

## **CHAPTER – 6**

### **DEMAND FOR HEALTH CARE AND ITS DETERMINANTS**

Good health care facilities and services are essential for society healthy which can effectively contribute to social and economic development. Ill health of any member creates a lot of trouble not only to his family but also to the society in terms of loss of production and productivity. A healthy society is always desirable to emerge as a wealthy nation (Bloom et al. 2004).

In India, health care facilities are provided through the public sector, private sector, public-private partnership and NGOs. Only primary health care services are available in rural areas, whereas there are a lot of health care services available in urban areas. Most of the rural health sub-centres and primary health centres (PHCs) are not serving facilities properly due to inadequate infrastructures. Some of these public health centres are not functioning properly due irregular attendance of doctors and support staffs.

In government hospitals and clinics, which account for the greatest part of the modern medical care provided, are often inefficient, suffering from highly centralized decision making procedure, wide fluctuations in budgetary allocations and poor motivation of facility manager and health care workers. The quality of public health care services is low, drugs and equipments are in short supply, patient's waiting times are long, wrong diagnoses and inappropriate treatments are common due to careless and negligence approach of the medical staffs of the health centres.

In spite of a steady increase in health care infrastructure available in Cachar district, there is a huge shortage of both physical and human infrastructure in sub-centres, primary health centres and community health centres. Huge shortage of health infrastructures creates a high demand for health care services among the people. The concept of ‘demand for health care’ is closely related to the health seeking behavior of individuals in a society. The demand for health care is a derived demand from the demand for health care. A health care facility is demanded as a means for consumers to achieve a larger stock of “health capital.”

The notion of demand for health care is closely related to the health seeking behaviour of individuals in any society. Before a person consume any health care facilities, either from private sources or from government sources or self care, she / he must perceive the need for it and then demand it. Need for health care could be either ‘self-perceived’, or ‘observed’. For instance, pain, headache, hygienic behaviour, psychosomatic problems, etc. which are internal to the individual herself / himself are examples of self-perceived need; while observed need is anything that can be observed and assessed by a trained individual, which might or might not have been perceived by the concerned individual. In any case, when there is a need for health care, individuals decide whether to visit a doctor and where to visit. The process of making such decisions may be complicated because of little information or too much information from friends, relatives, neighbours, physicians, and advertisements about the potential costs, risks, benefits, and opportunity cost of foregoing consumption of non-medical commodities.

When a person consumes medical facilities from private health sector or govt. health sector or use traditional methods, individual perceive the need for it and then

demand it. Rather than treatment of illness, patients and practitioners may aim to prevent disease at first. Depending on one's beliefs about the body and causes of disease, such prevention may take many forms. It may include diets and exercise, vaccination and drugs. There are some diseases viz; menstrual, headache, pain etc. which can be self-reported while the diseases like sexual, gynecological problem etc. cannot be treated by the concerned women and as such can be observed by a trained individual.

The previous chapter explains that there is a huge shortage of both physical and human health infrastructure in rural area of Cachar district. As a result, in most of the times rural women depend on private health care facilities. But, the cost of treatment is very expensive if the treatment is done from private health service providers. However, most of the rural households are belonging to lower income category; therefore, they cannot afford the high cost for their treatment from these private health service providers. Therefore, rural women are depending on the traditional preventive measures to protect themselves as far possible.

In this light, the present chapter focuses on the demand analysis for getting better health care facilities. In order to explain the demand analysis, the present chapter is divided into two following sections viz; Section 6.1 and Section 6.2. Section 6.1 deals with the traditional preventive measures taken by the Muslim married women in rural area of Cachar district for their different types of diseases whereas Section 6.2 analyses the factors responsible for the demand for health care in rural area of Cachar district.

## ***6.1 Traditional Preventive Measures Taken for Different Diseases by the Muslim Married Women in Rural Area of Cachar District***

Majority of the respondents are belonging to poor economic condition and there is a huge shortage of health infrastructure in rural area of Cachar district as already discussed in Chapter 4 and 5. Therefore, most of the women are taking traditional preventive measures, which include self-care, suggestions given by the aged women or quack doctor. World Health Organization (1998) defines self-care, as “Self care is what people do for themselves to establish and maintain health, and to prevent and deal with illness. It is a broad concept encompassing hygiene (general and personal), nutrition (type and quality of food eaten), lifestyle (sporting activities, leisure etc.), environmental factors (living conditions, social habits, etc.), socio-economic factors (income level, cultural belief, etc.) and self medication.” There are some Muslim women; particularly those are belonging in rural areas have limited access to modern medical facilities. Many of these women prefer to rely on a combination of supplications and traditional medical treatment. In the study area, it is observed that a remarkable percentage of respondents (approximately 54.68 per cent) are involved in superstitious belief (peer, fakeer, mullah, twabiz, kabiraj etc.) while 45.32 per cent respondents are not involved in these activities. It observed that out of the total reported diseased women (2248), majority of the respondents (53.91 per cent) are neglecting their health problems and only a few number of women are going for either traditional preventive measures (30.16 per cent) or modern measures (25.88 per cent).

**Table 6.1: Treatment of the Women Patients under Different Health Institutions**

Type of institutions	Number of treated patient	Patients treated (in per cent)
Primary health centre (PHC)/Community health centre (CHC) / Sub Centre (SC)	230	39.52
Silchar Medical College (SMC)	174	29.90
District hospital	65	11.17
Homeopathy	65	11.17
Ayurvedic	62	10.65
Private Institution	51	8.76

Sources: Field Survey, January 2013-December 2014

Table 6.1 depicts that out of the total women who used modern measures 39.52 per cent of them are treated in primary health centre, 29.90 per cent are treated in medical institutions, 11.17 per cent respondents are under the treatment of homeopathy, 11.17 per cent respondents are under the treatment of district hospital, 10.65 per cent are under the treatment of ayurvedic. Only 8.76 per cent are treated in private health centre. Table 6.2 depicts that Muslim women mainly depend on traditional preventive measures for dental problem, calcium deficiency, skin problem, arthritis, hearing problem, rheumatism, menstrual problem etc. while most of the women rely on modern medical method for their problem of gynecological, heart, breast, thyroid, high pressure etc.

