

Socio-economic Reality and Health Status of Tobacco Workers in Bangladesh: An Ethnographic Study

Md. Mosharaf Hossain^{*}

Mir Tamanna Siddika^{**}

Md. Sanwar Siraj, PhD^{***}

Abstract: The aim of this ethnographic research is to identify the prevalence of different disease patterns of the tobacco workers and explore how socio-economic realities have pushed workers into a working situation in tobacco factories located in the Rangpur region of Bangladesh. In addition to studies of literature, a total of 120 respondents are interviewed along with their description collected through informal discussions. Data are also collected by using case study method. We have employed a participant observation technique to find the real picture regarding the environment in tobacco factories. The study finds that a significant percentage of workers have been affected by a number of diseases such as the respiratory disease, chest pain, cardiac palpitation, eye irritation and redness, low blood pressure, underweight, skin irritation, loss of appetite, diarrhea, constipation, insomnia and pain in limbs. The study explores that the quality of working time of female, children and adolescents have been perceived to be lower than that of their male counterparts. It has also revealed that female, children and adolescent workers are severely affected compared to their male workers and they remain untreated as they are submissive and do not generally complain regarding their ill health. Although they are affected by a number of communicable and non-communicable diseases, they do not want to get treated by themselves as it costs more than their income. It reveals that socio-economic realities have forced female, children and adolescents working hazardous working condition in the tobacco factories in order to get out from extreme poverty. The government has not taken proper policy measures to provide required healthcare services to the sufferers employed in bidi/cigarette processing.

Introduction

Bangladesh is one of the most densely populated countries in the world with 160 million people, of whom more than half live below the World Bank poverty level defined as living on less than \$1.25 per day (Islam & Biswas, 2014, p. 367; United Nations Development Program, 2013; Rahman, 2008; p. 1) in an unhygienic health condition and health status. The reason is that the production and usages of tobacco products are increasing especially in the Northern parts of Bangladesh. National and regional health oriented NGOs report that those people who work in the tobacco industry suffer from a negative impact on their health. Workers in the tobacco industry are negatively affected by several chronic diseases such as cancers, strokes, tuberculosis, respiratory diseases, cardiovascular diseases, gastrointestinal disorders, cancer in organ cavity, abridged physical fitness, cataracts, broken bones and they need long time to recover from other physical illnesses (Gaur, Kasliwal & Gupta, 2012; see also Trivedi and Raj, 1992). A

^{*} MSS in Women and Gender Studies, Begum Rokeya University, Rangpur- 5400, Bangladesh.

^{**} Assistant Professor in Women and Gender Studies, Begum Rokeya University, Rangpur-5400, Bangladesh.

^{***} Lecturer, Department of Government and Politics, Jahangirnagar University, Savar, Dhaka-1342, Bangladesh.

recent study shows that people who work in tobacco industry have a higher rate of diseases as of 37% and it imposes a huge burden on healthcare services with its associated mortality and mobility especially coronary heart diseases and cancer. It has been known for many decades that tobacco is the leading preventable causes of the ill-health and premature death in the world. Rahman (2008) argues that tobacco causes serious health hazards and it loses quality of life of the workers. Valic, Beritic & Butkovic (1976) opine that a significantly increased prevalence of asthma symptoms are found for tobacco workers. Rahman (2008) in a reputed *Internet Journal of Epidemiology* (vol. 6, no. 2), indicates that health hazards have increased among tobacco workers in Bangladesh over the past three decades. In addition, it indicates that the sanitation, ventilation and other facilities are not enough in tobacco factories. The situation is more acute for female workers and adolescents. A number of studies have found that female workers, children and adolescents constitute the majority in tobacco industry because their financial demands are comparatively lower than that of their male counterparts. The grim reality is that the owners of tobacco industry do not provide required healthcare services for their workers. The health condition of female workers, children and adolescents have been worsen as their daily income is very low; many of them do not generally go to hospital to visit doctors, and remain untreated being afraid of paying extra consultation fees as well as medicine costs.

