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By Neaz Ahmed & Abul Kashem

Abstract- This paper is focused on health and hygiene practice of tea garden workers in Bangladesh. It is generated out of a study conducted in a tea garden of Sylhet City in Bangladesh. The tea garden workers are mostly vulnerable as they deprived from proper health, hygiene and sanitation. They are badly treated in every respect of their life. To explore the health and hygiene facilities, culture of practice, diseases due to not having proper practices and health supports from Government and Non-government organizations, the study approach was qualitative in nature and case study method considered as method. By using purposive sampling method fifteen (15) respondents were selected from the study area. Semi-structured interview schedule and observation technique were used to collect primary data from the respondents. It was found that majority of the tea garden workers and their family members are now aware about health and hygiene practice. They are suffering from different types of general and chronic illnesses like jaundice, diarrhea, skin etc. Most of the family of tea gardens drink tube-well water and use the same for bathing, washing and other household purposes.

Keywords: health, hygiene practice, disease, tea garden.

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Health and Hygiene Practice of Tea Garden Workers in Bangladesh

Neaz Ahmed [α] & Abul Kashem [σ]

Abstract- This paper is focused on health and hygiene practice of tea garden workers in Bangladesh. It is generated out of a study conducted in a tea garden of Sylhet City in Bangladesh. The tea garden workers are mostly vulnerable as they deprived from proper health, hygiene and sanitation. They are badly treated in every respect of their life. To explore the health and hygiene facilities, culture of practice, diseases due to not having proper practices and health supports from Government and Non-government organizations, the study approach was qualitative in nature and case study method considered as method. By using purposive sampling method fifteen (15) respondents were selected from the study area. Semi-structured interview schedule and observation technique were used to collect primary data from the respondents. It was found that majority of the tea garden workers and their family members are now aware about health and hygiene practice. They are suffering from different types of general and chronic illnesses like jaundice, diarrhea, skin etc. Most of the family of tea gardens drink tube-well water and use the same for bathing, washing and other household purposes. But it's not that all about drinking safe water to stay away from diseases. The hygiene practice demands to be safe in bathing as well as washing clothes from safer water sources. The majority of the tea garden workers use sanitary latrine which is given them by different NGOs. It is significant that they face problem to use the shared latrine. Another problem found that there are lots of broken toilets in the community especially in workplace where there are very limited numbers of latrine available. Workers use open place for toileting purpose which spread germs and increase various types of diseases. In order to give proper facilities to them need of hour is to arrange intervention for practicing hygiene and accelerating more facilities so that tea garden workers can live in a healthy life.

Keywords: health, hygiene practice, disease, tea garden.

I. Background

Though globally the water and sanitation practices have improved but yet 1 billion people are used to open defecation and 748 million people lack access to safe drinking water and hundreds of millions people have no access to soap and water to wash their hands (WHO, 2016). Even 7 out of 10 people live without improved sanitation and 9 out of 10 people have to go out for open defecation (UNICEF, 2016) with the risks of different chronic diseases and even abuses, mostly for women and girls (Barbara, 2007). Access to safe water hygienic sanitation is closely related to poverty alleviation (Coles and Wallace, 2005) and such cost brings more return (Economist, 2014), but there are billions of people still under sever threat in the globe. Health and hygiene related issues have been getting special attention in Bangladesh but in a country of huge population nothing seems to be enough. Bangladesh has made some progress in health sector but when it comes to rural areas, the overall situation is much more severe (Shammi and Morshed, 2013). It is very tough to reach all segments of people with adequate services and opportunities. Here, the portion of people who are living outside (Tribal Groups, special economic class etc.) of mainstream are mostly affected by the health and hygiene related problems. Tea garden workers are one of them who have been living without minimum health related service.

