

Health and Hygiene Condition of Female Tea Workers: A Study in Three Tea Gardens of Sylhet District

Abstract

Tea garden workers are the most deprived section in Bangladesh, especially female tea workers. The present study is an attempt to explore the health and hygiene condition of the female tea laborers, especially laborers of the Malnichara, Lakkatoorah and Tarapur tea estate in Sylhet district. The study was conducted through personal interview with 80 purposively selected sample respondents. The study reveals that about almost are illiterate. Nearly 70% are living in extended type of family and their household's monthly income is between 5000-6000 Taka, where as their monthly family expenses is almost equal with their earnings. Therefore, it was observed that the female laborers are suffering from various disorders like fever, skin problems, diarrheal diseases, cough, hypertension, gastric problems, etc. Significant percentages (76%) of female laborers do not get opportunity to take foods during working hour. Around 86% revealed that they do not reach proper nutritional facilities due to lack of knowledge and economic insolvency. Study showed that health services of tea estates are not satisfactory. Highest 65% disclosed that they are using water from river, canal, lake for cooking proposes. A noteworthy portion (78%) of female tea workers does not wash their hands before eating or after toilet. Majority of the respondents use ordinary shared latrine and these are not sanitary. Maximum laborers usually throw their garbage's in open places, which contaminated the estates environment. Finally, areas and context-specific data are essential to raise awareness among the tea gardeners about female workers rights and also for future policies, effective surveillance initiatives.

Keywords: Health and hygiene, female workers, tea garden and Sylhet

1. Background of the Study

Bangladesh is one of the largest tea contributors among south Asian countries in world's tea market as well as a good consumer of tea. The tea industry is one of the largest labor oriented

industry in Bangladesh. Tea industry occupies an important role in the economy of this country. A large portion of the population of the state is directly and/or indirectly dependent on this industry, with diversified origin, caste and culture. In Bangladesh, there are 358,550 workers are now working in around 164 tea gardens (Chowdhury et al. 2011). According to Khan et. al. (2012) on an average, Bangladesh produces 63 million kilograms tea annually which is 0.81 % to GDP and about 1.0% to export earnings (Hossain, 2011). Among tea workers more than seventy five percent are women and plucking leaves is their principle duty (Majumdar and Roy, 2012). The very future of tea gardens greatly depends on tea laborers who spend most of their life in the tea garden. But, so to speak, they have been living in misery from the very beginning of the establishment of tea gardens in Bangladesh. It is very real scenario that women workers of tea garden do not get actual evaluation in terms of financial and social aspects through giving hard working whole day long as well as deprived of minimum level of facilities, low nutritional status, and citizenship rights as well (Morser, 2010). There is a lot of evidence that the tea workers in Bangladesh especially women live an inferior standard of life compared to that of the major tea producing countries in the world (Hasan, 2014). In the early period, the recruited laborers were given inhuman treatment. In the eyes of the European planters, the laborers were a ‘beast in a menagerie’ (Singh *et al.*, 2006). The tea garden workers are considered to be among the poorest and most deprived section of organized labor (Sankrityayana, 2006). Livelihood status of the tea estates workers have not been changed over time. The tea garden workers of Bangladesh lead a poor life due to their low level of income (less than US\$1 for a day’s work from sunrise to sunset), which is much lower than that of the Indian tea garden workers. As a result, the workers are cannot reach to sufficient food and nutrition. They suffer diseases such as malnutrition, diarrhea, dermatitis and pregnancy problems. Deb (2000) revealed in his ‘Cross-sectional Study in Dhaka City’ that the prevalence of undernourishment and malnourishment is high among female tea laborers. Hazarika *et al.* (2006) highlighted the prevalence of hypertension among the tea garden workers in India. Historically, the opening up of tea and other plantations worldwide has been built on migrant unskilled labor and women workers constitute the majority of workers of tea garden in India and Bangladesh (Wal, 2008). An important note is that, while Bangladesh has made commendable progress in all aspects of millennium development goals from 1992 to 2015, gross disparity still exists in tea garden areas.

