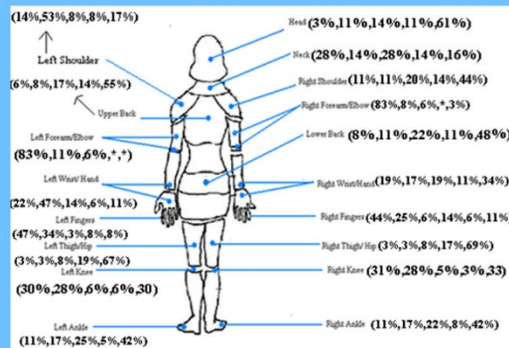




University Grants Commission Major Research Project



Ergonomics Intervention on Labour Productivity & Health parameters of Women in Garment Industries and Remedial Measures



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Submitted by

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University Grants Commission
Major Research Project

**Ergonomics Intervention
on Labour Productivity & Health Parameters
of Women in Garment Industries and
Remedial Measures**

Final Project Report

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Chapter 1

Introduction

India is the second largest manufacturer of garments. The Indian Textiles sector plays a vital role through its contribution to industrial output, employment generation, and the export earnings of the country. Abundant availability of raw materials such as cotton, wool, silk, jute and skilled workforce has made India a sourcing hub. The garment industry is one of the oldest and largest export industries and employs over 45 million people. The garment sector contribution in total GDP is estimated at 4%, while that of country's foreign exchange inflows is estimated at 27% during 2013-2014. It also contributes nearly 14% of the total industrial production of the country. Karnataka is one of India's leading industrial states, contributing almost 8% to the national manufacturing income. The garment industry in Karnataka is the largest employment provider next to beedi industry. It contributes 6% of the total cotton produced in the country, 65% of India's raw silk and 12 % of India's wool production, making the State a leading centre for the textile and garment industry. There are 2638 factories in Bangalore employing over 5, 40,670 lakh workers out of which women form a 93 per cent of workforce in the industry. The majority of the workers employed in the garment industry in the state comprise of skilled, semi-skilled un-skilled workers.

The recent technological developments and globalization of markets in garment sector which operate without regional and national boundaries result in the need for a work environment that must be adapted to a worker in order to perform a work task successfully without excessive fatigue [1]. Thus ergonomics deals with the relationship between a man and his work, trying to find a way of better adapting to a man. The goal of ergonomics is to improve human's work activity. The rational usage of working capacity of a man is a matter of not only being humane but also being economical. A good ergonomics strategy can add value to a company's business strategy and ultimately contribute to the business goals of higher profits.

Ergonomic disorders are the fastest growing category of all the occupational illnesses. They include 56% of all diseases [1]. Ergonomic risk refers to the physical stress factors and workplace conditions that carry a risk of damage or muscle-bone disorders of the employees. Thus optimization of work is the need of the hour.

Origin of the Research Problem

With the advent of liberalization, globalization and privatization, the developed countries are relocating their Garment businesses in developing and third world countries, where the human resource is conveniently available and comparatively cheap. The garment industries being the

option for poor and economically weaker sections, their work atmosphere needs to be taken care with at most priority. It becomes very important to recognize the ergonomics of a working place as large number of people are dependent on this sector.

The Garment industry is generally seen as a safe place to work and when compared to other industries. There are relatively few serious accidents in clothing plants. But, the hazards faced are different. The major health risks in this industry do not arise from immediate, potentially fatal hazards. Instead, the risks that workers, in particular women, face come from more subtle hazards whose effect accumulates over time. This also affects the productivity of workers. Good ergonomic condition is absolutely essential for the health of an individual in such environments. A hazardous workplace affects a workers' health both physically and mentally. But, both physical and mental health is very important for a worker for a successful work-life and increase in productivity. Hence, it is felt that there is a need to study and analyze the ergonomic issues related with Women workers in Garment industries and its influence on Productivity & health parameters and to suggest remedial measures.

Objectives

- To study and analyze the ergonomic issues related with Women workers in Garment industries.
- To identify the factors that influence Labor Productivity & health parameters.
- To recommend remedial measures for adopting better ergonomic practices in garment industries.

Methodology

- Studying the various processes involved in manufacturing variety of garments through videography and identifying the ergonomic related parameters
- Interviewing Women workers and administering to fill in the Questionnaire and consolidation of the data collected by using statistical package.
- Identifying the predominant factors affecting the Women workers in terms of their health and productivity and comparing these factors with already available standards.
- Undertaking pilot study and by considering medical dimension of the whole issue suggest remedial measures for Accident injuries, Physical injuries, Chemical hazards, orthopedic problems and occupational disorders

1.1 Ergonomics Intervention Studies of Garment Industries – Review of Literature

The review of the earlier works carried out in the selected area is classified under four categories:

- Human Resource Issues in Garment Industries

- Review on role of Women in Garment Industries.
- Review on Ergonomic Interventions with emphasis on MSD
- Review on Occupational Hazards in Garment Industry

1.1.1 Human Resource Issues in Garment Industries

Garment Industry is contributing to the Indian Economy and it is necessary to know the wide range of activities carried out. These include the production of natural raw materials such as cotton, jute, silk and wool, as well as synthetic filament and spun yarn. In addition an extensive range of finished products are made. There are more than 1,500 structured spinning units of large scale, and over 280 composite mills which are vertically incorporated from spinning to finished fabric. The most well-known places in India, known for Garment manufacturing and its trade are Tiruppur, Ludhiana, Surat, Panipat, Delhi, Bangalore and Chennai and are known as leading manufacturers of Garment goods [1]. It is necessary to create better working environment for employees, to select a “Right person for the right job” and to understand and gain monetary benefits for the employees with the effective use of HR practices. The retention of employees has been shown to be significant to the development and the accomplishment of the organization’s goals and objectives. It was found that the employees look for good career path. Hence the factors like compensation, career path and working environment should be taken care in order to retain their employees [2]. The socio-economic status of the garments workers have to be explored. It was found that the socio-economic condition of the Garments workers is not in a lofty stage. Amongst the workers about 70 per cent are women, who work dawn to dusk even up to late night when their wages are not in the satisfactory level. They cannot afford their foods, cloths, housing, medicines, and educations of their wards as they are ill paid. On the contrary, their children are deprived from their care; they suffer from malnutrition and unhygienic complexities. They have no time or scope for recreation [3]. Along with the socio-economic status, the job satisfaction level among workers has to be examined. The studies indicated that the employees were dissatisfied with Salary, Safety facilities, Leave policy, Promotion policy and Behavior of the owner and were seen satisfied with Working environment, Health care facilities and Overtime benefits. The studies have suggested that such provisions may contribute in creating proper job satisfaction among the garment factory workers in Bangladesh in terms of establishing health care centers, dormitories for garment workers, developing awareness among workers regarding their legal rights and responsibilities [4].

It was found that, there were eight factors affecting the productivity. They are synchronization of management processes, TPM for weaving and dyeing, input and process quality, HR policies for textile SMEs, Process technology, labor behavior, use of scientific tools for improvements and system deployment. The outcome of this empirical study can form an important reference to continue the research for investigating the relationship between output variable and input factors

[5]. The Information Technology plays an important role to enhance the competitiveness in Garment Industry. Tools like Computer Aided Designing, Material Requirement Planning, Digital Fabric Printing, and Data mining and Data warehousing, Sketch Pad Systems, Texture Mapping are considered. The implementation of Information Technology would help in reducing labor cost, production cost, product development cost, inventory, more efficient layout, better quality, less waste, improved productivity, shorter manufacturing lead time and quicker responses from the market shift [6].

