

Health and Occupational Safety for Female Workers of Garment Industries in India

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ABSTRACT: For the last two decades, India Readymade Garment (RMG) segment has played a critical part in establishing job chances for village marginal individuals. Currently, there are 5,100 garment companies in the nation, employing 3.6 million people, with more than 80 percent of them being women. From the start, it's clear that the female garment workers' health isn't good enough for them to execute their jobs correctly. This research aims to determine the health problem faced by women's employees in the garment business. During the research data is collected and analyzed based on a variety of factors like age, department, skills of workers, working hours, etc. According to findings, nearly every female worker in this business is afflicted with a range of diseases and problems, including bone difficulties, abortion-related complications, back discomfort, dermatitis, eye strain, pruritus, starvation, and breathing issues. From a future point of view, this study will help to identify the health problem faced by female workers in the garment industry.

Keywords: Female Workers, Garment, Health, Industry, Safety.

1. INTRODUCTION

India's economy's largest source of foreign currency earnings is the readymade garment (RMG) sector[1],[2]. The garment industry accounted for 78.15 percent of total revenue in the 2010–2011 financial year [3],[4]. Currently, there are 5,100 garment manufacturers in Bangladesh, employing 3.6 million people, with more than 80 percent of them being women who mostly come from India rural districts[5]. It is crucial in providing economic possibilities for rural illiterate women who would otherwise be forced to work as domestic servants[6]. As a consequence, the RMG sector has provided a new avenue for rural people to participate in India's economic activity[7],[8].

Workers in this industry are living paycheck to paycheck and are unable to meet their fundamental necessities with their earnings[9]. They can't afford even basic health care, so medical services, clean lodging, and access to other luxuries are a pipe dream for them[10]. As a result, they had to deal with various levels of physical complexity[11]. Furthermore, the working atmosphere in garment workshops is not conducive to maintaining healthy health. Moreover, garment employees are concerned about their upcoming prospects owing to lower pay, which has an impact on their emotional and social well-being[12].

In the garment industry, female employees are mostly responsible for sewing the textiles together[13]. As a result, they were forced to inhale fabric dust, posing a health risk and resulting in ailments such as asthma, respiratory problems, breathing problems, conjunctivitis, and visual discomfort[14]. Furthermore, they were required to labor for lengthy periods without leaving their workstation[15]. Back discomfort is a regular occurrence among female employees due to the nature of their jobs[16]. Neck discomfort, joint pain, musculoskeletal pain, neurological problems, and problems with body muscles, joints, tendons, ligaments, and bones are also common[17]. This paper consists of 5 sections out of which section 1 discusses the overview, section 2 discusses the review of literature, and section 3 discusses the methodology part which is further divided into 5 parts which include research design, sampling, instruction, data collection, and data analysis, section 4 discusses the result and discussion part and section 5 discusses the conclusion part[14].

2. LITERATURE REVIEW

M. S. Mahmud et al. [18] Stated that Bangladesh is the largest important export earner in the readymade clothing sector. Currently, the sector employs over 4.5 million people, with 80 percent of them being women. Women in the business are subject to a variety of physical and psychological health risks because of the poor workplace conditions and the physically demanding type of profession. To investigate the health difficulties of female garment workers in Dhaka, cross-sectional descriptive research was conducted by the author. According to the study majority of respondents were experiencing migraines, finger pain, and respiratory issues, due to the type of their jobs, working position, dust, and toxins, and 69 percent of participants were depressed. Physical health concerns were indicated as unpleasant sitting postures (79 percent) and noise (75 percent), while psychological issues were highlighted as fear of accidents (75 percent).

J. A. Laub [19] stated that the textile business in India contributes significantly to the growth of the Indian economy and plays a vital role in giving employment to India's rural and urban populations, but it fails to promote education and health as crucial components of human development. Workers in the textile business confront a variety of dangers, including cotton dust exposure, chemical exposure, noise, and ergonomic concerns, among others. Certain elements contribute to workplace dangers, such as job stress, inappropriate use of personal protection equipment, stress, an unhealthy working environment, and bad working conditions. The majority of employees are uneducated and have no idea about the safety precautions they should take at work. Employees need to be informed of the many occupational dangers to avoid health problems in the workplace. Management must also take the appropriate precautions to safeguard employees from potentially harmful situations.

N. Islam [20] stated that the Ready Made Garment (RMG) business has been ranked as India's top export earner, with over 5000 garment factories employing over 4 billion persons, with more than 80% of employees being women. India's RMG industry is regarded as the country's economic backbone. The RMG sector's key strength is India's low-wage garment workers. As a result, the author finds that Bangladesh is an emerging nation with a lot of room for expansion. In the garment and textile sector, it offers a lot of potentials. The nation is a member of the Generalized System of Preferences (GSP), which has allowed it to become the European Union's second-biggest exporter.