Now-a-days, health and hygiene condition of tea workers is an alarming problem in Bangladesh. It is a general perception that, tea worker especially women’s have lack of health

65 and hygiene related education and awareness. The women, children and adolescent girls are
66 the most vulnerable groups in terms of health and hygienic condition in tea garden. Their
67 awareness on health and healthy lifestyle was superficial, knowledge on common illnesses
68 and their prevention pattern and treatment-seeking behavior not conducive to the
69 maintenance of health (Ahmed, 2011). They are habituated in using open place or waterside
70 for defecation (The Daily Star, May 13, 2009; Ahmed, et. al., 2006; Barkat et. al., 2010). Even
71 children faeces are generally disposed to nearby water bodies or throwing in the jungle
72 (Chowdhury et. al., 2011). Open defecation causing various excreta related diseases. Women
73 are not habituated with washing hand after defecation, which raises the risk of happening
74 diseases (Ahmed, et. al., 2006). Now-a-days, estate authority provides latrine and bathroom
75 facilities to the laborers of the plantations, but these are not adequate. Due to lack of
76 maintenance, they got damaged and are mostly out of use. That is why, tea workers have to
77 use their own built latrine. But, these are not well hygienic and create various diseases.
78 Women are most susceptible group in that case (Sahoo et.al, 2010). High rate of illiteracy,
79 ignorance, social exclusion, economic hardship, etc bound them to maintain traditional life
80 without minimum opportunities. Due to traditional attitude, shortage of tube well and absence
81 of proper facility they use different sources of water for various uses. Even both human and
82 animals use the common water body and in most of the cases they are habituated in throwing
83 their household waste on these water sources (Chowdhury et. al., 2011; Das and Islam, 2006;
84 Ahmed, et. al., 2006). Although in recent years, use of tube well is increasing (Barkat, et. al.,
85 2010) but still now they have to depend on natural sources like canal, deep hole, pond etc.
86 (Ahmed, et. al., 2006; Majumder and Roy, 2012; Chowdhury and et. al., 2011) which are not
87 always safe and hygienic. Unhealthy working environment and occupational health hazards
88 remain unchanged and limited facilities bound them to cope with situation without any
89 question (The Daily Star, May 13, 2009; Majumder and Roy, 2012). Medical or treatment
90 facilities in the tea estate are very scanty. Many studies show that, women tea workers do not
91 get proper health services during the time of pregnancy. Most of the male laborers are also
92 not much aware about their wife's health. Even nearly all of them have work full time in tea
93 estate as well as in their house. This also directly creates negative impact on their children's
94 health. Sylhet is the land of tea garden in Bangladesh. In different tea estates of Sylhet city,
95 most of the female tea laborers work in the age between 15 to 45 years, when they are also
96 responsible for their reproductive role. Due to lack of proper medical facilities and awareness
97 about using contraceptive, they often face serious maternal diseases which directly make a
98 negative impact on their lives. The poor and unprivileged people usually have very little

knowledge about health and hygiene issues. Moreover lack of safe drinking water could lead to various types of diseases. Improper sanitation facilities could also be threatened their health situation. Multiple factors are influential in determining one's personal health and hygiene behavior including culture, economic condition, opportunity, etc. Even their working environment and living arrangement influence them negatively (Majumder and Roy, 2012). It is also important to note that, there is hardly any development program initiated either by the government or non-government organizations in order to improve the living standard of the tea gardeners. The present paper is an attempt to explore the female tea-garden workers health and hygienic conditions as well as their miserable life style.

1.1 Objectives of the Study

The specific objectives of this study are as follows:

- ✚ To explore the socioeconomic conditions of female tea workers.
- ✚ To identify the pattern of health & hygienic conditions female tea workers

2. Methodology of the study

Methodology is a system of methods used in a particular area of study or activity. The reliability of a research depends on the proper methodology used in the study. It is very important for any research and has to be chosen carefully to fulfill the purpose of the study. Based on the objectives of present study and considering the associated limitations with respect of time, money and other facilities, three tea-gardens (i.e. Malnichara Tea-Garden, Lakkatoorah Tea-Garden and Tarapur Tea-Garden) located in Sylhet city was selected as study area of this research. Through using snowball sampling technique, total 80 respondents were drawn from these three tea gardens. Those total 80 respondents were drawn through following sequence:

Tea Garden	Female Tea Workers
Tarapur Tea-Garden	25
Malnichora Tea-Garden	30
Lackatoorah Tea-Garden	25