1.1.2 Review on Role of a Women in Garment Industry

In the past, Indian women have wielded only behind-the-scenes of power in the household. Today, however, women's roles in Indian society are gaining importance and accreditation besides western influences are gaining visibility in place of traditional values [7]. The socio-economic condition of female garment workers is very frustrating because of mainly low wage and salary, poor working environment, limited housing facilities, lack of medical facilities, low level incentives and so on. It is important for the firm to think in workers perspective and to provide them with better life and prospects. From the study, it is found that the maximum female workers are young. About 71% women lived with their family in houses that are not well developed. About 78% workers commute to their workplace by sole foot. 93% usually walk to their workplace. 73% of female workers apply leave for illness. Some of the firms have facilities for the intensive medication of the workers. It is observed that the women employees of the garment factory are satisfied with on Grievance handling procedures followed by the factory, Work atmosphere and job security measures of the factory and were dissatisfied with the permitted leave that could be availed, Health and Safety measures provided and having more of Occupational stress, are least satisfied with the Salary and Health and Safety provided by the company. It is important to increase in quality of work life that result in increase in productivity. An attractive pay scale can be offered and permissible leave limits can be extended. Grievance handling procedures can be made at a satisfactory level [8][9]. Most of the female workers in the garment industry suffer from occupational disease such as Eye problem, Headache, Vomiting, Respiratory Problems, Stomach ache, Body pain, back ache, pain in joints, menstrual problems, anaemia etc. From the study, it can be stated that, 97% of women suffer from Headache, 61% suffer from abdominal pain. There are no health safeties or examination of the workers. It is necessary to pinpoint the health hazards for workers in the garment manufacturing industry and spread awareness of the same [10]. The prediction on the satisfaction level of female workers can be depicted by clustering methods. The method K-Medoids perform better clustering for the large data set. Markov Chain performs well for the large data set. Bayesian Network works well for small data set. The algorithm predicts that most of the female workers in the garment industry are merely satisfied with the fewer incentives provided to them [11].

1.1.3 Review on Ergonomic Interventions, with emphasis on Musculoskeletal Disorders (MSD's)

Macro Ergonomics is a branch of Human Factors and Ergonomics and are based on system approach which considers the organizational and socio-technical context of work activities and processes. Human Factors are relevant to people work with systems and their interaction with other elements such as Artifacts, Tasks, Environments, Team, Legal etc. [12]. Different model are being developed to redesign the system environment. The Systems Engineering Initiative for Patient Safety model of work system and patient safety integrates the macro ergonomic work system model of Smith and Carayon and the Structure-Process-Outcome model of Donabedian (1978). According to SEIPS model, the health care quality and patient safety are influenced by work systems and a process which in turn focuses on the performance of processes that tend to mitigate the health related hazards. Karsh and Colleagues Model are developed to reduce the healthcare professional errors, reducing patient harm or improving the use of evidence-based medicine.

Hence, it is necessary to systematically redesign the processes. The needs for macro ergonomics research are highlighted, including understanding the link between worker outcomes (e.g., safety and well-being) and patient outcomes (e.g., patient safety), and macro ergonomics of patient-centered care and care co-ordination [13]. The technology of ergonomics is defined as Human System Interface Technology. Ergonomists apply Human System Interface Technology to the design or modification of systems to enhance safety, health, comfort, and performance which in turn includes productivity and quality. It can be said that Ergonomics has evolved to be unique, stand-alone discipline that can be defined most directly by its technology. By further educating the public, would help in understanding the scope of ergonomics which in turn enhances the organizational performance and the quality of human life [14]. The extent of ergonomics awareness and its influence in inculcating safety culture amongst practitioners can be measured by three parameters. They are Implication and Improvement, Suitability of job to the worker, ergonomics basic consideration [15]. Ergonomic interventions are commonly classified as engineering, administrative or behavioral/personal. Engineering interventions are engineered or physical manipulations of hazards or routes of exposure to physical hazards. Administrative interventions often change the duties of workers by job assignment changes or rotation or the break schedules. Education on work related musculoskeletal disorders or usage of personal protective equipment are a part of Behavioral/ Personal interventions. The various risk factors caused due to low control and poor work place social environment, and perceptions of high physical demands, low job satisfaction level can be mapped by an Ergonomic intervention [16]. The implementation of ergonomics in system design should make the system work better by eliminating aspects of system functioning that are undesirable, uncontrolled or unaccounted for, which includes inefficiency, fatigue, accidents, injuries, user difficulties and low morale and

apathy. In ergonomics, absenteeism, injury, poor quality and unacceptably high levels of human error are seen as system problems rather than people problems, and their solution is seen to lie in designing a better system of work rather than in better man management or incentives, by motivating workers or by introducing safety slogans and other propaganda [17].

A cross sectional study was carried out in various sections including stitching, pasting, cutting and fusing departments of various leather garments manufacturing industries is to find the level of work related musculoskeletal disorders (WMSD) risk at work and its impact on workers, as shown in table 1.1. Wilcoxon signed ranks test was used to analyze the relationship between Left and Right side in workers using RULA and REBA. Scores obtained from the RULA and REBA clearly indicated that, workers are at a high risk of work related musculoskeletal disorders. The study identified the following areas of pain and exercises for improvements. Not only an ergonomic intervention can give a complete remedy, but also it must be accompanied with a set of exercises at regular intervals to workers who work continuously for hours [18].

Table 1.1: Level of work related musculoskeletal disorders risk at work and its impact on workers

Section	Position of Workers	Affected Area
Stitching	Prolonged forward bent posture	<ul style="list-style-type: none"> • The static posture makes neck extensor and spinal extensor muscles to get fatigue soon, which in turn leads to neck pain and low back ache. • 50% of workers complained of low back pain, • 40% of workers complained of left shoulder pain. • 10% of workers complained both.
Pasters	Prolonged Standing Posture	<ul style="list-style-type: none"> • Postural muscles, Lower limbs get fatigue • Pain in the shoulder, upper arm, neck and fore arm. • Varicose veins
Cutters	Due to forward bending	<ul style="list-style-type: none"> • Muscle Strain in the thumb and index finger , Low back pain
Fusers	Prolonged standing	<ul style="list-style-type: none"> • Varicose veins

SI No	Risk Factors	Exercises
1.	Lower Limb – Calf, Hamstring, Quadriceps muscles	Ankle pumps, Toes exercise, Hamstring and quads isometrics
2.	Upper Limb - Shoulder stabilizers, Thenar, Hypothenar muscles	Crunches, Push-ups, Active range of motion exercise
3.	Pelvic Girdle and Spain - Core stabilizers, Spinal extensors	Iron man, Spinal extension exercise, Cat and camel exercise
4.	Eye ball muscles in the head	20-20-20 exercise to the eye ball muscles

Ararso Tafese et.al (2014) reported that the aim of this study was to assess the prevalence and associated risk factors of work related neck and shoulder musculoskeletal disorders among sewing machine operators of garment industries in Galan City, Oromia Regional State. Data were collected using standardized Nordic questionnaire. Lottery method was used to recruit the actual number of study units. The collected data were coded and entered into SPSS version 21.0 software program for analysis. Bivariate logistic regression analysis was used to determine the effect of independent variables on the dependent variables. From the study, it was found that the prevalence of self-reported work related neck and shoulder musculoskeletal disorders was 51.7% and 45%, respectively. There is high prevalence of neck and shoulder MS disorders among sewing machine operators. Hence, promoting worker involvement in improving the workstation would enhance problem solving capabilities and would lead to motivation of workers in increasing the productivity [19]. Sartaj Ahmad et.al (2013) stated that the study focuses on determining the socio-demographic status and morbidity disorders of textile workers in small scale industries. The cross-sectional study was conducted among textile workers. The subjects were then interviewed by using a pre-designed, pre-tested, semi-structured interview schedule. From the study, it was found that, the morbidity detected were musculoskeletal problems, Respiratory illness and others common general disease. The study found that the work related musculoskeletal disorder and respiratory problems were due to addictions among workers. Hence, it is necessary to improve the socio-demographic status of a worker, counselling should be given for addiction and training regarding health issues should be provided [20]. Tiwari Meenaxi, Babel Sudha (2012) reviewed the aim of the study is to know about musculoskeletal disorders (MSDs) and their causative and preventive measures. A cross sectional study was carried out. The different risk factors such as physical and psycho-social load, poor climatic conditions, and vibration contributing to MSD were reviewed. From the study, it was found that the poor work environment may increase the risk of MSD which included lower back pain, upper extreme pain, discomfort and radiating pain.

Safety and health of workers is important for smooth and effective functioning of any organization. Most of the workers suffer from MSD due to various reasons. One among them is incorrect lifting technique. The correct technique can be implemented for better health.

- **Lifting:** Before lifting the load, it is necessary to plan and prepare for the task.
- **Pushing and Pulling:** Pushing and pulling is done using the body's own weight: when pushing you should lean forward, when pulling you should lean backward.
- Handle height should be between the shoulder and waist so that you can push/pull in a good, neutral posture.
- Handling devices have handles/hand grips that you can use to exert force [21].

