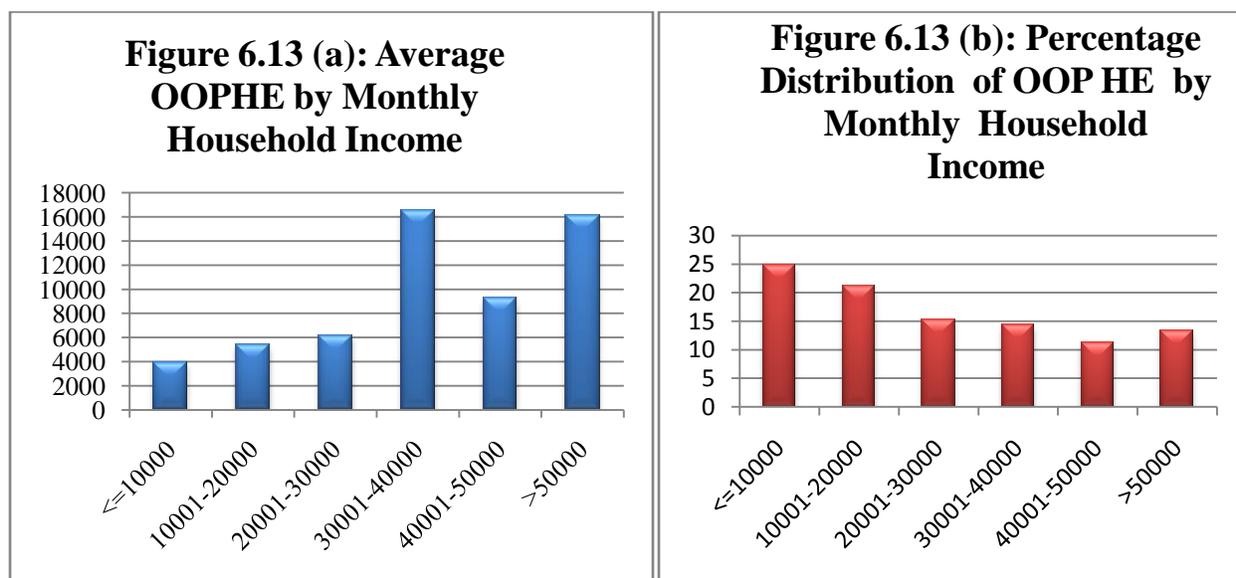
#### **6.2.2.5 OOPHE and Monthly Household Income**

When any family member falls sick, income of that family is mainly affected because low income groups have to spend major part of their income on curing the diseases of that family member. Different income groups spent different OOPHE as per their affordability as shown in table 6.16. Variations in average and percentage OOPHE with regard to different monthly households income are presented in figure 6.13 (a) and figure 6.13 (b). Data reveal that households belonging to the first income group (less than or equal to Rs. 10,000 monthly income) spent Rs. 3945.32, while households belonging to the fourth income group (Rs. 30001-40000) and the final income-group (more than Rs. 50000) made payment of Rs. 16558.10 and Rs. 16138.66 for per illness episode during one year respectively. It is to be noted that higher income groups spent higher amount per disease episode probably with more hospitalisation cases in private nursing homes and their affordability during the reference period. The low income groups particularly those falling under the first two groups (less than or equal to Rs. 10,000 and Rs. 10001-20000 monthly income), spent comparatively more percentage of total OOPHE as a whole and it may create a financial burden on them.

**Table 6.16: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Monthly Households Income of the sick people of SMCA**

Monthly Households Income	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
<=10000	3945.32	24.8
10001-20000	5363.43	21.2
20001-30000	6187.26	15.2
30001-40000	16558.10	14.4
40001-50000	9209.64	11.1
>50000	16138.66	13.4
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure



#### 6.2.2.6 OOPHE and Major Source of Household Income

Major source of income or regular flow of income may sometimes determine how much expenditure will be made on curing the diseases. Table 6.17 discloses that households having pension as their major source of income reported highest annual OOPHE (i.e.10389.00) per illness episode, may be due to sickness in old age, while wage earning households spent lowest

amount ( i.e. Rs.2387.40) per disease episode during one year. On the other hand, due to higher financial capability business and salaried households incurred higher percentage of OOPHE, whereas pensioner and other category households spent comparatively less percentage of OOPHE.

