Chapter 5
Gender Perspectives in Health-Related Situation in Rural Bangladesh: A Microlevel Study

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Abstract Bangladesh has a success story in achieving the Millennium Development Goals, especially those related to women's development. Women's participation in income-generating activities, education, and politics has also increased significantly in the recent years. Under the circumstances, the proposed study endeavors to discover the gender perspectives in health-related situation in a village named Kathalbari situated in northern Bangladesh. Using social survey method, heads of household and their spouses were interviewed using structured questionnaires to know about their health-related situation and practices. Data have been processed and analyzed using SPSS software. Factors that affect health condition of men and women have been identified using binomial logistic regression. The findings suggest that disparity between men and women regarding getting nutritious food, maintenance of necessary hygiene, and seeking medical care is not very conspicuous. Among many variables, ownership of land and age affect men's health condition, while women's health condition was significantly affected by age and use of contraceptives (significance level 0.05).

Keywords Gender · Health-related situation · Kathalbari village · Bangladesh

5.1 Introduction

Article 25 (1) of the Universal Declaration of Human Rights states, "[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control" (United Nations 2015). Article 2 of the same document declares "[e]

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veryone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. . . .” Therefore, as human beings, all men and women have equal right to get ample opportunity to remain healthy and to get access to health care. As Bangladesh has endorsed this document, the people of this country also deserve the same.

The World Health Organization (1946) defines “health” as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” Sociologists contend that the concepts of “health” and “illness” are social constructs. Rather than having a universal meaning, connotation of such concepts is influenced by culture, experience, time, place, etc. (Conrad and Barker 2010).

There are several models that explain issues relating to health and illness in sociology, e.g., biomedical model, social model, etc. According to the biomedical model, illness—either mental or physical—occurs when some measurable physiological departure takes place from what is recognized as “normal” or “healthy” (Strickland and Patrick 2015). This model does not take into account socioeconomic, cultural, and environmental variables, which are emphasized by the social model. The author of this chapter underscores the need to consider factors that help people to remain healthy as well as those that help one to get well when they are sick. For this reason, instead of using the concept of “health,” the author uses the term “health-related situation” in which culture and socioeconomic-demographic aspects, time, and space as well as people’s access to health-care system have been brought under consideration.

Bangladesh is a country where inequity is high with a Gini coefficient of 0.32. Health-related situations vary in this country with changes in various factors such as geographic region, rural-urban location, wealth, gender, etc. (UNICEF 2015). According to Britt et al. (2010), “gender equity and positive health outcomes are mutually reinforcing.” In order to address this issue in a patriarchal society like Bangladesh, this paper endeavors to study the health-related situations from a gender perspective in a rural setting of northern Bangladesh.

At a certain point in time, baby boys naturally outnumber baby girls by a ratio of 105:100 (WHO 2018). However, according to Amartya Sen (1990), this usual trend found in developed countries was not observed in India or North Africa, owing to gender disparity in the distribution of food, access to medical care and social services, etc. Similar was the situation of women in Bangladesh until the recent past. During the second half of the twentieth century, women’s life expectancy at birth in Bangladesh was 49 years or below. During the first few years of this millennium, service of a trained doctor was not available to about 30% of the dying patients, and prenatal checkups were not done by 60% of the expectant mothers. People in the rural areas in particular enjoyed very little access to health-care facilities. The poor were also deprived of such services (Rahman et al. 2005).

At present average life expectancy at birth in Bangladesh has risen up to 72 years (UNDP, Bangladesh 2017). The Human Development Index reveals that an improvement by 46% had taken place in between 1990 and 2013 (UNICEF 2015). Findings of a study carried out in 2009 showed that female under-five mortality rate

(U5MR) was 20% lower than that of boys (UNICEF 2011). Maternal mortality rate reduced from 4.5/1000 live births in 1998 (Ahmed et al. 1998) to 1.7/1000 live births in 2014 (The Daily Star 2014). Similarly, many significant visible changes have occurred in women's socioeconomic position, lifestyle, and empowerment. Bangladesh has a success story in achieving the Millennium Development Goals, especially in reducing head-count poverty, primary school enrollments, gender parity in primary and secondary education, improved immunization coverage, and under-5 mortality rates (UNICEF 2015). Women's participation in income-generating activities, education, and politics has also increased significantly. A finding of a research conducted by Asaduzzaman et al. (2015) was that 88% of the respondent women contributed to increase their household income. Gender Gap Report, 2017 shows that the position of Bangladesh is 47th among 144 countries (placing the country with the least gap on top), based on the criteria of "political empowerment, economic participation and opportunity, educational attainment and health and survival," leading the list of South Asian countries (Rezvi 2017).

