CHAPTER - 4

HEALTH STATUS OF MUSLIM MARRIED WOMEN AND ITS SOCIO-ECONOMIC DETERMINANTS IN CACHAR DISTRICT

The economic well being of a society depends on the health of the members of that society. When people have an acceptable level of health only then they can enjoy other benefits of life. Development of health sector is essential for social and economic development of the country. Women's health is important not only for themselves but also for the whole family and obviously for future generations. Women's health affects the wellbeing of the household and that of the society. The health of families and communities are tied to the health of women. The illness or death of a woman has serious and far-reaching consequences for the health of her children, family and community. The health of women is highly linked to their status in society. As in any other domain of development, gender based discrimination is inherent in health also. They suffer from early pregnancy and are at a greater risk of retarded growth than boys. Reproductive aged women are subject to numerous stresses affecting their health and well-being. Elderly women in many societies are deprived. There exists an intergenerational cycle of growth failure for women.

Lower status of women is the outcome of their lower education and relatively lower social position compare to their male counterpart. Tradition idealizes a woman's role as a mother, homemaker and a distributor of food and she eats whatever is left after feeding the family, which results in malnutrition and ill health. Some evidence in developing countries indicate that malnourished individuals, that is, women with a body

mass index (BMI) below 18.5, show a progressive increase in mortality rates as well as increased risk of illness (Rotimi et al., 1999). For social and biological reasons, women of the reproductive age are amongst the most vulnerable to malnutrition. Increased prenatal and neonatal mortality, a higher risk of low birth weight babies, stillbirths, and miscarriage are some of the consequences of malnutrition in women (Krasovec and Anderson, 1991). Poor woman's nutrition has negative consequences on her health and that of the entire family. However, despite the central role that a woman plays in the health and well-being of members of her household, little attention has been paid to her nutrition needs as other development challenges have been viewed as more important.

Morbidity is an indicator of illness, which denotes any deviation from the state of normal, physical and mental well-being. Higher morbidity has significant social, economic and health implications as it directly reduces labor productivity on the one hand and increases medical and non-medical costs attached to it on the other. Women often neglect their own health because they prioritize their commitment to others. Poverty and lack of access to financial and other resources affect women's health. Although women live longer than men but almost everywhere they suffer more illness and disabilities throughout their lives. The World Health Organization notes "gender disparities in health care are often striking. Girls are given less priorities in nutrition, health care, schooling and vocational training than boys in the family. Compared to men, women suffer more due to physical disability, obesity, pregnancy and childbirth, menopause, fertility problems, HIV/AIDS and depression. While middle and upper class women may be able to achieve treatment, lower class women generally remain without diagnosis, ignorant of how to help themselves, and they suffer due to lack of treatment

and medical facilities. If a physical problem is aggravated by emotional problems, any cure will be delayed.

Muslims represent the second largest religious group in India. As minority community they are subjected to different types of discrimination. According to Hasan and Menon (2004) low income, widespread poverty, social norms that inhibit girls' education, a patriarchal ideology that prioritizes marriage and domesticity for women, and gender inequality on the one hand and perceptions of discrimination, limited job opportunities and slow upward mobility are constraints that Muslims experience as a community. The repercussions of this discrimination are seen in the health status of Muslim women in India.

Realizing the importance of above issue, this chapter attempts to analyze the health status of Muslim married women in rural area of Cachar district. This chapter consists with two sections viz; health status of Muslim married women in rural area of Cachar district in section 4.1 and determinants of health status in section 4.2. These sections are discussed in the following:

4.1 Health Status of Muslim Married Women in Rural Area of Cachar District

This section consists of four sub-sections. The status of women's health is explained according to different age group in sub-section 4.1.1. Both age wise and disease-wise health status is explained in sub-section 4.1.2. Comparison of health status of women in selected blocks of Cachar district is discussed in sub-section 4.1.3. Finally, block-wise comparative analysis of crucial diseases in sub-section 4.1.4 is explained.

4.1.1 Age Group Wise Women's Health Status

The study comprises a total number of 440 household covering 586 respondents. Respondents are categorized into three groups viz; reproductive group, pre-menopause group and menopause group which is already mentioned in Chapter 3 in detail. The present section focuses on the age group-wise health status of the married women. Out of 586 respondents, approximately 81 per cent of the women are suffering from different types of health diseases. Table 4.1 represents health status of women in different age group.

Table 4.1: Illness in Different Age Group of Women in Cachar District

Age group	Total number of Women	Affected No. of Women	Reported No. of Disease	Average number of Disease
Reproductive	291	209 (71.82)	794	2.73
Pre-menopause	119	98 (82.35)	489	4.1
Menopause	176	167 (94.89)	965	5.48
Total	586	474 (80.89)	2248	3.84

Sources: Field Survey, January 2013-December 2014

Note: Percentages are given on the parenthesis.

Table 4.1 reveals that the total number of diseases reported by the respondents is 2248, which implies that an ill woman is facing on an average more than three (3.84) types of diseases. It is also seen that the affected women of each group are suffering by multiple types of diseases. Out of the total women, the women of menopause (94.89 per cent) group are mostly affected followed by pre-menopause (82.35 per cent) and reproductive (71.82 per cent) group of women. It is observed that the percentage of affected women or the number of average disease increases according to the higher age bracket. Among these three groups the health condition of reproductive group of women

are comparatively better than other age group of women. Affected reproductive women suffer on an average approximately 2.73 types of diseases. On the other hand, an affected pre-menopause woman and menopause woman suffer on an average more than four (4.1) and more than five (5.48) types of diseases respectively. Therefore, it is found that rural Muslim married women of Cachar district are facing multiple types of health problems and as the age increases, number of diseases also increases.

4.1.2 Both Age Group Wise and Disease-Wise Health Status of Women

The nature and pattern of disease are different according to different age groups. The health statuses of the women are analyzed based on some common diseases. In this study, total 42 diseases are taken into consideration as mentioned in the methodology section of Chapter 3. Some of the diseases are considered as common diseases that can affect any women of different age group. In this section, diseases are explained in details according to different age group.

4.1.2.1 Disease-wise Health status of the Reproductive Age Group

World Health Organization (WHO) has defined reproductive health as a "state of complete, physical, mental and social well-being and not merely the absence of disease or infirmity, reproductive health addresses the reproductive processes, functions and system at all the stages of life. The term reproductive age group refers to the active reproductive years in women starting with menarche around 12-14 years and ending with menopause around 45-49 years. For demographic purposes, reproductive age group is usually defined as 15-49 years or 12-49 years.

Most of the women belonging to this age group are facing the diseases such as anemia, menstrual, calcium shortage, white discharge, sexual problem, gynecological problem, hair falling, skin problem, stress, headache etc. Apart from this, there are some other problems like breast problem, respiratory problem, thyroid, heart disease, piles, kidney, infertility, high pressure, hepatitis-B etc. are not significantly observed among this reproductive group of women. Table 4.6 represents the different types of disease, which are facing by the women of reproductive group of Cachar district.