Bangladesh is administratively divided into eight major divisions like Dhaka, Chittagong, Rajshahi, Sylhet, Khulna, Barisal, Rangpur and Mymensingh. Comilla and Faridpur are two proposed administrative divisions. Rangpur is the seventh administrative division in Bangladesh and it was formed in 2010. Rangpur is located in the northern part of Bangladesh and bordered by West Bengal to the north. The division of Rangpur consists of eight districts and fifty eight sub-districts under these eight districts. According to 2011 census, Rangpur division has a population of 15, 665,000 which is about 10 percent of total population of Bangladesh. The per capita income and literacy rate of the people are considerably lower than the national average. People in this region are mainly dependent on agriculture for their livelihood. In comparison to other regional divisions, Rangpur is socially and economically backward. Majority people still live under poverty line which is the main problem in this region. The gap between rich and poor is extreme and the rich becomes richer and the poor becomes poorer in this economy. Consequently, labor is very cheap and most of the workers find employment as day laborers in tobacco factories as there is no alternative employment opportunity. A handful of studies have found that unemployment, seasonal income and low income are the common phenomena. As a result, many poor families involve their female, even under-aged children and adolescents as day laborers to supplement income in their families. As Rangpur is known as the tobacco growing and processing zone in Bangladesh, owners of the tobacco factories generally prefer to recruit female, children and adolescents for the availability of cheap labor. A recent study shows that almost 95 percent of tobacco workers are female, children and adolescents (Sultana & Bashar, 2015, p. 82), and rest of the workers are male. The newspaper report shows that almost half of the tobacco workers in Rangpur are from the age group between 4 to 12 (bdnews24, 30 January, 2016). Although child labor is strictly prohibited in Bangladesh, as the labor law prohibits employing anyone under 14 years for employment, a large number of children and adolescents still continue to be

employed in such a hazardous and life threatening work place. It is observed that the poor economic condition and social realities forcefully push these vulnerable people to work in tobacco factory as day laborers although their health is negatively affected by the hazardous environment. However, these workers are not aware that they are at high risk as tobacco related diseases may ruin their lives. This research aims to explore how socio-economic realities push them forcefully into such working condition and what kind of diseases do affect their health? The findings may help tobacco workers to create awareness regarding their health status and the policy makers to take appropriate policy measures to abstain children and adolescents from working in tobacco factories.

Research Methods

We have first selected three tobacco factories located at Aditmari and Kaligang sub-districts under Lalmonirhat district and Haragacha sub-district under Rangpur district purposively. A total of 120 respondents are interviewed of whom 40 seasonal and permanent tobacco workers have been selected from each factory. We have collected the list of workers from each factory first and interviewed them chronologically. Tobacco factories usually hide the names of the children and adolescents as their workers. We have convincingly collected those lists and interviewed them. Information is collected about the socio-economic characteristics of the workers, such as age, education level, gender status, household income, occupation, religious status, marital status, employment status. Information is gathered on health issues like cardiac diseases, eye ailment diseases, chest pain, shortness of breath, diarrheal disease, vomiting, skin diseases, loss of appetite diseases and other health related symptoms. Along with this, we have also used participant observation over a period of two months to observe how decisions are made regarding medical decisions when they become ill. We have closely observed within the environment of the tobacco factories where workers process cigarettes and bidi, from morning to late evening. We have collected case studies to understand how tobacco workers cope up with the vulnerable situation when they become physically ill. Anonymous names are used to describe the views and narratives of the respondents.



Source: <https://www.mapsofworld.com/bangladesh/maps/rangpur-map.jpg>

Socio-economic Characteristics of the Respondents in Tobacco Factories

The word 'socio' is derived from the word 'social' that refers to the demographic and social characteristics such as the age group, sex ratio, level of education, religious composition, marriage and divorce rates, and so on. The term 'economic' is related to the economic conditions, such as, income, occupation, and so on. Scholars generally use socio-economic term as an umbrella term to encompass a wide array of interrelated social and economic characteristics (see Rahman et al, 2014, p. 65). In this study, socio-economic status has consisted of respondent's religion, education, marital status and income.