Research questions:

- What types of health problems are faced by female workers in the garment industry?
- In which department of the garment industry maximum female workers faced health problems?

3. METHODOLOGY

3.1 Research design:

This research is carried out in India on female workers in the garment industry in step by step way. Variables such as age, skills, workers' job types, working hours, and the problem of health are considered for this research. Several workers from various parts of the garment industry were asked questions on the causes of health problems and safety concerns to provide relevant data.

3.2 Sampling:

In this research samples are taken from the garment industry in India out of 100 respondents out of which 20 respondents are 15-25 years old, 26 respondents are 25-40 years old, 35 respondents are 40-60 years old, and 19 respondents are more than 60 year old as shown in Table 1.

Table 1: Illustrating the age group of respondents

Number of respondents	Age of respondents
20	15-25
26	25-40
35	40-60
19	More than 60

3.3 Instrument used:

Statistical tools will be utilized throughout the research process, depending on the availability of data and the study's requirements. Mean, percentage, correlation, chi-square test, and t-test are a few examples. The study's findings will be

represented using graphs and tables. Several questions have been asked to aid in the explanation of the research and the mapping of the graph. The list of questions is shown in Table 2:

- Do Females workers have health problems related to the bone?
- Do female workers have health problems related to the work environment?
- Do female workers have health problems related to long working hours?
- Do female workers have a health problem related to respiratory?

Table 2: Illustrating the list of questions asked during research.

S.NO.	Questions asked	Yes	No	In the developing stage
1	Does Females workers have health problem related to bone	55%	30%	5%
2	Does female workers have health problem related to work environment	40%	40%	20%
3	Does females workers have health problem related to lengthy working hour	50%	44%	6%
4	Does females workers have health problem related to respiratory	35%	40%	15%

3.4 Data collection:

During the research, 100 respondents were served. About 20% of respondents were between the ages of 15 and 25, 26% were between the ages of 25 and 40, 35% percent were between the ages of 40 and 60 and 19% of respondents were more than the age of 60 as shown in Figure 1.

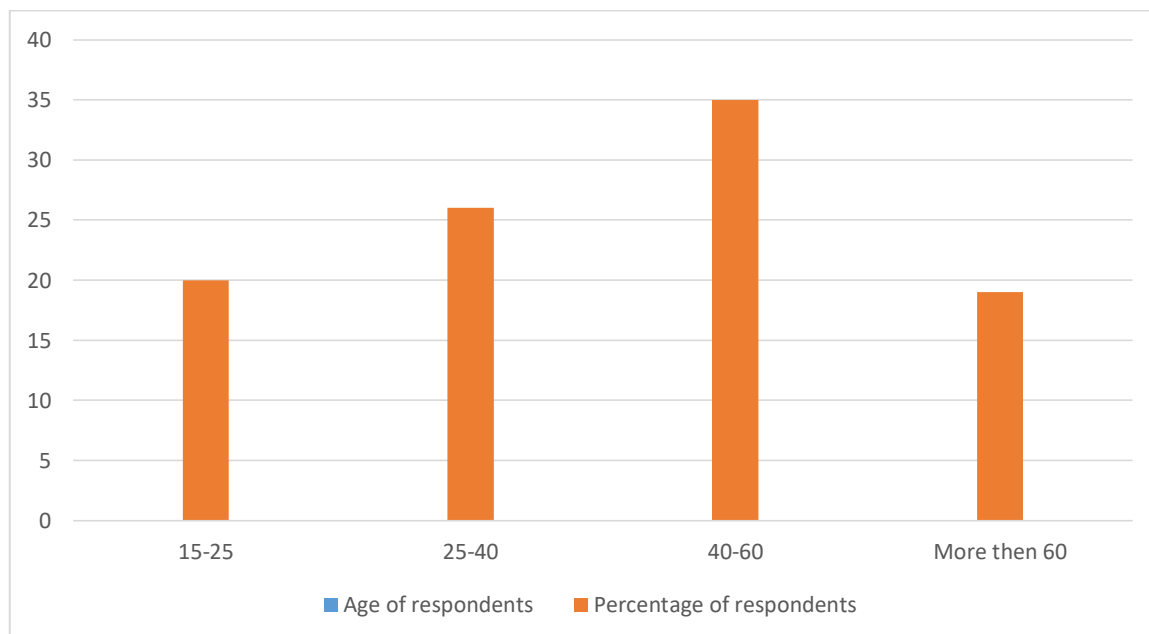


Figure 1: Illustrating the percentage of respondents concerning age group

Figure 2 shows that 12% of female workers have health issues between the age group of 15-25, 26% of females workers have health issues between the age group of 25-40, 25% of females workers have health issues between age group of 40-60 and 37% of females workers have health issues between the age group of more than 60.

