# A STUDY ON HEALTH CONDITION OF BANGLADESH GARMENTS WORKER

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## ABSTRACT

With millions of garment workers in the forefront, Bangladesh's garment sector is poised for future growth. Due to their heavy workloads, inadequate personal protective equipment, and poor or nonexistent workplace medical facilities, workers experienced a variety of health issues. Bangladesh's clothing sector has grown quickly in recent years to become one of the greatest textile producers in the world, second only to China, whose economy is nine times larger. Bangladesh's textile workers were paid only one-fourth of what those in China were, which is why foreign investors favored Bangladesh over China. With hasty construction and subpar working conditions, the industry was created. In addition to a general lack of licenses, legislation, and control, the enormous industries were frequently dangerous. Colds and flu, leg pain from musculoskeletal injuries, hot flushes from pseudoneurological issues, gastrointestinal disorders, and allergies from allergens were the major issues among garment workers. The majority of the workers had decent health. Coughing was associated statistically significantly with age, whereas allergies and gas pain were significantly associated with the employees' gender. Global clothing manufacturers began expressing more interest in the factories (and people) that were producing their products in distant nations as the international community banded together to push for improvements to labor conditions. According to this survey, the majority of the workers had good health, with the most common health problems being allergies, gas pain, and coughing. In order to enhance the employees' condition of health, the authorities and policymakers in the clothing industry do create healthcare facilities and provide primary healthcare services there.

Keyword: - Bangladesh, Garment Industry, RMG, Health Issues, Indoor Work.

## **1. INTRODUCTION**

Bangladesh is a middle-income nation with a sizable population of 166.63 million people. [1] Over the past three decades, the garment industry has expanded quickly, making it the most difficult industrial sector to evaluate economically.[2] The development and expansion of the economy depend on this sector. [3] This industry employs over 4.1 million people, the bulk of whom are under 30 and come from Bangladesh's rural areas. [4,5] Ready-made clothing (RMG) exports made up 84% of all exports during the fiscal year 2017–18 and contributed 11% to the country's gross domestic product (GDP). [5,6] In order to live a healthy life, it is necessary to maintain excellent physical and mental health. Access to proper healthcare at all levels, including the workplace, is a fundamental human right. [7] In comparison to other parts of the globe, the pay and other benefits provided to garment workers in our nation are inadequate. [8]

The garment workers are frequently subjected to lengthy sitting or standing, extremely exhausting labor, heavy weight lifting to shoulder level, and working with their backs bent or twisted forward, all of which are leading to poor workability and chronic illness. [9] The most prevalent medical conditions are those related to the lungs, the heart, the digestive system, the nervous system, the musculoskeletal system, and nutrition. [10] The healthcare facility at the Maximum plant is underdeveloped and has minimal amenities. The majority of the time, supplementary healthcare practitioners simply provided basic medical care and first aid [11]. Important factors in this respect include textile workers' patterns of morbidity and healthcare utilization. To enhance the quality of life of garment workers, it is critical to ascertain the frequency of subjective health concerns [12].

## 2. LITERATURE REVIEW

Since over ten years ago, Bangladesh's garment industry has been a major driver of the nation's economic expansion, growing at an astonishing 6 percent annually. Out of a total workforce of over 150 million people, the garment industry in Bangladesh, one of the top exporters of garments today, employs 3.6 million people. The majority of the country's 4,500 industries are centered in and around Dhaka, the capital, and they draw thousands of rural citizens looking for employment and a better living for their families [13,14]. Concerns about the working environment have taken precedence in labor policy discussions across the industrialized world. According to the consolidated version of the Treaty establishing the European Community [16], the European Union has set itself the goal of improving overall working conditions. In addition, a factory has two different sorts of work environments: (a) conducive work environments (b) toxic work environments. Employee satisfaction is higher and superior talents and performance are made possible in a healthy work environment. The self-actualizing habits are also supported in this kind of work setting.

Discussions regarding labor policy have increasingly focused on issues related to the working environment in developed nations. The European Union has given itself the objective of enhancing general working conditions, in accordance with the consolidated version of the Treaty creating the European Community [16]. In addition, a factory has two different forms of work settings: (a) favorable work environments (b) poisonous work environments. A healthy work environment fosters exceptional abilities and performance while also increasing employee happiness. In this type of workplace environment, the self-actualizing practices are also fostered.