Table 6.2 depicts the number of women using preventive measures and Table 6.3 shows the different disease wise traditional preventive measures. Therefore, this section analyses the traditional preventive measures that the Muslim married women of Cachar district uses for different kinds of diseases.

Table 6.2 shows that most of the Muslim married women follow either traditional preventive measures for getting relief from their diseases or neglect their diseases which they face mainly due to the poor family income. Most of the married women neglect some problems such as mental (97.83 per cent), white discharge (68.75 per cent), low blood pressure (68.29 per cent), anemia (66.26 per cent), mouth ulcer (62.86 per cent), diabetic (58.62 per cent), eye related problem (58.24 per cent) etc. without taking any measures. Married women are following the traditional measures for the problems such as dental (49.52 per cent), calcium shortage (41.67 per cent), skin (41.56 per cent), hearing (36.36 per cent), headache (34.72 per cent), rheumatism (32.65 per cent), menstrual (32.11 per cent), hair falling (30.48 per cent) and so on. Only in case of heart disease, mental and thyroid related problem, no traditional measures are taken. For gynecological problem (62.22 per cent) and heart related problem (58.82 per cent), the married women are not following traditional measures whereas they keep faith on modern measures.

**Table 6.2: Distribution and Pattern of Treatment of the Muslim Married Women in Rural Area of Cachar District:**

Disease	No. of Reported Diseased Women	Traditional Preventive Measures (in per cent)	Modern Measures (in per cent)	Negligence (in per cent)
Gas	254	29.13	22.05	48.82
Anemia	163	18.4	15.34	66.26
Calcium shortage	156	41.67	26.92	31.41
Menstrual	109	32.11	18.35	49.54
Dental	105	49.52	33.33	17.14
Hair falling	105	30.48	11.43	58.1
Rheumatism	98	32.65	28.57	38.78

White discharge	96	18.75	12.5	68.75
Eye	91	19.78	21.98	58.24
Skin	77	41.56	33.77	24.68
Headache	72	34.72	13.89	51.39
Menopause	68	26.47	22.06	51.47
Giddiness	63	23.81	31.75	44.44
Mental	46	0	2.17	97.83
Gynecologic	45	13.33	62.22	24.44
Low blood pressure	41	24.39	7.32	68.29
Mouth Ulcer	35	22.86	14.29	62.86
Gall Stone	34	26.47	35.29	38.24
High blood pressure	29	17.24	34.48	48.28
Sugar	29	13.79	27.59	58.62
Respiratory	28	14.29	32.14	53.57
Piles	25	28	16	56
Hearing	22	36.36	22.73	40.91
Heart	17	0	58.82	41.18
Thyroid	14	0	42.86	57.14

Source: Field Survey, January 2013-December 2014

Table 6.2 reveals that most of the married women are following traditional preventive measures. Preventive measures are of different types for the same disease and also for different diseases which are following.

### **Traditional Preventive Measures to Cure Gastroenterological Problem**

Gas is one of the serious health problems of almost all these age groups of the Muslim women are affected by this problem (43.33 per cent). As per the medical science, excess gas in the stomach can be caused by several things, such as excessive drinking, not chewing food thoroughly, eating spicy and gas forming food, too much stress, some kinds of bacterial infections or digestive disorders. Symptoms of gas in stomach include

flatulence, bad breath, lack of appetite, a coating on the tongue, abdominal bloating, and belching and even stomach pain. However, this problem can be easily treated with some simple, natural home remedies. It is seen that about 29.13 per cent of rural Muslim married women in Cachar district are taking different traditional preventive measures and 22.05 per cent of women are taking any modern method. It is seen from Table 6.3 that approximately 29 per cent of women are avoiding spicy food, 21 per cent chew ginger after meal, 19 per cent eat garlic before meal, 16 per cent take mixture of garlic and ginger with salt and so on to get relief from gas problem.

### **Traditional Preventive Measures to Cure the Problem of Anemia**

Anemia is a disease, which arises when red blood cells (RBCs) in our body become less than their normal count, or if the quantity of hemoglobin in our blood reduces. This disease leads to lack of oxygen in the organs of the body. Anemia can be short term or mild, which can be easily treated by intake of healthy diet with more iron component. Although there are some kinds of anemia as well, which are severe and that cannot be treated easily. It can also endanger a threat to an individual's life. The most common symptom of anemia is fatigue and weakness. The other signs and symptoms of anemia include shortage of breath, chest pain, cold hands and feet, pale and dull skin, headache, sore gums and throat, brittle nails, low blood pressure, memory loss, affected taste, depression etc. Out of the total affected women, 18.40 per cent of women use different kinds of traditional preventive measures, 15.34 per cent of women goes for any modern method and 66.26 per cent of women are neglecting this problem. To get relief from this problem about 42 per cent of women eat nutritious food, 28 per cent of women



eat dates, 26 per cent of women eat beetroot, 20 per cent of women eat banana and 23 per cent of women used to massage whole body with mastered oil.

### **Traditional Preventive Measures to Avoid the Problem of Calcium Deficiency**

Calcium is required for the growth and strengthening of bones and teeth. Calcium deficiency is one of the most common problems that begins at childhood and resurfaces during pregnancy and old age. Calcium deficiency occurs due to inadequate intake of calcium rich foods, defective absorption of nutrients in the stomach and intestine and other conditions like vitamin-D deficiency, liver disease etc. The symptoms of calcium deficiency include brittle bones, joint pains, yellowing of teeth etc. Table 6.2 reveals that almost 41.67 per cent and 31.42 per cent women are using traditional preventive measures and modern measures respectively. Women of different age group are following different preventive measures. The preventive measures which they are using mainly eating greenish leafy vegetables (39 per cent), drink warm water after mixing with ginger (21 per cent), massage body with mastered oil and salt (43 per cent) and massage with ayurvedic oil (39 per cent).