Ufuk Berberoglu, Burcu Tokuc (2012) reviewed the aim of this study to determine the work related musculoskeletal disorders and risk levels of these factory workers. The questionnaire used for data collection consisted of two parts. The first part described socio-demographic features,

working conditions and health problems of workers in the previous four weeks. In the second part a Rapid Upper Limb Assessment (RULA) Employer Assessment worksheet was used. In the assessment of the upper limbs of the workers, the arm/wrist score (AWS) is 5.9 ± 1.7 (3-11); neck, trunk, legs score (NTLS) is 5.3 ± 2.5 (3-11); and total score (TS) is 5.5 ± 1.3 (3-7). The ages of the workers are significantly associated with higher RULA scores ($r=0.207$, $p=0.000$). AWS, NTLS and TS of the women workers were found to be statistically significantly lower than for the men. An employer can establish procedures to correct or control risk factors by using: appropriate engineering controls such as workstation, tool and equipment designs or redesigns, work practices such as proper lifting techniques and keeping work areas clean, administrative controls such as worker rotation, more task variety and increased rest breaks and personal protective equipment such as knee pads, vibration gloves and similar devices [22]. Lina Bandyopadhyay et.al (2012) reviewed an observational, descriptive, cross sectional epidemiological. The study was carried out primarily to determine the prevalence of musculoskeletal and other health problems, to find out the association between musculoskeletal problems with occupational and socio demographic factors. The cross sectional study was carried out. A predesigned, pretested, semi structured schedule of interview was performed among the workers. A total of 172 workers of small scale garment industries participated in the present study. 135 workers i.e.78.5% were having musculoskeletal morbidities at different sites and out of these, neck (60.7%) was the commonly affected part followed by upper back (35.6%), lower back (31.1%), shoulder (24.4%), hand/wrist/fingers (23.0%) etc. 68.1% complained of aching followed by numbness (43.0%), stiffness (25.9%) and weakness (21.5%) of the affected part. Proper Counseling and health education through campaign would help to improve the workers health. Periods of rest in between long hours of work, provision of seats with adjustable back rest for support to lumbar region may be helpful to reduce low back pain [23].

Sekulova, Simon (2011) in his study focused on the musculoskeletal disorders and related occupational diseases in Czech Republic and possibilities and ways to prevent health problems. The occupational disease was divided into six parameters which included: occupational diseases caused by chemical substances, occupational diseases caused by physical factors, occupational diseases of the lung, pleura and peritoneum, skin diseases, infectious and parasitic occupational diseases and occupational diseases caused by other factors. From the study, it was found that the most endangered working positions are from areas such as textile industry. The affected areas included: Carpal tunnel syndrome caused by long-term excessive one sided overtaxing, Carpal tunnel syndrome caused by vibrations, Radial humeral epicondylitis, Ulnar humeral epicondylitis, Trigger finger, Arthrosis of thumb, Other synovitis and tendosynovitis and Ulnar nerve lesion at the elbow [24].

Andrej Polajnar et.al (2010) reported to find out whether sewing workstations are designed in accordance with ergonomic principles or not and what are the body postures of operators at these

workstations. A detailed analysis and workstation design of the selected sewing workstation for the technological operation was carried out. Since women in the Slovenian garment industry represent more than 90% of the employed; the research was limited to the female population. The analyses of the workstations included: Workstation analysis and evaluation; Analysis of the existent workstation dimensions with respect to working postures and workers' perceptions. Ovaco Working Analyzing System (OWAS) to determine the postures that needs to be remedied. The results obtained with the above analyses are sufficient to re-design the workstation according to ergonomic requirements. The inadequate postures of operators during sewing at non-designed workstations and a high proportion of sick leave due to illnesses of the muscular-skeletal tissues show that workstations in the garment industry urgently need re-designing in accordance with ergonomic requirements and special features of the sewing operation. The ergonomic recommendations are presented for a typical sewing workstation, however, the same recommendations, regarding working postures, can be used for any other workstation [25]. D.C.Metgud et.al (2008) stated to identify Musculoskeletal problems among women workers in spinning section of woolen textile industry. In this study, the authors selected randomly 100 females in range between 30-45 years out of 350 workers. Few Problems were identified using a pilot study. Data were collected using questionnaire based on workload, working posture and related health and safety problems based on related studies. The numbers of sites of musculoskeletal pain were increased with increase in length of occupational exposure. The study showed that 91% of workers suffered from one musculoskeletal pain in relation to the length of occupational exposure [26].

S Calvin, B Joseph (2006) reported to identify the common accidents that occurred in this industry and to identify any factors that were associated in order to recommend preventive steps. The authors performed a walk through survey of the factory shop floor to observe the activities undertaken in the production of garments. Record review of health records and accident records maintained in the factory was done to identify the cause of accident and the type of injury and use of protective equipment, training of workers and other related factors. Participatory methods such as key informant interviews were conducted with the workers who have suffered the accidents, floor supervisors and managers to learn more about these accidents. The incidence of reported accidents was 2.49/1000 workers during the conduction of the study. Almost all the workers were treated promptly at the factory. Very few man-days were lost because of these accidents. The authors concluded that accidents were common in garment industry that workers and management were to be properly educated about the consequences of accidents and proper use of the recommended safety equipment [27]. Alireza Choobineh et.al (2004) stated that the study focused on the determination of the prevalence of MSD symptoms, identification of major factors associated with MSD symptoms and development of guidelines for workstation design. Questionnaire were framed and it consisted of two parts a) Workshop Details b) Personal Details. Checklist was framed which consisted of two parts. a) Weaving posture assessment checklist b)

Weaving workstation assessment checklist. Statistical analyses were performed using SPSS and STATA. The results of multivariate analyses showed that major ergonomic factors associated with musculoskeletal symptoms were loom type, working posture, daily working time and seat type. Based on the results, some general guidelines for designing weaving workstations were developed [28].

Dr. Max M. Martin et.al (2004) reported that the study has focused on ergonomic risk factors, the various types of musculoskeletal disorders (MSD), and practical approaches to ergonomic issues in the workplace. The proposals contained in this paper are designed to make the practitioner both more comfortable and more productive. The causes for MSD included:

- Repeated identical or similar motion performed could cause over-extension or over use of certain muscle groups that could lead to muscular fatigue.
- The amount of force required by an activity can sometimes be magnified causing even more muscular fatigue.
- Mechanical Stresses are encountered when working with forearms or wrists against the edge of a desk or work counter.
- The muscles and tendons are impinged when pressed into the sharp edge.
- Postural stress is assuming an extreme posture at or near the normal range of motion.
- Posture and positioning profile factors increases the risk of musculoskeletal symptoms which is due to torso twist, upper arm, tipped shoulders, head tilt/Rotation, raised elbows, tilting sideways, twisting the vertebral columns, bending forward and slumping

Interventions or prevention strategies require an awareness of how to fit the job to the worker and not the worker to the job. Applying ergonomics to the practice not only could provide safety benefits but a practice might also improve performance objectives through greater productivity [29].

How- Ran Guo et.al (2003) reviewed that the study focuses on determining the prevalence of musculoskeletal disorder among Taiwan workers. A standard Questionnaire were framed and the interview were conducted for the respondents. The data were analyzed with the **Software for Survey Data Analyses (SUDAAN)** which was designed for analysis of data from complex multistage surveys. For MSD of Nine body parts were considered in the survey. It was found that the prevalence in female workers (39.5%) was significantly higher then that in male workers (35.2%). The study did not include risk factors of MSD in the survey such as body weight, addiction, psychological factors, underlying disease and conditions and occupational factors and ergonomic prevention measures [30]. Stephen Bao et.al (2000) reported that the main purpose of the study is to obtain information about musculoskeletal disorders (discomfort and pain) in the Chinese workplaces through surveys. Two surveys were carried out: First survey quantifies the

prevalence of musculoskeletal disorders in some Chinese workplaces in order to provide basis for further investigation and to facilitate the formulation of ergonomics intervention programs. Second survey was carried out to investigate the musculoskeletal disorders in workplace. From the study, it was found that prevalence of musculoskeletal disorders, especially in the low back and shoulder-neck regions, was high among many Chinese occupational groups. The prevalence of musculoskeletal disorders, especially in the low back and shoulder-neck regions, were high in many of the investigated Chinese workplaces. Assembly workers comprised of a high risk group for shoulder-neck disorders. Female assembly workers had significantly higher prevalence of shoulder neck complaints compared with male assembly workers [31].