Bangladesh is the tenth tea producing and ninth tea exporting country in the world with 359,085 people live in tea garden areas, including 89,812 registered workers and 19,592 casual workers (Ahmmed and Hossain, 2016). The tea garden laborers are the most disadvantaged group and vulnerable community in terms of health and hygiene (Ahmed, 2011; Ahmmed and Hossain, 2016; Das and Islam, 2006) due to insufficient education, lack of income as well as appropriate awareness. Sylhet is the northeastern divisional city with over 150 tea gardens including three of the largest tea gardens in the world. In recent years Bangladesh has become an emerging nation in achieving the millennium goals (Planning Commission, 2015) but gross disparity still exists in tea garden areas (Ahmmed and Hossain, 2016; Chowdhury et al.; 2018). Their amount of income and related opportunities are not favorable to maintain minimum living standard where health and hygiene issue is hardly get attention to them.

Tea garden workers are the most vulnerable population in Bangladesh with lower income which is less than 1 USD per day (Ahmed, 2011; Ahmmed and Hossain, 2016), do not support and allow them to arrange and maintain healthy life. Thus they have been leading a life untold misery where human rights related issues is often absent. The condition of human rights of the women and adolescent girls of tea gardeners has often been described as pathetic, but no concerted effort have yet been undertaken to promote the human right conditions as a whole in the tea garden areas of Sylhet (Das and Islam, 2006). The living conditions of these communities are remarkably eager due to the lack of proper utility facilities, especially in water supply

Author α σ: Department of Social Work Shahjalal University of Science and Technology Bangladesh. e-mail: neazahmed_2002@yahoo.com

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and sanitation sectors. About 50 per cent to 60 per cent tea garden workers still are used to open defecation causing various excreta related diseases and not practiced with washing hand after defecation. Even they are habituated in using open space near to water source and do not wash their hands properly. Women and children are most vulnerable groups here who often affected by various diseases for this reason (Ahmed, et.al., 2006; Ahmed, Begum, & Chowdhury, 2009; Chowdhury, Hasan and Karim, 2011; Gain, 2009; Hoque, 2003; Sahoo, Konwar and Sahoo, 2010). Moreover, throwing household waste nearby place is also common among them that helps to spread diseases (Ahmed, et.al., 2006; Chowdhury, Hasan and Karim, 2011; Das, Islam and Zakirul, 2006;). In recent years some changes are made and owners and authorities have taken some initiative to improve their livelihood but due to absent of proper knowledge and ability to manage the necessary cost, initiatives have failed to change their attitude and behavior (Chowdhury, et. al., 2018). Their living arrangement is very poor and generally they lived in a house made of bamboo and mud (Chowdhury, et. al., 2018; Mahmud, et. al., 2017) and sometimes 10 persons cramming into a single room measuring 10 x 20 feet along with the cattle. Even initiatives are also invisible that bound them to maintain unhygienic environment inside their home (Ahmmed and Hossain, 2016; Mahmud, et. al., 2017).

Unawareness about health and hygiene makes them more susceptible to various health hazards, which causes them ill health (Ahmmed, 2012). Different studies explored that knowledge and understanding about healthy life style is very poor or unknown to them. Their awareness on health and healthy lifestyle was superficial, knowledge on common illnesses and their prevention pattern and treatment-seeking behavior not conducive to the maintenance of health (Ahmed and Masud, 2011; Borsha, 2015). They have no little access to information to know and to change their life. Like their personal life, they have to face occupational health hazards due to absence of necessary arrangement by the owners. This has resulted in a number of work-related accidents and the workers are found to suffer from a number of health problems. Health aims at prevention of disease and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations (Ahmmed and Hossain, 2016; Borgohain, 2013). Despite having laws and rules, access and opportunities to get proper medical service is very poor among tea gardens. Workers have common complain not to get necessary medicine and medical treatment from the official medial centers. Even in many cases, they face problems in getting such services outside from the gardens due to many reasons, like economic problem, less support from the owners and many more (Ahmmed and Hossain, 2016; Hossain, 2002; Mahmud, Miah and Jahan, 2017). In many case they follow traditional healing methods which lead them to become vulnerable in terms of health and hygiene practice.

