



# A REVIEW STUDY ON OCCUPATIONAL HEALTH AND SAFETY MEASURES IN GARMENT INDUSTRIES

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## **ABSTRACT:**

Occupational Health and Safety Measures (OHAS) are crucial for managing workers' health and safety in the workplace. Adoption of OHAS in a work environment therefore helps for the promotion and maintenance of the highest degree of physical, mental and social wellbeing in all occupations. Literature reveals that the apparel sector's working environment is mostly associated with different kinds of workers, machinery and management teams and therefore, it should be safe and free from health and safety risks and hazards. This research investigates the exposure of employees in apparel manufacturing organizations to OHAS hazards. The study focuses on the Garment industries, emphasizing the importance of safety measures to prevent accidents and improve working conditions. Effective safety procedures can motivate employees and enhance their ability to work, as they appreciate working in a safe environment.

**INDEX TERMS**-OHAS, Garment Industry, Common Hazards, Working conditions, control measures

## **INTRODUCTION:**

Textiles is the world's second highest agricultural production. Textile is one of the most ancient industries in the world. (Singh, N. 2016)

Textile sector in India plays an important role in the country's economy; providing employment to a significant population in rural and urban area. The processes involved in the production of clothing and other finished textile products have changed little since the inception of the industry. There are several safety and health issues associated with the Garment industry. This article aimed at developing a framework for understanding risks to textile workers resulting from lack of health and safety standards in industries. (Singh, N. 2016)

## GARMENT INDUSTRY:

Garment workers are susceptible to various health problems by virtue of their workplace and working conditions. The textile and garment industry in India is one of the oldest manufacturing sectors in the country and is currently its largest. The textile and garment industry fulfils a pivotal role in the Indian economy. (Padmini D.S. and Venmathi A. 2012).

Garment industry is one of the most important strategic industries which constitute about 7% of total industrial production in the world and 8.3% of the total trade in industrial materials. Also, occupies more than 14% of the total labour force in the world. It employs about 40 million people in various countries of the world. The garment industry in Tirupur is known for its expertise in knitting and producing a wide range of garments, including casual wear, sportswear, and innerwear. (Padmini D.S. and Venmathi A. 2012).

## OCCUPATIONAL HEALTH AND SAFETY MEASURES:

Occupational health and safety (OHAS) are concerned with a person's safety, health, welfare, and well-being while at work. Industries have a legal obligation to ensure that their employees are in a safe working environment. The occupational health and safety Measures (OHAS) situation of workers in the clothing manufacturing sector is progressively becoming more severe and complex. In this industry, the most significant risks typically come from indirect risks that have a long-term impact from repeated duties rather than direct dangerous dangers. (Mekala K.G.H, Malki A.R.I, Amarasinghe D.P.N.T, Ishara G.K.K. 2023).

OHAS hazards are divided into five categories by the International Labor Organization, including physical hazards, ergonomic hazards, psychological hazards, biological hazards, and chemical hazards.

## INTERNATIONAL LABOUR STANDARDS

- ✚ **C155** -Occupational Safety and Health Convention, 1981 (No. 155)
- ✚ **R164** -Occupational Safety and Health Recommendation, 1981 (No. 164)
- ✚ **C187** -Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)
- ✚ **R197** -Promotional Framework for Occupational Safety and Health Recommendation, 2006 (No. 197)
- ✚ **C161** -Occupational Health Services Convention, 1985 (No. 161)
- ✚ **R171** -Occupational Health Services Recommendation, 1985 (No. 171) (Mekala K.G.H, Malki A.R.I, Amarasinghe D.P.N.T, Ishara G.K.K. 2023).

## COMMON HEALTH HAZARDS IN THE GARMENT INDUSTRY

- ❖ The working staff in the Garment industry has serious issues with health and safety. It is a particular sector of the economy where employees' health is impacted by their line of work. Numerous risks and hazards come with these jobs. These risks not only have an impact on the workers' physical health but also on their mental and emotional well-being.
- ❖ Workers in the Garment industry are exposed to various risks, including physical, chemical, and biological risks and psychosocial risks, such as mental stress and psychological imbalance (Mekala K.G.H, Malki A.R.I, Amarasinghe D.P.N.T, Ishara G.K.K. 2023).