1.1.4 Review on Occupational Hazards in Garment Industry

The occupational hazards are those hazards which are faced by the workers due to poor working environment. The congested work area, improper ventilation, dust, un-ergonomically designed workstation, excessive noise were the main constraints faced by the workers in garment manufacturing units. Noise and vibration are often found in textile settings, garment manufacturing units, and many other workplace environments where predominantly women work. Occupational noise exposure commonly results in hearing loss and distortion. The quality and type of lighting can have a significant impact on our health and comfort. Noise related hearing loss may result in distortion of sound, including auditory perception of sound of co-workers speech. The distortion of co-workers speech may result in miscommunication and an increased potential for accidental injury. The exposure to noise, especially to impulse noise, was associated with increase in Coronary Heart Disease (CHD) risk that persisted even after the workers had passed the age of retirement. The amount of the tools produced vibration that is transmitted to the hands and arms of the operator is influenced by the grip force with which the tool is held and the force applied by the operator holding the tool against the work piece. The most common work hazards are noise, vibration, physical and psychological strain, visual exertion and inadequate working posture. It has been suggested that sewing machine operators, who frequently suffer from back pain, reduce eye task distances in order to compensate for adequate lighting. This adjustment exaggerates trunk inclination and increases back loading. The poor lighting can accentuate existing vision problems and reading difficulties among the elderly, it can cause depression and disrupt sleep cycles. The work environment in a majority of these units is unsafe and unhealthy. These include poorly designed workstations, unsuitable furniture, lack of ventilation, inappropriate lighting, excessive noise and lack of personal protective equipment. People working in such poor or substandard environment are prone to occupational diseases [32].

The measures towards improving the awareness of occupational health and safety and thereby motivating the workers in use of personal protective equipment would help in achieving a safe and healthy workplace environment. The work environment parameters such as Illumination was

measured using luxmeter, noise level using sound level meter and temperature with hand held thermometer. Averages of a minimum of three observations were taken to ensure reliability of the recorded values [33]. The different hazards arising due to workplace equipment or movement are identified and are pictorially represented. The corresponding solutions for these are then conceptualized using OSHA standards. An easy to understand pictorial document aided with the description of the cause and effect relationship between the hazard and its consequences complemented by the corresponding solutions is made which can be used as a framework for designing sewing stations. Workers involved in sewing activities, such as manufacturing garments, shoes, and airplane or car upholstery, may be at risk of developing musculoskeletal disorders (MSDs). Designing the right sewing station plays a huge role in these industries [34].

A detailed review of various aspects associated with the work has been done. Literature has been reviewed to understand the status at national and international level in focus areas pertaining to the project such as human resource issues in garment industries, participation levels of women workforce in the units, the extent and type of prevalence of the musculoskeletal disorders and occupational hazards.


Chapter 2



Equipment and Instruments used for the conduction of the Research

Several equipment and instruments have been used for the successful completion of the research work. Instruments such as Infrared Thermometer, Sound level meter and Lux meter available in Ergonomics Laboratory of Industrial Engineering and Management department were used to measure room temperature, noise and illumination levels respectively in the work area. Also to capture the processes in the selected garment units, a camera for both video and image recording of Panasonic make was purchased along with the relevant accessories. The specifications and features of the instruments and equipment are provided below.

2.1 Specifications/ Features of Instruments used for Measurement




The three main instruments were used and the specifications are shown below. The sound level meter was used to assess sound decibel levels for a variety of workplace situations including workplace machinery monitoring and audio/alarm system checks. Thermometer was used to determine the room temperature and Luxmeter was used to measure illumination of the workplace.



1.		Brand Name	Center 350 Infrared Thermometer
		Features	a) Simple One Handed Operation b) Laser Targeting c) LCD With Back Light d) °C / °F Select Switch e) Laser ON/OFF Switch f) Automatic Power Off g) Display Hold Function
		Display	3 ½ digits LCD
		Low Battery	Symbol appears when battery is low
		Measurement Range	-20°C ~ 500°C -4° F ~ 932°F
		Accuracy	± 2% or ± 2°C (3°F)
		Resolution	0.5°C 0.5°F
		Distance to Spot (D:S)	8:1
		Response Time	500m sec
		Emissivity	Pre-Set at 0.98
		Battery Type	9V Battery




2.		Brand Name	IEC 651 Type 2 Digital Sound Level Meter
		Features	a) Microphone b) Windscreen c) One 9V Battery
		Ranges	a) Low = 32 ~ 80 dB b) Medium = 50 ~ 100 dB c) High = 80 ~ 130 dB
		Resolution	0.1 dB
		Accuracy	± 1.5 dB
		Weighting	A and C
		Functions	MAX, MIN hold, Fast/ Slow Response, High/ Low range data
		Display	Backlight LCD
		Dimensions	2" × 8 ¼ × 1 ¼ (5 × 20.9 × 3.1 cm)
3.		Brand Name	LX-101 Lux Meter
		Features	a) Sensor used the exclusive photo diode & multi-color correction filters, spectrum meet C. I. E. standard. b) Built-in low battery indicator c) LSI-circuit use provides high reliability and durability. d) Sensor COS correction factor meet standard. e) Separate LIGHT SENSOR allows user take measurements of an optimum position. f) LCD display provides low power consumption. g) Compact, light-weight, and excellent operation. h) Precise and easy readout, wide range. * LCD display can clearly read out even of high i) High accuracy in measuring ambient light
		Display	13 mm (0.5") LCD
		Ranges	0-50,000 Lux
		Over-Input	Indication of "1"
		Sampling time	0.4 sec
		Sensor Structure	The exclusive photo diode & 108x73x23


			mm (4.3x2.9x0.9 inch) color correction filter
		Operating Temperature	0 to 50 C° (32 to 122)°F
		Power Supply	DC 9V battery. 006P, Ranges 0-50,000 Lux. 3 Ranges. M N1604 (PP3) or equivalent

2.2 Specifications/ Features of equipment and accessories purchased for conduction of research

1.		Specifications / Features Panasonic Lumix GH4 Camera <ul style="list-style-type: none"> The sensor resolution is 16.05 megapixels has a supersonic wave filter sensor. The digital video format includes AVCHD, MOV, MPEG-4 and image recording format includes JPEG, MPO, RAW, RAW + JPEG The interfaces provided are HDMI, USB 2.0, composite video/audio
2.		Secure Digital (SD) memory cards <ul style="list-style-type: none"> The Sony NEX-5R Sandisk Extreme Pro SDHC 32Gb 95Mb/s memory card will significantly speed up the transfer and writing time of your camera (up to 95Mb/s). With the Sandisk Extreme Pro SDHC 32Gb 95Mb/s memory card for Sony NEX-5R you will be able to take High Definition photos and videos and save them at a very high speed.
3.		Case <ul style="list-style-type: none"> The black RIG-GH4 Case for Panasonic GH4 from Porta Brace is a rigid-frame top loading case designed for the Panasonic GH4 mirrorless camera. It features a 1000D Cordura nylon exterior and a soft, padded Veltex-lined interior, and provides 19 pockets and assorted pouches to keep your gear and accessories organized. The case includes a 4" lens cup, 7" lens cup, soft zippered pouch, padded iPad/tablet carrying pouch, while balance card, a cinch tie-down strap, half cradle, and a carabiner.