### **Traditional Preventive Measures to Cure the Problem of Menstrual**

Menstrual cycles often bring about a wide array of uncomfortable symptoms leading up to period. Pre-menstrual symptoms encompass the most common issue, such as mild cramping and fatigue, but the symptoms usually go away when period begins. However, other, more serious menstrual problems may also arise. Menstruation that is too heavy or light or a complete absence of a cycle, pain during period etc. can contribute to an abnormal menstrual cycle. Table 6.3 reveals that only 26.47 per cent and 22.06 per

cent of women are using different kinds of traditional preventive measures and modern measures respectively. Eight per cent of women are drinking hot water; three per cent eat awla churna and six per cent uses hot oil message in their belly.

### **Traditional Preventive Measures to Avoid the Problem of Dental problem**

Dental problem can be defined as any issue with the teeth or gums that can affect oral health. There are many types of dental diseases and conditions such as tooth cavity, gum disease, plaque, tooth sensitivity, toothache, tooth enamel erosion etc that can affect us. To reduce this problem women are using different kinds of preventive measures such as they use the mixtures of salt and oil on teeth (26 per cent), drink warm water (23 per cent), use camphor on affected area (15 per cent), use khaini on affected area (12 per cent). Few per cent of women uses fitkiri on affected area (seven per cent), leaf of marigold (two per cent) and leaf of mango tree (three per cent). It also reveals that about 33.33 per cent women are spending money for this problem and a large number of women (49.52 per cent) are using different kind of traditional measures. Only 17.14 per cent of women are neglecting this problem.

### **Traditional Preventive Measures to Avoid the Problem of Hair Falling**

Hair falling is one of the most common problems now-a-days. This problem arises due to lots of factors such as hormone imbalance, an underactive thyroid gland, nutritional deficiencies, insufficient blood circulation in the scalp, dandruff etc. Table 6.2 shows that most of the women (58.10 per cent) are neglecting this problem and only 30.48 per cent and 11.43 per cent of women are using different kinds of traditional method and modern method respectively. It is seen that as a traditional preventive

measures 23 per cent of women uses mastered oil and coconut oil on head, eight per cent uses neem leaf paste on head, nine per cent uses henna, three per cent uses egg on head and four per cent uses amla on head.

### **Traditional Preventive Measures to avoid the problem of Rheumatism**

Rheumatism refers to a painful conditions caused by inflammation of muscles, tendons, joints and connective tissues. Mainly pre-menopause group of women are facing this problem. Table 6.2 reveals that about 38.78 per cent women are neglecting this problem. Only 32.65 per cent and 28.57 per cent women are using traditional preventive measures and modern measures respectively. To overcome this problem 49 per cent women are taking rest, 32 per cent using a special kind of leaf named as akhond leaf with ghee, and 27 per cent women uses warm water for drinking and bathing. It is seen that most of the women are using different types of oil for massage to get relief from this problem. 48 per cent women massage the affected parts of body with the mixture of mastered oil and salt, 32 per cent message with kerosene, 34 per cent massage with different ayurvedic oil.

### **Traditional Preventive Measures to Cure the Problem of White Discharge**

White discharge is a common problem of women with different age groups. In a specific face of menstrual cycle, this discharge can be seen. Little bit of white discharge is not at all a health problem. However, it can cause discomfort for the woman having more white discharge. Excess discharge of a woman can be a matter of concern. The medical term used for this white color liquid is leucorrhoea. This can give rise to many serious problems in the reproductive organs of women viz; sexually transmitted disease,

pelvic inflammation, hormonal problems, vaginal infections, ovarian cancer, cervical infections etc. Most of the women having white discharge backed with symptom such as constipation, redness, pain in stomach, pelvic pain, itching etc. Out of the total affected women almost 18.75 per cent of them are using traditional preventive measures, 12.5 per cent goes for medical treatment and about 68.75 per cent of women are neglecting this problem. Table 6.3 reveals that 23 per cent avoid spicy food, 12 per cent drink juice of tulsi leaf with honey, 12 per cent drink saline water of salt and sugar, six per cent drink juice of guava leaf, four per cent of women eat boiled ladies finger and three per cent eat pomegranate.

#### **Traditional Preventive Measures to Cure Eye Disease**

Many people experience problems with their eyes, some of which develop or worsen, as they get older. From Table 6.2, it is seen that about 19.78 per cent rural Muslim married women are taking different traditional preventive measures and 21.98 per cent women are taking any modern method. To get relief from the problem women are using different types of preventive measures viz; eating greenish leafy vegetable (32 per cent), drinking plenty of water (24 per cent), use garlic juice (six per cent).

#### **Traditional Preventive Measures to Cure Skin Disease**

Skin related disease is one of the most common problems now a day. There are different kinds of skin problem such as eczema, psoriasis, acne, rosacea etc. Table 6.2 reveals that most of the women (41.56 per cent) are using traditional preventive measures. 33.77 per cent women are spending money for this problem and 24.68 per cent women are neglecting this problem. As traditional preventive measures women uses paste

of tulsi leaf (12 per cent), paste of neem leaf (ten per cent), garlic for acne (12 per cent), mixture of rose water and glycerin (four per cent) and so on.