The term "sick building syndrome" (SBS) is used to describe a scenario in which building occupants notice sudden changes in their comfort or health that appear to be directly related to their time there. There is no known sickness or underlying cause. The complainants may be concentrated in one area of the building or zone or they may be dispersed across [19]. Cough, chest discomfort, shortness of breath with minimal effort, edema, palpitations, nosebleeds, cancer, pregnancy issues, and miscarriages. There are also known cases of extrinsic allergic alveolitis, legionnaire's disease, humidifier fever, pneumonia, and occupational asthma [13]. The reasons of the symptoms are quite evident, and they may be clinically identified. When the complainants leave the premises, they can need a lot of time to recuperate.

## 3. HEALTH ISSUES AMONG GARMENT WORKERS

According to a research on sick building syndrome, workers who encountered certain illnesses while working in the plant were considered as having sick building syndrome. Fever, colds, and coughs, as well as body aches, headaches, eye discomfort, skin irritation, stomach and abdominal pain, are just a few of the illnesses that the study uncovered. Workers in the chosen manufacturing buildings are unwell with a variety of ailments, as shown by a questionnaire study. According to the field survey, 74% of the sample of employees suffer from headaches and fever on three to four days per month. Workers who contracted certain ailments while working at the facility were thought to have sick building syndrome, according to a study on the condition. The study identified a number of ailments, including fever, colds, and coughs, as well as body aches, headaches, eye discomfort, skin irritation, stomach and abdominal pain, and stomach and abdominal pain. According to a questionnaire research, employees in the targeted manufacturing facilities are ill with a range of diseases. According to the field study, 3–4 days a month, 74% of the sample of employees experience headaches and fever.

The research also revealed that on average, employees experienced 4–7 days of sickness each month. Workers occasionally take time off or report unwell to work. They are not in a good mood to work when they are not in good health, which has a direct impact on their conduct. When they are working in an unpleasant environment, they will take a break and leave the working area to get some fresh air, relax for a bit, drink some water, or go for a short stroll. The workers occasionally took this break during lunch or throughout working hours. Since there isn't enough fresh air within the workplace, workers leave the floor to get it.

Because of their poor physical state, employees' behavior toward their own job scope is also impacted. The production will be impacted immediately by this prolonged influence of 5-10 days. When working in factories with unhealthful interior conditions, workers frequently exhibit irritable moods, depression, and a lack of motivation. The

field survey also revealed that workers do not prefer to work in factories between the hours of 12 pm and 5 pm. Due to overcrowding, poor ventilation, reduced circulation, and rising interior temperatures, the thermal indoor environment is not ideal. [13]

At least one member of 15% of families is afflicted with a chronic disease. Among the chronic illnesses, prevalence of asthma, long-term heart diseases, diabetes, blood pressure, long-term fever, injury or disability are commonly found. For the treatment of chronic illnesses, these households often spend close to Tk. 970 each month [20].

In the month before the poll, around two thirds of the families had no acute sickness. Additionally, it shows that every third household experienced an acute sickness in the month before the study. Acute illnesses included fever, cold, or both for roughly 18.5% of households, injury and discomfort for 5.3%, consequences from high blood pressure and heart disease for 3.1%, gynecological issues for 1.2%, and water-borne infections for 1.1%. 48.7% and 19.5% of these families have gotten care from private and state hospitals, clinics, and healthcare institutions, respectively. Additionally, 27.7% of people took over-the-counter medicines to treat their individual acute illnesses. Only 1.5% of households used the factory healthcare services, while 2.5% did nothing. It demonstrates that despite having health care facilities on the industrial grounds, few employees use them.

The most crucial consideration when selecting a treatment center is the "cost" of the service, while other factors such as accessibility and the distance to the institution also play a role [20]. It's interesting to note that during the COVID-19 period, fewer cases of acute illnesses were reported at the household level than during the pre-COVID-19 period. Utilizing a mask, routinely washing your hands and face, and increasing your understanding of basic hygiene practices may have helped reduce the number of incidents. [20-24]

The main causes of workers' subjective health concerns include extended working hours without appropriate rest, a lack of usage of personal protection equipment, and poor ergonomic workplace accommodations. The average worker was 27.0 years old, with men being the oldest at 28.2 years old and women being the youngest at 26.2 years old. The average number of hours worked each week was 55.4 6.3. Over two-thirds of the workforce (70.6%) have education as high as the elementary level. A typical household made 106,416.732,360.6 taka annually. The socioeconomic status of the garment workers is evident from the overview.

According to the survey, gastrointestinal issues (89.4%), the flu (63.9%), musculoskeletal discomfort (56.7%), pseudo-neurology issues (41.1%), and allergies (33.3%) were the most common SHCs among the workforce. In the SHC subscale, the substantial prevalence was found for the following conditions: cold flu (59.1%), leg pain (27.5%), pseudo-neurological disorders (23.0%), heat flushes (53.4%), gastrointestinal difficulties (53.4%), and allergies (28.3%). The studies [25–27] revealed that stomach discomfort, heartburn, and other gastrointestinal issues were most common. Gas pain is statistically significantly associated with the gender of the workers (p=0.023), with female workers (51.35%) having the highest prevalence. In investigations undertaken in Bangladesh, Sri Lanka, and Turkey [28–30], heat flushes and vertigo were identified as typical neurological-related issues.