Nevertheless a study conducted in a remote village of Chandpur district found a "very poor" condition of women's health. Women aged between 15 and 49 suffered from various diseases, including fever, diarrhea, skin diseases, asthma, reproductive tract infection, and gynecological diseases (Paul et al. 2014). According to a report of 2015, only 40% of the population enjoys government medical facilities, and malnutrition is persistent in all age groups. Poverty prevents the poor from getting minimum access to secondary−/tertiary-level medical care, although the government tries to provide primary health-care services through union-level health centers and upazila (thana) health complex hospitals (Prince 2015). The major public health concerns in Bangladesh according to Mohammad et al. (2016) are childhood malnutrition; unsanitary living conditions; food contaminated by toxins, microbial pathogens, and chemical substances; TB; pneumonia; cancer; diabetes; chronic cardiovascular disease; chronic respiratory disease; etc. Under the circumstances, this study endeavors to discover the gender perspectives in health-related situation in a village named Kathalbari situated in northern Bangladesh. More specific objectives of the study and its methodology are given below.

5.2 Objectives of the Study

The specific objectives of this study are as follows:

1. To examine the socioeconomic and demographic conditions of the people of the study village;
2. To study the health-related situation for men and women in the village;
3. To depict the differences in the health-related situation for men and women in the village (if any).

5.3 Methods

Social survey method has been used for this study. The study locale was a village named Kathalbari, located in Katabari Union of Gobindaganj Thana within Gaibandha District under Rangpur Division. The area is situated in northern Bangladesh. There were 303 households in the village at the time of data collection (January to March, 2018). To get actual information, the head (usually a male) and his wife of each household were interviewed (using structured schedules) by some interviewers appointed by the researcher. Attempts have been made to include all the households. However, as the questionnaires included some personal questions, some residents in the village declined to participate as a respondent. At the end of the survey, the number of respondents stood at 199. Even among these 199 respondents, not all the questions were answered by all respondents. The data were processed and analyzed using SPSS software. Statistical procedure of binomial logistic regression has been applied to show the socioeconomic and demographic factors that can predict the health condition of men and women.

5.4 Socioeconomic and Demographic Condition of the Respondents

Socioeconomic conditions make up a significant share of the health-related situation in any area. Having information on age, occupation, income, etc. helps us to understand the extent to which these factors affect people's awareness on health issues and also determine whether they would or would not avail medical services (Khanum et al. 2003). Hossen (2014: 109) is of the opinion that socioeconomic factors rather than medical care influence "the most important antecedents of human health." Owing to its prime importance, information on various socioeconomic factors is presented in this section before delving into more particular health-related aspects.

Table 5.1 portrays that more than 91.4% of the households under study earned less than 15,000 taka (183 US$) per month. With such an income, it is difficult to maintain a healthy lifestyle. However, most of the respondents opined that they were feeling healthy at the time of data collection.

Table 5.1 Family income

Amount of income per month (taka)[a]	No. of respondents	Percent
<5000	89	44.7
5000–15,000	93	46.7
15,000–30,000	13	6.5
30,000–50,000	4	2.0
Total	199	100.0 (Approx.)

[a]1 US$ = 82 taka

Table 5.2 Occupation of the heads of household

Occupation	No. of respondents	Percent
Service	15	7.9
Business	1	0.5
Farmer	164	86.8
Others	9	4.8
Total	189	100.0

Table 5.3 Amount of cultivable land owned by the respondents

Social status	No. of respondents	Percent
No cultivable land	81	40.7
Less than one bigha[a]	15	7.6
1–3 bighas	46	23.1
3–9 bighas	41	20.6
More than 9 bighas	16	8.0
Total	199	100.0

[a]1 bigha = 0.33 acres

A village or a rural area is often characterized by the occupation of its residents. It is expected that most of the residents of a village would earn their living through agriculture—be it as a land owner or a tenant. Table 5.2 shows occupation of the heads of households who are usually male in Bangladesh. Accordingly, in this study, all the heads of households were men. Among the respondents, only 1 was a businessman, and 15 (7.9%) were service holders. Nine of them earned their living by engaging in other occupations, including teaching in a school or a *madrasa* (a school that emphasizes Islamic teachings). However, almost 87% of the respondent heads of household in Kathalbari village earned their living through agriculture proving it as a typical rural area.