Table 4.2: Disease-wise Affected Women in Reproductive Age Group

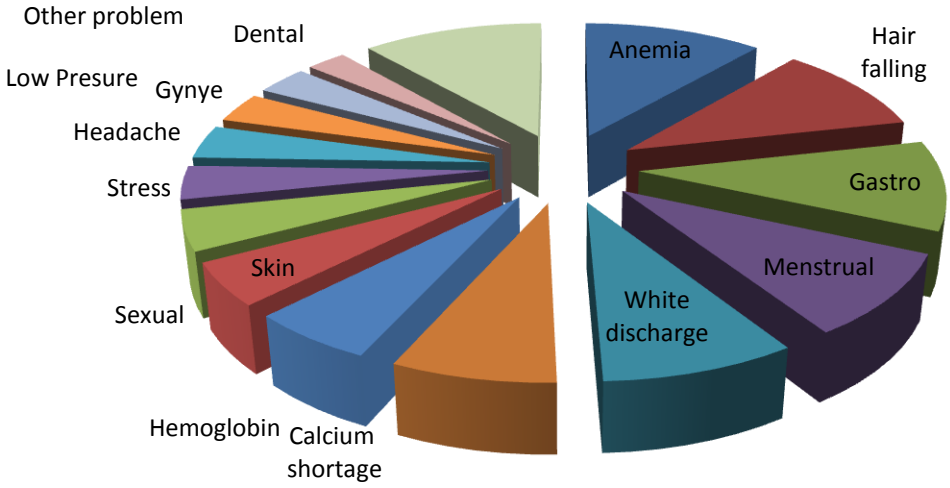
Name of Diseases	Reported No. of diseased women	Diseased out of affected women (per cent)	Diseased out of total women (per cent)
Anemia	90	43.06	30.93
Hair falling	81	38.76	27.84
Gas	80	38.28	27.49
Menstrual	73	34.93	25.09
White discharge	69	33.01	23.71
Calcium shortage	58	27.75	19.93
Hemoglobin	45	21.53	15.46
Skin	38	18.18	13.06
Sexual	36	17.22	12.37
Stress	30	14.35	10.31
Headache	30	14.35	10.31
Gynecological	27	12.92	9.28
Low Pressure	26	12.44	8.93
Dental	20	9.57	6.87
Other problem	23	43.54	31.27

Source: Primary Survey Sources: Primary Survey, January 2013-December 2014

The above Table 4.2 depicts that out of the total women of reproductive age group (291), 30.93 per cent of women are suffering from anemia, 27.84 per cent of women are suffering from hair falling, and 27.49 per cent of them are suffering for

gastroenterological problem. It is also seen that 25.09, 23.71, 19.93, 13.05, 12.37 and 9.27 per cent of women are suffering from menstrual, white discharge, calcium shortage, skin problem, sexual and gynecological problems respectively. Some of the women are also facing other problems such as stress (10.31 per cent), headache (10.31 per cent). Moreover, few numbers of women are suffering from low pressure (8.93 per cent) and dental (6.87 per cent). Out of the total 291 reproductive women, 209 of them have reported their problems. It is seen that the reported women are facing multiple diseases. The picture of health would be more relevant if the analysis is done in terms of affected women. The above Table also shows that out of 209 affected women 43.06 per cent of women are facing the problem of anemia followed by hair falling (38.76 per cent), gas (38.28 per cent), menstrual (34.93 per cent), white discharge (33.01 per cent), calcium shortage (27.75 per cent) and so on. Thus, from the above analysis it is observed anemia, hair falling, gas, menstrual, white discharge are the major health problems in this age group. The following Figure 4.1 also depicts the above analysis.

Fig 4.1: Diseased women out of total Reproductive Women



Source: Primary Survey, January 2013-December 2014

4.1.2.2: Disease-wise Health Status of the Pre-Menopause Age Group

Pre-menopause is a term used to mean the years leading up to the last period, when the levels of reproductive hormones are already becoming more variable and lower, and the effects of hormone withdrawal are present. Pre-menopause often starts some time before the monthly cycles become noticeably irregular in timing. Other symptoms may include vaginal dryness, trouble sleeping, and mood changes. The severity of symptoms varies between women. These changes usually begin after the age of 35 years of women as per medical science. So, some of the diseases are different compare to the reproductive women to some extent. Most of the women belonging to this age group are facing the diseases such as gas, anemia, menstrual, calcium shortage, arthritis, headache, gynecological problem, hair falling, skin problem, stress, eye, dental etc. Apart from this, there are some other problems like ear problem, respiratory problem; thyroid, heart disease, piles, kidney, high pressure, hepatitis-B etc. are not significantly observed among this pre menopause group of women.

Table 4.3 represents the different types of disease, which are facing by the women of pre-menopause group of Cachar district. Table 4.3 depicts that out of 119 pre menopause women, 30.11 per cent of women are suffering from gastroenterological problem, 24.43 per cent of women are suffering from calcium shortage and 21.59 per cent of them are suffering for anemia problem. Further, it is seen that 19.89 per cent of them are facing stress, 17.61 per cent are facing menstrual problem, 15.91 per cent are suffering from arthritis and 10.23 per cent are facing hair falling. It is also found that some of the women are also facing other problems such as menopause problem (9.66 per cent), headache (9.09 per cent), hemoglobin, gynecological, eye problem (8.52 per cent),

giddiness, dental problem (7.95 per cent), skin problem (6.82 per cent), mental problem (6.82 per cent), rheumatism (5.68 per cent), sugar (4.55 per cent) and thyroid (3.98 per cent). Out of the total 119 pre menopause women, 98 of them reported their problems. It is seen that the reported women are facing multiple diseases. The picture of health would be more relevant if the analysis is done in terms of affected women.

Table 4.3 also shows that out of 98 affected women 54.08 per cent of women are facing the problem of gastroenterological problem followed by calcium shortage (43.88), anemia problem (38.78), stress (35.71), menstrual problem (31.63), and arthritis (28.57) and so on. Thus, from the above analysis it is observed that gastroenterological problem, calcium shortage, anemia, menstrual, arthritis is the major health problems in this age group. Irregularity in the menstrual problem is very common problem among the women of this age group. About 68 per cent respondents are suffering from irregularity of menstrual problem.

Table 4.3: Disease Wise Affected Women in Pre-Menopause Age Group

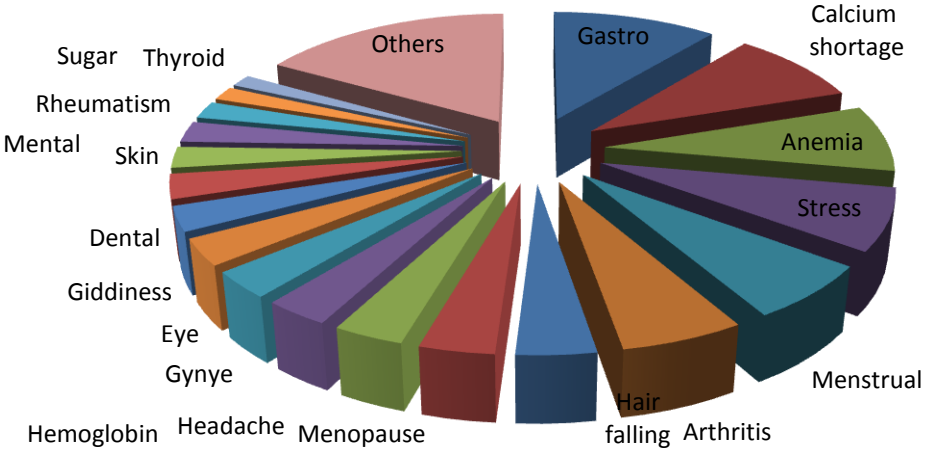
Name of Diseases	No. of Reported diseased women	Diseased out of affected women (per cent)	Diseased out of reported women (per cent)	Diseased out of total women (per cent)
Gas	53	54.08	10.84	30.11
Calcium shortage	43	43.88	8.79	24.43
Anemia	38	38.78	7.77	21.59
Stress	35	35.71	7.16	19.89
Menstrual	31	31.63	6.34	17.61
Arthritis	28	28.57	5.73	15.91
Hair falling	18	18.37	3.68	10.23
Menopause	17	17.35	3.48	9.66
Headache	16	16.33	3.27	9.09
Hemoglobin	15	15.31	3.07	8.52
Gynecological	15	15.31	3.07	8.52

Eye	15	15.31	3.07	8.52
Giddiness	14	14.29	2.86	7.95
Dental	14	14.29	2.86	7.95
Skin	12	12.24	2.45	6.82
Mental	12	12.24	2.45	6.82
Rheumatism	10	10.2	2.04	5.68
Sugar	8	8.16	1.64	4.55
Thyroid	7	7.14	1.43	3.98
Others	81	82.65	16.56	46.02

Source: Primary Survey, January 2013-December 2014

The following Figure 4.2 also depicts the above analysis.