**Table 6.17: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Major Source of Household Income of the sick people of SMCA**

Major Source of HH Income	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Salary	9451.25	41.5
Pension	10389.00	3.9
Business	9183.18	42.3
Wages	2387.40	10.0
Others	7031.43	2.2
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: OOPHE= Out-of- Pocket Healthcare Expenditure

### 6.2.3 Analysis of OOPHE according to Burden of Disease of the people of SMCA

#### **6.2.3.1 OOPHE and Category of Disease**

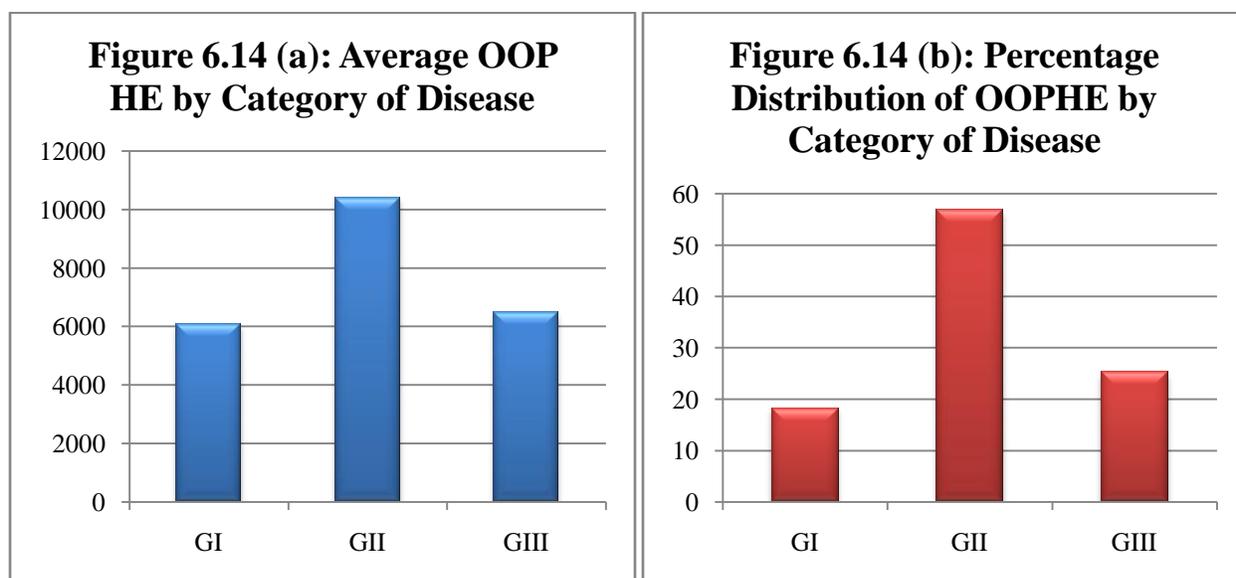
Table 6.18 displays the average annual OOPHE and percentage of healthcare expenditure to the total OOPHE for the treatment of various categories of diseases. Data show that annual OOPHE per illness episode for GII category diseases was Rs. 10397.04, which is about 57 percent of total OOPHE. Further, it was worked out that average annual OOPHE for GI and GIII category of disease were Rs. 6466.04 and Rs. 6040.90 respectively. It clearly indicates that major part of average and total healthcare expenditure was incurred on curing GII category diseases, followed

by GIII category diseases and GI category diseases as depicted in the figure 6.14 (a) and figure 6.14 (b).

**Table 6.18: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Category of disease of the people of SMCA**

Category of Disease	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
GI	6040.90	18.2
GII	10397.04	56.7
GIII	6466.04	25.1
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: GI: Communicable, maternal, peri-natal and nutritional conditions; GII: Non-communicable diseases; GIII: Injuries and accidents; OOPHE= Out-of-Pocket Healthcare Expenditure



### 6.2.3.2 OOPHE and Severity of Disease

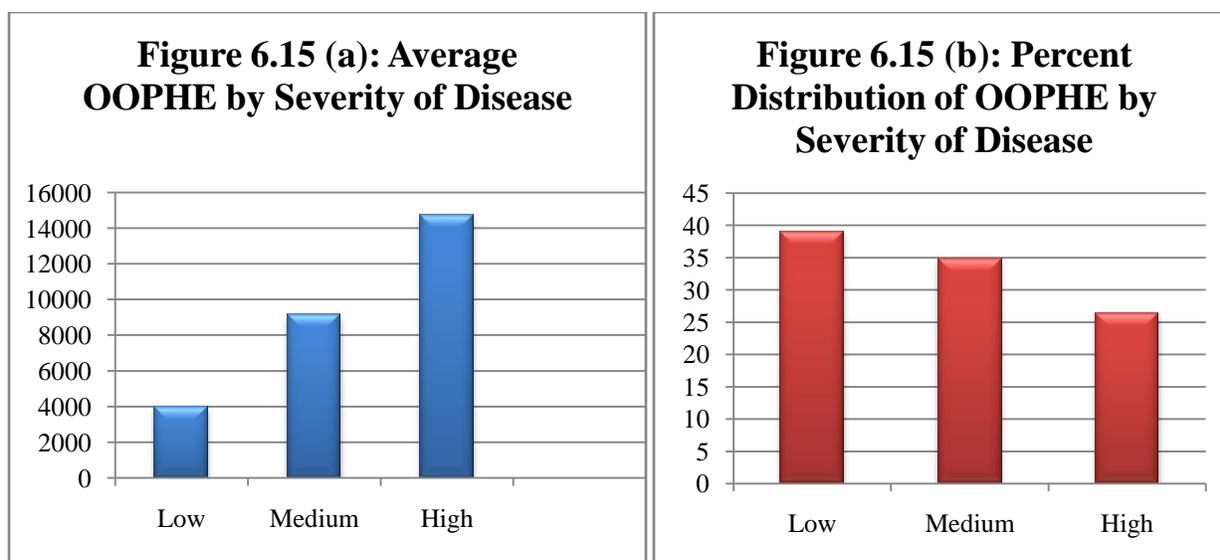
It is expected that the more is the severity of disease, the more is the utilisation of healthcare services which leads to increase in OOPHE as evident in the table6.19 figure 6.15 (a) and figure