It is found that 30 percent of the respondents (age group 10 to 18) who work in the tobacco industry at the northern region are children and adolescents. Twenty five percent of the respondents belong to the age group 19 to 29. Thirty percent respondents are lying between the age group of 30 to 40 and rest 15 percent belong to the age category of 41-50. A relevant question we have addressed: does age affect work and how does it affect? Does age affect workers health and how does it affect? It is found and observed that a vast majority of these children and adolescents work in tobacco factories not as full time workers and they work as helping hands just like filling up empty shells of bidi and cigarettes. Children and adolescents also close the shells and shell tops and prepare bidi/cigarette packets. The workers from the age groups of 19 to 29, 30-40, 41 to 50 prepare those empty bidi and cigarette shells and insert chopped tobacco and tobacco flake in the shells. Tobacco workers from these age groups usually wrap bidi and cigarettes in a *Diospyros melonoxylon* or *Piliostigma racemosum* leaf tied with a string or adhesive at one end. It is found that children and adolescents, and elderly workers whose age group is 10 to 18 and 41 to 50 respectively are mostly affected by the tobacco toxicity. These age groups are more vulnerable to health problems as they often have a lower protective immune response. It is found and observed that the young tobacco workers whose ages range from 19-29 and 30-40 are not severely affected by the tobacco toxicity. This means that age groups create differences among tobacco workers regarding working conditions and their health.

Among 120 respondents, 25 percent are adolescents whose age is under 18, about 32 percent are male workers and more than 43 are female. It is found that there is a gender discrimination in tobacco factories with regard to their work, because owners of the tobacco factories favor female workers as women are more dexterous, docile, and willing to work longer time for a less payment. Thus female workers are mostly recruited for the processing of bidi and cigarettes whereas male workers are mostly recruited for supervising and administrative functions. Out of 52 female workers, it is found that more than 90 percent of them work in processing of bidi/cigarettes, only nearly 10 percent work as the helpers of their supervisors. On the other hand, out of 38 male workers, 56 percent work as supervisors. Rest of them work in processing of bidi/cigarettes. Alternatively, the owners of the tobacco factories usually prefer to recruit female workers as bidi and cigarette processing fee for women is lower than that of the male workers. Although female workers deserve equal payment for equal work, unfortunately they receive lower payment. It is found that male workers are paid 32 taka per 1,000 bidi processing where as it is fixed 29 taka for women workers.

Out of 120 tobacco workers, more than 54 percent respondents are Muslims, 33.33 percent Hindus, 8.33 percent Christians and 4.17 percent Buddhist. It is found that religion does not create discrimination for working in tobacco factories. It is found and observed that people from different religions who wish to work in tobacco factories are hired equally and are paid by the same standard. This means that tobacco factories have tolerance for religious differentiation and ensure a non-communal character of the working environment.

More than 27 percent of the workers, children and adolescents have no formal education, majority of the respondents (nearly 52 percent) have primary level of education and nearly twenty one percent have passed secondary level of education. It is found that a vast majority of the tobacco workers including children and adolescents do not have their formal education. It is found that illiterate and people who passed primary level of education work in processing of bidi and cigarettes and almost 90 percent of them are female, children and adolescents. It is also found that people who have passed secondary level of education work as supervisors and maintain generally administrative duties in tobacco factories and a vast majority of them (98 percent) are male workers. The salary for supervisors is slightly higher than that of day laborers who process bidi/cigarettes for a fixed payment.

In Bangladesh, the legal age of marriage is 18 for a woman and 21 for a man but a newly passed bill by the Cabinet on 24 November, 2016 adds new stipulations that allow early marriage for girls before age 18 in special cases or for the greater benefit of the adolescents. Bangladesh has one of the highest rates of child and adolescent marriage in the globe, and the highest rate is in Asia. The Human Rights Watch figures that 52 percent of girls in Bangladesh get married before age 18, and 18 percent are married before they turn 15. In order to get out of the poverty trap, the new stipulations may encourage Bangladesh's economically vulnerable families to get their children and adolescents married at early ages. Out of 120 respondents, 38.33 percent are married, 32.50 percent are unmarried, 08.33 percent are divorced/separated and 20.83 percent are widowed. Among the unmarried groups, a total of 14 percent are from children and adolescent groups and their average age is 12-14 years. It is found that owners of the tobacco factories prefer to employ unmarried, divorced/separated and widowed workers as they represent a total of 74 out of 120 respondents. It is found that marriage is directly related to work in tobacco factories as owners of the factories prefer to employ unmarried, divorced and widowed workers as they come to the factories regularly and give much time as much as they can. Administrators of the factories narrate that they do not usually prefer to recruit newly married and young workers as they are apathetic to their work in processing of bidi/cigarettes, even if they do, they always try to get higher payments for processing of bidi/cigarettes. On the other hand, Sheuli - a female worker of age 40, opines that female, children and adolescents are discriminated in two ways: first, female workers receive low payment than that of their male equivalents; secondly: female, children and adolescents are deprived in receiving their payment as it is withdrawn by their husbands and parents respectively. Factory owners also allow husbands and parents to withdraw the payment of their wife, children and adolescents.