Fig 4.2: Diseased Women out of total Pre-Menopause Women



Source: Primary Survey, January 2013-December 2014

4.1.2.3 Disease-wise Health status of the Menopause Age Group

Menopause comes when menstrual periods stop permanently in most women's lives, and during this period the woman is no longer able to have children. Menopause typically occurs 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 be 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. In the study area, the women of 46 years and above are included in menopause age group bracket as already mentioned in Chapter 3. Women under this age group are facing multiple crucial problems such as gastroenterological problem, arthritis, rheumatism, dental problem, eye problem, calcium shortage, menopause, anemia, giddiness, mental problem, skin disease, headache, blood presser problem, forgetfulness, respiratory problem, piles etc. Apart from this, some other problems like ear problem, thyroid, heart disease, kidney, hepatitis-B, goiter, sugar etc may happen among this menopause group of women but in this study, these are not significantly observed.

Table 4.4 depicts the different types of disease, which are facing by the women of menopause group of Cachar district. Out of the total women of menopause age group (176), a remarkable number of women (60.18 per cent) are suffering from gastroenterological problem followed by arthritis (53.98 per cent), rheumatism (48.30 per cent) and dental problem (39.77 per cent). Further, it is observed that few women are found to be suffering from gall stone (11.38 per cent), piles (11.98 per cent), respiratory problem (12.57 per cent), forgetfulness (13.77 per cent), high blood pressure (14.37 per cent) and headache (14.97 per cent). Moreover, 28.74, 26.95, 20.36, 17.96, 17.37 and 16.17 per cent of menopause women argued that they face the problem of menopause, giddiness, anemia, stress, mental and skin problem respectively. Table 4.4 also shows that out of 167 affected women 71.86 per cent of women are facing the problem of gastroenterological followed by arthritis (56.89 per cent), rheumatism (50.90 per cent),

dental problem (41.92 per cent), eye problem (40.12 per cent), calcium shortage (32.34 per cent), and so on.

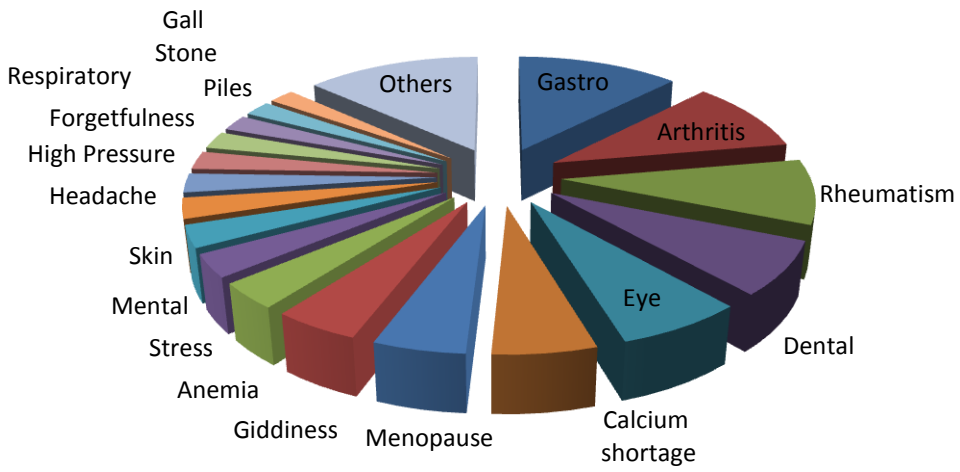
Thus, from the above analysis it is observed that gastroenterological, arthritis, calcium shortage, problems of dental and eye, anemia are the major health problems of this age group. The following Figure 4.3 also depicts the above analysis.

Table 4.4: Disease-wise Affected Women in Menopause Age Group

Name of Diseases	No. of Reported diseased women	Diseased out of affected women (per cent)	Diseased out of total women (per cent)
Gas	120	71.86	68.18
Arthritis	95	56.89	53.98
Rheumatism	85	50.90	48.3
Dental	70	41.92	39.77
Eye	67	40.12	38.07
Calcium shortage	54	32.34	30.68
Menopause	48	28.74	27.27
Giddiness	45	26.95	25.57
Anemia	34	20.36	19.32
Stress	30	17.96	17.05
Mental	29	17.37	16.48
Skin	27	16.17	15.34
Headache	25	14.97	14.20
High Pressure	24	14.37	13.64
Forgetfulness	23	13.77	13.07
Respiratory	21	12.57	11.93
Piles	20	11.98	11.36
Gall Stone	19	11.38	10.80
Others	129	77.25	73.30

Source: Primary Survey, January 2013-December 2014

Fig 4.3: Diseased Women out of total Menopause Women



Source: Primary Survey, January 2013-December 2014

4.1.3 A Comparison of Health Status of Total Muslim Married Women in Cachar District

A block-wise comparison shows the relative position of the blocks in response to the health status of Muslim married women. For comparison of health status of women among different blocks illness index is constructed by using dimensional. For the dimensional index the goal post value for maximum and minimum is considered 65 per cent as happened in Orissa and ten per cent as happened in Kerala.

Table 4.5 depicts the comparison of health status of Muslim Married women among seven blocks. It is observed that the percentage of total illed married women is highest in Borkhola block (88.89) and lowest in Barjalenga block (75.00). The health status is almost similar in Udharbond (77.42), Sonai (77.59), Katigorah (78.13) and Narshingpur (78.57). The illness index value for all the blocks are greater than one, which indicates that women's health status is very poor in selected blocks of the district.

Thus from the above analysis it is observed that out of these total Muslim married women in seven blocks of Cachar district the health status is best in Barjalenga block followed by Udharbond block. However, the situation is worst in Borkhola block in comparison to the other blocks.

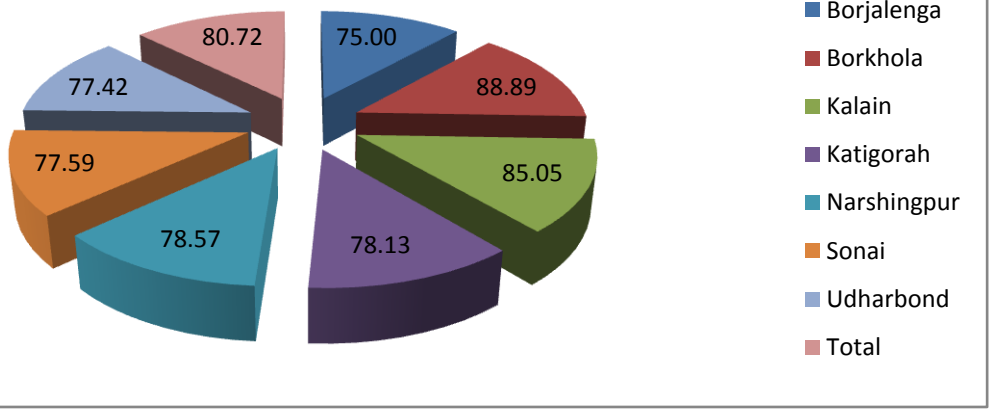
Table 4.5: Health Status of Married Women in Selected Blocks of Cachar District

Blocks	No. of Illed women	Total No. of women	Percentage of illed women	Illness index value
Borjalenga	36	48	75	1.18
Borkhola	80	90	88.89	1.43
Kalain	91	107	85.05	1.36
Katigorah	50	64	78.13	1.24
Narshingpur	99	126	78.57	1.25
Sonai	45	58	77.59	1.23
Udharbond	72	93	77.42	1.23
Total	473	586	80.72	1.29

Source: Primary survey, January 2013- December 2014

Figures 4.4 represent the block-wise percentage of illed women of Cachar district.

Fig. 4.4: Percentage of total illed women



Source: Primary survey, January 2013- December 2014

4.1.4 Block-wise Comparative Analysis of Crucial Diseases

The study here investigates the crucial diseases faced by Muslim married women in different age group among the seven blocks of Cachar district viz; Kalain, Borkhola, Katigorah, Sonai, Narshingpur, Barjalenga and Udharbond.

Reproductive Women:

It is seen that out of 291 respondents of reproductive age group 209 are affected by different kinds of diseases. The diseases, which are faced by most of the respondents is termed as crucial diseases. The crucial diseases faced by reproductive women among the selected blocks are anemia, calcium shortage, gastroenterological, gynecological, hair falling, menstrual, sexual, skin and white discharge.

Table 4.6 depicts the crucial diseases in different blocks of Cachar District.