Musculoskeletal conditions are the primary cause of SHCs among textile workers, according to several research [23, 27–29]. It was discovered that 60% of women who worked with sewing machines had back discomfort. Sewing machine operators frequently complained of neck and shoulder ache. [25,32,33] In this study, the relationship between the SHC subscale and the age and gender of the garment workers was described. Coughing was statistically significantly correlated (p=0.027) with workers' ages, with the 21–30 age group (31.7%) having the highest prevalence. The prevalence of allergies was statistically significantly correlated with the gender of the workers (p=0.019), with male workers (15.9%) having the highest prevalence [23-33].

## 4. CONCLUSIONS

The primary goal of this study is to evaluate the interior environment of workers in manufacturing buildings in Bangladesh in order to ascertain the state of their health and behavior at the time. The field study recounted the point of workers' work rate for the whole day while they are working in the factories. The results of this poll will be used to create guidelines that will assist factory owners in providing improved indoor working conditions. Better working conditions for the employees will enable the owner to raise the production margin. The report clearly shows that garment workers are subject to a range of health issues. The most frequent issue is gastroenteritis, and the most common SHC among employees is the prevalence of musculoskeletal illnesses. The reasons of the musculoskeletal issues were prolonged sitting, waist bending and twisting, improper posture, and motions while working. Additionally, linked to digestive issues are somatic illnesses, anxiety, and sadness. Without diagnoses, hypotheses, or attributions, the SHCs appear to be a quick, affordable, straightforward, and accurate tool to assess subjective health problems that arise in the typical working population. The construction and upgrading of medical facilities within the garment factory, as well as the supply of urgent and basic healthcare, might lessen the subjective health issues that the workers experience.

## **5. REFERENCES**

[1]. Srabon, Shakil. (2017). Health and Safety Situations of Garments Workers in Developing Countries A Study on Bangladesh. British Journal of Sociology of Education. 10.

[2]. Health SDG profile 2018: Bangladesh. [Internet]. World Health Organization (WHO): 2018. Available from: https://apps.who.int/iris/bitstream/handle/10665/276833/sdg-profile-Bangladesh-eng.pdf

[3]. Sattar S, Laila K. The Effect of Health Problems on Quality of Work Life among Garments Workers in Dhaka City. Scientific Research Journal. 2018;6(8):11-21.

[4]. Jahan N, Das M, Mondal R, Paul S, Saha T, Akhtar R, Khan MA, Banik PC. Prevalence of musculoskeletal disorders among the Bangladeshi garments workers. Sikkim Manipal University Medical Journal. 2015;2(1):102-13.

[5]. BGMEA sustainability reports 2017-18. [Internet]. Bangladesh Garment Manufacturers and Exporters Association (BGMEA): 2018. Available from: http://download.bgmea.com.bd/SDG%20Report.pdf

[6]. BGMEA sustainability reports 2020. [Internet]. BGMEA: 2020. Available from: http://download.bgmea.com.bd/BGMEA%20Sustainability%20Report%202020.pdf

[7]. Nurunnabi M, Rahman T, Absar TU, Hamid S. Factors Affecting the Utilization of Postnatal Care Services in Readymade Garments Working Mother.Journal of ZH Sikder Women's Medical College. 2022;4(1):8-13.

[8]. Hasnain MG, Akter M, Sharafat MS, Mahmuda A. Morbidity patterns, nutritional status, and healthcare-seeking behavior of female garment workers in Bangladesh. Electronic Physician. 2014;6(2):801.

[9]. Begum F, Ali RN, Hossain MA, Shahid SB. Harassment of women garments workers in Bangladesh. Journal of the Bangladesh Agricultural University. 2010;8(2):291-6.

[10]. Chandra N, Dubey N. Role of rest period: An ergonomic study on sewing machine operators. Hand.Journal of Family, Community and Consumer Sciences. 2014;9(16.3):5.

[11]. Lillypet S, Jain T, Joseph B. Health problems among garment factory workers: A narrative literature review. Journal of Occupational Health and Epidemiology. 2017;6(2):114-21.

[12]. Thomas S. A study on the health problems of women working in a textile unit in Coimbatore. International Journal of Science and Technology. 2011;1(5):200-3.

[13]. Khan, M. A. A. S., & Ahmad, M. H. EFFECT OF INDOOR CONDITION OF BANGLADESH FACTORY TO WORKERS HEALTH AND BEHAVIOR. Management, 7(27), 405-416.