In rural areas, ownership of land is sometimes more important than pecuniary income. Table 5.3 presents the amount of cultivable land owned by the respondents. It shows that more than 71% of the respondents owned less than one acre of land. Only about 30% of the households owned more than three *bighas* (1 acre) of land. We observe that marginalization regarding ownership of cultivable land has already occurred in Kathalbari.

Level of education achieved by the respondents is an indicator of their income, lifestyle, and well-being. In developing countries, mother's education is said to be an important indicator of children's survival and health as well as their education (see Akmam 1997, 2001). Women's education is also related to reduction of fertility rate (Akmam 2002). Table 5.4 reveals that a higher proportion of men (18.7%) were illiterate than women (12.4%) in the study village. This could be due to the fact that the government and NGOs have undertaken various types of initiatives for girls' education in particular since the 1990s. Besides, husbands are usually 5–10 years older than wives meaning that the wives might have received better educational opportunities than their husbands. A higher percent of women have been

Table 5.4 Level of education of the male and female respondents

	Male		Female	
Level of education	No. of respondents	Percent	No. of respondents	Percent
Illiterate	37	18.7	24	12.4
Literate	49	24.7	52	26.8
Primary	41	20.7	49	25.3
Secondary	53	26.8	68	35.0
Tertiary	18	9.1	1	0.5
Total	198	100.0	194	100.0

Table 5.5 Religion of the respondents

Religion	No. of respondents	Percent
Islam	173	86.9
Hinduism	26	13.1
Total	199	100.0

Table 5.6 Age of male and female respondents

	Male		Female	
Age (in years)	No. of respondents	Percent	No. of respondents	Percent
15–25	3	1.5	18	9.3
26–40	98	49.2	103	53.1
41–50	48	24.1	45	23.2
51–60	37	18.6	26	13.4
More than 60	13	6.5	2	1.0
Total	199	100.0 (Approx.)	194	100.0

educated up to the secondary level (35%) than men (26.8%). However, much greater proportion of men ($n = 18$, 9.1%) achieved tertiary-level education than women ($n = 1$, 0.5%).

Table 5.5 portrays religion of the respondents. Often religions prescribe or prohibit certain acts that are likely to affect one's health. Among the 199 households of Kathalbari under this study, 86.9% ($n = 173$) were Muslim, and 13.1% ($n = 26$) were Hindu.

Age of an individual naturally affects one's health condition. Usually people suffer less from diseases in between 15 and 45 years of age, the working age. As people grow older, their morbidity rate increases. Thus age is an important demographic factor to consider while studying health condition. Among the respondents of this study, heads of households (males) are relatively older than their wives. It is more or less a cultural norm in patriarchal societies like Bangladesh that wives would be younger to their husbands. Table 5.6 shows that 73% of the men and 76% of the women belonged to the age group of 26–50 years. More than 25% of the men were aged more than 50 years while only 14% of the women belonged to that age category.

Table 5.7 Number of members in household

No. of members	No. of respondents	Percent
Three	2	1
Four	149	74.9
More than four	48	24.1
Total	199	100.0

Table 5.8 Type of house

Type of house	No. of respondents	Percent
Kacha	135	70.7
Semipaka	16	8.4
Pakka	40	20.9
Total	191	100.0

Table 5.9 Number of rooms in the house

No. of rooms in the house	No. of respondents	Percent
One	3	1.5
Two	132	67.7
Three	41	21.0
Four	17	8.7
More than four	2	1.0
Total	195	100.0 (Approx.)

Joint families are now breaking up into nuclear families that comprise of husband, wife, and their unmarried children. Hence, the average number of members in family (family size) is naturally decreasing. Moreover, birth control practices are keeping family size small. In the study area, more than 75% of the households had only four members or less in their families (Table 5.7).

The type of house one lives in negatively affects his/her health if it is not congenial to good health. As portrayed in Table 5.8, more than 70% of the respondents of this study lived in *Kacha* houses (wall and floor made of mud with a roof made of bamboo and straw or corrugated iron sheets). Almost 21% lived in *Pakka* houses (concrete roof and floor, wall of bricks) and 8% lived in Semi*paka* houses (concrete floor, brick walls, and roofs made of corrugated iron sheets).

Number of rooms of a house usually represents the size of the house as well as the extent of privacy maintained. Most of the respondents (67.7%) lived in two-room houses while 21% lived in houses with three rooms (Table 5.9).

Nowadays, a house without electricity is unthinkable. Although electricity connection is still not available in all parts of Bangladesh, 98% of the respondents in Kathalbari enjoyed electricity connection (Tables 5.10).