4.		<p>Lithium-Ion battery</p> <ul style="list-style-type: none"> • This 2200mAh rechargeable Lithium-Ion battery is specially designed for Panasonic DMW-BLF19E. • Fully compatible with OEM equipments and chargers. • Capable of showing battery status including battery level and remaining usage time. • High Capacity 2200mAh can meet your day life use and travel need, lasting longer, power supply stable and fast charging. • Battery Cells: Li-ion. • Capacity: 2200mAh or 2.2Ah. • Voltage: 7.4V.
5.		<p>Panasonic Panasonic GH4</p> <ul style="list-style-type: none"> • Height: 4 1/2 • Width: 6.35 cm (2.5 inches) • Charger suitable for: Digital cameras • Colour: Black • Depth: 1.5 Inches (1.5 cm) • Charger Type: Inner • Qty: 1 • Power supply: AC • 'Each strip is 2.5 "Width • Depth: 3.8 cm
6.		<p>Polaroid Tripod</p> <ul style="list-style-type: none"> • Open Height : 206 CMS • Closed Height : 71.5 CMS • Legs Diameter : 30 MM • Tripod Weight : 2.4 KG • Maximum Weight Capacity : 5 KG

7.		<p>Flash Black</p> <ul style="list-style-type: none"> • Brand: Simtex • Model Name: 333 Semi TTL • Type: Flash • Color: Black • Designed For: Nikon, Canon • Recycling Time: 2.9 seconds • Guide Number: 66 • Weight: 400 g
8.		<p>Rechargeable Batteries.</p> <ul style="list-style-type: none"> • Eneloop by Panasonic is the next generation of environmentally friendly batteries. • Pack of 4 Pre-Charged (Ready to use) AA 2500mAh Ni-MH Eneloop Pro Rechargeable Batteries. • Charge up to an impressive 500 times, with an 85% capacity after 1 year. • All Eneloop batteries are pre-loaded with environmentally friendly solar energy and ready for use immediately after purchase. • Ready-to-use for everyday use, these Eneloop Lite batteries come pre-charged for your convenience. Designed for high drain devices.
9.		<p>SD memory cards Case</p> <p>Sturdy and water-resistant case for up to 8 SD or 4 CF cards. This sturdy, waterproof memory card case is able to carry and store up to 8 PCS Secure Digital (SD) memory cards or up to 4 PCS Compact Flash (CF) cards. It's made of tough Polycarbonate resin. The inner liner absorbs shock and protects the cards from almost any harm such as impact, dirt, moisture or water.</p> <ul style="list-style-type: none"> • Stores up to 8pcs SD or up to 4pcs CF cards • Shock or impact proof • Water, dirt and weatherproof • Internal soft liner • Plastic rubber design • Dimensions (HxWxD): 11,5 x 8x 1,5cm • Material: plastic (Polycarbonate), rubber • Weight: 125g • Color: black, blue

10.		External USB 3.0 Hard Drive <ul style="list-style-type: none"> • 2TB Capacity • USB 3.0 Port • Max. Sustained Read/Write Speed: 100MB/s • 5400rpm Disk Speed • Seagate Dashboard for Automatic Backup • Pre-Loaded NTFS Driver for Mac • Free Seagate Mobile Backup App Available
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Several equipment's available with the institution's ergonomics laboratory were used for measuring environmental parameters such as noise, illumination and temperature in the selected garment manufacturing units. To gain better insights into the processes in different sections of the garment manufacturing units' photography and videography equipment of Panasonic make procured as part of the project has been used.

Chapter 3

Process Flow Study at various Divisions in Garment Units

After a thorough literature review companies were selected for studies on ergonomic interventions in Garment manufacturing sector. This chapter provides an overview of the processes being carried out in the manufacturing units selected for the study. Based on the convenience and permission availability, initially four companies were identified. The relevant company details required as general information are depicted below in table 3.1.

Table 3.1: General information of companies

Company	MAF Clothing Pvt. Ltd.,	MAGNUM Enterprises	DISHA Designs Pvt. Ltd	Sri Ram & Sons
Address	AdikemaranaHalli, 21 Km, Makali Post, Tumkur road, Bangalore- 562128	#371, 10 th Cross, 4 th Phase, Peenya Ind area, Bangalore- 560058	#106/1, 12 Km, Kenchanahalli, Mysore Road, Bangalore-560059	#193B, 3 rd Phase, Peenya Ind area, Bangalore- 560058
Contact	Mr Chakravarthi Mr Balaraj	Mr Aditya Mr Mohan	Mr Raghuraj	Mr Nagaraj
Phone No	9739913005	080- 40965661	9538890272	9538890285
Turnover in Rs.	255 Crores.	13 Crores.	54 Crores.	26 Crores.
Customers	Primak, C&A, Best Sellers , Takko, Peacock, Landmark, MAX	Takko, ZSK, Reliance, Mufti, Mim, Next, ACC, CAZ India	Bon O Boss, Taylor Vinatge, GAP, H & M, Austin, Takko, HPJ, Sports Master, Oldeschool	Arrow, Takko, HPJ, Bon O Boss, HArmont & Blaine, Red Tape, Sports Master, Taylor Vinatge

The study primarily focused on women employees and health parameters affecting them. Therefore, the data related to women employees working in four companies were collected. It is observed that around 85 percent employees are women in these four companies. The following table 3.2 provides section wise split up of employees and this is helpful for isolating problems section wise.

Table 3.2: Section wise split up of employees

Company	MAF Clothing Pvt. Ltd.,		MAGNUM Enterprises		DISHA Designs Pvt. Ltd		Sri Ram & Sons	
Department	Total Strength	Women	Total Strength	Women	Total Strength	Women	Total Strength	Women
Sampling	53	20	6	3	15	1	0	0

Company	MAF Clothing Pvt. Ltd.,		MAGNUM Enterprises		DISHA Designs Pvt. Ltd		Sri Ram & Sons	
Fabric	14	2	4	0	5	1	0	0
Accessories	28	20	7	7	6	2	2	2
Cutting	121	102	23	20	51	48	28	24
Sewing	1379	1164	160	126	521	516	273	248
Finishing	353	247	44	30	142	123	62	57
Packing	58	33	6	1	30	22	13	8
Total	2006	1588	250	187	770	713	378	339
% of women		79		75		93		90

The process study initially was started with M/s Disha Designs Private Limited, Bangalore. It is a private company incorporated on August 2010 and is the main manufacturer of readymade garments. The 90% of workers in the industry are women with minimum education qualification. The Garment Industry comprises of several functional divisions such as Cutting, Sewing, Stitching, Finishing, Ironing and Packing. Each process passes through series of activities as shown in the Figure 3.1. There are various machines and instruments in various activities and is shown in brackets in each box, wherever it is required.



Figure 3.1: Process Flow of a Trouser manufacturing

The garment industry manufacturing process starts from ordering for the raw material from different suppliers as per their requirements. The raw material is obtained in terms of grey fabric which is then inverted and documented. The fabric inspection machine is used to determine both quality as well as the measurement of a fabric. Defects could include Holes, Slub, Stains, Broken Picque, White Streaks Mark, Running Col Vary, Width Warp, Foreign Yarn, Color Yarn, Double pick; Weaving, Missing yarn. These defects are examined and are measured by a Four Point System as shown in Table 3.3. Once each fabric meets the tolerance level, it is forwarded to cutting section. Any fabric that exceeds 9, falls under Point 4 and it is Rejected.

Table 3.3: Four Point System of defect identification

SI No	Defects, in Inches	Points Assigned
1.	Defects up to 3 inch	1
2.	1-6	2
3.	6-9	3
4.	>9	4

Cutting Section: The accepted fabric is first transported to cutting section. In this process, the fabric is laid on long table in a multilayer arrangement. The patterns of the garment are placed on top of the layers and a clamp is used for a support. The multi layers are cut according to the patterns by using electric cutter around the patterns to produce garment parts, lining parts and interlining parts. Each part are segregated and numbered for further reference. Fusing is a thickness/ grip provided to the garment parts. The garment parts, lining parts and interlining parts once fused is bundled in batch and are dispersed to dispatch section.

Sewing Section: Sewing department is the heart of a manufacturing unit. In this process, the bundled garment parts are sent to the measurement section for measuring purpose. It is then forwarded to back section and front section. Their function is to stitch the trousers according to the style mentioned in the pattern.

Stitching Section: Once the trousers are stitched, it is further sent to Kaja Button Section. In this section, the fabrics are counted and markings are done by identifying the area to be buckled and holes are made to insert a button. The marked garment parts are outsourced for washing. The final step in this process is to fill the gap.

Finishing Section: In the finishing process, the readymade garments are checked before forwarding to Inspection section. If a defect is found, it is sent back to the respective section to

relook the garments and to re-correct it. Trimming i.e. Thread sucking machine or Cello Tape is used to remove the leftover/ waste threads on the finished garments. Inside, outside and topside checking is done. The finished garments are then sent for Ironing. Finishing section also includes a chemical department. Its function is to remove stains found in the finished garment using a chemical called acetone.

Inspection Section: In this section, checking is divided into different section such as final checking, measurement checking, label checking. i.e. checking of a finished garments are done thoroughly as per the standards specified by the customer.

Packing Section: In this section, the finished garments are audited to examine the quality of a product. The price, size and other parameters are tagged and are filled in a poly bag and the packing is done in a ratio or in a bulk as per order requirements and are then loaded in carton box and is dispatched.

