INVESTIGATION OF OCCUPATIONAL HAZARDS AND ILLNESSES IN THE SRI LANKAN APPAREL SECTOR

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Degree of Master of Science in Occupational Safety and Health Management

Department of Building Economics

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DECLARATION

I declare that this is my own work and this dissertation does not incorporate any material without acknowledgement and which has been previously submitted for a Degree or Diploma in any other university or institute of higher education. To the best of my knowledge and belief, it does not contain any material previously published or written by another person, except where the acknowledgement is made in the text.

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A.M.U.P. Pollamure Date

The candidate has carried out research for the Masters Dissertation under my supervision.

…… ……

Dr. Nayanthara De Silva Date

Dissertation Supervisor

ABSTRACT

The Sri Lankan apparel industry is one of the major industrial export earners in Sri Lanka. It contributed 40% to GDP in the year 2017. This industry is highly labour intensive and has provided more than 300,000 direct employment opportunities in which the majority is trade workers.

The employees in apparel sector are exposed to various occupational hazards knowingly or unknowingly. As a result, many of them suffer from various occupational illnesses during their employment period or even after a certain period of retirement.

This research is a questionnaire survey which was carried out among the industry workers attached to the production sections from medium and large scale garment factories to identify occupational hazards and illnesses in large and medium scale factories in Sri Lanka. 384 employees were selected randomly for this sample, from 25 factories for this survey. Statistical analysis (t-Test) was carried out to find the significant occupational hazards, illnesses and management practices. Nine expert interviews were carried out to explore strategic preventive measures or mitigate the occupational hazards and occupational illnesses in the apparel sector.

This study reveals that the employees in the apparel sector are exposed to occupational hazards such as, production target pressure, quality demand pressure, excessive work hours, fabric dust, inadequate wages and working for a prolonged time in the same posture. The significant illnesses are leg pains and back pains. To overcome these issues the factories are required to implement workplace oriented improvements such as upgrading the work places considering the ergonomic and human factors, establishing quality management systems, planning the production volume according to the physical and psychological capacities of human capital etc. Finally the industry is required to identify occupational illnesses through medical surveillances audits and steps are to be taken for corrective and preventive measures. The people oriented proposals are skills development, professional carrier growth and enhancing the leadership qualities of employees, in order to increase their performance and quality of life.

Findings of this research provide an insight in to the workplaces of medium scale garment factories. These findings will benefit the industry leaders and policy makers in the industrial upgrading and to enhance the skills and quality of life of employees.

Keywords

Hazard, Health, Illness, People, Workplace

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LIST OF ABBREVIATIONS

ACGIH	-	American Conference of Government Industrial Hygiene
BMI	-	Body Mass Index
CSR	-	Corporate Social Responsibility
EDB	-	Export Development Board
ERI	-	Effort Reward Imbalance
GDP	-	Gross Domestic Product
HIRA	-	Hazards Identification and Risk Assessment
HRM	-	Human Resources Manager
HSE	-	Health and Safety Executive
IEQ	-	Indoor Environment Quality
ILO	-	International Labour Organization
JDC	-	Job Demand Control
MSD	-	Musculoskeletal disorders
OSHAS	-	Occupational Safety and Health Assessment Series
PE	-	Participatory Ergonomics
PPE	-	Personal Protective Equipment
SPSS	-	Statistical Package for Social Science
TLV	-	Threshold Limit Value
USD	-	United State Dollar
WHO	-	World Health Organization

LIST OF APPENDICES

Appendix-A - Sample Questionnaire

Appendix-B - Expert Interview Guidance Form