The main source of safe drinking water in the study village was tube well. Access to safe water is essential for healthy living. Table 5.11 confirms that 99% of the respondents had a tube well within their home compound. Although tube wells of some areas of Bangladesh are badly contaminated by arsenic, the study village Kathalbari is free of such menace.

Table 5.10 Whether residence has electricity connection

Whether residence has electricity connection	No. of respondents	Percent
Yes	192	98.0
No	4	2.0
Total	196	100.0

Table 5.11 Whether the house has a tube well

Whether the house has a tube well	No. of respondents	Percent
Yes	189	99.0
No	2	1.0
Total	191	100.0

Table 5.12 Type of toilet

Type of toilet	No. of respondents	Percent
Sanitary	102	51.3
Non-sanitary	97	48.7
Total	199	100.0

To maintain hygiene, a sanitary latrine/toilet is a must. In Kathalbari, it is observed that only 51.3% of the respondents had sanitary toilets in their houses. This shortcoming has to be overcome to ensure health for all in the village (Table 5.12).

5.5 Health-Related Situation in Kathalbari: Gender Perspectives

All the social, economic, demographic, and environmental factors along with access to health care comprise the health situation of a particular area. Health situation involves consumption of a balanced diet, maintenance of hygiene, and access to health care. Health situation in Kathalbari is described below on the basis of these three conditions mentioned above.

As we have seen in Table 5.1, monthly income of the villagers was quite low. With such an income, it is difficult to manage protein-rich food items like meat and fish everyday for everyone in the house. Eggs are also a good source of protein. In Kathalbari, women of many households kept chickens to get eggs and to have meat when necessary. At the time of their need, they also sold those chickens and eggs to get hard cash. Table 5.13 shows that 34.2% of the women respondents never ate meat/fish/eggs. However, all of the male respondents consumed these protein items at least once a week. Surprisingly, however, we observe that while only 22.1% of the male respondents consumed protein items everyday, 48.7% of the women enjoyed the same.

Table 5.13 Consumption of meat/fish/egg by the male and female respondents

Consumption of meat/fish/egg per week	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Never	0	0	68	34.2
1–2 days	5	2.5	0	0
3–4 days	113	56.8	6	3.0
5–6 days	37	18.6	28	14.1
Everyday	44	22.1	97	48.7
Total	199	100.0	199	100.0

Table 5.14 Consumption of dal by the male and female respondents

Consumption of dal per week	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Never	0	0	6	3
1–2 days	57	28.9	0	0
3–4 days	120	60.9	35	17.7
5–6 days	18	9.1	129	65.2
Everyday	2	1.0	28	14.1
Total	197	100.0 (Approx.)	198	100.0

Table 5.15 Consumption of milk by the male and female respondents

Consumption of milk per week	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Never	2	1	0	0
1–2 days	45	22.6	70	35.2
3–4 days	84	42.2	30	15.1
5–6 days	16	8.1	73	36.7
Everyday	52	26.1	26	13
Total	199	100.0	199	100.0

Dal (split pulses) is a kind of bean-like crop, rich in protein consumed by almost all people in Bangladesh. There are many types of *dal* including lentils, chickpeas, *mung*, etc. *Dal* is a source of vegetable protein, which doctors recommend to those who cannot afford to eat animal protein. Table 5.14 shows consumption of *dal* by the male and female respondents. The table clearly shows that women consume dal more often than men—whereas 14.1% of the female respondents consumed *dal* everyday, and only 1% of the male respondents did the same.

Milk is a good source of protein, carbohydrate, vitamins, and minerals. Women usually suffer from calcium and iron deficiency and doctors advise them to take milk and milk products (e.g., yogurt) as a remedy. Consumption of milk is therefore taken in this research as a criterion of being in good health. According to Table 5.15, on an

Table 5.16 Consumption of vegetables by male and female respondents

Consumption of vegetables per week	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Never	0	0	3	1.5
1–2 days	44	22.1	28	14.1
3–4 days	151	75.9	3	1.5
5–6 days	2	1.0	0	0
Everyday	2	1.0	165	82.9
Total	199	100.0	199	100.0

average, consumption of milk is similar for men and women. Even though 13.1% of the female respondents took milk everyday, 26.1% of the males consumed milk everyday.

Consumption of vegetables is necessary for a balanced diet. Vegetables provide us with necessary vitamins and minerals. Among the respondents we find that women by far consumed more vegetables than men. In rural areas of Bangladesh, women usually keep kitchen gardens in which they grow vegetables. Thus vegetables are more easily available to them than meat and fish (Table 5.16).