Tea workers are one of the most important labor units of our economy but their life and livelihood is still under the server threats with inhuman degradation. What they have been doing for the economic growth of the country is out of question but there are series of questions about their development. Authorities often ignore existing legal obligations and bound them to live without adequate health and hygiene opportunities. From their home to work place, everywhere they are not protected and secured, rather follow some behaviors and practices which are directly harmful their sound health. Existing working and living environment and facilities do not allow them to use sanitary latrines, drink safe water, washes hand properly and taking bath with soap (Ahmed, et.al.,2006; Ahmmed and Hossain, 2016; Mahmud, et. al., 2017). In many cases, they drink *chora* water for drink. NGOs project installed some toilet but local people use *chora* for toileting purpose. An improved understanding of the extent and the characteristics of utilization water in their daily life also identify health status and hygiene condition, as well as the barriers to access can serve multiple health facilities. At the national level and local level this tea garden worker how much facility get from government and tea garden authority it can aid in developing equitable, allowing policy makers and health care service providers to better understand and meet tea garden worker's needs. All this information will help government to achieve its goal to ensure safe water, proper medical and health facilities and improve hygiene condition of the tea garden worker.

II. Methods and Materials

The study was case study in nature and the approach of the study was qualitative. The Lackatoorah Tea Estate of Sylhet city was considered as case for this study. There were several tea gardens in Sylhet where but Lackatoorah Tea Estate was selected due to easy transportation facility. Along with this factor the huge population who are living in this territory considered. It is located under Tuker Bazar Union Parishad, Sylhet Sadar Upazilla. By using purposive sampling procedure fifteen respondents were selected from the above mention area and in-depth-interview schedule and observationnaire were used for gathering primary data. Voluntary participation was ensured so that all respondents participate spontaneously in research process. All the questions in this interview schedule were formulated before the interview. Observationnaire was used for gathering information from tea garden workers community. Extensive field notes were collected through observation and interviews. Data was analyzed by three parts strategy namely reducing the data, Coding the

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data and Synthesize the data. Read and re-read data, become engrossed in it. Identifying themes based on common, conflicting, minority. Test themes across the data set, where they are common, under what circumstances are they found, not found. Demonstrate trust worthiness in data analysis.

III. Finding and Discussion

a) Access to Health Services

i. Diseases and way of Treatment

It is found that the tea garden workers are suffering from different type of general and chronic illnesses. Waterborne diseases such as jaundice, diarrhoea, skin diseases etc. are the common illness suffered by the workers and their family members. There is a crisis of safe drinking water among the community. A large number of people are suffering from Lung disease, heart disease, peptic ulcer and tuberculosis. Smoking and alcohol are the major causes identified by the doctors. Most of the tea garden workers are now take allopathic treatment and few of them are go for local quack doctor or other *Ayurveda*[1] treatment. Tea garden authority has established a dispensary for the community. Most of the people are going there for primary treatment. Many of the people are aware about the modern treatment. One of the respondents pointed out the lack of facility in garden dispensary in this way,

> *In the garden dispensary they provide only few type of medicine and rest of the medicine need to buy from the outside pharmacy. But lack of money we cannot buy costly medicine.*

ii. Emergency injury and its handling mechanism

When any workers are injured in the workplace they go to the garden dispensary. If they injured severely than they went to the Government Hospital for better treatment. Garden authority sometimes gives transportation facility to the worker. But Most of the occasion injured worker goes to the hospital by their own arrangement. Workers spend their own money for transportation and for buying medicines. In few occasion garden authorities bear some portion of the treatment expenditure but the way of getting compensation is very difficult. One of the respondents point out his emergency injury in the following way,

> *I was working in the garden and cutting tea plant. Suddenly I cut my left hand finger. Immediately I went to the dispensary but there is no doctor available. Then my fellow workers brought me to the Osmani Medical College and Hospital. Garden authority didn't provide transportation facility. After following complex procedure garden authority gave me some money.*

iii. Health services providing by garden authority

Garden authority established a dispensary for the garden workers. Garden workers can get medical treatment and medicine in free of cost. But now there is no permanent MBBS doctor available. In past a MBBS doctor was working in the dispensary. But one of the workers father was died because of wrong treatment and apathy of the doctor. One of the respondents point out his life experience related to the health service in the following way,

> *My father was very ill and suffering from the chronic disease. I brought him to the dispensary and there was no available doctor. After long period of time doctor came but he gave not proper attention to my father. Doctor gave my father some low cost medicine. I brought my father couple of time in the dispensary but same things were happen. After few days later my father was died because of male treatment.*