After carrying out the initial study in M/s Disha Designs (P) Ltd., the processes were understood in a better way. This helped the team to study the processes in the other companies in a better manner. Even though the divisions and the processes at the gross level are same, the types of machines used, the varieties of garments manufactured vary based on the requirements of the customer.

The process study was also carried out at Namaste Export limited, is Bangalore, India based leather garment exporter with the history of decades. Established in 1970, Namaste exports is recognised name in the field of leather garments. Namaste makes leather garments for leading labels in Europe, US and Russia. Namaste exports limited and exports is an India based company. The company is engaged in manufacturing, sale, production and exports of leather garments and finished leather products. The company operates in the leather garments segment. The company's products include leather garments and finished garment. As of march 31, 2010 the company had installed capacity of 56,160 leather garments goods. All manufacturing facilities in the company are covered under ISO 9002 certification. .NEL leather goods reach 15 countries worldwide covering Asia, Europe, America and the Middle East. The major markets which NEL found acceptance were Germany, Switzerland and UAE. Namaste exports outsource leather garments to brands like:(i) Tommy Hilfiger, (ii)Bogner, (iii) Strellson, (iv)Bugatti, (v) Barbour, (vi)Abercrombie and Fitch, (vii) Milestone, (viii)Aigner

There are 5 leather sewing batches and 1 lining batch. Once each type of batches receives the instructions and respective leather or lining bundles, the work is started. Fusing, wadding etc., happens before it is sent out to the batch. In the leather sewing section, there are 13 stations with each station allotted one particular task. The material flows in a continuous manner, from one

station to the next up to the 10th station. On the other hand, one full lining bundle is given to one sewing operator to stitch. Once sufficient lining pieces are stitched, it is sent to the leather batch. From the 0th station onwards, the attaching of leather piece and lining piece takes place. By the end of the 13th station, the leather garment is 90% complete. Along with online inspection, there is another round of inspection that takes place before it is sent to the hemming and buttoning section. Once the two activities, hemming and buttoning is done it is sent to the finishing tables where it passes through various phases of inspection before its sent to package and dispatch. The following flowchart depicts what's explained above briefly:

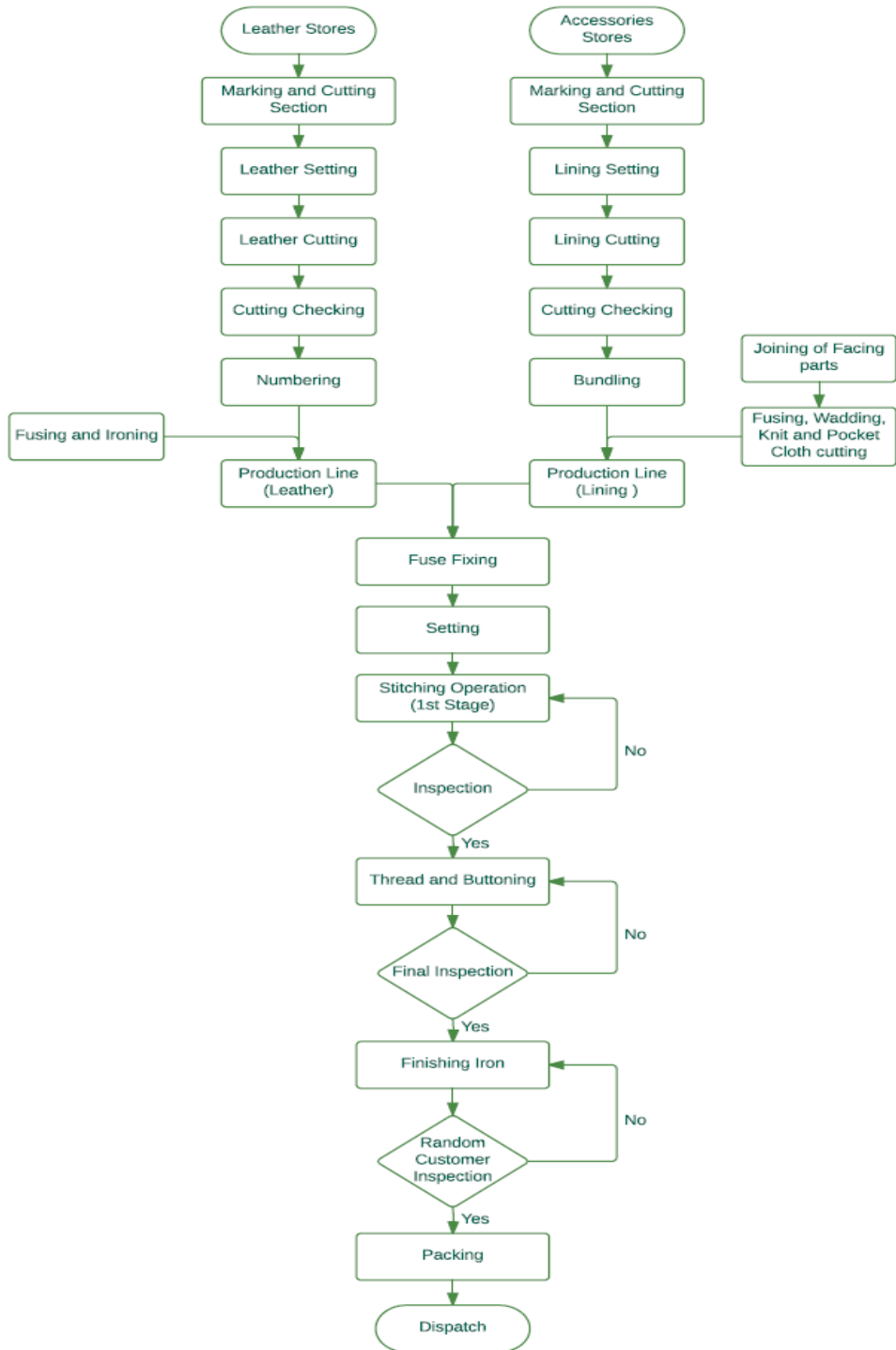


Figure 3.2: Process Flow of Garment manufacturing

Based on the study it was observed that almost all the manufacturing units selected for the study comprised of cutting, sewing, stitching, finishing, inspection and packing sections. The processes involved in each of these sections have been documented. Also it was found that these units comprised predominantly women workforce ranging from 75% to 93%.

Chapter 4

Auditing of Indoor Physical Environmental Factors in Divisions of Selected Garment Units

Indoor physical environmental factors include temperature, lighting, noise which affects the performance of humans. Good indoor environment is beneficial in terms of increasing productivity, satisfaction and overall well-being of employees. Standards proposed should be used as a basis, while due attention should be given to ethnic and geographic diversity, individual differences and adaptability while designing / planning any indoor workplace/workstation/facility. Organizations like ISO (International Standards Organization), CEN (European Committee for Standardization), ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers), IES (Illuminating Engineering Services), OSHA (Occupational Safety and Health Administration) and such others put forth standards and accepted methods for evaluation of physical environments while periodically revising the existing standards and publishing new ones. Adherence to these standards help in overall system design optimization for employee well-being [35]. The standards adopted for temperature, light and noise are as follows:

Illumination: According to Energy Efficiency Guide for Industry in Asia, the recommended level of Illumination in the Garment Industry is as shown in Table 4.1

Table 4.1: Recommended Levels of Illumination

Area and Task	lux	
	Max	Min
Cutting	1000	500
Sewing	1000	500
Stitching	1000	300
Finishing	1500	300
Ironing	750	300
Packing	500	250
Checking/Inspection	2000	1000

Noise: Regulations limiting noise exposures of industrial workers have been instituted by OSHA. According to Section 139 of Regulation 851 (Industrial Establishments) under the Occupational Health and Safety Act (OHSA). The maximum allowable exposure to noise level is as shown in Table 4.2 below:

Table 4.2: Maximum Allowable Exposures to Noise

Duration	Steady Sound Level (dBa)
8 hours	85
4 hours	88
2 hours	91
1 hour	94
30 minutes	97
15 minutes	100

Temperature: According to OSHA, the recommended levels of temperature based on the work load handled by the employees, in terms of permissible heat exposure is as shown in Table 4.3 below:

Table 4.3: Permissible Heat Exposure Threshold Limit Value

Work/Rest Regimen	Work Load		
	Light	Moderate	Heavy
Continuous Work	30.0 °C (86 °F)	26.7°C (80°F)	25.0°C (77°F)
75% Work, 25% rest, each hour	30.6°C (87°F)	28.0°C (82°F)	25.9°C (78°F)
50% Work, 50% rest, each hour	31.4°C (89°F)	29.4°C (85°F)	27.9°C (82°F)
25% Work, 75% rest, each hour	32.2°C (90°F)	31.1°C (88°F)	30.0°C (86°F)

4.1 Instruments used for Measurement

The three main instruments used for measuring the above considered parameters are luxmeter, sound meter and infrared thermometer respectively. The sound level meter was used to assess noise decibel levels for a variety of workplace situations including workplace machinery monitoring and audio/alarm system checks. Thermometer was used to determine the room temperature and Luxmeter was used to measure illumination of the workplace at different points in time. The detailed specifications and features of the instruments were discussed in Chapter-2.