Table 4.6: Comparative Analysis of Crucial Diseases among Reproductive Women

Disease	Kalain	Borkhola	Katigorah	Narshingpur	Sonai	Barjalenga	Udharbond
Anemia	23 (50.00)	16 (36.36)	8 (22.85)	18 (27.69)	11 (40.74)	4 (15.38)	10 (20.83)
Calcium Shortage	10 (21.73)	16 (36.36)	5 (14.28)	10 (15.38)	8 (29.63)	5 (19.23)	11 (22.92)
Gastro	12 (26.08)	17 (38.63)	4 (11.43)	19 (29.23)	8 (29.63)	6 (23.07)	22 (45.83)
Gynye	2 (4.34)	3 (6.81)	2 (5.71)	4 (6.15)	5 (18.51)	4 (15.38)	4 (8.33)
Hair Falling	15 (32.61)	12 (27.27)	6 (17.14)	18 (27.69)	9 (33.33)	3 (11.53)	12 (25.00)
Menstrual	16 (34.78)	10 (22.72)	11 (31.42)	15 (23.07)	10 (37.03)	4 (15.38)	9 (18.75)
Sexual	9 (19.56)	7 (15.90)	1 (2.85)	6 (9.23)	4 (14.81)	2 (7.69)	5 (10.41)
Skin	4 (8.69)	9 (20.45)	3 (8.57)	10 (15.38)	5 (18.51)	1 (3.84)	4 (8.33)
White Discharge	17 (36.95)	11 (25.00)	4 (11.42)	18 (27.69)	9 (33.33)	2 (7.69)	8 (16.67)

Sources: Field Survey, January 2013-December 2014

Note: Percentages are given in the parenthesis.

In Kalain block it is seen that majority of the women are suffering from anemia (50.00 per cent). A significant number of reproductive women also argue that they face the problem of white discharge (36.95 per cent), menstrual (34.78 per cent), hair falling (32.61 per cent). However only 4.34 per cent, 8.69 per cent and 19.56 per cent of women are suffers from sexual, skin and gynecological problem respectively. Moreover a remarkable number of women are faces the problem of gastroenterological (36.08 per cent) and calcium shortage (21.73 per cent). In Borkhola block, it is observed that majority of the women are suffers from the problem of gastroenterological (38.63 per cent) followed by calcium deficiency (36.36 per cent) and anemia (36.36 per cent). Further the above Table 4.6 depicts that 27.27 per cent, 25.00 per cent, 22.72 per cent and 20.45 per cent of women are faces the problem of hair falling, white discharge, menstrual and skin related problem respectively. Only 6.81 and 15.80 per cent of women suffers from any kind of gynecological and sexual problem respectively. In Katigorah block, majority of the respondents are suffering from menstrual problem (31.42 per cent). The number of women suffering from anemic problem (22.85 per cent) is also very high. Women facing sexual (2.85 per cent) and gynecological (5.71 per cent) problem is very negligible. Moreover, 17.14 per cent, 14.28 per cent, 11.43 per cent, 11.42 per cent and 8.57 per cent of women respond that they suffers from hair falling, calcium shortage, gastroenterological, white discharge and skin related problems respectively. In Narshingpur block, most of the women are suffering from gastroenterological problem (29.23 per cent) followed by hair falling (27.69 per cent), white discharge (27.69 per cent), anemia (27.69 per cent) and menstrual problem (23.07 per cent). Only 6.15 per cent and 9.23 per cent of women are facing the problem of gynecological and sexual

respectively. 15.38 per cent of women are suffers from both the problem of skin related diseases and calcium shortage related diseases. In Sonai block, most of the respondents are facing the anemic problem (40.74 per cent) followed by the problem of menstrual (37.03 per cent), white discharge (33.33 per cent) and hair falling (33.33 per cent). Moreover, 29.63 per cent of the women are faces both calcium shortage related diseases and gastroenterological diseases. Similarly, 18.81 per cent of women are suffers from both skin problem and gynecological problem. Only fewer percentages of women argue that they face the sexual problem (14.81 per cent). In Barjalenga block, most of the respondents are suffering from gastroenterological problem (23.07 per cent). Only a few women are facing the problem of white discharge (7.69 per cent) and sexual disease (7.69 per cent). The women suffering from the problem of menstrual, gynecological problem and anemia is same (15.38 per cent). Moreover, only a negligible per cent of women are suffers from skin related problem (3.84 per cent). In Udharbond block, majority of the respondent argue that they suffer from gastroenterological problem (45.83 per cent). A remarkable percentage of women are also facing the problem of hair falling (25.00 per cent), calcium shortage (22.92 per cent), anemia (22.92 per cent) and white discharge (20.83 per cent). Moreover, only few women (8.33 per cent) are suffering from both skin related diseases and gynecological diseases.

From the above discussion, it is seen that anemia problem is highest in Kalain block (50.00 per cent) which is followed by Sonai block (40.74 per cent) and Borkhola block (36.36 per cent) and this problem is lowest in Borjalenga block (15.38 per cent). Calcium shortage related diseases is highest in Borkhola block (36.36 per cent) and lowest in Katigorah block (14.28 per cent). Respondents faces Gastroenterlogical

problem is almost similar in all the blocks except Udharbond block (45.83 per cent), Borkhola block (38.63 per cent) and Katigorah block (11.43 per cent). Gynecological problem is not very significant in all the blocks. This problem is highest in Sonai block (18.51 per cent) and lowest in Katigorah block (4.34 per cent). Among all the blocks, hair falling problem is highest in Sonai block (33.33 per cent) and lowest in Borjalenga block (11.53 per cent). Both menstrual (34.78 per cent) and white discharge (36.95 per cent) problem is highest in Kalain block and lowest in Borjalenga block (15.38 percent and 7.69 per cent respectively). Sexual problem is highest in Kalian block (19.56 per cent) and lowest in Katigorah block (2.85 per cent). Finally, skin diseases are highest in Sonai block (18.81 per cent) and lowest in Borjalenga block (3.84 per cent).

Therefore, it is argued that the health condition of rural reproductive Muslim married women in different blocks of Cachar district is not satisfactory and among the blocks, the health status of women in Borjalenga block is relatively better than other blocks of Cachar district.

Pre-Menopause Women

From Table 4.1 it is observed that out of 119 respondents of pre-menopause age group 98 are affected by different kinds of diseases. The crucial diseases faced by pre-menopause women among the selected blocks are anemia, arthritis, calcium shortage, dental, gastroenterological problem, eye, giddiness, gynecological, hair falling, menstrual, mental, rheumatism and skin.

Table 4.7 depicts that in Kalain block majority of the women are suffering anemia and gastroenterological problem (34.78 per cent). A significant number of pre-menopause

women also argue that they face the menstrual problem (30.43 per cent) followed by calcium deficiency (26.09 per cent), arthritis (21.74 per cent), giddiness (21.74 per cent). It is also observed that 17.39 per cent of women reported that they face the gynecological problem, problem with eye and dental. Moreover, 8.70 per cent of women face the problem of hair falling and rheumatism. A few women are suffering hearing, mental and skin diseases (4.35 per cent each). In Borkhola block, more than fifty per cent respondents are suffering gastroenterological problem (52.94 per cent). A huge number of women are found to be affected from calcium shortage (32.29 per cent), arthritis (29.41 per cent) and menstrual problem (29.41 per cent). 23.53 per cent women reported that they suffer from anemia, eye related problem, giddiness, hair falling and mental illness. Moreover, 17.65 per cent of women are facing gynecological and rheumatism problem. However, there is no skin related problem found in Borkhola block whereas a very negligible percentage of women are facing the dental problem (11.76 per cent). In Katigorah block, majority of the respondent are suffering anemia (42.86 per cent) and calcium shortage (42.86 per cent). It is also seen that 28.57 per cent of respondents are facing the problem of arthritis, gastroenterological disease, and menstrual problem. Only 14.29 per cent of women face the gynecological problem, hair falling and rheumatism. None are reported in Katigorah block about the problem of mental, hearing, eye, dental and skin related diseases. In Narshingpur block, more than fifty per cent women are suffering calcium deficiency (54.17 per cent) followed by gastroenterological problem (50 per cent), anemia (33.33 per cent) and arthritis (29.17 per cent). Only few pre-menopause women are facing the eye problem (8.33 per cent). It is also observed that 12.50 per cent of women reported that they face the problem of giddiness, hair falling and

rheumatism where as 20.83 per cent argue that they face skin and mental trouble. None of the women are facing menstruation and hearing problem in this block. In Sonai block, most of the respondents are facing the gastroenterological problem (35.71 per cent) followed by the arthritis (28.57 per cent), calcium shortage (28.57 per cent), anemia (21.43 per cent) and menstrual problem (21.43 per cent). Only 7.19 per cent of women are faces the problem of rheumatism, hair falling, giddiness and skin diseases. However, no pre-menopause women reported the problem of mental and hearing in Sonai block. In Barjalenga block, more than one third respondents are suffering gastroenterological problem (77.78 per cent).