The villagers generally depend on multiple sources of income and as a result their income varies from person to person (Rahman et al, 2014, p. 68). For example, as it is mentioned before, the processing fee per 1,000 bidi for female, children and adolescent workers is 29 taka whereas for male workers it is 32 taka. The monthly income for 44 percent of the respondents is between 2001-3000 taka, for 20 percent income is from 3001-4000 taka and only 4 percent workers have monthly income of 6000 taka.

The household occupation of 42.50 percent tobacco workers is non-agricultural day laborer, while 29.17 percent are rickshaw-pullers and 20.83 percent are agricultural farmers. The rest of the respondents such as 7.5 percent are involved in other professions such as CNG auto driving and small business. It is found that workers in tobacco factories work on part-time basis, men usually drive CNG auto and work on hourly basis in tea stalls. Very few female workers work in people's home on part-time basis. But a large number of them do not usually have such alternative income opportunities as they have to regularly manage household chores, cook food and wash clothes for their family members, and have to take care and nurture their children and elderly parents. It means that women have to bear dual responsibilities or double burden who after finishing their paid work must work for their family members at home. Although a working women's burden is more than that of a man, female workers remain untreated when they get ill. They are even deprived of receiving their payments as it is mostly withdrawn by their husbands and often parents. Only in very few cases when female workers receive payments by themselves. Even if they are allowed to receive salaries, these salaries are immediately handed over to their guardians, saying that they may spend it for unnecessary purposes. It is more problematic when female workers don't have money in their own hands particularly when they wish to visit physicians and pay for the cost of medications. Although female workers suffer from different diseases and malnutrition as they work in unhealthy environment, they are truly unable to treat themselves. Rahima, a married young woman, narrated that - *I work in tobacco factories day long and after returning to my home, I have to nurture my children, manage household chores and cook food for my family members. My husband receives my payment and spends money for family purposes. I have been seriously ill several times but I have not been treated. I still have to start working in tobacco factories. I am getting so sick day by day.* It is also observed that the working condition in factories is not hygienic. Workers are affected by tobacco dust as it floats on air inside the factories where they work. Such hazardous working conditions directly affect the health condition of those who work there. They are affected by a number of chronic diseases such as asthma and bronchitis, kidney infection, abdominal problems, vomiting, diarrhea, eye and skin diseases.

As per the employment status of the tobacco workers, selected respondents are divided into two groups such as permanent and seasonal. Distribution as per employment status of the workers is shown in table – 8. This table shows that about 27 percent respondents have been working as permanent basis throughout the year whereas 66 percent respondents work temporarily. This shows that a vast majority of the respondents work in selected tobacco factories on seasonal basis. Usually men prefer to drive CNG auto and work in tea stalls whereas women find part-time jobs at home of others. Those who get such opportunities, they work on a contractual basis at the home of factory owners for

cleaning, chopping vegetables, cooking food and washing clothes. The salary for such household work is low and these salaries are also required to be handed over to their husbands as women are afraid of being assaulted by their husbands. Still they have to continue their work as they don't have alternative working opportunity elsewhere.

Health Related Diseases of the Sample Respondents

The workers in the factories are not aware about their health, hygiene situation and sanitation. Most of them do not wear mask, glass and hand gloves while working in tobacco factories. An estimated 4 million deaths are caused by tobacco each year and if the current trends continue the figure will reach 10 million per year by 2030 (Beyer et al, 2001, p. 210). Tobacco workers in North Bengal have been suffering from different diseases. They are affected by a number of communicable and non-communicable diseases such as the cardiac diseases, eye ailment, skin diseases, sleeping fluctuation and loss of appetite diseases. The tobacco workers who are affected by cardiac diseases endure heart palpitation, low blood pressure, irritation and burning symptoms. The common triggers of palpitations include stress, anxiety or panic, caffeine, diet pills, nicotine, low level of blood sugar, low levels of oxygen in human blood and many others. The heart palpitations are thus caused by nicotine that can irritate heart and cause extra beats. Nicotine causes a decrease in appetite, which leads to weight loss. Thus, in turn, it lowers the blood pressure. Cardiac irritation can be caused by a number of factors. Tobacco substances may also play a role for the development of cardiac irritation that leads to workers heart attack. Heartburn, is a burning sensation in the central chest or upper central abdomen which is also caused by tobacco use. Nicotine causes inflammation in esophagus which leads to heartburn.