After this incident all the community workers was very much angry and they was united and began to protest against the doctor. They submitted complain to the garden authority about this matter. Garden workers called strike and sited in front of the garden office. After this entire incidents garden authority withdraw the doctor from dispensary. Then a long period of time there was no specialized doctor in the dispensary. Now garden authority appointed a doctor who is not permanent. Even garden authority does not give proper salary and accommodation facility to the doctor. For these reasons present doctor is unwilling to continue his job and he feel apathy in his duty. The doctor arrives in dispensary at morning and stay only for an hour. The doctor also does not come to the dispensary regularly. He comes to the dispensary only once or twice in a week. Sufficient and necessary medicines are also not available in the dispensary. Most of the medicines are need to buy from the medicine shop. Only low cost and preliminary medicine are found in the dispensary.

iv. Working of NGOs related to health and hygiene

Institute of Development Affairs (IDEA) a non-governmental organization currently working. IDEA running the WaSH project here. WaSH means Water, sanitation and Hygiene. WaSH project established lots of water resources and platform in this garden area. They also provide material for building toilets. Water resources and toilets are made by the joint venture of WaSH project and workers. WaSH project also working in hygiene related activities. One of the respondents point out his experience related to the service of WaSH project in the following way:

> *Before IDEA starting their work here most of the workers drink "indiras" water and do toilets in the hilly area or in the chora. IDEA changed their behavior and establishes many water resources and toilets in the garden area.*

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IV. Food and Nutrition

a) Food Habits and concept of nutrition

The study found that the main food of the tea garden workers community is rice. Along with rice five or six days in a week they eat peas, potato mash, vegetable etc. Once or twice in week they eat fish, chicken etc. Tea garden workers get their wage week wise. They get their whole week wage in a specific day of a week. That day they can buy some costly food. But other day they are unable to buy costly food. They earn only 85 BDT in a day and 595 BDT in a week which is too low income for maintaining standard of living. One of the respondents opined that,

> *My income is very low. I can't maintain my family properly. One day we can eat thrice in a day other day we can eat twice in a day. I can't able to buy cheap food daily how I can buy costly food. One medium size fish rate in the market is 200 to 400 BDT. But I earn only 85 BDT in a day. How I can buy fish, meat, egg for my family regularly.*

The study reveals that most of the workers are consider nutritious food means rich food like fish, meat, egg, milk etc. They are unaware about that also some cheap foods have much nutrition. The study found that few workers are well known about nutritious foods. Like small fish, vegetable, fruits have much nutrition.

b) Child food and concept of nutrition

New born baby and child under 2 years drink mother milk. After reaching 6 month child eat normal food also. But there is no different between child food and adult food among the tea garden workers. Almost all the respondents have said that they give same food to their children which they eat regularly. Majority of the respondents are aware about nutritious foods of the children but they are unable to give extra foods to the children because of lack of money. Children of the tea garden workers eat general foods like rice, peas, potato mash etc.

c) Pregnant mothers' food habits and concept of nutrition

The study reveals that majority of the respondents have told that pregnant mother eat same food as they eat regularly. Few respondents told that they give extra food to the pregnant mother. They give more food to the pregnant mother than previous. Some respondents told that they don't give more food to the mother because if they provide much food than child size in the womb will be small. Few respondents said that after delivery of a child they don't provide rice to the mother. After three days of the delivery date they provide rice to the mother. Then again they stop provide rice to the mother. After seven days from the date of the delivery they are starting to provide rice to the mother. In the meant time they provide bread, fruits, parched rice etc. One of the female respondents share his experience about this matter in such manner,

> *When I delivered my child, my mother-in-law and other older relatives stop giving me rice for three days. They said if I eat rice than my health will not recover quickly. My body will be heavier and I will be suffering from various diseases. After three days they gave me rice. I was very hungry for eating rice. Then again they stopped giving me rice and again started giving rice from seven days of my delivery date.*