5.6 Maintenance of Hygiene

Like eating a balanced diet, it is also important to maintain personal hygiene as well as hygiene of the household as a whole. In rural Bangladesh sexual division of labor imposes the duty of cooking food and keeping the house clean on women. They also are in the charge of doing the laundry. It is to be mentioned that all these works are done manually that require a lot of physical labor.

To do their laundry, the women used both detergent powder (92.6%) and laundry soap (16.6%) depending on the type of clothes they washed. Most frequently they used tube well site (77%) and local pond site (15%). Apart from cleaning the rooms, it is necessary to clean the toilet as well. Contagious and communicable diseases for the most part spread through the toilet. So it is important to clean the toilet regularly. More than half of the respondents (52.8%) cleaned the toilet once a week and 7.5% cleaned the toilet everyday. Most of the respondents used toilet cleaning detergent to clean their toilets.

The usual place to wash dishes for a huge majority of the female respondents was the tube well site (93.5%). However, to clean the dishes, most of them (57.3%) used ash (burnt fuel wood/fodder). Almost 41% used dishwashing detergent. Many rural women think cleaning dishes (especially those made of aluminum) with ash makes them shinier. Moreover, it saves them the extra expenditure for dish cleaning detergent.

Table 5.17 Substance used by respondents to wash their hands after using toilet

	Male		Female	
Substance	No. of respondents	Percent	No. of respondents	Percent
Soap	104	52.5	98	50.0
Ash	49	24.7	89	45.4
Soil	45	22.7	9	4.6
Total	198	100.0 (Approx.)	196	100.0

Table 5.18 Whether wears sandals while using toilet

	Male		Female	
Whether wears sandals while using toilet	No. of respondents	Percent	No. of respondents	Percent
Yes	197	99.5	195	99.5
No	1	0.5	1	0.5
Total	198	100.0	196	100.0

It is necessary to maintain hygiene and be cautious while preparing food. In order to retain vitamin A of vegetables, it is suggested by doctors to wash vegetables before cutting and not vice versa. Among the respondents of Kathalbari, 93.5% washed the vegetables after cutting them. Washing the vegetables after cutting them drained away the vitamins that were soluble in water (e.g., Vitamin A). It is also important to keep food covered to keep it safe from flies and other insects. Among the respondents 74% said that they were not able to keep their food covered all the time. Naturally it is expected that many people would suffer from stomach disorders. The villagers did, however, put their garbage in one specific place, to keep germs from spreading (97%). Maintenance of hygiene requires cutting one's nails regularly. Among the respondents 92% cut their nails every week. To cut their nails, they mostly use razor blades (60.8%) and nail cutters (35.2%). A huge majority of the women (96%) took their bath at the site of tube wells, and 76% used bathing soap everyday while taking their bath. It is to be mentioned that the tube well sites in most cases were fenced on four sides without a roof.

People all over Bangladesh are now aware of the importance of washing their hands after using the toilet. Washing hands with only water is not sufficient. So, respondents used soap, ash (of fodder/fuel wood, etc.), and even soil to clean their hands. Table 5.17 shows that larger number of women used ash (45.4%) as compared to soil, which tends to be more often used by men (22.7%) in Kathalbari.

Wearing sandals while using the toilet is very important to be safe from various germs that cause diseases. Table 5.18 shows that this practice is equally prevalent among males and females.

The most important question this paper aims to answer is whether male and female respondents of Kathalbari felt completely healthy or not. Almost 73% of the men and 76% of women said they felt completely healthy at the time of the interview (Table 5.19).

Table 5.19 Whether feels completely healthy or not

Whether feels completely healthy or not	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Yes	145	72.9	152	76.4
No	54	27.1	47	23.6
Total	199	100.0	199	100.0

Table 5.20 Common diseases the respondents suffered from

Most common diseases the respondents suffered from	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Cold/flu	27	13.6	5	2.5
Fever	108	54.3	11	5.5
Headache	120	60.3	6	3
Toothache	45	22.6	7	3.5
Stomach problems	42	21.1	47	23.6
Diabetes	0	0	15	7.5
Female disease	0	0	139	69.8
Others	9	4.5	3	1.5

Multiple response accepted

Table 5.20 depicts the common health problems the respondents suffered from. Among men, fever, headache, toothache, and stomach problems were common. Among women, female diseases occupied the most common health problems. Diabetes was observed among 7.5% of the women.