### **Traditional Preventive Measures to Avoid the Problem of Headache**

Headache including migraine is extremely common now-a-days. Because headache can stem from a variety of cause, some headache suffers seek treatment on a near daily basis. However, several home remedial treatments can help alleviate migraine pain and other types of headache. Table 6.2 depicts that 34.72 per cent women are using traditional method while only 13.89 per cent women are using modern method. However, a large percentage of women (51.39 per cent) are not using any method. To reduce this problem, women mainly use oil on head (52 per cent), use henna on head (18 per cent) and take warm bath or shower (15 per cent).

### **Traditional Preventive Measures to Cure the Problem of Menopause**

Menopause, also known as the climacteric, is the time in most women's lives when menstrual periods stop permanently, and the woman is no longer able to have children. Menopause typically starts between 45 and 55 years of age. Medical professionals often define menopause as having occurred when a woman has not had any vaginal bleeding for a year. It may also defined by a decrease in hormone production by the ovaries. Menopause is usually a natural change. Menopause is the opposite of menarche, the time at which a girl's periods start. Table 6.2 depicts that almost 51.47 per cent of women are neglecting this problem and only 22.06 per cent of women are going for any modern method. 26.47 per cent of women are using different kinds of traditional preventive measures, which mainly include use of cool oil on head (32 per cent),

messaging body with mastered oil (34 per cent), drink beet juice (12 per cent), eat carrot (nine per cent), eat garlic (eight per cent) and eat pumpkin seed (eight per cent).

### **Traditional Preventive Measures to Cure the Problem of Giddiness**

This is a condition when a person loses control of the movements of his body, not to balance herself, has the feeling that all the objects around them are moving in a way archie, or fall to the ground if attempts to move. The symptom of giddiness includes a strange feeling that the external environment is spinning. Giddiness causes disorders of digestion, deteriorating eyesight, dysfunctions of the nervous system, lack of sleep and fatigue total, lack of sexual and other problems related to sex and frequent and severe attacks of migraine etc. This disease mostly affects the women of pre menopause and menopause groups. Table 6.2 reveals that almost 23.81 per cent women are using traditional preventive measures and 44.44 per cent women are neglecting this problem. 31.75 per cent women are spending money for this problem. To remove or reduce this problem 34 per cent women eat nutritious food, 32 per cent women massage head with different kinds of cool oil and only 17 per cent women drink saline water of salt and sugar.

### **Traditional Preventive Measures to Cure Mental problem**

A mental illness is a condition that influences a person's thinking, feeling or mood and may affects his or her ability to relate to others and function on a daily basis. Mental health problems may be related to excessive stress due to a particular situation or series of events. Mental illnesses may be caused by a reaction to environmental stresses, genetic factors, biochemical imbalances, or a combination of these. With proper care and

treatment, many individuals learn to cope or recover from a mental illness or emotional disorder. Table 6.2 depicts that Muslim women are not following any types of preventive measures. Almost all the women are neglecting this disease.

### **Traditional Preventive Measures to Cure Gynecological Diseases**

Gynecologic disorders refer to the disorders that affect the female reproductive system. The most common symptoms of gynecologic disorders include pelvic pain, vaginal itching, vaginal discharge, abnormal vaginal bleeding, breast pain etc. The significance of these symptoms often depends on the women's age because symptom may be related to the hormonal changes that occurs with aging. Table 6.2 reveals that a large percentage of women (62.22 per cent) are spending money for this problem and only a few numbers of women (13.22 per cent) are using traditional preventive measures. 24.44 per cent women are neglecting this problem. As traditional preventive measures, they mainly use to take more rest (21 per cent), drink plenty of water (15 per cent), eat garlic (12 per cent), use ginger on head (12 per cent), eat nutritious food (ten per cent) and drink tomato juice (two per cent).

### **Traditional Preventive Measures to Avoid the Problem of Low Blood Pressure**

Low blood pressure, also known as hypotension, is a condition in which a person's blood pressure becomes so low that it causes symptoms like dizziness, fainting, fatigue, nausea, difficulty breathing, blurred vision, palpitations, cold and clammy skin. A blood pressure when reading consistently remains around 90/60 mm Hg or lower, it is considered hypotension. Issues like dehydration, prolonged bed rest, nutritional deficiencies, a decrease in blood volume, heart problems, endocrine disorders and

neurological conditions, can cause the condition of low blood pressure. It is seen that majority of the women (68.29 per cent) do not use any measures for this problem and only a few per cent of women (7.32 per cent) uses any modern measures. Some of the women (24.39 per cent) are using any kind of traditional preventive measures that mainly include drinking of salt water (six per cent), drinking of beetroot juice (ten per cent) and eat nutritious food (23 per cent).

**Table 6.3: Disease-wise Traditional Preventive Measures taken by the Muslim Married Women in Rural Area of Cachar District**

Disease	Traditional Preventive measures	Women used TPM (in per cent)
Gas	i. Eating boiled papaya	16
	ii. Eating boiled raw banana	13
	iii. Chew ginger regularly after meal	21
	iv. Drinking ginger tea	8
	v. Eating garlic before meal	19
	vi. Avoid spicy food	29
	vii. Eating mixture of garlic and ginger with salt	12
	viii. Drink warm water with black salt	16
Anemia	i. Eating nutritious food	42
	ii. Eating dates (khejur)	28
	iii. Eating beetroot	26
	iv. Massage whole body with mastered oil	23
	v. eat banana	20
Calcium shortage	i. Massage with ayurvedic oil	39
	ii. Massage with mustered oil and salt	43
	iii. Drink warm water after mixing with ginger	21
	iv. Eating greenish leafy vegetables	39
Menstrual	i. Eating awla churna	3
	ii. Drink hot water	8
	iii. Use hot oil in the belly	6
Dental	i. Use the mixture of salt and oil	26
	ii. Drinking warm water	23