6.15(b) exhibit how average and total healthcare expenditure vary as the degree of severity of disease of the people varies in the study area. Data reveal that when severity of disease was low, average annual OOPHE was Rs. 4014.10, but when the disease turned out to be highly severe, the same expenditure reached to Rs. 14779.76, indicating direct relationship between severity of disease and average annual OOPHE spending. On the contrary, it was worked out that while low severe diseases accounted for higher percentage of OOPHE (i.e. 39 percent), high severe diseases accounted for lower percentage of OOPHE (i.e. 26.2 percent).

**Table 6.19: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Severity of disease of the people of SMCA**

Severity of Disease	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Low	4014.10	39.0
Medium	9138.26	34.8
High	14779.76	26.2
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, \*Note: Low: Normal activity with symptoms; Medium: Impairment of activities; High: Bed ridden for seven days or more; OOPHE= Out-of- Pocket Healthcare Expenditure



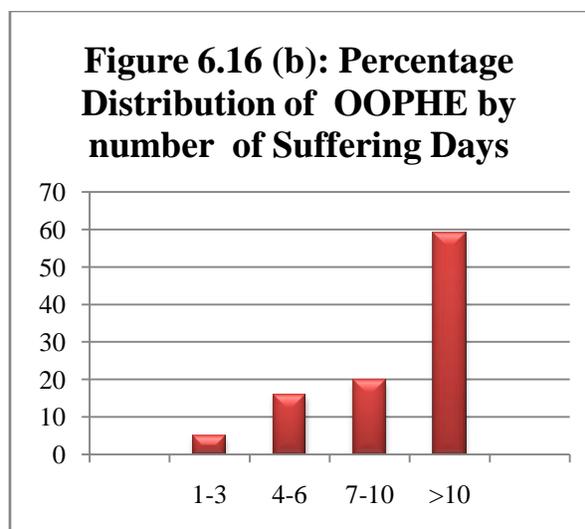
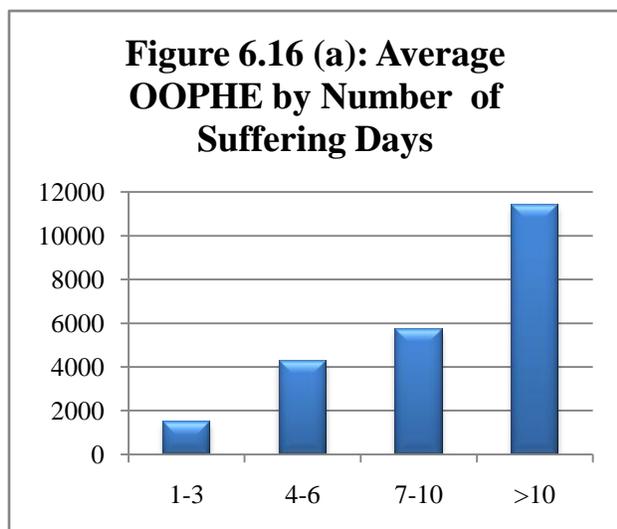
### 6.2.3.3 OOPHE and Number of Days of Suffering

Table 6.20 demonstrates that the number of days of suffering is another important factor for variation in OOPHE incurred by the households for the treatment of various types of diseases. Data reveal that while average annual OOPHE for 1 to 3 days suffering is Rs. 1482.66, same expenditure increases by nearly 8 times (i.e. Rs. 11382.67) for disease episodes suffering for more than 10 days, indicating there is a direct relation between number of days of suffering and average in the study area. Data on percent of healthcare expenditure to total OOPHE also support the fact. Figure 6.16 (a) and figure 6.16 (b) also confirm that long duration diseases require more average and total OOPHE than the short duration diseases.