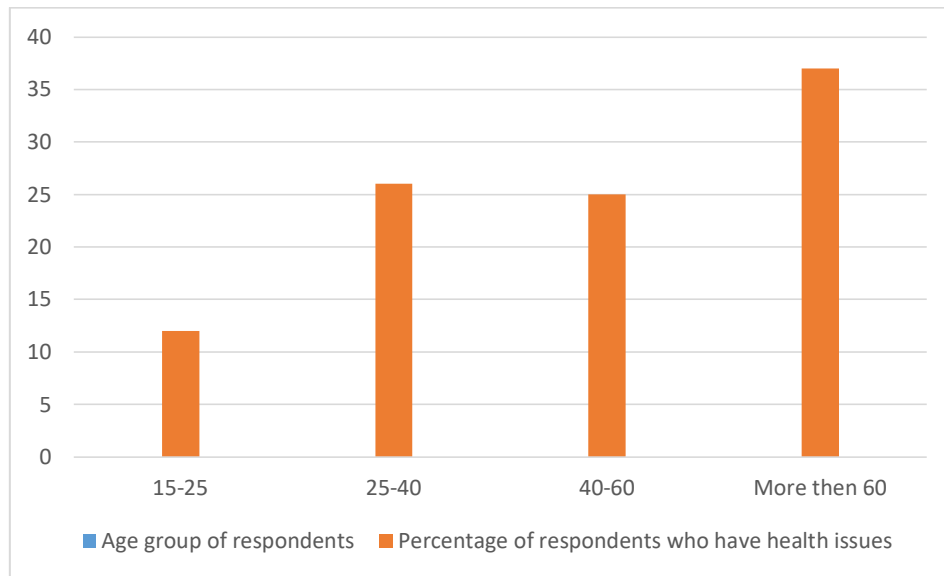


Figure 2: Illustrating the percentage of female workers who have a health problem.

3.5 Data analysis:

Figure 3 shows that 14% of female workers have faced asthma, 20% faced back pain, 8% faced upper back pain, 12% faced eye problems, 15% faced headache, 10% faced allergy, 9% faced neck pain, and 12% faced chest pain.

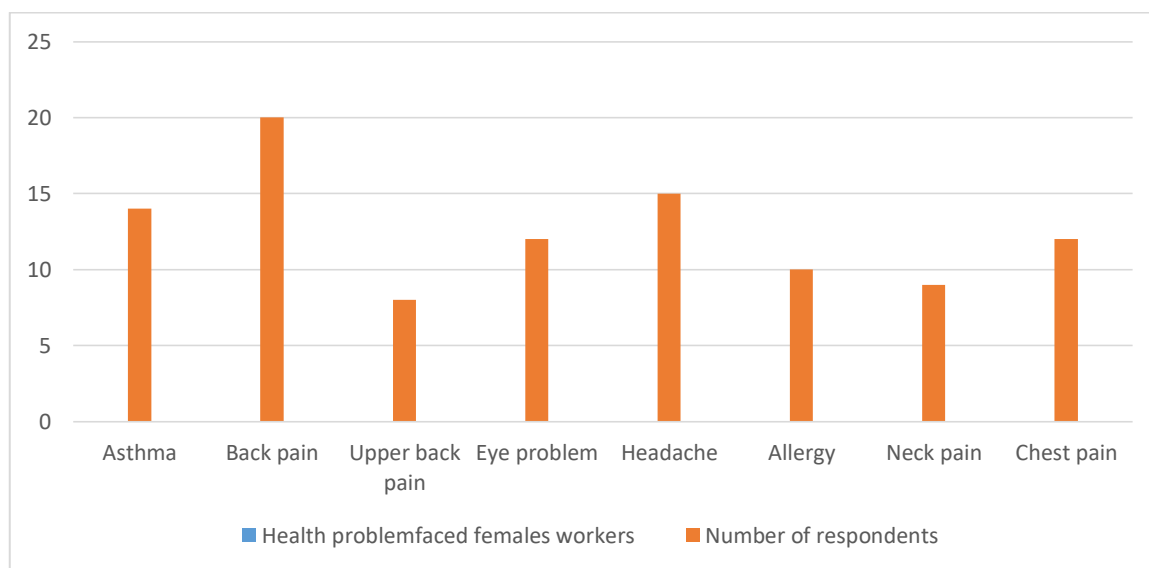


Figure 3: Illustrating the types of health problems faced by females workers

4. RESULT AND DISCUSSION

The clothing hands in India are suffering from bone diseases too, as seen in Table 3. Female workers are forced to work for long periods without moving, and as a result, they have discomfort in their arms, legs, and muscles. Furthermore, female employees have tendonitis in various places of the body as well as joint discomfort while at work. It has also been reported that as they were rushing to finish the job, they had numbness and tingling in their fingers and arms, as well as nerve and ligament problems. The skeleton-related health issue is made up of eight separate disorders that are all linked to the general health of female employees.

