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Study On Occupational Health And Safety For Women Workers In Garment Industry

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ABSTRACT:

Garment industry in India contributes a lot to the growth of Indian economy and plays an important role in providing the employment to the rural and urban population in India but it fails to foster education and health as key component of human development. There are different hazards faced by the women workers in garment industry such as exposure to cotton dust, noise and ergonomics issues etc. There are also some common factors, which are responsible to create the hazards in the women working environment the job strained, improper use of personal protective equipment stress, unhealthy women working environment and poor women working conditions etc. Most of the women workers are illiterate and do not know that what protective measures should be adopted for their jobs. To prevent the health issues of women workers in industries it is essential that the workers be aware of the various occupational hazards in the industry. It is also necessary that the management should take the necessary steps to protect workers from potential hazardous situation. This review shows the challenge and health problems faced by women workers in garment industry.

INDEX TERMS: Women workers, OHAS, Physical Hazards, Garment Industry

INTRODUCTION:

India's economy's largest source of foreign currency earnings is the ready made garment (RMG) sector. Currently, there are 5,100 garment manufacturers in Indian, employing 3.6 million people, with more than 80 percent of them being women who mostly come from India rural districts. It is crucial in providing economic possibilities for rural illiterate women who would otherwise be forced to work as domestic servants. As a consequence, the RMG sector has provided a new avenue for rural people to participate in India's economic activity. Workers in this industry are living pay check to pay check and are unable to meet their fundamental necessities with their earnings. They can't afford even basic health care, so medical services, clean lodging, and access to other luxuries are a pipe dream for them. As a result, they had to deal with various levels of physical complexity. 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.

GARMENT INDUSTRY:

In the garment industry, female employees are mostly responsible for sewing the textiles together. 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. Furthermore, they were required to labor for lengthy periods without leaving their workstation. Back discomfort is a regular occurrence among

female employees due to the nature of their jobs. Neck discomfort, joint pain, musculoskeletal pain, neurological problems, and problems with body muscles, joints, tendons, ligaments, and bones are also common.

OHAS:

Occupational health care is a preventive medicine approach that seeks to maximize both the health and the function of workers by providing services that address individual worker concerns and health issues as well as the health-promoting aspects of the workplace.

WOMEN EMPLOYEES IN GARMENT INDUSTRY:

Textile industry is the only industry to have Employed women workers since long time. Women Workers unlike the majority in the informal sector have Been exposed to rigorous work, discipline, fixed working Hours, specific production norms etc. The women are ready to work for very low wages And for longer hours under exceedingly inhospitable Conditions of work. Their “oriental docility” normally Does not let them join unions and agitate against the Management. The sole reason behind the differential Distribution of male and female workers of different Branches of industry is the gender gap in wages in Manufacturing. Moreover, garment manufacturing has Been one of the most women intensive sectors in India from the beginning. In Tamil nadu, the garment industry is female Dominated. There are certain unskilled and semi skilled Job categories which are specifically ear marked for Women. It was found that if there is a temporary shortage Of women workers, available male workers with similar Background demand a higher wage. The predominance of Small firms, low qualification of the workforce and limited Trade union presence, contribute to the fact that Exploitation and discrimination particularly in terms of Women, continues to exist in the textile and garment Industry. (nirupama.v 2019)

Physical health issues:

1. Physical health issues due to the nature job
3. Health issues due to dust

1. Physical health issues due to the nature job:

Working in the garment industry is physically demanding with continuous exposure to loud noise, improper lighting and stress. In addition, the working environment in the factories is often considered unhygienic and not worker friendly, which has an adverse effect on the workers' health. Therefore, major type of the participants reported suffering from chronic headache. The severity of the problem ranges from mild to chronic headache. The participants also confirmed they suffer from headache daily. In addition to physical labor, women workers are compelled to work for long hours every day and frequently go without proper food, rest and recreation, leaving them often fatigued. The participants reported experiencing eye problem, including limited division conjunctivitis and irritation. Most women workers are employed in the sewing section which produces the great est noise in a garment factory. As a result, of participants singled out experiencing hearing problems, including chronic and acute hearing loss and tinnitus. Others concede noise problem is quite serious. Additionally, participants mention having to work under consistent pressure, follow tight scheduled and compelled to achieve daily working target, and quite frequently work 7 days a week without proper rest or recreation and that too, with minimal pay. This dire-situation in addition to often personal issues make the worker vulnerable number of stresses ultimately in many of them being in diagnosed hypertension.

