Journal of Applied and Advanced Research 2017, 2(3): 184–188 http://dx.doi.org/10.21839/jaar.2017.v2i3.91 http://www.phoenixpub.org/journals/index.php/jaar ISSN 2519-9412 / © 2017 Phoenix Research Publishers

**Research Article – Social Science** 

# Prevalence of Health Hazards: A Study on the Female Workers of Garment Industry in Gazipur District, Bangladesh

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#### Abstract

The present study tries to find out the prevalence of health hazards among the female workers of the garment industry in Gazipur district, Bangladesh. This study focused on two sub-districts, Sreepur and Kaliakoir, of Gazipur district. Data for this study were collected from 100 female garment workers of Gazipur district. This study observes female workers in the industry consistently suffer from a range of physical health complexities such as headache, eye problem, hand pain and respiratory difficulties. This study also analyses the causes and measures to solve the health issues of female workers of the garment industry.

Key words: Bangladesh garment industry, Female garment workers, Physical health, Dust and chemical, Solution

#### Introduction

Garment industry plays a vital role in the economy of many countries. For some countries, this industry is the leading earning and employment sector. But when it comes to the workers' health and safety, globally the industry does not meet the expected standard and when referring to the developing countries, the standards are not satisfactory and underdeveloped compared to the developed and industrialised countries.

Worldwide, approximately 60 to 75 million people were employed in this industry in 2014 that experienced an incredible growth from only 20

Received: 18-05-2017; Accepted 12-06-2017; Published Online 14-06-2017

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Md. Shohel Mahmud, Department of Sociology, Mangalore, University, Mangalagangotri - 574 199, Karnataka, India million in 2000 (Stotz and Kane, 2015). Bangladesh is one of the top garment producing countries in the world, second only to China, where around 4.5 million vibrant, young and urbanising people, of which 80 percent are female, are working in about 4500 garment factories (Ahmed and Nathan, 2014; Begum et al., 2010; Farhana et al., 2015; Sultana et al., 2012, Heath and Mobarak, 2015, "BGMEA at a glance," 2017). The garment export accounts for almost 80 percent of total export earnings of Bangladesh ("About Garment Industry of Bangladesh," 2017; Islam et al. 2014).

But when it comes to the health and safety, the standards in the garment industry of Bangladesh are not satisfactory and currently going through a significant transitional period towards achieving expected health and safety standards. Due to infirm health and safety standards, workers are common victims of assorted health perils, for instance, respiratory problems, recurrent fever, headache, weakness, blood pressure, and body pain (Ahmed and Raihan, 2014; Islam et al., 2014; Thomas, 2011). Workers aged between 21 to 30 years of age suffer most from the physical hazards (Nahar et al., 2010). Although both men and women are vulnerable to health and safety hazards industry, women in the garment are unquestionably more exposed to a wider range of risks as they work in the stitching section that requires more labour and intensity (Mehta, 2012).

In Gazipur district, 898 garment factories are situated where hundreds of thousands of people are working (Bangladesh Bureau of Statistics, 2011). This proposed study tries to explore the prevalence of health hazards and their prospective solutions.

#### Methodology of the study

The data in the study come from Sreepur and Kaliakoir sub-districts of Gazipur district, Bangladesh. These two sub-districts are in a periurban area and outside of Dhaka city. From each sub-district, five garment factories were selected and from each garment factory, 10 female garment workers were chosen (a total of 100). To collect the data a questionnaire was carried out among the workers. And to maintain the authenticity, data were collected from the area's workers' lives, so that they can answer without any influence.

# **Objectives of the study**

To explore the prevalence of health hazards among the female workers of the garment industry, the objectives of the study were set to:

- identify the health issues of the female garment workers.
- explore the causes of physical health hazards among the female garment workers.
- find out the measures to ensure the health complications among the female garment workers.

## Major findings of the study

## Physical health hazards

This study finds female workers in the garment industry in Bangladesh are exposed to a wide range

of physical health perils due to some reasons associated with the industry, for example, poor sitting arrangement, indigent dust and chemicals management, and intense nature of the job.

This study explores female garment workers are common sufferers of different physical health issues related to their work ranging from headache to the hearing problem to hypertension (Table-1).

 Table 1. Physical health complaints related to work

Physical health complaints	Response (%)	
Headache	92	
Eye problem	71	
Fatigue	70	
Hearing problem	57	
Hypertension	54	

The most frequently suffered physical health complaint among the female garment workers was found to be headache (92%). The respondents informed almost all the time they suffer from chronic headache and the severity of this problem ranges from normal to extreme. Eye problem (71%) and fatigue (70%) were found to be the following two problems among the workers. As the nature of work in the garment industry is very intense that requires women to work with high concentration and making continuous precise movements without any rest and mostly under the lights, they suffer from eye problem and fatigue. Respectively 57 percent and 54 percent respondents reported hearing difficulties and hypertension as their physical health problems. As the stitching section in the garment industry where most of the women work is a high noise section, they suffer from the hearing problems. But it is to be mentioned that hearing problem to a great extent was not found among the workers. Besides, issues like tremendous working pressure, fear of accidents and inadequate family time causes hypertension among the employees.