Table 3: Illustrating the health problems related to the bone condition.

Variables	% of problem
Problem in bones	13%
Ligament	19%

Nerves	21%
Tendons may be found in several regions of the body	7%
Joint discomfort	12%
Fingers and forearm stiffness and trembling	10%
Trauma	14%
Body muscles	4%

In the majority of instances, pruritus is one of the disorders that clothing workers suffer from, as shown in Table 4. Female employees had to labor in a humid and enclosed atmosphere, which may lead to ailments including skin allergies, pruritus, and other medical problems. Likewise, the manufacturing environment is unsanitary and loud, resulting in the majority of employees contracting ailments such as hearing loss, dermatitis, Diarrhea, asthma, fungus infections, cataracts, and diarrhea are just a few of the conditions that affect them.

Table 4: Illustrating the health problems related to the unhealthy environment

Variables	Percentage of problem
Pruritus	17%
Dermatitis	9%
Hearing problem	11%
Fungal infection	7%
Skin allergies	10%
Diarrhea disease	10%
Asthma	6%
Cut injuries	15%
Conjunctivitis	9%
Dysentery	6%

Table 5 illustrates that garment industry employees suffer from back discomfort as a result of working for long periods without rest. The ailments that affect garment workers are caused by the nature of their labor. Another significant health issue that female employees encounter is eye staining. Because they are required to work for extended periods and must maintain a high level of focus, an additional strain is placed on their eyes, affecting their visual comfort. Furthermore, garment workers labor in an unpleasant atmosphere that causes their bodies to sweat, resulting in ailments such as bodily discomfort, skin irritation, and fainting. Another major illness that garment workers must deal with is weariness. The future of garment workers is a source of concern for them. As a result, they experience a lot of weariness, frustration, and chest discomfort.

Table 5: Illustrating the health problem related to a long working hours.

Factor	Percentage of problem
Back pain	17%
Fatigue	15%
Neck pain	9%
Eye strain	20%
Frequent body ache	10%
Hypertension due to heavy workload	5%
Skin irritation	8%

Pain in joint	7%
Frustration	9%

Table 6 illustrates that female employees have respiratory problems as well. Almost all female industrial employees are involved in fabric stitching, and they inhale fabric dust regularly, producing lung problems. Furthermore, a lack of activity at work contributes to heart disease. As a result, these illnesses are prevalent among women working in the garment industry.

Table 6: Illustrating the health problem related to respiratory problems.

Factor	Percentage of health problem
Heart disease	57%
Respiratory problem	43%

The wage of textile workers is insufficient to meet their necessities. As a result, they are unable to purchase the essentials and well-balanced diets required to maintain good health. They were forced to go hungry and eat rotting meals at times, resulting in food illness, hunger problems, and other bodily imbalances. Gastric discomfort is common among female employees. Due to their heavy workload, most employees are unable to eat on time. As a result, individuals will experience the health issues listed in Table 7. The factor loadings on these factors are quite high, indicating that they have a strong association.

Table 7: Illustrating the health problem related to an Imbalanced diet

Factor	Percentage of health problem
Malnutrition	18%
Food poisoning	23%
Less appetite	22%
Gastric pain	9%
Headache	13%
Breathing	15%

5. CONCLUSION

A substantial percentage of female employees in the Indian readymade garment business continue to work while suffering from numerous ailments and illnesses since they have no other option to live in society. Because female employees are the primary contributors to the garment industry, its growth, and development are heavily reliant on them. We must assume that sick employees will not contribute to a strong economy. Health issues among employees have a significant impact on the garment sector's competitiveness in the global market since they reduce workers' productivity significantly.

Virtually all women's employees in this profession are afflicted with various ailments and disorders, including bone problems, abortion-related complications, erythema, back pain, eye strain, itching, nutrition, pulmonary problems, hepatitis, stomach discomfort, exhaustion, fever, abdominal pain, common cold, and hookworm are just a few of the conditions that might affect you. Despite their youth, the textile workers suffered from anemia, feminine disorders, diarrhea, and other illnesses. Female employees should be allowed to take breaks throughout the day to relax and relieve back discomfort, eye strain, and exhaustion. Female employees' earnings are insufficient to make ends meet.

As a result, they should be provided a sum that will allow them to purchase the needs of life. Malnutrition, stomach discomfort, abdominal pain, and weariness will all be avoided. To reduce the risk of diseases such as companies must offer proper operating circumstances, clean drinking water, and a dedicated rest chamber for female employees to prevent dermatitis, pruritus, respiratory issues, hepatitis, fever, abdominal discomfort, general cold, helminthiasis, and infections induced by sexual interaction.

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