- ❖ According to a study, the number one occupational hazard in the Garment sector is lung disease, followed by reproductive system disorders, noise-induced hearing loss, heart and vision problems, neurotoxicity, other dermatological conditions, and mental stress.
- ❖ The main risk factors were identified as the workers' lack of understanding of their occupational risks and prolonged exposure due to irregular work hours. (Ravichandran, S. P., & Shah, P. B.2018).
- ❖ Thirty-five per cent of the garment workers agreed that they had to experience physical hazards such as noise, vibration, electricity, temperature and lighting in their working places.High noise levels are found in some parts of garment industries. Similarly, if many of the sewing machines are old or mounted incorrectly, they are likely to produce high noise levels.
- ❖ The health effects of noisy environment and presence of vibration are temporary and permanent hearing loss and vibration disease called vibration white finger. Burns, electric shock or sometimes death may be possible due to frayed wiring, broken plug sockets and wires dangling close to workers in many parts of a garment industry. (Kumari, K. P., & Kumar, D. A. 2018).
- ❖ Due to danger of electrocution there is possibility of fire. Many garment workers complained of hot, humid conditions in key sections of the garment industry such as ironing area.
- ❖ As a result, some owners provided ad-hoc solutions by placing fans in certain locations to try to increase the ventilation. A common problem found in many Tirupur garment industries is either too much or too little light.
- ❖ They need the light to shine directly onto the exact area where the fine work is being carried out. Often there are no shades on the lights or they are poorly positioned. In some cases, the shades may be present but the light reflects off a shiny surface and into the workers' eyes.(Kumari, K. P., & Kumar, D. A. 2018).
- ❖ For the industry as a whole, there must be good general lighting especially near steps, ramps, exits, etc. So that workers can see where they are going and avoid trips and falls. In the cases of fluorescent lighting, they are often flickering which can be extremely stressful to workers.
- ❖ Causes of fire accidents in Tirupur garment industries may be due to unplanned work environment, disorganized workers, electric short circuit, faulty electrical wiring, smoking materials, boiler explosion, kitchen stove and carelessness, fire from existing structure and poor building design(Padmini D.S.and Venmathi A. 2012).
- ❖ During survey, it is found that most of the garment industries have no designated first aid sections clearly marked. All the workers should be thus trained in basic first aid treatment and it is ensured to present in every shift especially at night.
- ❖ Twelve per cent of the workers complained of chemical hazards. Almost all the occupations in industry have scope of exposure to some chemical substance or the other. These substances may be solids, liquids or gases, vapours, fumes, dusts, smoke, mist, fog or smog.
- ❖ Sixty-seven per cent of the workers reported to have ergonomical problems. Such problems are common throughout the garment industry.Obsolete machinery, inadequate seating and standing

arrangements for workers and the improper lifting or movement of heavy loads all garment industries is either too much or too little light. These are the some of the most common hazards in garment industries. (Padmini D.S. and Venmathi A. 2012).

## SUGESSTIONS:

### HEALTH OF EMPLOYEES

- i. **Cleanliness**-Every factory shall be kept clean by daily sweeping or washing the floors and work rooms and by using disinfectant where necessary.
- ii. **Disposal of wastes and effluents**-Effective arrangements shall be made for the disposal of wastes and for making them innocuous.
- iii. **Ventilation and temperature**-Effective arrangements shall be made for ventilation and temperature so as to provide comfort to the workers and prevent injury to their health.
- iv. **Dust and fume**-Effective measures shall be taken to prevent the inhalation and accumulation of dust and fumes or other impurities at the work place.
- v. **Overcrowding**-There shall be in every work room of a factory in existence on the date of commencement of this act at least 9.9 cubic meters and of a factory built after the commencement of this act at least 4.2 cubic meters of space for every employee.
- vi. **Lighting**-The State Government may prescribe standards of sufficient and suitable lighting.
- vii. **Drinking Water**-There shall be effective arrangement for wholesome drinking water for workers at convenient points.
- viii. **Latrines and Urinals**-There shall be sufficient number of latrines and urinals, clean, well-ventilated, conveniently situated and built according to prescribed standards separately for male and female workers.
- ix. **Spittoons**-There shall be sufficient number of spittoons placed at convenient places in the factory. (Dr. K. Nithyavathi. 2016)

### SAFETY OF EMPLOYEES

- i. **Fencing of machinery**-All dangerous and moving parts of machinery shall be securely fenced. Screws, bolts and teeth shall be completely encased to prevent danger.
- ii. **Work on or near machinery in motion**-Lubrication or other adjusting operation on moving machinery shall be done only by a specially trained adult male worker.
- iii. **Employment of young person on dangerous machines**-No young person shall be allowed to work on any dangerous machine (so prescribed by the state government) unless he is sufficiently trained or is working under the supervision of knowledgeable person.
- iv. **Device for cutting off power**-Suitable device for cutting of power in emergencies shall be provided.
- v. **Hoists and lifts**-These shall be made of good material and strength, thoroughly examined at least once in every six months and suitably protected to prevent any person or thing from being trapped. (Dr. K. Nithyavathi. 2016)

## AWARENESS TRAINING PROGRAMS

Managers, supervisors, and employers must acknowledge the organisation of OHAS programs, policies, and processes. By being aware, everyone may participate completely in developing, implementing, and upgrading the program. Training those parties on the company's health and safety policies, goals, and procedures, OHAS program functions, and how to report hazards and handle emergencies is crucial. The company should ensure that all the training is provided at the employer's literacy level. Here, it should emphasise that all the company members have a right to make suggestions and report hazards.(Dr. K. Nithyavathi. 2016)

## CONCLUSION

The role Workers in every occupation can be faced with a multitude of hazards in the workplace. A majority of the respondents feel secure while working at textile industry and feel that the safety measures help to reduce the severity of accidents. Hazards in the workplace can be found in a variety of forms, including chemical, physical, biological, psychological, non-application of ergonomic principles, etc. Because of the multitude of hazards in most workplaces and the overall lack of attention given to health and safety by many employers, work-related accidents and diseases continue to be serious problems in all parts of the world.

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