Table 4.7: Comparative Analysis of Crucial Diseases among Pre-Menopause Women

Disease	Kalain	Borkhola	Katigorah	Narshingpur	Sonai	Barjalenga	Udharbond
Anemia	8 (34.78)	4 (23.53)	3 (42.86)	8 (33.33)	3 (21.43)	4 (44.44)	5 (20.00)
Arthritis	5 (21.74)	5 (29.41)	2 (28.57)	7 (29.17)	4 (28.57)	2 (22.22)	4 (16.00)
Calcium shortage	6 (26.09)	6 (35.29)	3 (42.86)	13 (54.17)	4 (28.57)	4 (44.44)	3 (12.00)
Dental	4 (17.39)	2 (11.76)	0 (0.00)	4 (16.67)	0 (0.00)	1 (11.11)	5 (20.00)
Eye	4 (17.39)	4 (23.53)	0 (0.00)	2 (8.33)	0 (0.00)	1 (11.11)	2 (8.00)
Gastro	8 (34.78)	9 (52.94)	2 (28.57)	12 (50.00)	5 (35.71)	7 (77.78)	8 (32.00)
Giddiness	5 (21.74)	4 (23.53)	0 (0.00)	3 (12.50)	1 (7.14)	1 (11.11)	0 (0.00)
Gynye	4 (17.39)	3 (17.65)	1 (14.29)	4 (16.67)	0 (0.00)	0 (0.00)	2 (8.00)
Hair falling	2 (8.70)	4 (23.53)	1 (14.29)	3 (12.50)	1 (7.14)	2 (22.22)	7 (28.00)
Hearing	1 (4.35)	1 (5.88)	0 (0.00)	0 (0.00)	0 (0.00)	1 (11.11)	1 (4.00)
Menstrual	7 (30.43)	5 (29.41)	2 (28.57)	0 (0.00)	3 (21.43)	1 (11.11)	1 (4.00)
Mental	1	4	0	5	0	1	3

	(4.35)	(23.53)	(0.00)	(20.83)	(0.00)	(11.11)	(12.00)
Rheumatism	2 (8.70)	3 (17.65)	1 (14.29)	3 (12.50)	1 (7.14)	0 (0.00)	2 (8.00)
Skin	1 (4.35)	0 (0.00)	0 (0.00)	5 (20.83)	1 (7.14)	2 (22.22)	5 (20.00)

Sources: Field Survey, January 2013-December 2014

Note: Percentage are given on the parenthesis

It is also seen that a remarkable number of women face the problem of anemia (44.44 per cent). Only 11.11 per cent of women reported that they face the problem of dental, giddiness, hearing, menstrual and mental illness. Moreover, 22.22 per cent of women are suffering from arthritis, hair falling and skin diseases. However, no pre-menopause women in Barjalenga block reported the rheumatism and gynecological problem. In Udharbond block, majority of the respondent argue that they suffer from gastroenterological problem (32.00 per cent) followed by hair falling (28 per cent). However, none of them are reported the problem of mental and hearing in Sonai block. Only few women argue that they suffer from menstrual problem and hair falling (four per cent), eye and gynecological problem (eight per cent). Moreover, 20 per cent of respondents are reported that they face the problem of anemia, dental and skin. However, none of them suffer from giddiness problem in Udharbond block.

From the above analysis it is seen that anemia, arthritis and calcium shortage is relatively higher in Borjalenga, Borkhola and Narshingpur block (44.44, 29.41, 54.17 per cent respectively) whereas these problems are relatively lower in Udharbond block (20.00, 16.00 and 12.00 per cent respectively). Further, it is observed that both eye and mental problem is more prevalent in Borkhola block (23.53 per cent). However, these problems are relatively lower in Katigorah and Sonai block. Dental and hair falling problem is reported more in the Udharbond block (20.00 and 28.00 per cent respectively)

whereas there is no dental problem in Katigorah and Sonai block and hair falling is reported less by the women of Kalian block (8.70 per cent). Gastroenterological problem which is found to be significant in all the blocks, though it is relatively higher in Barjalenga block (77.78 per cent) and lower in Katigorah block (28.57 per cent). Giddiness, gynecological and rheumatism problem is more prevalent in Borkhola block (23.53, 17.65 and 17.65 per cent respectively). Menstrual problem is common for the pre-menopause group of women, is found to be higher in Kalain block (30.43 per cent) and nil in Narshingpur block. Hearing problem is not very significant in all the blocks of Cachar district, though this problem is relatively higher in Barjalenga block (11.11 per cent) and relatively lowers in Katigorah, Narshingpur and Sonai block. Finally, skin problem is reported more in Narshingpur block (20.83 per cent) and none is reported from Borkhola and Katigorah block.

Therefore, it is argued that the health status of pre-menopause age group of Muslim married women in different blocks of Cachar district is not satisfactory and among these blocks, the health status of women in Katigorah block is relatively better than other blocks of Cachar district.

Menopause Women

From Table 4.1 that out of 176 respondent of menopause age group 167 are affected by different kinds of diseases. The crucial problems faced by menopause women among the selected blocks are gastroenterological problem, arthritis, rheumatism, dental problem, eye problem, calcium shortage, menopause, anemia, giddiness, mental problem, skin disease, headache, blood presser problem, piles etc.

Table 4.8 depicts that in Kalain block majority of the respondents are suffering gastroenterological problem. It is also observed that a remarkable number of women face the problem of rheumatism (52.63 per cent) followed by the problem of eye (50 per cent), arthritis (44.78 per cent), dental problem (39.47 per cent) and calcium shortage (31.58 per cent). Only few women are suffering from diabetic (7.89 per cent), heart disease (5.26 per cent), stress (10.53 per cent) and high blood pressure (10.53 per cent). Moreover, 18.42 per cent women are affected in giddiness, menopausal symptom, piles, respiratory and skin diseases. Like Kalain block most of the respondents in Borkhola block are suffering from gastroenterological problem (79.31 per cent) followed by rheumatism (65.52 per cent), arthritis (55.17 per cent), eye problem (44.83 per cent) and dental problem (41.38 per cent). Few respondents face the problem of piles (3.45 per cent), respiratory problem (3.45 per cent), diabetic problem (6.90 per cent), heart problem (10.34 per cent), giddiness (13.79 per cent) and skin problem (17.24 per cent). Moreover, 20.69 per cent of respondents are suffering from anemia, calcium shortage, high blood pressure and stress. In Katigorah block, more than two third respondents are facing both gastroenterological and arthritis problem (54.55 per cent) followed by rheumatism (40.91 per cent).

It is also observed that 4.55 per cent of women are suffering heart disease, high blood pressure and diabetic problem whereas none of them are facing respiratory problem in Katigorah block. Further the Table 4.8 depicts that only 9.09 per cent women face both skin and piles problem, 27.27 per cent of women are affected by giddiness and dental problem, 13.64 per cent by anemia and eye problem and finally 18.18 per cent of respondents by stress and calcium shortage.