**Table 6.20: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Number of Days of Suffering of the people of SMCA**

Number of Days of Suffering	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
1-3	1482.66	5.1
4-6	4266.23	16.0
7-10	5713.40	19.9
>10	11382.67	59.1
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data; OOPHE= Out-of- Pocket Healthcare Expenditure



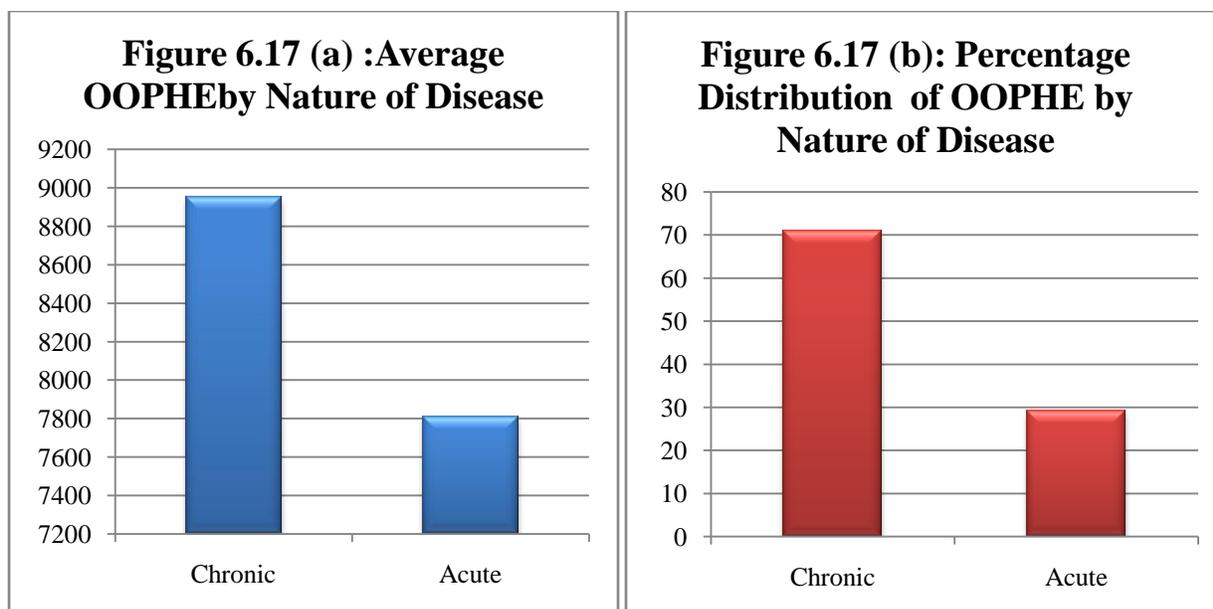
#### 6.2.3.4 OOPHE and Nature of Disease

Table 6.21 displays the variation of OOPHE according to change in nature of disease of the people of the SMCA during the reference period. Data reveal that average annual OOPHE for acute diseases was Rs. 7809.70 and for chronic diseases, it was Rs. 8949.57. Figure 6.17 (a) and figure 6.17 (b) depict the variation of average annual and total healthcare expenditure between two types of diseases. On the other hand, percentage of OOPHE data expresses the remarkable difference between acute diseases and chronic diseases. It was worked out that while 29 percent of total OOPHE spent on curing acute diseases, nearly 71 percent of total OOPHE was incurred on treatment of chronic diseases during the reference period.

**Table 6.21: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Nature of disease of the people of SMCA**

Nature of Disease	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Chronic	8949.57	70.9
Acute	7809.70	29.1
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note :Acute Disease: Suffering for less or equal to 30 days; Chronic Disease: Suffering for more than 30 days continuously; OOPHE= Out-of- Pocket Healthcare Expenditure



## 6.2.4 Analysis of OOPHE according to Health Seeking Behaviour of the people of SMCA

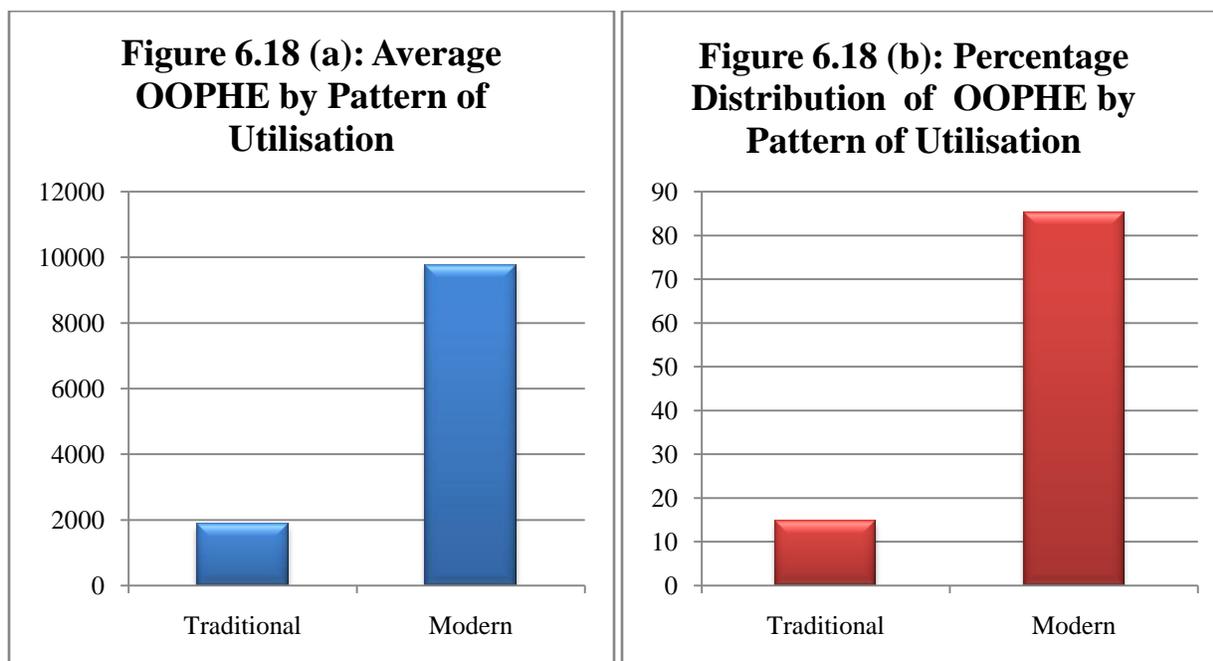
### 6.2.4.1 OOPHE and Pattern of Utilisation