3. Health issues due to dust:

Exposure dust is common for the female garment workers 'while sewing Other works in the factory. Therefore, they are victims of health hazards resulting from dust as this dust is in and irreparable. As a consequence of constant contact with dust every day without proper protection, workers suffer from diverse health perils. Three major respiratory difficulties were identified first, inhalation problem, as the workers were consistently exposed to the cotton dust without proper protection. In some severe cases, workers were found suffering from shortness of breathing (second) and in fewer cases, asthma (third). In addition to the exposure to the dust, respiratory difficulties may result from participant's constant suffering from headache. participant reported suffering from allergy due to continuous exposure to dust and in the factories, of whom 5 percent were found to have severe allergy. During data collection, some symptoms of allergy were

noticed among the workers, such as sneezing, runny, stuffy and itchy-nose, itchy and red eyes. The next problem due to dust exposure was identified as skin irritation. Workers with irritation issues-reported feeling constantly itchy and uneasy on their body skin. In the end, a certain type of rash called contact dermatitis were identified among the workers that cause skin burning results from regular exposure to dust and substances, capable of producing allergic reaction and skin irritation. Workers who were found to be suffering from contact dermatitis reported expressing red bumpy and some Times servers itchy skin.(vinay rayhan mahmudn 2018)

Phycological health issues;

1. Causes of health issues
2. Causes of physiological health issues

1.psychological health issues:

Good psychological health is important. The study found female garment workers were invariably vulnerable to a number of psychological troubles, often more than one at the same time. The four most common psychological complications that were identified were depression, mood disorder, phobia and anxiety. Health Issues of Female Garment Workers Depression was identified to be the most prevalent psychological issue among the participants, reported it in the first place. Several symptoms were noticeable among the workers during the data collection, for example, always or frequently feeling sad or having depressed mode, trouble in sleep, feeling worthless and fatigue. Subsequently, mood disorder, serious and rapid change in mood, was identified which has both emotional and physical symptoms. Emotional symptoms include chronic sadness, feeling hopeless, and loss of interest in work, whilst physical symptoms include fatigue, headache, pain, and difficulties in remembering details. Subsequently, half of the participants said they were suffering from phobia. Although phobia has a number of symptoms, the study found workers regularly suffered from uncontrolled anxiety, headache and dry mouth. Anxiety was another big problem though The workers reported feeling numbness, tingling, chest pain, headache, inability to etc...

1.Causes of health issues:

Causes of physical health issues Women workers in the garment industry work predominantly in the sewing section as operators and helpers. The operators are comparatively experienced and earn more than the helpers. The operators sew the garment while the helpers engage in small works such as cutting threads. Based on their nature of work, those who operate the sewing machine, for example, sit on the stool, while the helpers are entitled to no such arrangement and work in standing position during their entire time in the factory. As the workers need to work for long time every day with virtually no breaks or leisure time, poor and uncomfortable sitting arrangement causes several health difficulties, mostly pain. Health complications were mainly due to exposure to loud noise. In one floor, hundred workers operate the sewing machine causing a great deal of noise. Besides, as workers do not use ear protection devices while working, they are exposed to loud noise causing a number of health complexities, notably hearing difficulties. More than half of the participants believe lack of working knowledge was also responsible for their health perils. Uncomfortable sitting arrangement, Noise, Lack of working knowledge, Exposure to different dust, Lack of safe drinking water, Improper lighting, Insufficient ventilation. Observation at the factories showed dust control management was not available. Some participants deduced though there are masks available, they are reluctant to use it as they feel uncomfortable and furthermore it is not mandatory to wear them. And participants complained about lack of safe drinking water and improper lighting at the factory respectively. Water available in the factory according to the respondents, were not safe to drink and responsible for some of their health troubles, such as diarrhoea. Additionally, there is no proper lighting in the factory which has led to many complaining about eye problem whereby both over lighting and poor lighting were cited as a source. Of workers alleged insufficient ventilation at the factory for their health hazards. Poor and insufficient ventilation causes fatigue and affects workers health by disturbing their concentration at work. It also leads to poor air quality in the factory which contributes to headaches, allergies, dizziness, coughing and nausea and most notably, problems related to breathing.(nudsart jahan 2018)