	iii. Use comphor on affected area	15
	iv. Use khaini on affected area	12
	v. Use fitkiri on affected area	7
	vi. Use leaf of marigold	2
	vii. Use leaf of mango tree	3
Hair falling	i. Use mastered and coconut oil	23
	ii. Neem leaf paste	8
	iii. Use henna	9
	iv. Use egg on head	3
	v. Use amla	4
Rheumatism	i. message with ayurvedic oil	34
	ii. Take rest	49
	iii. Message with salt and mastered oil	48
	iv. Use akond leaf with ghee	32
	v. Drink and use warm water	27
	vi. Message with kerosene	32
White discharge	i. Eat boiled lady finger	4
	ii. Eat pomegranate	3
	iii. Drink the mixture of tulsi leaf juice and honey	6
	iv. Drink the juice of guava leaf	5
	v. drink mixture of water, salt and sugar	12
	vi. Avoid spicy food	23
Eye	i. Eating greenish leafy vegetable	32
	ii. Drink plenty of water	24
	iii. Use garlic juice	6
Skin	i. Tulsi leaf paste	12
	ii. Neem leaf paste	10
	iii. Use milk	5
	iv. Use gulab jol and glycerine	4
	v. Use Tomato	6
	vi. Use paste of moosur dal	3
	vii. Use of garlic for removing acne	12
Headache	i. Use oil on head	52
	ii. Use henna on head	18
	iii. Take warm bath or shower	15
Menopause	i. Use cool oil on head	32
	ii. Message whole body with mastered oil	34

	iii. Eating pumpkin seed	8
	iv. Drinking beet juice	12
	v. Eating carrot	9
	vi. Eating garlic	8
Giddiness	i. Use cool oil on head	32
	ii. Eating nutritious food	34
	iii. Drinking saline water of salt and sugar	17
Gynecologic	i. Taking proper rest	21
	ii. Eating garlic	12
	iii. Use ginger on head	12
	iv. Drinking more water	15
	v. Eating nutritious food	10
	vi. Drinking tomato juice	2
Low blood pressure	i. Drinking salt water	6
	ii. Drinking beet root juice	10
	iii. Eating nutritious food	23
High blood pressure	i. Eating garlic	12
	ii. Drinking lemon juice	5
	iii. Eating banana	5
	iv. Drinking coconut water	9
Mouth ulcer	i. Rinse mouth with cold water	53
	ii. Rubbing with ice	34
	iii. Chew tulsi leaf	23
	iv. Drink coconut water	15
	v. Use honey on affected area	10
	vi. Use of garlic with cool water	7
Sugar	i. Use sugar free	6
	ii. Eating greenish leafy vegetables	34
	iii. Eating garlic	20
	iv. Do exercise	6
Piles	i. Showers with warm water	34
	ii. Drink plenty of water	56
	iii. Eating dark green leafy vegetable	43
Ear	i. Instill little warm mastered oil on ear	21
	ii. Instill mixture of onion and garlic juice after making it hot	10
	iii. Instill garlic juice	3
Respiratory	i. Use to take more rest	21

	ii. Drink plenty of water	15
	iii. Eating garlic	12
	iv. Use ginger on head	12
	v. Eating nutritious food	10
	vi. Drinking tomato juice	2

Source: Field Survey, January 2013-December 2014

### **Traditional Preventive Measures to Avoid the Problem of Mouth Ulcer**

Mouth ulcer can be quite painful and depending on their specific location in the oral cavity, often interfere with ability to eat and speak. Sometimes, such an ulcer indicates deficiency of certain vital nutrients and therefore, taking multi-vitamin supplements can be useful; however, it can take a few days for the effects to start showing. Table 6.3 reveals that 22.86 per cent women are taking traditional preventive measures while only 14.29 per cent women are spending money for this problem. However, a remarkable percentage of women (62.86 per cent) are neglecting this disease. The traditional preventive measures that the women uses include rinse mouth with cold water (53 per cent), rubbing small ice over the spot (34 per cent), chew tulsi leaf (23 per cent), drink coconut water (15 per cent), use honey on the affected part (ten per cent) and use garlic with cool water.

### **Traditional Preventive Measures to Avoid the Problem of High Blood Pressure**

High blood pressure known as hypertension is a serious health problem that can lead to heart attacks, strokes and kidney failure. A blood pressure reading of 140/90 mm Hg or above is considered as high. Common causes or contributing factors of hypertension are obesity, genetic factors, excessive drinking, and high salt intake, lack of aerobic exercise, stress, birth control pills, pain reliever, kidney disease and adrenal

disease. Table 6.2 depicts that about 34.48 per cent women are spending money for this problem and a remarkable percentage of women (48.28 per cent) are neglecting this problem. Only 17.24 per cent women are using any kind of traditional measures. It is seen that Muslim women are using different kinds of preventive measures viz; eat garlic (12 per cent), drink lemon juice (five per cent), eat banana (five per cent) and drink coconut water (nine per cent).

### **Traditional Preventive Measures to Cure the Problem of Piles**

Hemorrhoids, also known as piles, are a common condition in which the veins in the rectum or anus swell, sometimes painfully. Piles or hemorrhoids are caused due to increased pressure or straining while passing stools or due to weak muscles around anus. This leads to bulging and swollen blood vessels that often protrude and lumps while passing stools. These may bleed or may lead to discomfort, pain and itching around the anus. Simple self-care helps to get relieve from this problem. Table 6.2 reveals that almost 56 per cent women are neglecting this problem or does not disclose to others mainly due to shyness. However, a few numbers of women are using either traditional preventive measures (28 per cent) or modern measures (16 per cent). As preventive measures, they are mainly drinking a plenty of water (56 per cent), eating dark greenish leafy vegetable (43 per cent) and showers with warm water (34 per cent).