Table 6.22 depicts the variation of OOPHE with respect to the pattern of utilisation of healthcare facilities. Data indicate both average annual OOPHE as well as percentage of healthcare expenditure to the total OOPHE for modern treatment procedure was much higher than those of the traditional type of care in SMCA as shown in figure 6.18 (a) and 6.18 (b)

**Table 6.22: Distribution of average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Pattern of utilisation**

Pattern of Utilisation	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Traditional	1880.66	14.7
Modern	9778.59	85.3
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data, Note: Modern source where opinions or advices are taken from doctors and medical experts by one group, and utilisation of healthcare facilities from 'traditional source' where treatment is sought from paramedical staff including personnel in chemist's shop, family treatment, or by self-medication or and from any systems of medicine (including ayurveda, yoga, unani and others), excepting allopathy and homeopath by other group; OOPHE= Out-of- Pocket Healthcare Expenditure



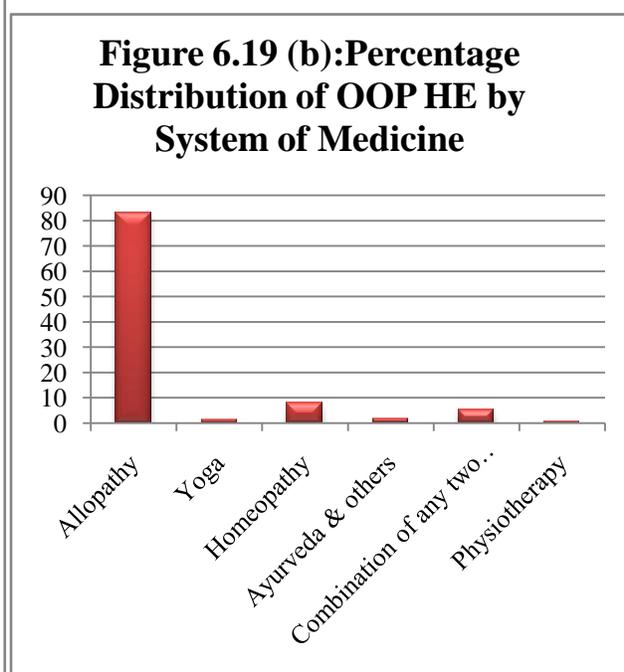
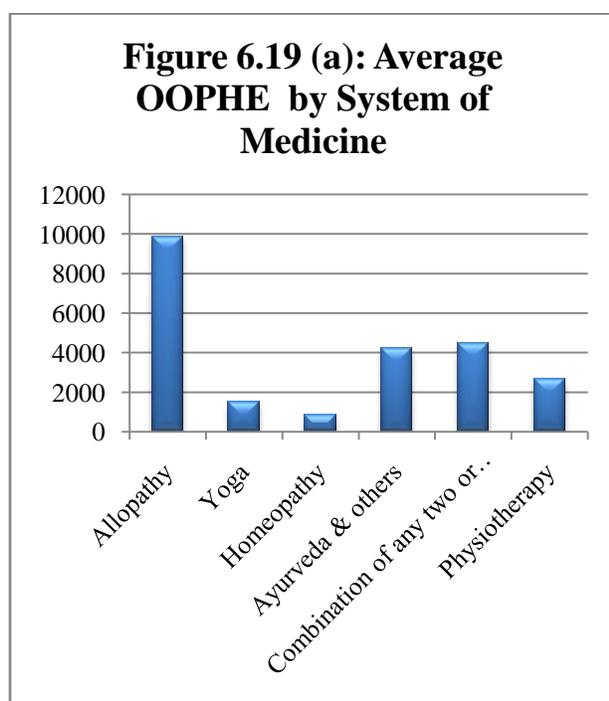
#### 6.2.4.2 OOPHE and System of Medicine Utilised