1. Causes of psychological health issues;

Majority of the participants cited accidents as the primary source of reason for their psychological distress. They marked regular fire in the factory as the most dangerous and frequent occurrence. Most common causes of fires were old electrical wiring and poor maintenance. The participants also pointed to the indifference of factory management to ensure safety at the work place whereby fire management, in particular, was inadequate and posing threat to their lives. Furthermore, workers are often not provided with proper safety gears. Safety equipment is also lacking. All these have contributed to their psychological woes. Causes of psychological health issues It is a common fact that garment workers are compelled to work long hours, often until late night and forced to do overtime. In addition, they need to do household chores, including cooking and taking care of other family members, ultimately making their daily lives so busy they hardly enjoy any leisure. This has contributed to psychological complications such as depression and anxiety. Ill-treatment at the workplace was described as another major source of psychological suffering where 65% of the participants admitted facing different types of ill-treatment.

Health Issues of Female Garment Workers verbal abuse that which affect their dignity and psychological state. Psychological abuse is related to high work pressure, poor, irregular and sometime uncertain salary, insufficient family time and social exclusion and, unethical and unacceptable proposals including sexual from male co workers or supervisors. Physical abuse include unwanted touching and pushing by male co workers, while sexual abuse includes unwanted sexual proposals or advances. Lack of recreation was cited as the biggest contributor to their psychological issue. Although majority of the participants received their salary on time, some reported to face difficulties in receiving payment on time. Some participants alleged that the factory forced them to sign a salary sheet indicating they have received their salary in full when in reality, they were not paid in full or not at all or were paid later. In addition, some participants said they were scammed by their superiors whereby they may have worked approximately 80 hours overtime in a month but only get paid equivalent to 60 hours. It is widely conceded that the garment workers in Bangladesh earn minimum salary which is hardly adequate to meet their basic needs. This causes them further distress. workers pointed at some other issues such as uncertainty and scarcity of jobs, repetitive tasks, lack or no prospects of promotion, family and personal troubles, and chronic physical issues as sources of their psychological troubles. (Nusrat Jahan 2018)

1. Respiratory Disease;

Garment industry workers are frequently exposed to airborne pollutants, such as cotton dust, fibers, and chemicals, which can lead to various respiratory problems.

1.1 Byssinosis (Brown Lung Disease):

Byssinosis is caused by inhaling cotton, flax, or hemp dust. It primarily affects workers in textile and garment industries where cotton is processed. Symptoms include chest tightness, wheezing, and chronic coughing, which worsen over time if exposure continues. Long-term exposure may lead to irreversible lung damage.

1.2 Asthma and Allergies:

Chemical fumes, textile dyes, and finishing agents can trigger asthma and allergic reactions. Workers exposed to synthetic fibers, formaldehyde, and other chemicals may experience persistent coughing, wheezing, and shortness of breath.

Chronic Obstructive Pulmonary Disease Continuous exposure to textile dust and chemical fumes can lead to COPD, a progressive condition that causes reduced lung function. Workers may develop chronic bronchitis and emphysema, leading to different diseases in female workers.

2. Musculoskeletal Disorders:

The repetitive nature of tasks in the garment industry, such as sewing, cutting, and pressing, can lead to musculoskeletal disorders. Poor ergonomics, prolonged sitting, and awkward postures contribute to these conditions.