### **Traditional Preventive Measures to Cure Ear Problem**

Ear problem is one of the most common issues of menopause group of women. Two of the major categories of ear disease are otitis and hearing disorders. Table 6.2 depicts that 36.36 per cent and 22.73 per cent women are using traditional method and

modern method respectively. A large percentage of women (40.91 per cent) are not using any method. As a preventive measure, women instill warm mastered oil on ear (21 per cent), instill mixture of warm onion and garlic juice (ten per cent) and instill warm garlic juice (three per cent).

### **Traditional Preventive Measures to Avoid the Problem of Respiratory Disease**

Respiratory tract diseases are diseases that affect the air passages, including the nasal passages, the bronchi and the lungs. They range from acute infections, such as pneumonia and bronchitis, to chronic conditions such as asthma and chronic obstructive pulmonary disease. Table 6.2 reveals that a few numbers of women (14.19 per cent) are using traditional preventive measures. 32.14 per cent women are spending money for this problem while a large numbers of women (53.57 per cent) are neglecting this. As preventive measures, they are mainly taking more rest (21 per cent), drinking plenty of water (15 per cent), eating garlic (12 per cent), using ginger on head (12 per cent), eating nutritious food (ten per cent) and drinking tomato juice (two per cent).

### **Traditional Preventive Measures to Avoid Sugar Problem**

Blood sugar concentration or blood glucose present in our body stream. Glucose or sugar is the primary energy mechanism for cells and blood lipids. If the sugar levels are not balanced, the people are facing diabetic problem. More amount of carbohydrate intake, less physical work or less burning of energy, more mental work with taking stress and generating small amount of insulin in a human body causes diabetic problem. Excessive caution of a diabetic person may create a problem of hypoglycemia which is mainly due to sudden falling of sugar level. Hypoglycemia can cause dementia, comas or

death. High blood sugar is a major cause of damage of body's internal organs. Table 6.2 reveals that only 13.79 per cent and 27.59 per cent women are using different kinds of traditional preventive measures and modern measures respectively. However, a large number of women (58.62 per cent) are neglecting this problem. As traditional preventive measures 56 per cent women are not taking sugar in their meal, 34 per cent eats greenish leafy vegetables, 20 per cent eat garlic and six per cent do exercise regularly for reducing this problem.

### **Traditional Preventive Measures to Avoid the Problem of Thyroid Disease**

A thyroid disease is a medical condition impairing the function of the thyroid. The thyroid is one of important endocrine glands in the body. This gland is found in the neck below the mouth. This gland makes thyroid hormone that travels in blood to all parts of body. The thyroid hormone controls our body's metabolism in many ways. Symptoms of thyroid disease include feeling cold, muscle weakness, weight gain, joint or muscle pain, feeling depression, feeling very tired, pale, dry skin, more than usual menstrual bleeding etc. Table 6.2 depicts that 42.86 per cent women are spending money for this problem and 57.14 per cent women are neglecting this problem. However, women are not taking any traditional preventive measures.

### **Traditional Preventive Measures to Avoid the Problem of Heart Disease**

Heart disease is an umbrella term for any type of disorder that affects the heart. Heart disease means the same as cardiac disease but not cardiovascular disease. Cardiovascular disease refers to disorders of the blood vessels and heart, while heart disease refers to just the heart. Table 6.3 reveals that women are not taking any traditional

preventive measures for this problem. It also reveals that 58.82 per cent women are taking modern measures and 41.18 are avoiding or neglecting this problem.

From the above analysis it is observed that a significant number of Muslim married women are either using traditional preventive measures to get relief from the diseases or neglecting such problem. Only a few numbers of women are using modern medical treatment either from private or government health institution. This may be due to their low family income or lack of awareness about the modern facilities. As already mentioned in Chapter 5, there is a huge shortage of manpower in rural health centres especially for women. Due to the absence of female doctor in public health centres, Muslim women sometimes feel shy to discuss their problems, which sometimes may cause serious health problems. Moreover, there are no special facilities available for women except for reproductive health problem. In this situation, women depend on either traditional preventive measures or private medical treatment. But, the cost of private treatment is very expensive and most of the women are belonging to lower income category. Therefore, they cannot afford these expensive private treatments though they have demand for it. In such a situation, they use either traditional preventive measures or neglecting the problem. This negligence of health not only creates more health problem but also affect health of other family members. These acute health problems generate the demand for public health care facilities in their locality. It is observed that most of the women are willing to pay or share some cost according to their ability if any public sector or voluntary organization come forward to provide health care facilities to them. So in the following section, the demand for health care and its determinants are analyzed.

## ***6.2 Demand for Health Care and it's Determinants***

The health status of Muslim married women is very poor in the Cachar district (already discussed in Chapter 4) and infrastructures for the public health are very poor compare to its requirements (also already discussed in Chapter 5). This section focuses on the demand for health care and its crucial determinants. Identifying the major determinants of demand for health care is essential for appropriate policy formulation as well as to assess the impact of public policy changes on individuals and to estimate their demand for health care services. Health care service is a pre-condition to transform the population as human resource and it is evident that a significant public investment in health sector is a must for this purpose. Health sector is one of the prime focused sectors of the government and health expenditure is expected to grow fast in coming years. It is also extremely important to identify the factors those are affecting peoples' demand for health care in order to maximize the benefits of future public expenditure on health service delivery. This is especially true because the public policies generally show limited understanding about the factors that are important in influencing health service behavior. Health care is an intermediate commodity which includes hospital care, outpatient care, nursing, home care and informal care. Presently, the health care institutes are facing shortage of qualified professionals like doctors, nurses and other supporting staffs. This section is therefore analyzing the determinants of the demand for health care in Cachar District of Assam.