Choice of system of medicine is another significant bearing on the healthcare expenditure. Table 6.23 displays how healthcare expenditure varies as the adoption or choice of system of medicine by the sick persons or households varies in SMCA. It was worked out that average annual OOPHE for adopting allopathy, ayurveda and others, homeopathy, yoga and combination of any two or more system of medicines were Rs. 9875.02, Rs. 4223.64, Rs. 830.00, Rs. 2662.00 and Rs. 4457.33 respectively. In percentage figures, these are around 83, 2, 8, 1.4 and 5 of total OOPHE respectively. It indicates that percentage of healthcare expenditure to the total OOPHE is highest for following allopathy system of medicine, followed by homeopathy, combination of any two or more systems of medicine and others etc. as shown in the figure 6.19 (b) figure but annual OOPHE per illness episode varies in different direction as choice of systems of medicine varies, probably it may be number of followers of some specific systems of medicine such as yoga, ayurveda and others are less compared to other systems of medicine available as depicted in figure 6.19 (a).

**Table 6.23: Distribution of Average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by System of medicine utilised by the people of SMCA**

System of Medicine	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
Allopathy	9875.02	83.1
Yoga	1505.56	1.4
Homeopathy	830.00	7.7
Ayurveda and others	4223.64	1.7
Combination of any two or more	4457.33	5.2
Physiotherapy	2662.00	0.8
<b>Total (All)</b>	<b>8618.23</b>	<b>100.00</b>

Source: Self-elaboration with survey data; OOPHE= Out-of- Pocket Healthcare Expenditure



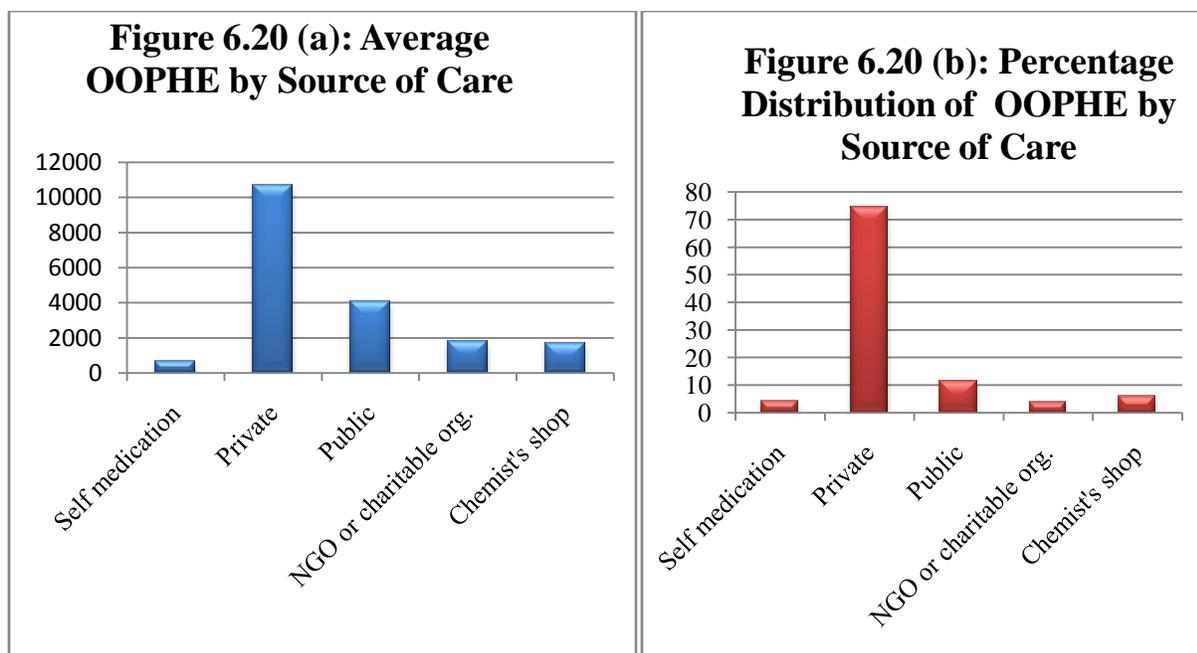
### 6.2.4.3 OOPHE and Source of Healthcare Facilities Utilised

Source of healthcare facilities to be utilised during any illness episode is a vital consideration for treatment costs. Table 6.24 presents the difference in OOPHE incurred by the households for seeking treatment from different sources of healthcare services. The individuals received treatment from private sources spent more than 74 percent of the OOP healthcare total expenditure, followed by public sources (i.e. 11.5 percent), purchasing medicines from chemist's shop (i.e. 5.8 percent), self-medication (i.e. 4.3 percent) and NGO or other charitable organisations (i.e. 3.9 percent). On the other hand, average annual OOPHE data reveal that individuals spent Rs. 10686.50 for using private sources of care, Rs. 4053.29 for public sources, Rs. 1807.60 for NGO or charitable organisation, Rs. 1707.32 purchasing medicines from chemist's shop, Rs. 657.41 for adopting self-medication or home therapy per disease episode during the reference period of one year. Thus, figure 6.20 (a) and 6.20 (a) expectedly and clearly exhibit that both average and total annual OOPHE are much higher in private healthcare facilities than the other sources of care people utilised during their illness episodes in the study area.