[14]. Bangladesh Garments Workers, 2012

[15]. ManuelArellano (manuel.arellano.g@gmail.com) and Stephen Bond, Review of Economic Studies, 1991, vol. 58, issue 2, 277-297

[16]. Kyko O.C. (2005) Instrumentation: Know Yourself and Others. New York: Longman

[17]. Alexander, C. (1970). The goodness of fit and its source. InH. Proshansky, W. Ittelson, & L.Rivlin (Eds), Environ-mental psychology: Man and his physical setting (pp.42–56). New York: Holt Rinehart and Winston

[18]. Ayr, ubaldo & cirillo, e. & martellotta, francesco. (2001). an experimental study on noise indices in air conditioned offices. applied acoustics - appl acoust. 62. 633-643. 10.1016/s0003-682x(00)00072-4

[19]. Indoor Air Facts No. 4 (revised) Sick building syndrome. Available from: http://www.epa.gov/iaq/pubs/sbs.html

[20]. BGMEA (2020). BGMEA Sustainability Report 2020. Bangladesh Garments Manufacturer and Exporter Association. Retrieved from: http://download.bgmea.com.bd/BGMEA%20Sustainability%20Report%202020.pdf [21]. Export Promotion Bureau. (2020, 10 October). Statistics: Export Data. Export Promotion Bureau.

Government of the People's Republic of Bangladesh. Retrieved from: http://epb.gov.bd/site/view/epb\_export\_data/-[22]. Haque and Bari (2015). Garments Workers in Bangladesh: Social Impact of the Garments Industry. Asian

[22]. Haque and Bari (2015). Garments workers in Bangladesn: Social Impact of the Garments Industry. Asian Center for Development (ACD). Retrieved from: http://acdonline.org/wp-content/uploads/2015/03/Garment-Worker-Survey-Summary-Report-2015.pdf [23]. Ministry of Finance (2020). Bangladesh Economic Review: Statistical Appendices. Government of the People's Republic of Bangladesh. Retrieved from: https://mof.portal.gov.bd/site/page/28ba57f5-59ff-4426-970a-bf014242179e/Bangladesh-Economic-Review-2020

[24]. Moazzem and Radia (2018). 'Data Universe' of Bangladesh's RMG Enterprises: Key Features and Limitations. CPD Working Paper 123. Centre for Policy Dialogue (CPD). Retrieved from: https://cpd.org.bd/wp-content/uploads/2019/01/CPD-Working-Paper-123-Data-Universe%E2%80%99-of-Bangladesh%E2%80%99s-RMG-Enterprises.pdf

[25] Rifat, Tafhim & Chowdhury, Md & Khan, Nabila & Arefin, Muntaha & Nurunnabi, Mohammad. (2022). Subjective Health Complaints among the Garments Workers. 12. 46-53. 10.47648/jswmc2022v12-02-51.

[26] Jahan N, Das M, Mondal R, Paul S, Saha T, Akhtar R, Khan MA, Banik PC. Prevalence of musculoskeletal disorders among the Bangladeshi garments workers. Sikkim Manipal University Medical Journal. 2015;2(1):102-13.
[27] Thomas S. A study on the health problems of women working in a textile unit in Coimbatore. International Journal of Science and Technology. 2011;1(5):200-3.

[28] Makurat J, Friedrich H, Kuong K, Wieringa FT, Chamnan C, Krawinkel MB. Nutritional and micronutrient status of female workers in a garment factory in Cambodia. Nutrients. 2016;8(11):694.

[29] Bandyopadhyay L, Baur B, Basu G, Haldar A. Musculoskeletal and other health problems in workers of small scale garment industry–an experience from an urban Slum, Kolkata. Journal of Dental and Medical Sciences. 2012;2(6):23-8.

[30] Ahmed S, Raihan MZ. Health status of the female workers in the garment sector of Bangladesh. Journal of the Faculty Economics and Administrative Sciences. 2014;4(1):43-58.

[31] De Silva PV, Lombardo S, Lipscomb H, Grad J, Østbye T. Health status and quality of life of female garment workers in Sri Lanka. Galle Medical Journal. 2013 May 8;18(1).

[32] Öztürk N, Esin MN. Investigation of musculoskeletal symptoms and ergonomic risk factors among female sewing machine operators in Turkey. International Journal of Industrial Ergonomics. 2011;41(6):585-91.

[33] Kaergaard A, Andersen JH. Musculoskeletal disorders of the neck and shoulders in female sewing machine operators: prevalence, incidence, and prognosis. Occupational and Environmental Medicine. 2000;57(8):528-34.