The shortage of health infrastructure and health care facilities in rural areas of Cachar district creates a huge demand for medical care in that area as already mentioned in Chapter 5. The result shows that almost 72 per cent Muslim women are willing to pay



for getting better health care facilities or for sharing cost of maintenance if any voluntary organization comes forward or public health sector establishes in their locality. Willingness to pay of the people reflects the demand for health care facilities because they are ready to get better facilities in lieu of some payment. Table 6.4 depicts the demand for health care ie; who are willing to pay for getting health care facilities in different blocks of Cachar district.

**Table 6.4: Demand for Health Care Facilities in Different Blocks**

Blocks	Total respondent	Demand for health care	Percentage of women
Borjalenga	48	40	83.33
Borkhola	90	57	63.33
Kalain	107	92	85.98
Katigorah	64	51	79.69
Narshingpur	126	76	60.32
Sonai	58	38	65.52
Udharbond	93	69	74.19
Total	586	423	72.18

Source: Field Survey, January 2013- December 2014

Table 6.4 reveals that the demand for health care facilities is relatively higher in Kalain block (85.98 per cent) followed by Borjalenga (83.33 per cent) and Katigorah block (79.69 per cent) whereas it is relatively lower in Narshingpur block (60.32 per cent). Further, it is observed that 74.19 per cent, 65.52 per cent and 63.33 per cent women are respectively willing to pay for health care facilities.

From the above Table 6.4, it is seen that in the selective blocks of Cachar district on an average 72.18 per cent of Muslim married women are willing to pay for getting better health care facilities. It is argued that, Muslim married women belonging to rural

area of Cachar district are not fully satisfied with the services provided by the existing govt. health care facilities and this is reflected in their demand.

Binary logit model is used to estimate the demand for health care facilities. The factors responsible for the demand for health care facilities are discussed below. Table 6.5 shows the descriptive statistics of the quantitative variables of demand for health care.

Table 6.5 shows that mean age of the respondent is 38 years and standard deviation of the respondent age is 13.2. The modal value of the respondent's age is 32 years, which indicates that most of the women are belonging to reproductive group (15-35 years). The mean value of the respondent BMI is 21.1 with maximum value is 37.49 and minimum value is 16.22. However, the modal value of the respondent BMI is 18.67. This implies that most of the women are suffering from malnutrition. The average education of the respondent and her husband is 5.46 and 6.10 respectively with standard deviation 4.09 and 4.02 respectively. Here, level of education is measured in terms of year of schooling that they have completed. This implies that an average rural Muslim married women or men does not possess more than primary level of education. The mean age of marriage of the respondent is 17.25 years. The mean, median and mode are almost equal which indicates that average Muslim women are getting married before the legal age of marriage i.e. 18 years. The mean value of household size is 5.57 with maximum number is 16 and minimum number is one.

**Table 6.5: Descriptive Statistics of Quantitative Variables**

Variables	Mean	Median	Mode	SD	Variance	Skewness	Min	Max
Age	38.03	36	32	13.2	174.28	0.6	15	79

BMI	21.1	19.77	18.67	3.7	13.7	1.52	16.22	37.49
Respondent education	5.46	6	0	4.09	16.71	-0.01	0	17
Husband education	6.1	7	0	4.02	16.14	-0.13	0	17
Household size	5.57	5	5	2.32	5.38	1.1	1	16
Per capita Medical expt	76.53	42.86	33.33	89.67	8039.88	2.96	3.33	666.67
Per capita income	1645.01	1000	1000	1427.87	2038816	1.98	111.11	6750
Distance	5.41	5.5	6	1.19	1.42	-0.43	2	9
Area of house	3225.6	2880	3600	1864.8	4845.6	2138.4	0	17280

Source: Field Survey, January 2013- December 2014

The average value of the distance of health centre from home is 5.41 kilometer with standard deviation 1.19. The maximum distance of health centre from home is 9 kilometer and minimum distance is 2 kilometer. As the mean, median and mode are closer to each other and smaller variance shows that public health centers are not closer to respondents' house and it will be difficult for the rural women to avail the benefit of public health approximately 5.5 km. away from their home where transportation is very poor. The mean value of per capita area of house is 3225.6 sq. ft. with very high standard deviation 1864.8 sq. ft. The average per capita medical expenditure of the households is Rs.76.53 with a standard deviation 89.67. The maximum value of per capita medical expenditure is Rs. 666.67 and minimum value is Rs.3.33. The average per-capita income of the family is Rs.1645.01 with standard deviation 1427.87. This implies that there is a high dispersion of income among rural household. The modal value of per capita income of the family is Rs. 1000, which indicates that most of the families are belonging to this lower per capita income group or BPL group. The average per-capita expenditure of the family is Rs.1297.75 with standard deviation 834.78. The maximum value of per-capita income and expenditure are Rs.6750.00 and Rs.5333.33 respectively whereas the

minimum value is equal (Rs. 111.11). Table 6.6 shows the percentage analysis of qualitative variables viz; sanitation condition, purification of water and housing condition.

**Table 6.6: Percentage Analysis of Qualitative Variables**

Qualitative Variables	Types	Number	Per cent
Sanitation condition	Kaccha	171	38.08
	Semi pucca	141	31.4
	Pucca	137	30.51
Purification	Do nothing	267	59.47
	Filtration	182	40.53
Housing condition	Kaccha	189	42.09
	Semi pucca	131	29.18
	Pucca	129	28.73

Source: Field Survey, January 2013-December 2014

It is observed that most of the respondents are living in kaccha house (42.09 per cent) while only 28.73 per cent of women are living in pucca house. Most of the families used to drink water without any purification of water (59.47 per cent). Only 40.53 per cent of families are taking purified water through different purification method. It is also found that most of the respondents use kaccha sanitation (38.08 per cent) followed by semi pucca (31.40 per cent) and pucca sanitation (30.51 per cent).

From the above analysis it is observed that almost 72 per cent Muslim women are willing to pay for getting better health care facilities or for sharing cost of maintenance if any voluntary organization comes forward or public health sector establishes in their locality. To identify the responsible factors of demand a limited dependent variable model is estimated by using Maximum Likelihood Estimation method.