Table 4.8: Comparative Analysis of Crucial Diseases among Menopause Women

Diseases	Kalain	Borkhola	Katigorah	Narshingpur	Sonai	Barjalenga	Udharbond
Anemia	4 (10.53)	6 (20.69)	3 (13.64)	11 (29.73)	2 (11.76)	6 (46.15)	6 (30.00)
Arthritis	17 (44.74)	16 (55.17)	12 (54.55)	23 (62.16)	11 (64.71)	3 (23.08)	5 (25.00)
Calcium shortage	12 (31.58)	6 (20.69)	4 (18.18)	15 (40.54)	4 (23.53)	8 (61.54)	3 (15.00)
Dental	15 (39.47)	12 (41.38)	6 (27.27)	15 (40.54)	8 (47.06)	5 (38.46)	5 (25.00)
Eye	19 (50.00)	13 (44.83)	3 (13.64)	18 (48.65)	6 (35.29)	4 (30.77)	2 (10.00)
Gastro	29 (76.32)	23 (79.31)	12 (54.55)	21 (56.76)	12 (70.59)	7 (53.85)	11 (55.00)
Giddiness	7 (18.42)	4 (13.79)	6 (27.27)	13 (35.14)	3 (17.16)	6 (46.15)	1 (5.00)
Heart	2 (5.26)	3 (10.34)	1 (4.55)	3 (8.11)	4 (23.53)	0 (0.00)	0 (0.00)
High Pressure	4 (10.53)	6 (20.69)	1 (4.55)	4 (10.81)	5 (29.41)	0 (0.00)	0 (0.00)
Menopause	7 (18.42)	10 (34.48)	3 (13.64)	11 (29.73)	5 (29.41)	3 (23.08)	3 (15.00)
Piles	7 (18.42)	1 (3.45)	2 (9.09)	3 (8.11)	0 (0.00)	2 (15.38)	3 (15.00)
Respiratory	7 (18.42)	1 (3.45)	0 (0.00)	9 (24.32)	1 (5.88)	1 (7.69)	1 (5.00)
Rheumatism	20 52.63)	19 (65.52)	9 (40.91)	16 (43.24)	8 (47.06)	5 (38.46)	4 (20.00)
Skin	7 (18.42)	5 (17.24)	2 (9.09)	7 (18.92)	2 (11.76)	3 (23.08)	1 (5.00)
Stress	4 (10.53)	6 (20.69)	4 (18.18)	6 (16.22)	4 (23.53)	1 (7.69)	3 (15.00)
Sugar	3 (7.89)	2 (6.90)	1 (4.55)	4 (10.81)	2 (11.76)	1 (7.69)	1 (5.00)

Sources: Field Survey, January 2013-December 2014

Note: Percentages are given on the parenthesis.

In Narshingpur block, majority of the respondents are suffering from arthritis (62.16 per cent) followed by gastroenterological problem (56.76 per cent), eye problem (48.65 per cent) and rheumatism (43.24 per cent). Further, it is observed that 40.54 per cent of women are affected by calcium deficiency and dental problem. Moreover, 8.11

per cent of women are affected by heart problem and piles, 29.73 per cent of women are suffers by the problem of anemia and menopausal problem and only 10.81 per cent of women are affected by sugar and high blood pressure. In Sonai block also, majority of the respondents are suffering from gastroenterological problem (70.59 per cent) followed by arthritis (64.71 per cent), rheumatism (47.06 per cent) and dental problem (47.06 per cent). None of the women are suffering from piles in this block. Moreover, 23.53 per cent women have reported that they are facing the problem of high blood pressure and menopause. A few number of women are suffers from by the problem of respiratory (5.88 per cent) and giddiness (17.16 per cent). Further, it is observed that 11.76 per cent of respondents are affected by diseases like skin, sugar and anemia. In Barjalenga block, majority of the respondents are suffering from calcium deficiency (61.54 per cent) followed by gastroenterological problem (53.85 per cent). It is also seen that 38.46 per cent of women suffer from rheumatism and dental problem. However, in Barjalenga block none are affected in high blood pressure and heart problem whereas only 7.69 per cent of women reported that they face the problem of respiratory, stress and sugar. Moreover, 23.08 per cent of women are suffering from arthritis, menopausal and skin problem and only 15.38 per cent of women are facing piles problem. Like most of the blocks, there are majority of the respondents are suffering from gastroenterological problem (55.00 per cent) in Udharbond block. Further Table 4.8 depicts that 25 per cent of women are suffering arthritis and dental problem and only five per cent of women are facing the problem of giddiness, respiratory, skin and sugar. Moreover, only 15 per cent of women are suffering from calcium shortage, piles, stress and menopausal problem. However, no menopausal women in this block are found to be suffers from high blood

pressure and heart problem. Finally, 10.00, 20.00, and 30.00 per cent of women are reported that they face the problem of eye, rheumatism and anemia respectively.

From the above discussion it is observed that gastroenterological problem is more prevalent in all the blocks of Cachar district and this percentage is highest in Borkhola block (79.31 per cent) and lowest in Barjalenga block. The problem of calcium shortage, giddiness and skin related diseases is found to be relatively more in Barjalenga block (61.54, 46.15 and 7.69 per cent respectively) and relatively low in Udharbond block (15.00, 5.00, 5.00 per cent respectively) compare to other blocks of Cachar district. Further, it is observed that anemia problem is relatively higher in Borjalenga block (46.15 per cent) followed by Udharbond block and lowest in Kalain block (10.53 per cent). The problem of arthritis is also very high in all the blocks and this percentage is highest in sonai block (64.71 per cent) and lowest in Udharbond block. The problem of rheumatism and menopause is more prevalent in Borkhola block (65.52 and 34.48 per cent respectively). However, these problems are relatively lower in Udharbond block (20 and 15 per cent respectively). Heart and high blood pressure problem is reported more by the women of Sonai block (23.53 and 29.41 per cent respectively) whereas no menopausal women in both Barjalenga and Udharbond block are suffering from these two problems. Though sugar problem is not very significant among the women of all the blocks, still this problem is found to be relatively higher in Sonai block (11.76 per cent) and lower in Katigorah block (4.55 per cent). Similarly, piles problem is not very significant in all the blocks and among these blocks this problem is found to be highest in Kalain block (18.42 per cent) and nil in Sonai block. Dental problem is more or less same in all the blocks and this percent is highest in sonai block (47.06 per cent) and lowest in Udaharbond block (25

per cent). Finally, eye problem is reported less in Udharbond block (ten per cent) and affected more in Kalain block (50 per cent).

Thus, in conclusion it can be said that the health situation of Menopause age group of Muslim married women in different blocks of Cachar district is not satisfactory and among these blocks, the health scenario of women in Udharbond block is relatively better than other blocks of Cachar district.

4.2 Determinants of Health Status

Nutrition level is one of the main determinants of an individual's health status. Health status depends in part to nutritional status. Thus in improving health status, societies strive to eliminate malnutrition that is a condition that results either from eating a diet in which certain nutrients are lacking or is in excess (UNICEF, 2009). Malnutrition refers both to under nutrition (inadequate nutrients for growth and maintenance) or over nutrition (consumption of too many calories). Different nutrition disorders may occur depending on which nutrients are under or over abundant in diet. In most of the areas in the world, the most common form of malnutrition is under nutrition that is because of inadequate calories and protein. However, a rising form of nutrition disorder though common in wealthier nations is obesity. It has become a major public health concern in developed and developing countries as a result of consumption of diets in which energy, fats and refined carbohydrates are in excess.

Malnutrition remains an important public health concern in the developing world. Most developing countries with higher levels of malnutrition often face multiple challenges viz; poverty, economic crisis, conflicts disaster, all of them urgent and

competing for scarce resources (UNICEF, 2009). As a result, nutrition and especially women nutrition remains a low priority on the national development agenda of these countries despite the evidence of short and long term consequences of nutritional deficiency.

Everyone needs to be adequately nourished to live a healthy and a productive live. Nutritional demands vary depending on age, sex; health status and activity level (Prentice et al. 1988). In women, undernourishment places a more intense burden due to their unique nutritional requirements. Their monthly loss of iron for example, leads women to require more of this mineral than would be the case in men. Pregnancy and breastfeeding also make women vulnerable as a result of physiologically higher nutrient requirements, which are often not met (Lartey 2008). They need significantly more protein and calories as well as vitamins and minerals (especially iron, iodine, calcium, folic acid and vitamin A, C and K). However, high nutritional costs during pregnancy and lactation also contribute significantly to their poor nutritional status.