Wrong working posture is another reason female garment workers suffer from a number of health hazards (Table-2). It has been found that sitting arrangement for the workers is very skint and uncomfortable (Table-4). Side by side, workers who are operators have some sitting arrangements, but helpers are not entitled to any sitting facilities at all.

Table 2. Physical effects due to working posture

Effects of working posture	Response (%)	
Hand pain	74	
Lower back pain	71	
Shoulder pain	68	
Chest pain	63	
Abdominal pain	45	
Others	22	

Proportionately 74 percent and 71 percent respondents reported hand pain and lower back pain as their top two health problems. As it has been pointed out earlier those women in the garment industry usually work in the stitching section that demands highly accurate and fast movements of hands for a long time without any break and rest and in a comparative static position, they suffer from hand and lower back pain. For the same reason, shoulder (68%), chest (63%), and abdominal pain (45%) were found among the workers. Finally, 22 percent of the respondents also identified leg and hip pain due to wrong working posture. It has been singled out that helpers who have no sitting arrangement throughout their working time suffer from leg pain while hip pain was identified mostly among operators who sit their entire working hours without any break.

Dust and chemical particles also cause some health complications among the female workers of garment industry (Table-3). Unwillingness in using masks while working is one of the main reasons of suffering from dust and chemical particles often result in respiratory problems (66%). Some respondents informed that they get masks from the factory, but they don't wear them while working, as it is not mandatory or even monitored. This self-indifference in using the mask also causes difficulties for them.

**Table 3.** Health problems due to dust and chemical particles

Problem due to dust and chemicals	Response (%)
Respiratory problems	66
Allergy	28
Skin irritation	17
Contact dermatitis	7

Working in a garment factory without proper health measurement means constant exposure to different dust and chemical particles that can cause respiratory problems, allergy, skin irritation and contact dermatitis, respectively 28, 17 and 7 percent of the respondents referred to these problems.

# Causes of physical health hazards

This study observed that women workers in the garment factories in Gazipur district are exposed to an ample range of health issues due to unhealthy working environment and meagre health management. The causes this study identified ranges from impoverished sitting arrangement to lack of working knowledge to unsafe drinking water.

**Table 4.** Causes of physical health hazards of female garment workers

Causes of physical health hazards	Response (%)	
Uncomfortable sitting arrangement	83	
Noise	73	
Exposure to different dust	70	
Lack of working knowledge	46	
Improper lighting	43	
Insufficient ventilation	31	
Lack of safe drinking water	30	

As mentioned earlier majority of the female workers work in the stitching section. In the stitching section, women are employed, based on their experiences, in operator and helper post. Only the operators have some sitting arrangements. Even for the operators, the sitting arrangement is uncomfortable tools while the helpers are entitled no such arrangement. Helpers are compelled to stand throughout their working time. The highest number of the respondents (83%) mentioned uncomfortable sitting arrangements as the main reason for their physical health complications.

Next to the uncomfortable sitting arrangement, respectively 73 percent and 70 percent respondents mentioned noise and exposure to different dust as their main reasons for physical health hazards. Other reasons for the physical health hazards identified are a lack of working knowledge (46%), improper lighting (43%), insufficient ventilation (31%) and lack of safe drinking water (30%). All these problems unveil the dingy and hazardous working environment in the garment industry in Gazipur district.

## Measures of the physical health complications

To solve the health troubles of the women garment workers, health arrangements of the industry should be improved. We have asked a number of questions to female garment workers regarding how the health management can be improved. In order to improve the health provision and to ensure a salubrious working environment, both the factory authority and government should work unitedly.

**Table 5.** Employer's responsibilities to ensure the health of female workers

Employer's responsibilities	Response (%)	
Arranging sufficient medical facilities	84	
Arranging sufficient safety measures	76	
Providing leisure time	68	
Security	40	
Others	35	

In order to ensure a healthy workplace in the garment industry, 84 percent of the respondents emphasised on ample medical facilities including full-time qualified doctors, nurses and adequate medicines. The respondents also gave importance on the sufficient safety arrangements (76%), such as fire extinguishers and exits while respectively 68 percent and 40 percent stated enow leisure time and security are also crucial to ensure the workers' health. Only 35 percent respondents suggested other ways, for example, regular health checkup and food incentives while working for longer hours and late at night.

After ensuring the health of the female workers, it then comes to maintaining their healthy physical status. So they continue to work without any physical trouble. In this purpose, 73 percent respondents gave importance on the availability of sufficient fire safety measurement (Table-6). Subsequently, around 50 percent workers mentioned controlling of dust and chemical particles, and enough space in the factory to move around.

**Table 6.** Employers roles in maintaining health of the female workers

Employers	s roles			Response (%)
Ensuring	sufficient	fire	safety	73
measureme	ent			15
Proper controlling of dust and chemical		54		
Particles				54
Ensuring e	nough space to	o move	around	50

In order to maintain the health of the female workers in the garment factories, adequate medical arrangement is very crucial. Without proper and efficient medical facilities, health of the workers cannot be ensured.