5.7 Access to Health Care

In order to understand the situation regarding the respondents' access to health care, a short description of the types of treatment available to them is necessary. There is a union health center at 2 km distance and an upazila health complex hospital run by the government at 7 km distance from Kathalbari. Union health center provided some primary treatment, while upazila health complex hospitals provided relatively more specialized facilities. If a patient needs better treatment, they are referred to Shaheed Ziaur Rahman Medical College Hospital, Bogra, Rangpur Medical College Hospital, or even to hospitals situated in Dhaka, the capital.

Under private management some qualified MBBS (Bachelor of Medicine and Bachelor of Surgery) doctors treated patients at a place known as Bagda about 1.5 km from Kathalbari. There was also a treatment provider known as *Kaviraj* who provided herbal treatment. Usually women sought this kind of treatment. Moreover, there was a homeopath doctor to whom people went for treating specific

Table 5.21 Type of treatment availed by the respondents

Type of treatment used by respondents	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Kaviraj (herbal)	0	0	14	7
Govt. health center/complex	60	30.2	192	96.4
MBBS doctor (private)	23	11.6	106	53.3
Village doctor	166	83.4	155	77.9

Multiple response accepted

types of disease, like female diseases. Further more, there were some "village doctors" who prescribed and provided medicine to the villagers just on the basis of their experiences of selling medicines at drug stores. They did not have any specific degree or training.

Table 5.21 shows the type of treatment the male and female respondents availed when they were sick. According to Hossen and Westhues (2011), location, monetary requirements, "bureaucratic responses to the patient," sex of the health worker and social distance between service seeker and provider, and sex of providers create barriers to women's accessibility to medical care.

It is evident from Table 5.21 that women of Kathalbari sought medical care from various types of health-care providers, even from those that were situated at a distance. Village doctors provided treatment at a low cost. Although they did not have any medical degree, the medicines they prescribed and provided relieved the patients of their sufferings. That is why more people preferred to go to them for treatment.

Doctors who served at the government health centers and health complex hospitals were mostly male. However, they (women) could (83.4%) talk to them about their health problems without hesitation. Thus the barriers mentioned by Hossen and Westhues (2011) do not appear to be functioning in this village. The respondents were asked whether they provided same types of treatment for male and female members of their families. To this question only 67 women respondents responded. Among them, 92.5% have said that they took similar types of initiatives for the treatment of the female and male members of their families.

Table 5.22 depicts the amount of money spent per month by the male and female respondents. All the women respondents were informed that they had to spend some money for treatment purposes, be it a small amount. Three (1.5%) of the male respondents did not spend any money for treatment. The table reveals that on an average, women spent more money for medical purposes than men. More than 88% of the women spent 200–1000 taka, while that amount of money was spent for medicine by 66% of the male respondents. Ninety eight percent of the male respondents themselves paid for their treatment, while spouse/daughter of the remaining male respondents paid for their treatment. Among the respondents 86% women and 78% men were content with the health services they received. Those

Table 5.22 Amount of money spent per month on medicine

Amount of money spent per month on medicine	Male		Female	
	No. of respondents	Percent	No. of respondents	Percent
Do not spend any money	3	1.5	0	0
100–200	60	30.3	21	10.7
200–500	99	50.0	112	57.1
500–1000	32	16.2	62	31.6
More than 1000	4	2.0	1	0.5
Total	198	100.0	196	100.0 (Approx.)

who were not content complained about the high cost, low standard of treatment, and the distance of the health complex.

Among the respondents, 97.5% of the male and 96% of the female took vaccines to prevent five common diseases—diphtheria, measles, polio, tetanus, and whooping cough. Almost all of the women took necessary vaccines during pregnancy. A higher percent (96.5%) of the females visited government health center/complex than the males (30.2%). Only about 40% of the female respondents and 33% of the male respondents received necessary medicine at the government health center. Eighty two percent of the male and 96% of the female respondents reported that the behavior of the health workers at the health center/complex was neither good nor bad. Only 28% of the males but 90% of the females have opined that the doctors at the health complex considered their problems seriously, with care. Fifteen percent of the male respondents and only 0.5% of the female respondents have been informed that the doctors came to their houses for treatment upon request.