Malnutrition in all its forms increases the risk of infection and infectious diseases while moderate malnutrition weakens every part of the immune system and can thus lead to early death. It causes severe disability leading to aggravating illness, reduced educational attainment, and diminished livelihood skills and options (UNICEF, 2009). In women, malnutrition results in slow recovery from illness, increased infection, increased risks of adverse pregnancy outcomes, impaired ability to nurture children, and low productivity (Leslie, 1991). Women with a body mass index (BMI) below 18.5 show a progressive increase in mortality rates as well as increased risk of illness, (Rotimi et al. 1999). Women's nutritional status in the developing nations should be given priority as

the human welfare loses associated with women's malnutrition are vast. Some studies have also shown that there is bio directional causality between health and economic growth and development (Mugu 2012). Thus, women's nutrition should be prioritized as good nutrition leads to better health indicators that in turn promote the economy's development.

Body Mass Index (BMI) is an important indicator of nutritional status, which in turn affects the health status. Anthropometrics measurements such as height, weight, skin fold thickness, arm circumference and Body Mass Index are valuable indicators of nutritional status and thus health. The body mass index (BMI) can be used to assess both thinness and obesity. The health status of the Muslim married women in Cachar district is analyzed in the light of the Body Mass Index (BMI) value. The BMI value is classified into five categories viz; acute malnutrition (whose BMI < 18.5), malnutrition (18.5 < BMI < 19.99), normal (20 < BMI < 25), over weight (25.001 < BMI < 29) and Obesity (BMI > 30). Acute malnutrition, malnutrition, over weight and obesity represents a state of poor health. Persons having BMI value in the normal range can only be considered as enjoying good health.

Table 4.9 depicts that out of total respondents (586) most of the respondents are belonging to reproductive category (291) followed by menopause (176) and pre-menopause (119). It is observed that total 26.28 per cent of respondents are suffering from acute malnutrition and out of this, 53.25 per cent of respondents are from reproductive group, 25.97 per cent from menopause group and 20.78 per cent from pre-menopause group. The problem of malnutrition is also very high in all these three groups as out of 586 respondents 26.11 per cent of respondents are facing this problem. The

problem of malnutrition is highest in reproductive group (51.63 per cent) and lowest in pre-menopause group (22.22 per cent). The problem of overweight is highest in menopause group (51.42 per cent) followed by pre-menopause group (20 per cent). However, obesity cases is rare in all the groups as only 2.90 per cent of women suffer from this problem and out of this 17.64 per cent belong to reproductive group, 41.18 per cent belong to pre-menopause group and 41.18 per cent belong to menopause group. The condition of health is better among the reproductive group. All together 192 (32.76 per cent) respondents from 586 are enjoys a healthy condition. From this, 192 respondents most of the women are from reproductive age group (55.73 per cent) followed by menopause (27.60 per cent) and pre-menopause (16.67 per cent) group. It is also observed that out of 586 respondents, 307 respondents are suffering from malnutrition problem and 87 are suffering from over weight problem. The problem of malnutrition is highest in reproductive group (161) and lowest in pre-menopause group (66). Similarly, overweight problem is highest in menopause group (43) and lowest in reproductive group (23).

Table 4.9: BMI Status of Muslim Married Women in Rural Area of Cachar District

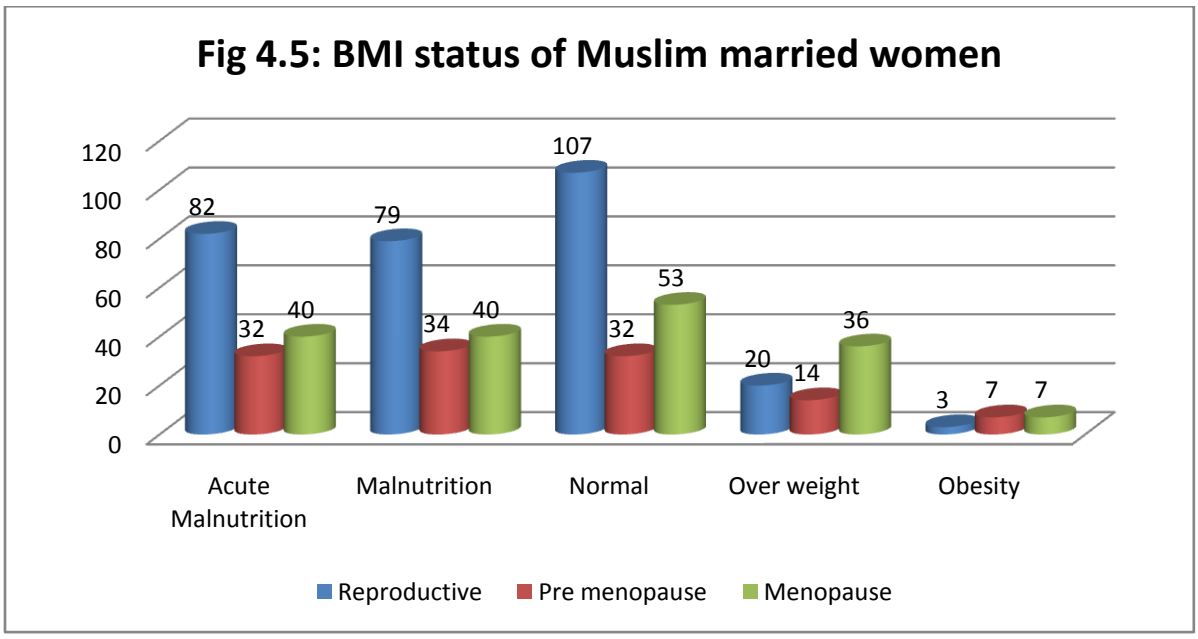
Category	Reproductive	Pre-menopause	Menopause	Total
Acute Malnutrition	82 (53.25)	32 (20.78)	40 (25.97)	154 (26.28)
Malnutrition	79 (51.63)	34 (22.22)	40 (26.14)	153 (26.11)
Normal	107 (55.73)	32 (16.67)	53 (27.60)	192 (32.76)
Over weight	20 (28.57)	14 (20.00)	36 (51.42)	70 (11.95)
Obesity	3 (17.64)	7 (41.18)	7 (41.18)	17 (2.90)
Total	291 (49.66)	119 (20.31)	176 (30.03)	586 (100.00)

Source: Primary Survey, January 2013 - December 2014

Note: Percentage are given on the parenthesis

The Table 4.9 also depicts that 26.28 per cent of women have problem of malnutrition in the form of being under weight (BMI below 18.5) while 14.85 percent women are facing the problem of overweight and obesity. Women under reproductive group are facing under weight problem more followed by pre-menopause (20.78 per cent) and menopause women (25.97 per cent). Similarly, the problem of over weight is highest among menopause women followed by pre-menopause and reproductive group of women.

The following diagram also represents the above analysis.



Source: Primary Survey, January 2013 - December 2014

Women's health and nutritional status are important matters of public health and developmental concern. Nutrition is a determinant of health. Diet and nutrition are important factors in the promotion and maintenance of good health throughout the life cycle. As already mentioned in Chapter 3, BMI is taken as a proxy of health status of

women. A well balanced diet increases the body's resistance to infection, thus warding off a host of infections as well as helping the body fight existing infection. Income, prices, individual preferences and beliefs, cultural traditions, as well as geographical, environmental, social and economic factors all interact in a complex manner to shape dietary consumption patterns and affect the morbidity and clinical status of women. The nutritional and health status of women is of great concern in the contemporary world, because the multiple roles played by women give rise to serious health and nutritional problems. Underweight and overweight among men and women are normally the result of deficit in energy intake and excess energy intake. These two physical conditions are associated with distinct types of public health problems. Thus, extremes of body mass index such as underweight, overweight and obese categories are associated with a variety of adverse health outcomes such as diabetes mellitus, cardiovascular diseases, low birth weight, poor quality of life and higher mortality. For social and biological reasons, women are the most vulnerable to malnutrition (Girma and Genebo 2002). Eliminating hunger and malnutrition is one of the most fundamental challenges facing humanity (Lomborg 2004). Malnutrition is one of the most devastating problems worldwide and is inextricably linked with poverty. The dietary intake and nutritional status of rural women is found to be poor as a result of various studies conducted on them (Rao et al. 2010), Mittal and Srivastava 2006, Singh 2006). Table 4.10 shows the descriptive statistics of health status and its determinants.