**Table 6.24: Distribution of Average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Source of healthcare facilities utilised by the people of SMCA**

Source of Healthcare	Avg. OOPHE (In Rs.)	Percent of healthcare Exp. to total OOPHE
Self-medication	657.41	4.3
Private	10686.50	74.4
Public	4053.29	11.5
NGO or charitable org.	1807.60	3.9
Chemist's shop	1707.32	5.8
Total (All)	8618.23	100.00

Source: Self-elaboration with survey data; Note: Public includes Urban Primary Health centre, Govt. Hospital, Medical etc., Private includes Chambers, Clinics of the doctors or Private Nursing Homes), Others include NGOs, Charitable Organisations and others trusts etc.; OOPHE= Out-of- Pocket Healthcare Expenditure



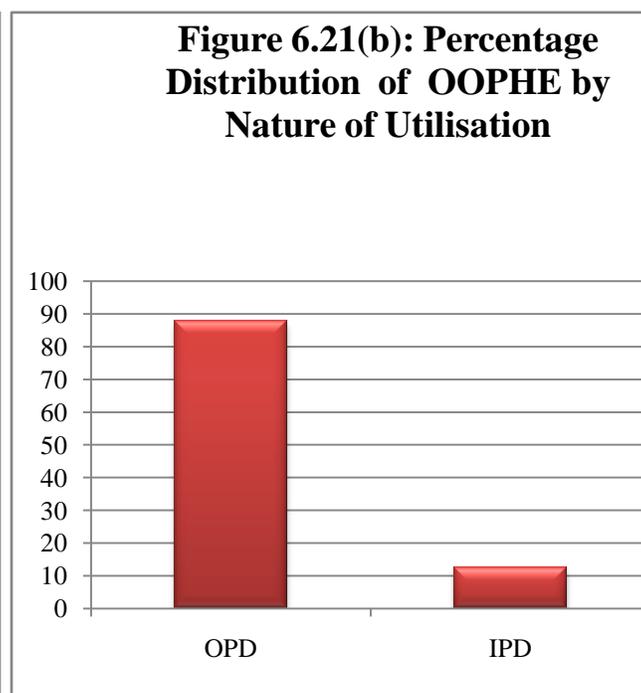
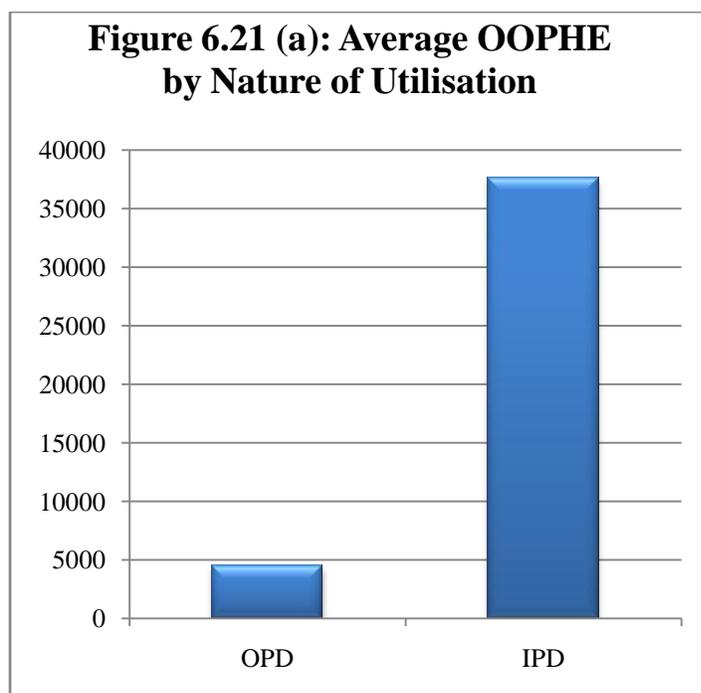
#### 6.2.4.4 OOPHE and Nature of Utilisation (or Type of visit)

As already stated earlier in the utilisation section that hospitalisation takes place when the disease becomes aggravated or in other words, illnesses are perceived as high severe by the sick person or his or her family members. Moreover, hospitalisation is comparatively expensive phenomenon. Therefore, it is not possible to afford the hospitalisation costs for all segments of society for all illness episodes. So, outpatient visits or OPD is preferred by the sick person or households. Table 6.25 shows how total annual OOPHE is distributed between OPD and IPD services. Figure 6.21 (b) shows that percentage of OOPHE for OPD services (i.e. 87.5 percent) was much higher than that of for IPD facilities (i.e. 12.5 percent) in SMCA, indicating that majority of the visits in healthcare institutions were for non-hospitalisation cases (i.e. OPD services). On the other hand, it was worked that average annual OOPHE per illness episode for inpatient care (IPD services) was Rs. 37551.90, while same expenditure for outpatient visits or OPD services was Rs. 4492.31, indicating average annual OOPHE per illness episode for OPD service is much higher than for IPD. It explicitly reconfirms the fact that hospitalisation or inpatient stay is high-priced issue in SMCA.