Tobacco workers who are affected by eye ailments have been suffering from eye disorder diseases such as the blur and poor visions and eye irritation disease symptoms. Tobacco use has been linked to two of the leading causes of vision loss. Tobacco reacts with substances in the human body to produce radicals, substances that can damage bodily cells- including the lenses of eye, contributing to the risk of cataracts. A cataract occurs when the lens of eyes thickens and becomes less transparent and less flexible. When the lens becomes cloudy, it causes vision problems. Loss of vision affects workers ability to work or care for themselves or family members. Among workers who are affected by skin problems mostly have eczema, dryness and insomnia disease symptoms. Eczema, is a type of skin disorder, which becomes apparent on the skin surface in the form of dry and red itchy patches. It is aggravated with chewing tobacco and chopping tobacco dusts. Tobacco leaf contains carbon monoxide, which displaces the oxygen of the workers skin, and nicotine, which reduces workers blood flow, leaving their skin dry and discolored. Nicotine is also a potent stimulant that causes workers insomnia symptoms.

Sample tobacco workers have suffered from a number of sleeping fluctuation diseases such as over sleeping, nausea and vomiting. Disturbance of sleeping, nausea and vomiting are among the most featured side effects of tobacco usage. People who work in tobacco industries struggle to fall asleep because the nicotine disrupts their natural sleep-wake cycle. Nausea and vomiting are consistent with acute nicotine poisoning which is an occupational illness specific to tobacco leaf harvesting and for processing of

bidi/cigarettes. This occurs when workers absorb nicotine through their skins. Nicotine disturbs tobacco workers sleep condition because it is stimulating. Sleeping disturbance thus creates nausea and vomiting related diseases. Tobacco workers who suffer from loss of appetite diseases, which is medically referred to as anorexia, endure diarrhea, constipation, biting & limb pains diseases. Workers who work in tobacco factories are contaminated by nicotine which comes from tobacco dusts, leaves and tobacco substances that causes a slump in appetite of tobacco workers. Anorexia is common among tobacco workers and smokers and is part of the reason for the typical lower weight. It can cause constipation and indigestion. Peristalsis, which is the wormlike movement by which the alimentary canal or other tubular organs with both longitudinal and circular muscle fibers propel their contents, is stimulated from nicotine and increased peristalsis causes diarrhea. Reduced peristalsis means a longer alimentary sojourn, greater inspissation of ingesta and a tendency to constipation. Tobacco workers also suffer from pains in limb which is used to describe discomfort affecting any part of a limb (elbow or knee) or the entire limb (arm or leg). As workers work on a contract basis to prepare bidi/cigarettes they work as long as they can endure and it causes pains in their limbs. Tobacco workers are also likely to be at increased risk of suffering from chest pain due to dusty air quality in the tobacco factories. Children and adolescents who work in the tobacco factories are mostly vulnerable to the adverse effects of toxic and nicotine exposures as their brains and bodies are still developing.

Among them who are affected by cardiac diseases 33.33 percent suffer from heart palpitation while 29.16 percent have low blood pressure. Only 16 percent workers have not had cardiac diseases. Among the respondents who are affected by eye ailment, 50 percent suffer from blurred eye vision while 12.50 percent from poor eye vision diseases. About seventeen percent are suffering from eye irritation while 20.83 percent have had no eye diseases. Respondents who suffer from skin diseases, 54.17 percent suffer from eczema. More than 19 percent are suffering from skin dryness and 13 percent from insomnia diseases. Only 13 percent have not had any skin diseases. Respondents who suffer from sleeping fluctuation, 16 percent have normal sleep whereas 30.83 percent and 38.33 percent are suffering from over sleep and nausea diseases respectively. Workers who suffer from loss of appetite diseases, among them nearly 26 percent and 16 percent workers have limbs and chest pain diseases respectively. Among them thirty percent have had diarrheal diseases. About 22 percent have not had diseases like loss of appetite. It is found that permanent workers are severely affected by a number of diseases while seasonal workers suffer less.