Data was collected from both primary and secondary sources. For the present study, survey and observation techniques were used. Survey method is a research method that collects data from respondents through a series of questions either in the form of a questionnaire or an interview (Kothari C. R, 1990). Keeping in view of the major objectives of the study, a draft interview schedule was prepared. The draft schedule was tested and finalized after necessary

correction, modifications and adjustments. Primary data were collected from sample respondents (female tea workers) through personal interview using structured questionnaire. Data were collected only from those, who were interested to participate. Hence, all possible efforts have been made by the researcher in order to ensure that collected data were reasonably accurate and reliable. Besides, some secondary sources like necessary information, records and documents provided by the garden authority, newspaper, published reports or articles etc were also used. Data were collected from 1st January to 30th March, 2017. To analyze and interpret the data, descriptive statistics was used. Moreover, data was analyzed using MS Word and MS Excel. Then data were also presented in tabular and graphical forms with significant interpretations.

3. Result and Discussion

3.1 Socio-economic profile of the female tea garden workers

Socio-economic characteristics are very useful to determine the behavior of any community. Decision making of any individuals would be influenced by their characteristics. That is why, socio-economic background of the selected sample respondents are discussed in table 1. In the present study the age of the respondents were classified into three groups. The study showed that, the highest number (45%) of the respondents fall in age group (36-45) and the lowest 25% of the respondents were belonging under the age group of 46 or above. It was found from the survey that, Hindu was the dominant religion (90% respondents were Hindu). Moreover out of 80 respondents, 45% were illiterate but most of them were capable to sign and only 15% of respondents were completed their primary education. Afterward, highest 80% were permanent workers of the tea estates. The permanent laborers enjoyed more facilities than the momentary laborers. In case of health facility, the permanent laborers had full access to all health care services provided by the estates authority, where the temporary workers had limited or “Zero” access. It was also noticed that, 70% lives in extended type family and 30% respondent’s lives in nuclear type family. Highest 47.5% respondents revealed that, their husband is the head of their family. Only 8% disclosed that they herself, the head of their family. Among 80 respondents, 65% tea worker’s revealed that their monthly household income is 5000 to 6000 Tk. Following that, 85% respondents said their monthly family expense is below 5000 Taka. It proved their poor standard of living. Due to this, they have to confront with lot of troubles. It was also found that, 30% of the female workers had (0-10) year’s job experience whereas highest 60% revealed that their tenure is

above 30 years. Out of 80 respondents, 40% get salary on a daily basis and 5% were conducting on monthly basis followed by 55% workers on weekly basis. Temporary laborer earned on a daily or monthly basis. It was also found in survey that, 80% were received overtime fees. On the other hand, 20% said they did not get additional fee for their overtime work. But, it is also observed that, highest 70% usually get maternity leave and bonus on a regular basis.

Table 1: Socio-economic profile of the female tea garden workers

Item		Frequency	Percentage (%)
Age	25-35	24	30.00
	36-45	36	45.00
	46 and above	20	25.00
	Total	80	100
Religion	Muslim	08	10.00
	Hindu	72	90.00
	Total	80	100
Education	Only sign	32	45.00
	Illiterate	36	40.00
	Up to class five	12	15.00
	Total	80	100
Nature of job	Permanent	64	80.00
	Temporary	16	20.00
	Total	80	100
Family type	Nuclear	24	30.00
	Extended	56	70.00
	Total	80	100
Family Head	Father	24	30.00
	Mother	8	10.00
	Husband	38	47.50
	Brother	2	2.50
	Respondent herself	8	10.00
	Total	80	100
Household Income (Taka/Month)	5000-6000	52	65.00
	7000-8000	28	35.00
	Total	80	100
Household Expense (Taka/Month)	3000-5000	68	85.00
	6000-8000	12	15.00
	Total	80	100
Service of occupation (Year)	0-10	24	30.00
	10-20	04	5.00
	20-30	04	5.00
	30 and above	48	60.00
	Total	80	100
Payment system	Daily basis	32	40.00
	Monthly salary	04	5.00
	Weekly salary	44	55.00
	Total	80	100
Over time payment	Yes	64	80.00
	No	16	20.00

	Total	80	100
Maternity leave and bonus	Yes	56	70.00
	No	24	30.00
	Total	100	100

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170 **3.2 Pattern of health and hygienic conditions female tea workers**171 **3.2.1 Pattern of health conditions female tea workers**