4.2 Research Design for Measurement of Environmental Factors

The work environment in the garment industries plays a vital role in increasing the productivity, quality and the wellbeing of workers. The poor working environment parameters such as Illumination, Noise level and Temperature adversely influence the effectiveness of workers which in turn reduces the actual productivity of the company. After understanding the processes involved in the manufacturing of garments in various divisions, the auditing of the indoor

physical environmental factors were carried out initially in two companies, M/s Disha Designs (P) Ltd., and M/s Magnam Enterprises.

A questionnaire was designed to audit the factors in selected garment units. The following aspects and methodology was adopted for measurement.

- The activity areas were divided approximately into three sections for readings. They were near the window, Centre of the half space of the depth and Furthest from window. The observations were taken depending on the nature of work. It was further divided to Light, Moderate and Heavy.
- It was seen that in sections like sewing, stitching, ironing and inspection the work load were heavy and hence the readings were taken for every 30 minutes time duration. And in sections like cutting and packing, the workload was heavy, but, the work progress was very slow by nature and hence, the readings were taken for every 2 hour time duration.
- The primary data were obtained by walk through survey in each section and the readings were collected. The Standard Values were obtained by various International organizations.
- The study was conducted to estimate the minimum exposure to noise level using **Sound level meter**. The illumination level of each section was measured using a **Luxmeter**. The room temperature was recorded with a **Handheld Thermometer**. Averages of a three observations were taken to ensure reliability of the recorded values. The details of work environment in each section are presented as follows. The value that exceeded standards is red marked and italicized.
- The recommended values of environmental factors for each section are summarized as shown in the Table 4.4.

Table 4.4: Recommended Values of Environmental Factors for each section

Parameters	Recommended Values					
	Cutting	Sewing	Finishing	Ironing	Inspection	Packing
Sample Taken	27	27	18	9	9	27
Nature of work	Heavy	Heavy	Heavy	Heavy	Heavy	Moderate
Duration	2 hours	30 min	30 min	30 min	30 min	2 hours
Illumination	Max – 1000 Min – 500	Max – 1000 Min – 500	Max – 1500 Min – 500	Max – 750 Min – 300	Max – 2000 Min – 1000	Max – 500 Min – 250
Temperature	25.0 °C	25.0 °C	25.0 °C	25.0 °C	25.0 °C	26.7 °C
Exposure to Noise	91db	97db	97db	97db	97db	91db

The data was collected, section wise using the instruments and the consolidated values are as follows:

Cutting Section: The nature of work was heavy. The readings were taken for Cutting, Fusing and Numbering departments. The readings in all the three departments were collected for every two hours. And the values obtained were noted in a Tabular column as shown in Table 4.5.

Table: 4.5: Environmental Parameters of Cutting, Fusing and Numbering Section

Location	°C			Lux(Lumens)			db		
	1	2	3	1	2	3	1	2	3
Near the Window	28.5	31.0	33.0	915	922	1092	79.4	66.5	83.3
Centre of the half space of the depth	28.0	32.5	28.5	730	1100	1192	67.1	88.9	66.2
Furthest from the window	27.5	32.5	28.0	1171	1147	1061	63.8	91.9	63.5
Fusing									
Near the Window	31.5	33.5	33.5	1422	1605	1447	70.7	66.0	71.7
Centre of the half space of the depth	29.5	33.5	35.5	950	1032	1096	73.4	67.6	73.1
Furthest from the window	32.5	34.5	34.5	936	1014	1110	64.9	70.5	71.8
Numbering									
Near the Window	32.5	32.0	32.0	214	596	1064	69.8	87.5	88.8
Centre of the half space of the depth	29.0	31.0	32.5	384	435	459	78.9	72.8	67.4
Furthest from the window	31.5	31.5	31.5	755	773	785	62.9	71.7	65.8

The three readings were taken at 10.30 am, 12.30 pm and 2.30 pm. In Cutting section, the room temperature remained to be high due to poor ventilation and the illumination level varied near the window and centre of the half space of the depth as workers were seen working in natural light and the artificial light were not used. In Fusing section, the room temperature remained to be high and the illumination level was found to be high as workers relied on artificial lighting. In Numbering section, the room temperature remained to be high and the illumination level was found below as the tube lights were found to be not working.

Sewing Section: The workload in sewing section was heavy when compared to other departments. The readings were taken for Sewing, Stitching and KB departments. The readings in all the three departments were collected for every 30 minutes. The values obtained were noted in a tabular column as shown in Table 4.6.

The three readings were taken at 11 am, 11.30 am and 12.00 pm. In the sewing section, the room temperature remained to be high. The illumination level furthest from the window was high as the workers relied more on artificial lighting. In the stitching section, the room temperature

remained to be high. The illumination level furthest from the window was high as the workers relied more on artificial lighting. In the KB section, the room temperature remained to be high and the illumination level was high near the window as the workers relied on both natural and artificial lighting.

Table 4.6: Environmental Parameters of Sewing, Stitching and KB Section

Location	°C			lux			db		
	1	2	3	1	2	3	1	2	3
Near the Window	30.0	31.5	32.0	442	618	495	82.5	82.3	83.7
Centre of the half space of the depth	31.0	31.5	33.5	445	461	511	88.0	85.9	95.4
Furthest from the window	34.5	35.5	31.5	1639	1597	1606	80.4	80.3	89.4
Stitching									
Near the Window	33.5	33.0	32.0	907	904	845	78.1	76.9	82.2
Centre of the half space of the depth	36.5	36.0	31.0	414	468	419	81.0	77.8	82.3
Furthest from the window	35.5	31.5	32.5	1171	1331	1595	78.3	84.0	84.3
KB Section									
Near the Window	30.5	31.5	32.0	1296	1240	1258	76.9	75.5	78.7
Centre of the half space of the depth	31.0	33.5	33.5	375	424	397	83.3	88.5	91.6
Furthest from the window	32.5	31.5	33.5	660	686	673	83.9	90.2	91.5

Finishing Section: The nature of work was heavy. The readings were taken for Finishing and Measurement departments. The readings in two departments were collected for every 30 minutes. And the values obtained were noted in a Tabular column as shown in Table 4.7.

Table: 4.7 Environmental Parameters of Finishing and Measurement Section

Location	°C			lux			db		
	1	2	3	1	2	3	1	2	3
Near the Window	29.5	30.5	30	541	611	721	84.4	84.3	77
Centre of the half space of the depth	31	33.5	31.5	1625	1749	1764	76.3	75.2	74.5
Furthest from the window	31	31	29.5	1752	1718	1746	71.3	70.1	73.8

Measurement Section									
Near the Window	30.5	31	30	776	796	814	77.3	76.4	76.1
Centre of the half space of the depth	33	32.5	33	851	995	1072	73.9	74.5	74.0
Furthest from the window	31.5	30	31.5	945	970	1064	73.9	73.5	73.3

The three readings were taken at 11 am, 11.30 am and 12.00 pm. In the Finishing section, the nature of work was heavy and the room temperature was relatively high. The illumination level was high in the centre of the half space of depth and in the furthest from the window regions, as it required bright lighting to examine the finished products. The artificial lighting was utilized for 8 hours. In the measurement section, the room temperature was high. The illumination and noise level was found to be within the recommended level.

Ironing Section: The nature of work was heavy. The readings were collected for every 30 minutes. The values obtained were noted in a Tabular column as shown in Table 4.8.