**Table 7.** Employers' responsibilities to ensure medical facilities in the factory

Medical facilities	Response (%)
Providing full-time doctors and nurses	100
Establishing a well equipped medical centre	58
Providing sufficient first aid box	43
Others	13

To ensure proper medical facilities of the workers, full-time doctors and nurses are a must requirement and astonishingly every single respondent (100%) cited this as the most important issue. While none of the workers expects the factory to own a hospital of its own, they expect every garment factory to have one well equipped medical centre (58%), so that the factory itself can provide the necessary primary health care to its employees. And to meet that requirement little less than half of the respondents (43%) asked for sufficient first aid box in the factory. To ensure proper medical facilities necessity of maternity leave, expense of treatment and sufficient medicine were also pointed by the respondents (13%).

The government is another major stakeholder to secure the health of the garment workers. But, it happens to see that the female garment workers in Sreepur and Kaliakoir are not well aware of the government's role in ensuring their health concerns.

**Table 8.** Government's roles to ensure health of the female garment workers

Government roles	Response (%)	
Regular inspection of factories	54	
Implementing health and safety Law	39	
Others	24	

Little more than half of the respondents (54%) gave importance on the regular visit of government inspectors to the factories to look after the health arrangement of the factories. Thereupon, if necessary, they can implement new health and safety law (39%) to ensure the health and safety of the workers and also to ensure that the law is obliged by the industry. Only a quarter of the respondents named some other demands than the discussed ones, such as establishing

specialised hospitals for the garment workers, transportation and reducing the price of daily necessities.

#### Conclusion

This paper studied the prevalence of health hazards of the female workers of the garment industry in Gazipur districts, Bangladesh. This study found that women workers in the industry are suffering from diverse health issues because of the ailing working environment at the workplace. Headache, hand pain and respiratory problem were recognised as three main health complications while uncomfortable sitting arrangements, noise and exposure to diverse dust and chemical particles found to be the main reasons. To solve the prevalence of health issues, sufficient medical facilities, safety measurements and regular government inspections of the factories were given importance by the respondents. But overall, the studied population pointed that the health measurements in the garment industry in Gazipur district are now better than before.

#### References

- About Garment Industry of Bangladesh. (2017, June 17). Retrieved from http://www.bgmea. com.bd/home/about/About Garments Industry.
- Ahmed, N., and Nathan, D. (2014). Improving wages and working conditions in the Bangladeshi garment sector: the role of horizontal and vertical relations (Working paper 40). Manchester: The University of Manchester (Capturing the Gains).
- Ahmed, S., and Raihan, M. Z. (2014). Health Status of the Female Workers in the Garment Sector of Bangladesh. *Journal of the Faculty of Economics* and Administrative *Sciences*, 4(1), 43-58.
- Bangladesh Bureau of Statistics (BBS). (2011). *Population and Housing Census-2011*. Community report: Gazipur). Dhaka: Bangladesh Bureau of Statistics.

- Begum, F., Ali, R. N., Hossain, M. A., Shahid, S. B. (2010). Harassment of women garments workers in Bangladesh. *Journal of the Bangladesh Agricultural University*, 8(2), 291-296.
- BGMEA at a glance. (2017, May 14). Retrieved from http://www.bgmea.com.bd/home/about
- Farhana, K., Syduzzaman, M., and Munir, M. (2015). Present Status of Workers in Readymade Garments Industries in Bangladesh. *European Scientific Journal*, 11(7), 564-574.
- Heath, R., and Mobarak, A. M. (2015). Manufacturing growth and the lives of Bangladeshi women. *Journal of Development Economics*, 115, 1-15. http://dx.doi.org/ 10.1016/j.jdevec215.01.006
- Islam, L. N., Sultana, R., and Ferdous, K. J. (2014). Occupational Health of the Garment Workers in Bangladesh. *Journal of Environments. Asian Online Journal*, 1(1), 21-24.
- Mehta, R. (2012). Major Health Risk Factors Prevailing in Garment Manufacturing Units of Jaipur. *Journal of Ergonomics*, 2(2), 1-3. doi:10.4172/2165-7556.1000102.
- Nahar, N., Ali, R. N., and Begum, F. (2010). Occupational Health Hazards in Garment Sector. *International Journal Biological Research*, 1(2), 01-06.
- Stotz. L., and Kane, G. (2015). *Facts on Global Garment Industry*. Amsterdam: Clean Clothes Campaign.
- Sultana, R., Ferdous, K. J., Hossain, M., Zahid, M. S. H., and Islam, L. N. (2012). Immune Functions of the Garment Workers. *International Journal of Occupational and Environmental Medicine*, 3 (4), 195-200.
- Thomas, S. (2011). A Study on the Health Problems of Women Working in a Textile Unit in Coimbatore. *International Journal of Science and Technology*, 1(5), 200-203.