To examine the demand for health care facilities of the women for which following binomial logit model is used in the study through contingent valuation technique. The primary use of contingent valuation method is to elicit the women's willingness to pay for getting health care facilities. This approach has been used to check whether they are interested to pay or not. The response option will be binary type i.e.; 1 for yes and 0 for no. If the response is in favor of yes then that implies there is a demand for getting better health facilities or the people agree to share the cost for its maintenance. For estimating the probability of willingness to pay (WTP), binomial logit model can be specified by the following equation.

$$P\{WTP = 1 \text{ for yes, } 0 \text{ otherwise}\} = \frac{1}{1 + e^{-\left(\alpha + \sum_{i=1}^k \beta_i X_i\right)}} \dots \dots \dots (2)$$

$X_i$  is the set of explanatory variables which are also mentioned in the following linear equation of log of odd ratio. The justifications of these explanatory variables are already explained in Chapter 3.

$$L_i = \alpha + \beta_1(AGE) + \beta_2(BMI) + \beta_3(RE) + \beta_4(HE) + \beta_5(HS) + \beta_6(PCME) + \beta_7(PCY) + \beta_8(DS) + \beta_9(AH) + \theta_2 D_2 + \theta_3 D_3 + U_i \dots \dots \dots (3)$$

Where;  $L_i$  is the log of odd ratio (ie;  $p_i$  to  $1-p_i$ ). The estimated result for the above equation is given in the Table 6.7.

**Table 6.7: The Result of Logistic Regression of Demand for Health Care**

Variables	Coefficient	Marginal Effect
Age (AGE)	0.073906* (0.00)	0.0071769* (0.00)
BMI	0.1474212** (0.02)	0.0143159* (0.00)
Respondent's Education (RE)	0.1758033* (0.00)	0.0170721* (0.00)

Husband Education (HE)	0.1497597* (0.00)	0.014543* (0.00)
Household Size (HS)	0.3005878* (0.00)	0.0291897* (0.00)
Per Capita Medical Expenditure (PCME)	-0.005568*** (0.06)	0.0005407*** (0.06)
Per Capita Income (PCY)	0.0013854** (0.02)	0.0001345** (0.02)
Distance (DS)	0.5325037* (0.00)	0.0517108* (0.00)
Area of House (AH)	0.9427604* (0.00)	0.0915504* (0.00)
Housing (semi pucca) (D <sub>2</sub> )	0.5839811* (0.10)	0.0567097* (0.09)
Housing (pucca) (D <sub>3</sub> )	-0.1957114 (0.74)	-0.0190053 (0.74)
Constant	-14.39369(0.00)	

Source: Calculated from Field Survey, January 2013 - December 2014

Note: The values in parenthesis represent probability value. \*, \*\* and \*\*\* respectively represent significance level of significance at one per cent level, five per cent level, ten per cent.

Table 6.7 shows the estimated coefficients of the determinants and the marginal effect. The result of the model reveals that respondent age has a positive and significant impact on the demand for getting health care facilities. It is found that if the age of the respondent increases by one unit, then the log of odd ratio in favour of the willingness to pay increases by 7.3 per cent. The probability in favour of willingness to pay is 0.007. This implies that there is a high demand for health care facilities if there are a more number of married women above the mean age of 38 years in the family. The result is highly significant at less than one per cent level of significance.

BMI is also another crucial significant determinant of the demand for health care facilities. The mean value of BMI is just above 21 (which is a higher value for women indicating not a good health). Log of odd ratio in favour of willingness to pay is 0.147 if BMI increases one unit more than its mean value. As BMI value increases more the person would not be well in her physic. The probability for willingness to pay increases by 0.014 as BMI value increases by one unit.

In the study area, the level of education in terms of year of schooling of the rural Muslim married women is very poor which is already shown in descriptive statistics. It is observed that 27 per cent Muslim married women are illiterate, 43 per cent have primary education, 24 per cent have secondary education and only six per cent have higher secondary education and above. The study reveals that education has a positive and statistically significant impact on the demand for health care facilities. This implies that with the increase in education level women more conscious regarding their health problems. Because of this, the probability of willingness to pay for getting the health care facilities is high (Johannesson and Gerdtham, 1997).

The effect of the household size on demand for health care facilities is positive and statistically significant. This implies that the probability of willingness to pay increases if there are more number of beneficiaries in a family (Sarma, 2003). Per-capita expenditure of the household is positive and statistically significant determinant of the demand for health care.

Higher income indicates higher ability to pay which leads to higher willingness to pay for health care facilities though the probability value in favour of willingness to pay is very low.

Distance is most important determinant of willingness to pay. Demand for health care facilities is positively associated with the distance of the health centre from their house (Ali and Noman, 2013; Das and Das, 2012). This implies that people, who are staying far away (approximately more than 5.5 km) from the health centre, demanded

more health care facilities and their probability in favour of willingness to pay increases by five per cent.

The demand is negatively associated with per-capita medical expenditure which means that as the per-capita medical expenditure increases by one per cent demand for getting health care facilities decreases by six per cent. This may be because, as per-capita medical expenditure, rises people move to private health care facilities as well as poor people demand less medical facilities when they have to pay more (Odwee, Okurut and Adebua, 2006).

Semi pucca housing has a positive and significant impact on the demand for health care facilities. If the people are staying in semi pucca house, the probability of willingness to pay increases by nine per cent.

Demand for health care facilities is positively related with per capita area of house. This implies that the probability of willingness to pay increases if the people have a larger area of house because family having larger area of house have more ability to pay.

Finally the chapter reveals that there is a high demand for health care facilities from the stakeholder's point of view. There are several significant responsible factors for showing this demand for health care.