V. Hygiene Practice

a) Water source and purity of water

The study reveals that majority of the respondents do not have own source of water. Rest of them told that they have own source of water. Those who have own source of water among them they have tube-well as their own source of water. During observation the study found 166 water sources in the community among them 48 water sources are found broken or unusable. The study found that 53 water sources are located in dirty place. Point to be taken into account that most of the respondents have no own source of water, they have use shared water source. In this community ten or more families share a tube well. They also collect water from "*Indeera*" which means ring-well. It is also significant that those who use "*Indeera*" as their water source may have possibility to use contaminated water, which can cause high disease rate.

b) Water and soap use for bathing

The study found that majority of the respondents use tube-well, "Indeera" water for bath. Few of them use "chora" which means canal water for bath. Although a good number of people use safe water for bathing but rest of them don't use safe water where contaminated water can cause skin diseases. The study found that there is one chora or canal located in this community. During observation the study found 17 people including children use chora or canal for bathing purpose. The study also found that majority of the respondents use soap on bath. Rest of them don't use soap in bath at all. Lack of awareness, difficult to change their habit that they were used to in ages, cultural lag, that is, the inability to adopt themselves with the changing culture where they have to collect water by their effort rather than open water of chora etc. are causes behind not using safe water and soap on bath.

c) Water use for cloth and Dish washing

Through the study lot of significant issues came in the light. One thing was very heartening that drinking water collection of majority of the people studied were from safe water sources. But it's not all about drinking

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safe water to stay away from diseases. Hygiene practice demands to be safe in bathing as well as washing clothes from safer water sources not from a dirty and mangy water source like chora. So this fact is alarming that despite having lot of available water sources people for various reason go to chora. The study found that majority of the respondents use safe water for cloth and dish washing but few of them also use chora water for cloth washing and bathing. One of the female respondents share his opinion in reply of questions why she use chora water,

> *Most of the times tube-well, indeeras are unavailable because lot of people use it. Some time I couldn't use tube-well because thief takes away the handle of the tube-well and sometime tube-well is broken. Washing cloths and dishes are easy in the chora water. Heavy cloth like katha is easy to wash in the chora water.*

During observation the study found that 15 people use chora or canal for cloth and dish washing purpose.

d) Information about Family Latrine

The study found that majority of the respondents has a Family latrine. Rest of them has no family latrine. They use shared latrine. It is significant that, they face some problem to use the shared latrine. Another problem found that there are lots of broken toilets found in the community during observation. I found total 70 broken latrines in the community. The study also found that during observation 3 children use chora for toileting purpose. The study found that respondents use the latrine made by slab/ring/tank. Few respondents told that they use open place. It is significant that few people are out of the safe latrine. That might cause their health and hygiene problem.

e) Use of Latrine and Its cleanliness

The study found that majority of the respondents clean their latrine regularly. Rest of the respondents doesn't clean regularly. The significance is that, who don't clean regularly the latrine can affect by Germ badly. The study found that majority of the respondents told that the children of their family use latrine regularly. Rest of the respondents told that the children of their families don't use latrine regularly. During observation 3 children use chora for toileting purpose. Although the majority use the latrine but a few people don't use latrine regularly, where the risk of health and hygiene is high. Especially in workplace there are very limited numbers of latrine available. Workers use open place for toileting purpose which spread germs and increase various types of diseases. One respondent opined that,

> *I work in different sector of the garden in different day. But latrines are unavailable in most of the sector. I use open place or hilly area for toileting purpose. It is impossible to go to the latrine because latrine is very far from my work place.*

VI. Conclusion

Now days the concept of Health and Hygiene practice is the significant issues to be addressed in determining levels of services. Although the study faces difficulties in conducting this research but also the findings get the real picture Health and Hygienic practice of Tea Garden Worker. Many of those tea garden laborers are use cannel water, defection in open place because of they have no ability to construct such low cost latrine, tube-well. Still a large number of both tea garden workers are using contaminated cannel water for bathing and other household activities. In the studied garden has access NGOs and they provide tube-well and sanitary latrine in shortly. Health and hygiene is one the most significant factor for living a standard life. The situation of health and hygiene among tea garden workers is not up to the mark. The research explored the deteriorated situation to some extent. The suggested recommendations could help to improve the situation.

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