Respondents express that they are somehow aware of health hazardous condition in tobacco factories. Actually they do not usually have available work facility to live their normal lives. They raise a common question: who will provide them food and daily necessities if they do not work in tobacco factories. Many respondents view that poor workers are compelled to work in tobacco factories as they do not have any other means to buy their daily commodities and groceries. Mostly they work in tobacco factories to get out of poverty and to live normal and happy life. A male worker, who has been working on permanent basis in Haragacha bidi factory, has narrated his story as follows:

I am born in a poor family. From my childhood I have grown up in unhygienic living environment and my parents have not had ability to offer me required food and clothes. I have been married few years back and have also two children. My wife also works in bidi factory. I know from watching TV that smoking bidi and using tobacco leaf for the purpose of processing bidi is harmful for health. It may cause severe diseases. But we don't have any option. We have to work here to live our lives.

Workers who have been working in tobacco factories throughout the year as permanent workers especially female, children and adolescents suffer mostly from health hazards in the factories. It is observed that the male workers of all ages lead better quality of life than the female, children and adolescents. Female workers do not usually go to consult physicians for physical examinations as it costs more than their income. Due to extreme poverty workers especially female, children and adolescent are malnourished which makes them more prone to be repeated attacks by a number of communicable and non-communicable diseases. Other studies also support these findings (Khatun et al, 2013, pp. 1-8; Harry et al. 2010, p. 2).

A local medical officer narrate that tobacco workers are not aware of their health and they do not usually wear mask and hand gloves in order to protect themselves from tobacco dusts. As a result, they mostly suffer from heart problems, low blood pressure, cough, vomiting, malnutrition, skin diseases and eye diseases. They do not come to hospitals so often. When workers are seriously affected they come to see us. As all required medications are not available in the hospitals, prescriptions are given to them to buy necessary medications for their recovery. But they do not usually buy such medicines. Consequently, their health conditions become worsen.

Workers who work in tobacco factories take a heavy toll on their physical and mental health that causes early deaths. The situation is worse for children and adolescent workers. As their health and brain is still developing, they become exposed to the detrimental health effects of tobacco – either they smoke it or not. Studies show that most of the children and adolescents who work in tobacco factories are between ages 10 to 16 years and are seasonally engaged in bidi/cigarette production. The National Child Policy 2010 stipulates that children and adolescents whose age is under 14 years are not legally allowed to work in any workplace and age below 18 are only allowed to do a light work but they cannot be employed in hazardous working condition. Bangladesh government has declared 38 jobs as hazardous and banned children and adolescents from engagement in those tasks. Working at bidi/cigarette factories is in the fourth position of the list. Bangladesh has also ratified ILO Convention number 182 in 2001 that deals with the hazardous child labor. Scholars think that appointment of children and adolescents who work in bidi/cigarette factories cannot be stopped due to lack of proper implementation of the relevant policies and ILO convention.

Figure – 1: Opinion of the Respondents Regarding Health Related Disease Symptoms

Disease Patterns		No. of Respondents	Percentage (%)
Cardiac symptoms	Heart palpitation	40	33.33
	Low Blood pressure	35	29.16
	Irritation	11	09.16
	Burning	16	13.13
	No symptoms regarding cardiac diseases	19	15.83
	Total	120	100%
Eye Ailment	Blurred vision	60	50.00
	Poor vision	15	12.50
	Irritation	20	16.67
	No eye disease symptoms	25	20.83
	Total	120	100
Skin problem	Eczema	65	54.00
	Dryness	23	19.17
	Insomnia	16	13.33
	No disease symptoms regarding skins	16	13.33
	Total	120	100
Sleeping Fluctuation	Disturbance of sleeping	37	30.83
	Nausea	46	38.33
	Vomiting	21	17.50
	No sleep fluctuation disease symptoms	16	13.33
	Total	120	100
Loss of appetite	Diarrhea	36	30.00
	Constipation	08	06.67
	Chest pain	19	15.83
	Limps pain	31	25.83
	No disease symptoms regarding loss of appetite	26	21.67
	Total	120	100