2.1.Repetitive Strain Injuries (RSI);

Workers performing repetitive tasks, such as sewing or cutting fabric, often experience RSI. Symptoms include pain, numbness, and inflammation in the hands, wrists, and shoulders. Without proper intervention, these conditions can become chronic.

2.2 Carpal Tunnel Syndrome;

Prolonged repetitive hand movements can lead to carpal tunnel syndrome, where the median nerve in the wrist is compressed. Symptoms include tingling, numbness, and weakness in the hands, which can severely impact a worker's ability to perform tasks.

2.3 Lower Back Pain and Neck Strain;

Poor posture, prolonged sitting, and inadequate seating arrangements can cause chronic lower back pain and neck strain. Sewing machine operators and quality control inspectors are particularly vulnerable to these conditions.

1.Dermatological Diseases.

2.Exposure to chemicals, dyes, and synthetic fibers can result in various skin conditions.

3.1 Contact Dermatitis;

Contact dermatitis is a common condition caused by prolonged exposure to irritants and allergens, such as textile dyes, chemicals, and detergents. Symptoms include redness, itching, swelling, and blisters on the skin

3.2 Eczema and Rashes;

Continuous contact with synthetic fibers and chemical agents can exacerbate eczema, causing inflammation and irritation of the skin. Rashes and itching may occur, particularly in humid environments where workers sweat excessively.

4.Hearing Loss and Noise-Induced Disorders;

The garment industry often involves noisy machinery, such as sewing machines, cutting equipment, and pressers. Prolonged exposure to high noise levels can lead to hearing-related problems.

4.1 Noise-Induced Hearing Loss (NIHL);

Workers exposed to continuous noise above 85 decibels without protective ear equipment are at risk of developing NIHL. Symptoms include gradual hearing loss, ringing in the ears (tinnitus), and difficulty understanding speech in noisy environments. Chemical-Related Disease Chemical exposure is a significant concern in the garment industry, where workers handle dyes, solvents, and adhesives

5.1 Chemical Poisoning and Toxicity;

Direct exposure to hazardous chemicals, such as benzene, formaldehyde, and heavy metals, can lead to poisoning and long-term health complications. Workers may experience dizziness, nausea, and skin irritation in the short term, while prolonged exposure can result in organ damage.

5.2 Cancer Risk;

Carcinogenic chemicals used in fabric processing and dyeing may increase the risk of cancers, including bladder, lung, and skin cancer. Workers with prolonged exposure to these substances may develop chronic illnesses, making cancer prevention efforts essential.

6. Mental Health and Occupational Stress;

The garment industry often imposes demanding work conditions, leading to psychological stress and mental health challenges.

6.1 Anxiety and Depression;

Long working hours, low wages, and high-pressure environments contribute to anxiety and depression. Workers may experience feelings of hopelessness, fatigue, and emotional exhaustion.

6.2 Burnout and Fatigue;

Continuous work with minimal breaks can lead to chronic fatigue and burnout. Workers experiencing burnout often feel physically and emotionally drained, resulting in reduced productivity and increased health risks.

7. Infectious Disease;

Poor hygiene, overcrowded work spaces, and inadequate ventilation can contribute to the spread of infectious diseases.

7.1 Tuberculosis (TB);

Overcrowded factories with poor ventilation provide an ideal environment for the spread of tuberculosis. Workers may be exposed to airborne bacteria, leading to respiratory infections.

7.2 Skin and Respiratory Infections;

Poor hygiene and unsanitary conditions can lead to various skin and respiratory infections. Workers with cuts and abrasions are at higher risk of developing skin infections

8. Vision Problems;

Garment workers often perform tasks that require intense focus on small details, leading to eye strain and vision-related issues

8.1 Eye Strain and Fatigue;

Prolonged focus on fine sewing details or quality control inspections can cause eye strain, blurred vision, and headaches. Poor lighting conditions exacerbate these problems

Safety issues for female workers in garments:

The garment industries are facing many safety and health problems. In this Covid-19 situation, the problems are becoming more apparent. Especially when we think about the tragedy of Rana Plaza, we can understand how much the workers suffering from this problem. There are numerous health and safety problems are present in garments industry. They include: exposure to cotton and other organic dust, and , musculoskeletal stresses, exposure to noise, ergonomic issues. There comes the question, what is the main problem faced by garment industry? How did the textile mills affect the lives of workers? How will the textile industries get rid from this problem? This article tries to answer all these questions as much as possible to give an outlook about safety and health issues in textile industry.(I.menon ,s.ali 2022)

Major Safety and health problems:

The garment industry consists of a number of units, which stitching ,packing, etc... There are health and safety problems in garments industry but the major safety and health problems in garments industry can be classified as:

- 1.Exposure to cotton dust
- 2.Exposure to noise
- 3.Ergonomic issues

1,Exposure to cotton dust:

The processing and spinning of cotton creates cotton dust and these dusts are exposed to particles of pesticides and soil. Firstly they all get into the air then Into the lungs of workers and makes serious lung issues, the most common of these is "brown lung"

2.Exposure to noise:

Exposure to high levels of noise is common in textile industries. Spinning and weaving industry are creating high noise level. This has caused hearing loss and other problems like sleep disorders, tension, weariness, non-appearance, inconvenience, change in pulse rate and blood pressure etc.

3.Ergonomic issues:

These issues are more common in developing countries, most of the workers are suffering from unsafe and unhealthy conditions for this cramped work environment with poor lighting and ventilation. Many garments

workers suffer from musculoskeletal disorders, like carpal tunnel syndrome, lower and tendinitis, back pain, shoulder pain, neck pain.(boopathi,bala kirshan 2022)

Way to overcome the problems:

Health and safety at textile industry is the responsibility of both employers and employees. The workers must follow all safety rules to keep themselves safe. The following suggestions can be made to improve the health and safety of workers and the environment in textile industry: Machinery should be regular serviced and well maintained to reduce the noise levels, providing earplugs. There should be provided masks and safety gloves. Ensure proper lighting and ventilation at the place of work. Well aligned tables and proper padded stools with backrest so that there is no musculoskeletal strain. Regular medical examinations should be conducted by the employers for the workers. Ensure proper fire safety measures and first aid kits. Provision of shift system and rotation of duties so that workers are not faced with continuous noise exposure. (mekala,malki,2023)

CONCLUSION:

Solving safety and health issues is very important for garments industry. And it is even more important for garment workers because more than half economy depends on the garment industry. There are various health problems in the garment industry. It is essential that the management find the solution to protect the workers from critical situation. It is essential for the workers to identify and solve problems. If these problems are solved then the garment industries of garment will be able to reach a better state.

REFERENCE:

- 1) Lillypet, S., Jain, T., & Joseph, B. (2017b). Health problems among garment factory workers: A narrative literature review. *Journal of Occupational Health and Epidemiology*, 6(2), 114–121. <https://doi.org/10.29252/johe.6.2.114>
- 2) Singh, N. P., Kaur, S., Ali, I., Menon, A., & Mishra, R. (2022). Health and occupational safety for female workers of garment industries in India. *European Economic Letters*. <http://eelet.org.uk>
- 3) Boopathiraj, K., Balakrishnan, P., & Saraswathi Narayanan College, Madurai. (2022). A study on health status of women workers in garment Industries of Aruppukottai Block. In *Shanlax International Journal of Arts, Science and Humanities* (Vol. 9, Issue Spl Iss.1, pp. 86–95) [Journal-article]. <https://doi.org/10.34293/sijash.v9iS2-May.5940>
- 4) Mekala, K. G. H., Malki, A. R. I., Amarasinghe, D. P. N. T., Ishara, G. K. K., & Faculty of Technology, University of Sri Jayewardenepura. (2023). Occupational Health and Safety in the garment industry. In *J. Res. Technol. Eng.* (Vol. 4, Issue 4, pp. 127–140). <https://www.jrte.org/wp-content/uploads/2023/10/Occupational-Health-and-Safety-in-the-textile-industry.pdf>
- 5) Clarke, S. (2016). Occupational health and safety. CRC Press.