Table 4.10: Descriptive Statistics of Health Status and Its Determinants

Variables	Mean	Median	Mode	S.D.	Variance	Skewness	Min.	Max.
Age	38	36	32	13	174	1	15	79
Respondent's education	5	6	0	4	17	0	0	17
Marital age	17	17	16	2	4	2	13	32
Household size	5.57	5	5	2.32	5.38	1.1	1	16
Food expt. (per capita)	892.32	750	500	475.23	225840	1.6	88.89	3333.33
Monthly medical expt. (per capita)	84.17	42.86	40	102.25	10454.5	2.72	3.33	666.67
Monthly Expenditure (per capita)	1365.05	1000	1000	907.33	823254	1.82	111.11	5150
Monthly Income (per capita)	1762.13	1000	1000	1586.41	2516698	1.79	111.11	6750
Area of house	2966.4	2966	3600	1152	1850.4	43.2	360	5760
Height (in ft.)	4.97	5	5	0.2	0.04	-2.08	4.1	5.5
Weight (in kg.)	46.67	45	42	7.29	53.12	1.21	34	78
BMI	21.1	19.77	18.67	3.7	13.7	1.52	16.22	37.49

Source: Primary Survey, January 2013-December 2014

Table 4.10 shows that mean age of the respondent is 38 years and standard deviation of the respondent age is 13.20. The model value of the respondent age is 32 years, which indicate that most of the women are belonging to reproductive group (15-35 years). The mean value of the respondent's BMI is 21.1 with maximum value is 37.49 and minimum value is 16.22. However, the modal value of the respondent's BMI is 18.67. This implies that most of the women are belonging to normal BMI, though they are suffering from malnutrition. The average education of the respondent is 5 with standard deviation value 4. Here level of education is measured in terms of year of schooling that they have completed. This implies that average level of education is very poor among the Muslim married women. The mean age of marriage of the respondents 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 and this may have a negative impact on the BMI of the women. The mean value of household size is 5.57 with maximum number is 16 and minimum number is one. More number of household sizes implies division of total nutrition or calorie intake among more members, which may have a negative impact on the BMI of women. However, in other words families with more number of earning members may have positive impact on the BMI of women. The mean value of per capita area of house is 2966.4 square ft. with very high standard deviation 1152sq ft. The average per capita monthly medical expenditure of the households is Rs. 84.17 with a standard deviation 102.25. 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.1762.13 with standard deviation 1586.41. This implies

that there is a high dispersion of income among rural household. The modal value of per capita monthly 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. Lower per capita income may have a negative impact on BMI of the respondents. The average per capita monthly expenditure of the family is Rs.1365.05 with standard deviation 907.33. The maximum value of per-capita monthly income and expenditure are Rs.6750.00 and Rs.5150.00 respectively whereas the minimum value is equal (Rs.111.11). It is also reveals that the average value of per capita food expenditure is Rs.892.32 with mode value is 500. The average height and weight of the respondent is 4.97 ft. and 46.67 kg. respectively.

To identify the responsible factors of health status or BMI, following multiple regression equation (the equation is already mentioned in Chapter 3) is used for estimation.

$$BMI = \alpha + \beta_1(AGE) + \beta_2(EDLR) + \beta_3(HS) + \beta_4(FE) + \beta_5(ME) + \beta_6(MA) + \beta_7(AH) + \theta_1 D_1 + \theta_2 D_2 + U_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where α is the intercept parameter and β's are the slope parameter or coefficient of the explanatory variables used in the equation specification. Some of the explanatory variables are treated as a qualitative variable or dummy variable, though these dummy variables are quantified by taking their binary options. u_i is the stochastic error component which follows normal distribution with zero mean and common variance σ^2.

Here, BMI=Body Mass Index

AGE= Age of the respondents in Years at the time of survey.

EDLR= Education level completed by the respondent in years at the time of survey

HS= Household size

FE= Monthly food expenditure of the family

ME= Monthly medical expenditure of the family

MA= Age at marriage of the respondent

AH= Area of house

$$D1 = \begin{cases} 1\ for\ semi\ pucca\ housing \\ 0, otherwise \end{cases} \qquad D2 = \begin{cases} 1\ for\ \ pucca\ housing \\ 0, otherwise \end{cases}$$

The justifications of variables are already given in Chapter 3. Table 4.11 reveals that The R^2 is 0.446, which means that approximately 44.6 per cent of the variability of health status or BMI is accounted for by the variables in the model. In this case, the adjusted R^2 indicates that the model accounts for about 43.5 per cent of the variability of BMI. F-test is statistically significant, which means that the model is meaningful. The coefficients for each variable indicates the change in BMI value due to one-unit change in the value of that variable, given that all other variables in the model are held constant.

The respondent's age is statistically significant at less than one per cent level of significance. The coefficient for respondent age is 0.1059 which implies that the value of BMI increases by 0.11 unit due to increase in respondent age; in other words, it is argued that the chance of being overweight or obesity as age increases.

Table 4.11: Determinants of Body Mass Index of Muslim Married Women

Variables	Value of Coefficient	t-value	P-value
AGE	0.1059	5.67	0.00
EDLR	0.0082	4.45	0.00
HS	-0.016	-6.43	0.00
FE	0.1199	6.08	0.00
ME	0.0155	1.66	0.09
MA	0.1004	1.82	0.07
AH	-0.0059	-2.5	0.01
D_1 (Semi pucca)	0.0284	2.28	0.02
D_2 (Pucca)	0.065	3.85	0.00
Constant	1.3277	6.65	0.00
Diagnostic Test			
F(9, 576)		51.71 (P-Value 0.00)	
R-square		0.4469	
Adjusted R-square		0.4383	
Number of observation		586	

Source: Primary survey, January 2013- December 2014

The coefficient of the respondent's education is positive and statistically significant predictor of BMI. This may be because as the level of education increases people become aware about their health status that in turn intends them to consume food that is more nutritious and as a result BMI of the women increases.

The coefficient of the household size is negative and statistically significant predictor of BMI. This implies that as the number of member of a family increases BMI or health status of the women decreases. This may be due to the fact that in our Indian society women are in general last to eat from whatever is left after feeding the family which results is low BMI or malnutrition or in other words ill health.

The coefficient of the food expenditure is positive and statistically significant predictor of BMI. This implies that the respondent intake nutritious food or consume

more calorie as food expenditure of the family increases, which in turn leads to better health or high BMI of the women.

The coefficient of the medical expenditure is positive and statistically significant predictor of BMI. This may be because the family who spends more for the medical purpose may be more aware regarding their health status, which in turn leads to better health status or BMI.

The coefficient of marital age is negative and statistically significant predictor of BMI. This may be because Muslim girls are normally getting married before the legal age i.e 18 and giving more number of childbirth at a very lower age may have a negative impact on their BMI or in other words on their health.

The coefficient of the area of house is negative and statistically significant predictor of BMI. This implies that the health status of the respondent decreases if the people have a larger area of house. This may be because women have to spend more time for maintenance of house or do hard work, which may leads them to devote less time for their health purposes that in turns leads to low BMI or worse health status.

The coefficient of the semi-pucca and pucca housing is positive and statistically significant predictor of BMI. The women living in better housing condition implies more income, which in turn implies consumption of nutritious food or in other words leads to better health. The structural factors effect is significant.

This chapter shows that the health status of rural Muslim married women is very poor especially for reproductive women and aged women who are under the menopause age group. They are facing different types of health problems due to their poor condition

as their per-capita income and expenditure are very poor. Even they are not able to spend more money for their medical purpose. The mainly depend on the public health care facilities. So, it is very important to observe what the health infrastructures available in the rural area are for them and kind of facilities they have in the Cachar district which is discussed in the following chapter.