(Source: The field survey, 2016)

Case Study:

What pushes poor people into tobacco factories? Khatun, a middle age married woman working at Gafur bidi factory of Haragacha in Rangpur district, is a member of nuclear family having four children. She was admitted in primary school but was not able to continue her studies as her parents were poor. She left school and started working with her parents in tobacco factory to supplement income in their family. She got married with a day laborer who was also working in tobacco factories. They have given birth to four children of whom two are working with them because they could not bear the educational expenses for their children due to extreme poverty. They are adolescents under the age of 15. Her two younger daughters are irregular at school and they do not pursue their children to go to school. She views that all of their family members have been working in tobacco factories because there is almost no secured employment opportunity throughout the year. She shared that they work in tobacco factories because poor people who work in farm as well as drive CNG auto do not have regular work or daily income. That is why they work in tobacco factories as it has regular employment opportunity. They do not want to be economically vulnerable as they have to feed themselves and their children. She narrated that she works from 8 a.m. to 4 p.m. every day and earns about 4,000 taka. She earns daily TK.145 for preparing 5000 bidi in a day from the factory. The Household Income and Expenditure Survey (2016) report shows that the monthly average (per capita) income of a person was \$1601 in 2016, \$1315 in 2010, \$610 in 2005 and \$350 in 1995-96. She said that their two children have also been working with them in tobacco factories to prepare empty bidi shells. We have observed that many other under aged children and adolescents work in tobacco factories usually prepare shells in order to help and supplement income for their family members. Most of them are unmarried and aged between ten to fifteen years. Khatun expressed her views keeping her hand on head which is an expression of extreme frustration because she frequently suffers from fever, eye irritation, muscle pain, skin diseases and diarrhea. Coughs and vomiting are also her regular companions. She does not go to visit physicians but takes medications and drugs prescribed by local medicine stores. She said that her husband is not worried at all about her sickness. She does not also care about her own health and many more. She



keeps on continuing her work silently in hazardous health conditions. Sickness has become a permanent companion. Khatun considers it to be her destiny. Khatun at home and in the factory, earn money, takes responsibilities of the family members but still she does not consider herself to be empowered. She is exploited in the household as a woman and in the factory as a female worker.

Conclusion

The environment of the factories is not hygienic; sanitation, and ventilation facilities provided by the tobacco factories are not so well. Moreover, a large number of tobacco workers live in overcrowded areas in unhealthy environment where basic services and utilities are either absent or grossly inadequate. Tobacco workers do not necessarily use hand gloves, mask and glasses to protect themselves from tobacco dust. It is found that workers who have been working in tobacco factories mostly suffer from various kinds of lung, skin and eye ailment diseases and loss of appetite. Tobacco factories do not provide any kind of treatment facility to their workers. The study also provides evidence that female, children, adolescents and older persons are more vulnerable to such diseases. This study has also unveiled that the duration of working hour in processing bidi increases the risk of diseases as workers work in tobacco factories from morning to evening on a contractual basis. Most of the tobacco workers live in kancha houses in slum areas where living condition is unhealthy. The daily income gained from this employment is barely enough to sustain their lives and is insufficient to meet the basic needs.

Recommendations

The government of Bangladesh and non-government organizations may take appropriate measures to improve the working situation. As the majority of the workers do not have formal education investment in education would help poor workers to rise from their deplorable conditions in tobacco related employment. As tobacco control law is already introduced in Bangladesh in 2005, stipulations should be modified to increase bidi/cigarette prices. The study finds that most of the workers are forced to join such