5.8 Reproductive Health of Women

Factors related to the reproductive health of women significantly affect their health condition as a whole. Although 76.4% of the female respondents of this study have expressed that they felt "completely healthy," while responding to another question, 132 out of 192 women (69.3%) have reported that they suffered from one or more female diseases. Only 131 women have given information on the type of problems they suffered from—126 (63.3%) said they suffered from leucorrhoea and 5 (2.5%) from irregular menstruation. Only 63 of them have informed the type of treatment they sought to treat these diseases. Among them 20 (31.7%) availed kaviraji (herbal) medicine, 30 (47.6%) sought advice of homeopath doctors, and 13 (20.6%) used other forms of treatment including allopathic medicine. All of those who suffered from female diseases informed about these problems to their family members—mostly to their husbands (99.3%). Only one woman shared about her female disease with her mother-in-law. This information shows a sharp variation with the finding of Khanum (2002) that rural women tried to conceal information regarding their female

diseases from their husbands and mothers-in-law. It also proves that the relationship between husband and wife is becoming easy, which allows them to share all types of information with each other, without a sense of vulnerability of being deserted because of his/her illness.

Women respondents' experiences of childbirth help to better understand the scenario regarding their reproductive health. Among the 199 respondent women, only one had given birth to their youngest child 1–3 years ago. Most of them (92%) had given birth at least 6 years back. This information indicates a low fertility rate in the village.

In a study by Roy and Shengelia (2016), it was found that traditional birth attendants conducted three fourths of all deliveries at home. Such unskilled deliveries were directly related to rural residence and lower level of education. Similar were the findings of Walton and Schbley (2013)—the risk of postpartum morbidity increased at the hands of unskilled birth attendants in rural areas who were not able to follow the proper birth practices. Among the respondent women in Kathalbari, 43.2% had given birth to their youngest child at home, 27.1% had given birth at government union/upazila health center, and 26.6% had their babies delivered at hospitals/clinics situated in district towns.

During their pregnancy, 95% of the respondent women sought medical advice—97% went to union-level health centers, 26% went to upazila health complex, and almost 50% sought advice at doctors' private chambers. It is to be noted that respondents sought advice from more than one place. However, at the time of delivery, only 2.5% got help of a doctor, 40.7% took assistance of a trained midwife, and 44.2% had their babies delivered by a nurse. Only one respondent spoke of complication during their last pregnancy. She had developed diabetes during that period. Among the 199 respondents, only 5 (2.5%) said that they took increased amount of food during pregnancy and 2 (1%) avoided consumption of *dal* as a precaution.

Male and female respondents were asked about the use of contraceptives. All the female respondents responded to this question, but the answer was received from only 156 male respondents. Almost all the women (96%) and men (98.1%) who answered the question used contraceptives either at the time of the interview or previously for birth control. Majority of the women took pills (63.8%), while others took injections (37.2%) as means of birth control. Condom was the only means used by men.

Maintenance of hygiene during menstrual period is a part of reproductive health of women. Of the 199 respondents, 94 (47.2%) used sanitary napkins, and 90 (45.2%) used old cloth during this period. Fifteen respondents abstained from answering this question. Those who used cloth reused them by washing. They used tube well water and soap to wash the cloth. Most of them (60%) dried the cloth in sunlight, but the rest dried the cloth at a corner of a room, so that people cannot see it. However, this practice opens possibility of infection and female diseases in the long run.

5.9 Impact of Socioeconomic and Demographic Factors on Health of Respondents

Binomial logistic regression analysis was carried out for men and women respondents separately to ascertain the gender-segregated effects of some socioeconomic and demographic variables thought to be associated with a respondent's being healthy. In the logistic regression analysis on the basis of data for men, religion, whether satisfied with food intake or not, type of toilet, family size, whether satisfied with treatment received, family income, education level, age, protein intake, milk intake, type of house, occupation, and amount of land were the independent variables, and the dependent variable was whether a male respondent felt completely healthy or not. The logistic model was statistically significant, $\chi^2(13) = 27.402$, $p < 0.010$. The model explained 23.8% (Nagelkerke R^2) of the variance in remaining healthy and correctly classified 75.3% of cases. Increasing age was negatively associated with a man being healthy, and amount of land was positively associated with men being healthy at the significance level of 0.05 (Table 5.23).

In the logistic regression analysis on the basis of data of women, religion, type of toilet, whether satisfied with treatment received, family income, education level, age, protein intake, milk intake, type of house, and whether uses contraceptives or not were the independent variables, and the dependent variable was whether a female respondent felt completely healthy or not. The logistic model was statistically significant, $\chi^2(10) = 25.389$, $p < 0.005$. The model explained 18.9% (Nagelkerke R^2) of the variance in remaining healthy and correctly classified 77.2% of cases. Increasing age and use of contraceptives were negatively associated with a woman being healthy at the significance level of 0.05. Protein intake was positively associated at the 0.10 significance level, and living in a kacha house was negatively associated with women being healthy at significance level 0.10 (Table 5.24).