172 Health is a state of complete physical, mental, social well-being of an individual. Health and
173 hygienic conditions of female workers is the prime objective of this study. Health and
174 hygiene facilities include medical facility, health service, nutritional facility, vaccination
175 arrangement, childbirth arrangement and water and sanitation facility, and other facilities
176 discussed and presented in this section. Table 2 shows that, among 80 respondents 68% were
177 dependent on allopathic treatment; only 14% respondents were dependent on homeopathic
178 treatment. On the other hand, only 18% of respondents prefer traditional treatment process.
179 Approximately 52% revealed that, the birth of child took place at home, while 48%
180 respondents told that it happened at hospital. Furthermore, during birth of child 42% took
181 help from midwife provided that by garden authority and 48% of respondents took help from
182 doctors. Female tea workers are more likely affected by a variety of diseases in comparison
183 with their male counterparts. Early marriage arise many risk factors especially birth of baby.
184 According to the following table, 62% of the female tea workers revealed that they got
185 married at before 18 years old. It is quite evident that, the safe maternity and child birth was
186 not satisfactory there. Study found that, about 44%, 28% and 22% of the female tea laborers
187 were affected by skin diseases, diarrheal diseases and fever respectively. It can be postulated
188 that the occurrence of infectious diseases is driven by seasonal environmental changes.
189 Research findings show that, 66% of female workers were suffered from various diseases
190 during rainy season and only 14% were experienced in winter season. Vaccination facility is
191 frequently vital for child and pregnant women to free from some severe infections. Precisely
192 70% of female tea workers supposed that vaccination facilities were offered by tea estates,
193 whereas rest 30% workers denied it. It was found from survey that, there was no health
194 insurance facility for female tea laborers in the tea estates. Literally, highest 76% of female
195 tea workers disclosed that they do not get opportunity of taking foods during working hour,
196 even as 24% revealed, they do not find it a problem. A principal fact regarding health issue is
197 the availability of nutritional facility. It is a matter of regret that highest 86% of female
198 laborers were not concerned get about it. Many reasons are associated with this problem.
199 Highest 37% had no proper understanding regarding it and 20% set reason of their financial

200 crisis. Furthermore, 42% female laborers revealed that they usually get health advices from
 201 estate's hospital, whereas 17% said they find medicine as well.

202 **Table 2: Pattern of health conditions female tea workers**

Item		Percentage
Type of treatment	Homoeopathy	14.00
	Allopathic	68.00
	Ayurvedic	18.00
	Total	100
Birth place of respondent's children	Home	62.00
	Hospital	38.00
	Total	100
Assistance during birth of child	Doctor	48.00
	Midwife	42.00
	Others	10.00
	Total	100
Prevalence of early age marriage	Yes	62.00
	No	38.00
	Total	100
Common Diseases	Skin disease	44.00
	Diarrheal	28.00
	Fever	22.00
	Others	6.00
	Total	100
Diseases happening season	Summer	20.00
	Rainy	66.00
	Winter	14.00
	Total	100
Vaccination facility	Present	70.00
	Absent	30.00
	Total	100
Food taking opportunity during working hour	Yes	24.00
	No	76.00
	Total	100
Nutritional facility	Present	14.00
	Absent	86.00
	Total	100
Reason behind lack of nutritional facility	Economic crisis	20.00
	Lack of knowledge	37.00
	Lack of awareness	18.00
	Limited access to market	14.00
	Others	11.00
	Total	100
Services of garden hospital	Health advice	42.00
	Medicine	17.00
	Emergency service	32.00
	Others	9.00
	Total	100
NGO's working for respondents	Yes	16.00
	No	10.00
	Unknown	74.00
	Total	100

Some NGO's are also providing health services to estate's laborers. But unfortunately 74% respondents were suspicious about NGO's activity in their locality regarding health. Only 16% stated that they get health services from some NGO are working in tea estate.

3.2.2 Hygiene condition of female tea workers

Hygiene practices are employed as preventative measures to reduce the incidence and spreading of disease. Present study has taken considering hygiene condition of female tea workers. Table 3 shows that 44% of the female workers had own source of water, whereas 56% told that, they have no own source of water. Alongside this, a lower portion (20%) said that they use tube-well water for cooking purpose, while 68% respondents revealed that they use other sources of water like, river, canal, pond, lake etc for cooking proposes. Highest 80% of female tea laborers did not use soap while they go for bath.