hazardous job environment only due to extreme poverty (see also Majra1 & Gur, 2009, pp. 316-318). However, tobacco workers earn very little. Their everyday income is around only 110-150 taka only if they work full-time. As we have mentioned above that the processing fee for 1,000 bidi for women is 29 taka whereas it is 32 taka for male counterparts. Why does it differ? Do women, children and adolescents produce low quality of bidi or are they unlawfully deprived? We have observed that a worker can process as much as 4 to 5 thousand bidi per day which is not sufficient to bear the cost of their daily commodities. As a result they are being pushed towards a fatal nutritional problem. Thus various malnourishment related diseases develop. Although they are ill, they remain untreated as payment for treatment is considered to be a dream where almost half of the population live their lives with less than US\$1.25 per day. In this deplorable situation either poor workers have to choose between receiving healthcare or food for their family. Public hospitals always remain overcrowded and poor are often denied access to healthcare services from public hospitals. Workers also do not want to visit public hospitals as required medicines and drugs are unavailable there (Beyer et al, 2001, p. 211; see also Siraj, Hassan & Islam, 2012). Awareness programs among the tobacco workers are needed for knowledge about the causes of diseases and find remedies to overcome those health related problems. The public hospitals should be better managed to offer medical services to the poor workers. The factories should be responsible for providing workers with health facilities, better working conditions, and good salary. Most of all workers need to be organized to demand their rights for their survival.

References

- Bhisey, R. A., Bagwe, A. N., Mahimkar, M. B. & Buch, S. C. (1999). Biological monitoring of bidi industry workers occupationally exposed to tobacco, *Toxicology Letters*, 108 (2-3), pp. 259-265.
- Elias, M. S., & Saha, N. K. (2009). Environmental pollution and health hazard problems of workers in tobacco industries, *J. Life Earth Sci*, 3-4, pp. 13-17.
- Gaur, K., N., Kasliwal, & Gupta, R. (2012). Association of smoking or tobacco use with ear diseases among men: a retrospective study, *Tobacco Induced Diseases*, 10:4.
- Gleich, G. J., Welsh, P.W., Yunginger, J. W., Hyatt, R.E. & Catlett, J.B. (1980). Allergy to tobacco: an occupational hazard, *New England Journal of Med*, 302(11), pp. 617-619.
- Harry A Lando,a Bethany J Hipple,b Myra Muramoto,c Jonathan D Klein,d Alexander V Prokhorov,e Deborah J Ossipd & Jonathan P Winickoffb. (2010). Tobacco is a global paediatric concern, *Bull World Health Organ*, 88, p. 2.
- Islam, Anwar & Biswas, T. (2014). Health System in Bangladesh: Challenges and Opportunities. *American Journal of Health Research*, 2(6), p. 366.
- Khaleque, A., & Elias, M. S. (1995). Industrial pollution and quality of life of workers in Bangladesh, *J. Human Ecology*, 24(1), pp. 13-23.
- Khatun, Fahmida; Kamruzzaman, M; Islam, Mominul; Islam, Shofikul; Rahman, Hafizur & Karim, Rezaul. (2013). Health hazards and the socioeconomic status of female labour of tobacco processing mills in Kushtia, Bangladesh *Science Journal of Public Health*, 1(1), pp. 1-8.

- Lander, F. & Gravesen, S. (1988). Respiratory disorders among tobacco workers, *Br J Ind Med*, 45(7), pp. 500-502.
- Majr, J.P; & Gur, A. (2009). Poverty, Tobacco, and Health: An Indian Scenario, *J HEALTH POPUL NUTR*, June, 27(3), pp. 316-318.
- Rahmanm, M. (2008). Health hazards and quality of life of the workers in tobacco industries: study from three selected tobacco industries at Gangachara Thana in Rangpur District of Bangladesh, *The International Journal of Epidemiology*, 2008, 6 (2), pp. 1-6.
- Siraj, Md. Sanwar, Hassan, A. S. M., & Islam, Muntasirul. (2012). Socio economic inequality in access to health care services in Bangladesh: An empirical study, *Journal of Social Sciences*, Begum Rokeya University, Rangpur-5400, Bangladesh.
- Sultana, Dr. Nasrin & Basher, Dr. Md. Abul Khair. (2015). Occupational Hazards in Tobacco Factory workers: Experience from Rangpur, *Banglavisian*, Vol. 15, No. 1, pp. 81-90.
- Trivedi, PR & Raj, G. (1992). The environment and emerging development issues, *Encyclopedia of Environmental Sciences*, Akashdeep Publishing House, New Delhi, (Vol. 1).
- United Nations Development Program. (2013). *Human Development Report 2013*.
- Valic, F. D., Butkovic, & Beritic, D. (1976). Respiratory response to tobacco dust exposure, *Am Rev Respir Dis*, 113(6), pp. 751-755.