5.10 Conclusions

From the findings of the research, it can be said that despite having low income, the health-related situation in Kathalbari was not very bad for its inhabitants. A positive sign was that almost all the men and women respondents were vaccinated. However, almost half of the households did not use sanitary toilets. This is an issue that needs due attention. The gap between men's and women's level of education was not very wide. Overall differences between men's and women's health-related situations did not appear to be conspicuous. Women's access to different types of health-care providers was not restricted. Rather, women availed more options of health care than men. More women visited the upazila health complex than men to get health care, although it was situated at a distance from the village. Nevertheless, we observe some differences in consumption of food among men and women—relatively low-cost food (*dal* and vegetables) were consumed by women in greater amounts.

Table 5.23 Results of binary logistic regression analysis (men)

Independent variables	B	SE	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Religion_	0.029	0.585	0.003	1	0.960	1.030	0.327	3.243
Whether satisfied with food intake	−20.793	27777.778	0.000	1	0.999	0.000	0.000	.
Type of toilet	−0.652	0.573	1.295	1	0.255	0.521	0.170	1.601
Family size	−0.288	0.516	0.312	1	0.576	0.750	0.273	2.061
Whether satisfied with treatment received	−0.662	0.482	1.883	1	0.170	0.516	0.200	1.328
Family income	−0.496	0.493	1.013	1	0.314	0.609	0.232	1.601
Education level	0.153	0.502	0.093	1	0.761	1.165	0.436	3.114
Age	−1.097	0.476	5.313	1	0.021	0.334	0.131	0.849
Protein intake	0.485	0.471	1.058	1	0.304	1.623	0.645	4.086
Milk intake	0.016	0.593	0.001	1	0.979	1.016	0.318	3.244
Type of house	−0.793	0.543	2.128	1	0.145	0.453	0.156	1.313
Occupation	−0.193	0.528	0.134	1	0.714	0.824	0.293	2.318
Amount of land	0.960	0.487	3.891	1	0.049	2.612	1.006	6.783
Constant	21.481	27777.778	0.000	1	0.999	2133435618.284		

Table 5.24 Results of binary logistic regression analysis (women)

Independent variables	B	SE	Wald	df	Sig.	Exp (B)	95% C.I. for EXP(B)	
							Lower	Upper
Type of toilet	−0.582	0.523	1.241	1	0.265	0.559	0.200	1.556
Family income	−0.619	0.427	2.101	1	0.147	0.539	0.233	1.244
Type of house	**−0.973**	0.510	3.645	1	**0.056**	0.378	0.139	1.026
Education level	0.188	0.424	0.197	1	0.657	1.207	0.526	2.768
Age	**−1.053**	0.408	6.666	1	**0.010**	0.349	0.157	0.776
Milk intake	0.557	0.480	1.350	1	0.245	1.746	0.682	4.470
Protein intake	**0.870**	0.474	3.360	1	**0.067**	2.386	0.942	6.045
Religion	0.861	0.600	2.058	1	0.151	2.365	0.730	7.667
Whether uses contraceptives	**−1.914**	0.960	3.972	1	**0.046**	0.148	0.022	0.969
Satisfaction with treatment received	1.262	0.888	2.020	1	0.155	3.534	0.620	20.144
Constant	−0.140	1.468	0.009	1	0.924	0.869		

Apart from the natural factor of age, the variables that were found significantly associated with men's and women's health condition were different. While men's health condition depended on their ownership of land, women's health tended to be dependent on consumption of protein, type of house, and whether they used contraceptives or not. A huge number of women (almost 70%) suffered from female diseases. More research needs to be carried out on the effects of contraceptives, as its negative effect has been observed on women's health. This issue must be addressed immediately by the government and the policy planners. Many men and women were observed availing treatment of village doctors, who did not have any professional training. Although the symptoms suffered by the villagers may subdue to some extent by the medicines prescribed by these doctors, the side effects of such medicines can be dangerous, even fatal, as these doctors often fail to prescribe the correct doses. Women have to be more careful in covering food and washing vegetables before cutting them into pieces. Awareness level must be raised in these aspects of health.

Amount of land has appeared as the social class related factor that significantly affected men's health condition. As women did not have direct access to the income received from landed property, their health situation depended more on direct consumption of protein (meat/fish/egg) and living in *pakka* house, which the poor can seldom afford. Therefore, as Islam and Biswas have suggested, "[e]quity must be the guiding principle in developing the health policy in Bangladesh. Under stewardship of the government there must be determination and a strategic vision to improve and strengthen both public and private sectors" (Islam and Biswas 2014).

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