**Table 6.25: Distribution of Average annual OOPHE and percentage of healthcare expenditure to the total OOPHE by Nature of utilisation of the people of SMCA**

Nature of Utilisation	Avg. OOPHE (in Rs.)	Percent of healthcare Exp. to total OOPHE
OPD	4492.31	87.5
IPD (Including all other payments such as Doctors fees, special diet, transportation costs, misc. expenditure etc.)	37551.90	12.5
<b>Total (All)</b>	<b>8618.23</b>	<b>100.00</b>

Source: Self-elaboration with survey data; Note: OPD= Non-hospitalisation cases, IPD= Hospitalisation cases, OOPHE= Out-of- Pocket Healthcare Expenditure



## 6.3 Summary

The results indicate the possible existence of gender gap regarding the utilisation of healthcare services among the people of SMCA. It is because of the fact that while on the one side, morbidity prevalence rate for females (i.e.429.96 per 1000 persons) is comparatively higher than for males (i.e.400.83 per 1000 persons), on the other side, utilisation of healthcare services for males ( i.e. 92.75 percent) is comparatively higher than that of for females ( i.e. 90.32 percent). It may be due to the fact that if male member, particularly, head of the household or main earning unit of the family falls sick, livelihood of the remaining members will get disturbed, so male member is given priority for use of healthcare services for minor problem too. On the other hand, few illness episodes of females were not utilised any healthcare service may due to their ignorance, lack of perception of future risk, sacrifice or compromise for the family, economic factors, accepting as natural event of life, thinking as destiny of life, high tolerance level, perceiving low severe etc. Taking utmost care for small children and perceived risk may be probable reason for high utilisation of healthcare facility by children below 5 years old, on the other side, highly aged people are physically or economically dependent on other members of the family, therefore, visiting healthcare institution during the illness episodes by themselves is quite impossible, this could lead to low utilisation of healthcare facility by them. To some extent, negligence or ignorance of other member towards health issues of aged members of the family might resulted into low use of healthcare facility despite they are experiencing higher morbidity prevalence rate. Higher utilisation of healthcare services among higher qualified persons may be due to their high perception, awareness and consciousness about health, avoiding perceived risks and uncertainties etc. Difference in tastes, beliefs, attitudes, culture attached with different castes and religions could be the cause of difference in utilisation of healthcare services among them. Further, variation in utilisation pattern of different occupational background people could be the result of difference in flow of income, convenient time, employee health benefits etc. On the other hand, high affordability, ability to pay, wishing to trouble free life etc. could be the

probable reasons for higher utilisation of healthcare facilities by the high income groups than the other lower income groups. As it is known that small-sized households can pay more attention on each member and generally have comparatively higher per capita income, more consciousness etc. than the large-sized households, so former category can perceive the disease at early stage and thus reporting to the healthcare facilities by them was comparatively higher than the other counterparts.

On the other hand, study reveals that average annual out-of-pocket healthcare expenditure per illness episode is Rs. 8618.23. Beside hospitalisation charges in private nursing home, medicine costs contributed a major part of OOPHE in SMCA. In addition, more annual OOPHE per illness episode was incurred for females than males, hospitalisation in private nursing home for delivery care could be a reason. Families having more children or elderly persons spent more OOPHE per illness episode as they are vulnerable to the health risks. Moreover, higher utilisation of healthcare facilities by the small sized family and currently married persons could be reason for higher OOPHE for them. More use of public healthcare services and less hospitalisation cases by the low income groups may be the reason for low OOPHE per illness episode and vice versa. Regular flow of income and higher financial capability of wealthy business men and high salaried households resulted into higher percentage of OOPHE by them. Moreover, higher prevalence of non-communicable diseases contributed higher percentage and higher average annual OOPHE. A considerable number of high severe diseases were treated in private clinics or nursing homes might have resulted into higher annual OOPHE per illness episode. Further, treatment of chronic diseases continues for long duration which may be the reason of higher OOPHE for chronic diseases than acute diseases. Study also reveals that as majority of the illness episodes utilised the modern method of treatment following allopathy system of medicine OOPHE in this case was higher. On the contrary, no doctor fees, availability of fair price medicine, no bed charges, no payment for diet, minimum user fees/registration fees etc. might have led to comparatively lower OOPHE incurred by the households for seeking treatment from public sources than the private healthcare services. Finally, the study found that hospitalisation at private nursing home or inpatient stay is expensive phenomenon in SMCA.