More importantly, 78% female do not use soap or other means for washing hands before taking foods or after toilet, only 22% said they were used to. Table 3 shows that highest 48% female tea workers just use water, 25% use sand and only 20% use soap for washing hand. It is a matter of regret that 57% of the female laborers have no suitable latrine in their dwelling, while 43% have possession of it. Highest 74% of total respondents told that they use shared latrine with their neighbors and only 26% be the owner of latrine herself. In addition, out of 80 respondents, 92% of female tea workers use cloths for menstruation, while only 8% are using napkin. The present study o also shows that, maximum 62% female laborers revealed that they usually throw their household waste in open places, whereas only 38% said they dispose garbage's on right place.

Item		Percentage (%)
Own water source	Yes	39.00
	Tube-Well	18.00
		8.00
		74.00
	No	68.00
	Total	100
Water use for cooking	Tube-Well	20.00
	Kua	12.00
	Others	68.00
	Total	100
Soap used for bath	Yes	20.00
	No	78.00
	Total	100
Wash hand before taking food & after	Yes	22.00

toilet	No	78.00
	Total	100
Way of washing hand	Ash	7.00
	Soup	20.00
	Sand	25.00
	Just water	48.00
	Total	100
Toilet facilities	Present	43.00
	Absent	57.00
	Total	100
Latrine ownership nature	Yourself (Respondents)	26.00
	Shared	74.00
	Total	100
Materials used for menstruation	Cloth	92.00
	Napkin	8.00
	Total	100
Garbage disposal	Right Place	38.00
	Open Place	62.00
	Total	100

Table 3: Hygiene condition of female tea workers

3. Conclusion and Recommendation

Bangladesh is the 12th largest producer of tea in the world, which occupies a significant portion of GDP of this country. Tea workers and their contributions are not negligible. Tea workers especially women have much more contributions in tea production of Bangladesh. Unfortunately, they are the most deprived section in tea industry as well as in our society. The present research explored the deteriorated situation of female tea laborers in some extent. From the present study, it is obvious that their socioeconomic condition is reasonably vulnerable. Most of them are neglected from their rights and duties. Health and hygiene is one of the most significant factors for improving the living standard of female tea laborer's. Present study showed that most of the female laborers suffer from fever, skin and diarrheal diseases. A significant portion does not get proper vaccination facilities. Proper nutritional facilities are also absent in tea estate areas. Although, most of them get health advice from estate's hospital but only few of them get medicine from hospital. Some NGO's are working here to provide health services, but unfortunately most of the female tea workers have no idea regarding NGO's health services. A worst matter is that, maximum female workers use river, canal and lake water for cooking purposes. Which is certainly spreads various diseases. Most

of them just only use water to wash their hands before eating or after toilet. Maximum uses shares latrine. For menstruation, most workers of tea garden are using cloths only. Highest portion of female workers in tea garden revealed that they throw their garbage's in open places which continuously polluted garden environment. The above all information clearly state that the health and hygiene conditions of female tea workers are susceptible.

According to the findings of the study, the recommendations that may be put forward in this regard are as follows:

1. The minimum wage of the tea workers should be raised up to that of the industrial workers. In this circumstance, the role of the "Cha Sramik Union" can be of a catalyst.
2. Tea garden authority should provide medicine or establish pharmacy within the tea garden or adjacent areas.
3. Tea garden hospital authority should take initiatives to provide adequate knowledge regarding harmful consequences of early marriage, should disseminate information about nutrition and hygiene required for good health.
4. Emergency health services should be developed for female tea workers.
5. Micro-health insurance for disadvantages female poor older people, and especially the extreme poor, may be one of the better options towards ensuring the adequate health care.
6. Estate authority should establish hygienic toilet facility in every dwelling and disseminate knowledge's regarding hygiene issues to female tea workers.
7. The amount of maternity allowance and beneficiaries should be increased at satisfactory level.
8. Various NGOs engaged in tea garden development activities need to take steps for wider literacy and health care programme in order to accelerate improvement in annual income.
9. An earnest and immediate policy by the government is required to improve the health condition of the laborers.

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