Table 4.8: Environmental Parameters of Ironing Section

Location	°C			lux			db		
	1	2	3	1	2	3	1	2	3
Near the Window	31.0	31.0	33.5	748	855	838	83.6	84.1	84.1
Centre of the half space of the depth	33.0	34.5	34.0	769	762	784	82.1	82.6	81.5
Furthest from the window	35.0	35.0	34.0	723	745	761	81.3	81.7	80.0

The three readings were taken at 11.15 am, 11.45 am and 12.15pm. The room temperature was relatively high as workers were seen ironing the garments on a steam pressed tables. They were exposed to extreme steam and proper ventilation was not found which resulted in the exhaustion of workers. The illumination level was high as the workers relied on artificial lighting throughout their working hours.

Inspection Section: The nature of work was Moderate. The readings were collected for every 30 minutes. The values obtained were noted in a Tabular column as shown in Table 4.9.

Table 4.9: Environmental Parameters of Inspection Section

Location	°C			lux			db		
	1	2	3	1	2	3	1	2	3
Near the Window	32.5	33.0	32.0	1394	1143	1193	71.2	71.8	66.5
Centre of the half space of the depth	30.5	31.0	33.0	1522	1159	1123	70.8	71.7	68.7
Furthest from the window	35.0	32.0	31.0	926	1033	1027	67.6	72.0	72.2

The three readings were taken at 3.00 pm, 3.30 pm and 4.00 pm. The room temperature was high as the area is congested. The illumination and noise level was found to be within the recommended value. The illumination is required in order to thoroughly inspect the finished garments before forwarding it to packing section.

Packing Section: The nature of work was moderate. The readings were taken for Packing, Tagging and Size Dividing/ Ratio Checking departments. The readings in three departments were collected for every 2 hours. And the values obtained were noted in a Tabular column as shown in Table 4.10.

The three readings were taken at 10.45pm, 12.45 pm and 2.45 pm. The room temperature and illumination level was high near Centre of the half space of the depth and at furthest from the window. As the activity area was congested and there was no movement of air or ventilation was placed.

Table 4.10: Environmental Parameters of Packing, Tagging and Size Dividing Section

Location	°C			Lux			db		
	1	2	3	1	2	3	1	2	3
Near the Window	24.5	26.0	26.0	353	345	399	62.1	62.6	62.2
Centre of the half space of the depth	29	28	27.5	967	995	994	61.9	64.1	61.2
Furthest from the window	28	27.5	29	785	766	795	64	61.3	62.9
Tagging									
Near the Window	25.5	26	24.5	701	791	798	72.6	68.5	82.5
Centre of the half space of the depth	27	28	27.5	763	839	820	75	70.4	74.3
Furthest from the window	27.5	29	27	1075	1137	1183	69	65	68.9
Size Dividing/Ratio Checking									
Near the Window	28	27.5	27	639	671	702	67.6	67.3	68.4
Centre of the half space of the depth	27.5	28	28.5	1172	1040	1099	61.2	62.9	62.4
Furthest from the window	27.5	29	28	1034	1047	1076	68.1	66.8	68.7

4.3 Results and Discussion

Summarizing the data and statistical analysis helps in recommending to the companies. The statistical results have been used for decision making and stored for reuse. The analyses of work environment in trouser manufacturing unit are done and the conclusions are drawn which are as follows:

1. Cutting Section:

From the analysis, it can be concluded that, the temperature level and the illumination level was found to be above the acceptance level and noise level was found to be within the acceptance level as shown in Figure 4.1.

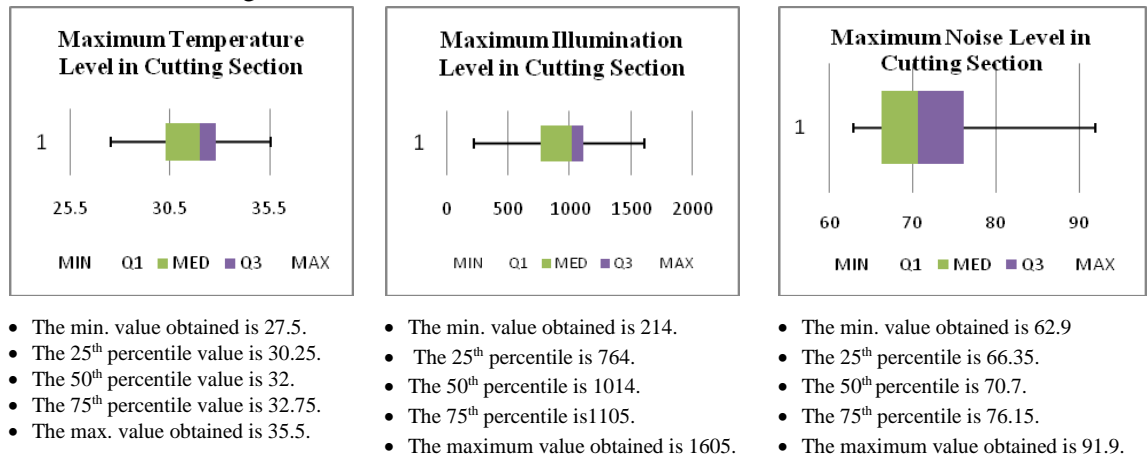
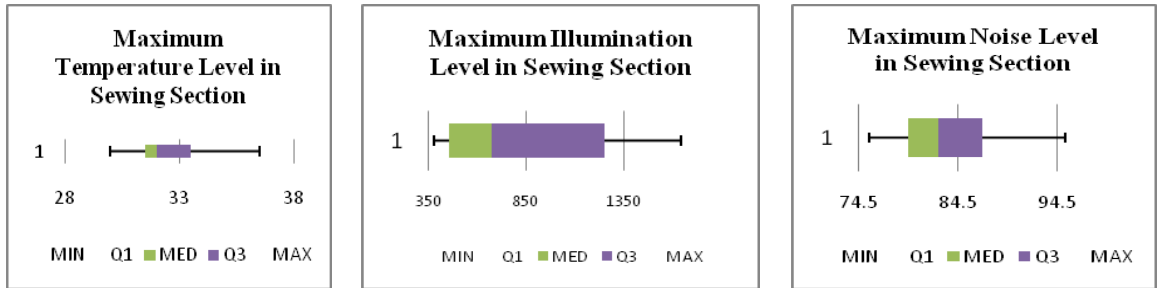


Figure 4.1 Analysis of Cutting Section

In Cutting section, the room temperature remained to be high due to poor ventilation and the illumination level varied near the window and centre of the half space of the depth as workers were seen working in natural light and the artificial light were not used. In fusing section, the room temperature remained to be high and the illumination level was found to be high as workers relied on artificial lighting. In Numbering section, the room temperature remained to be high and the illumination level was found below as the tube lights were found to be not working.

2. Sewing Section:

From the analysis, it can be concluded that, the temperature level and the illumination level was found to be above the acceptance level and noise level was found to be within the acceptance level as shown in Figure 4.2.



- The min. value obtained is 30.
- The 25th percentile value is 31.5.
- The 50th percentile value is 32.
- The 75th percentile value is 33.5.
- The max. value obtained is 36.5.

- The min. value obtained is 375.
- The 25th percentile is 453.
- The 50th percentile is 673.
- The 75th percentile is 1249.
- The max. value obtained is 1639.

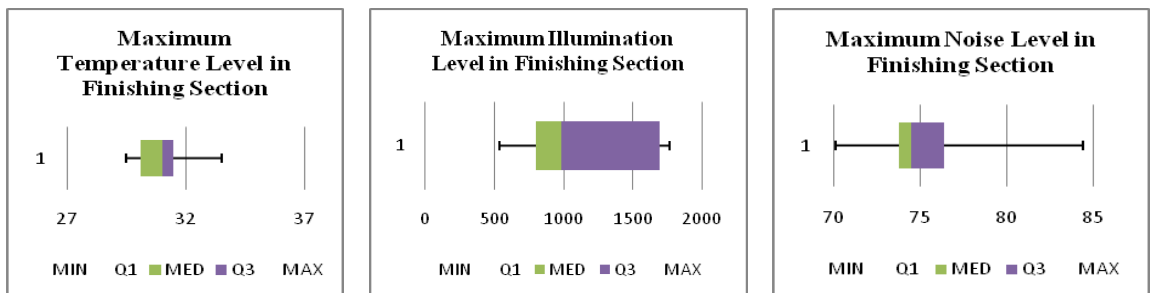
- The min. value obtained is 75.5
- The 25th percentile is 79.5.
- The 50th percentile is 82.5.
- The 75th percentile is 86.95.
- The max. value obtained is 95.4.

Figure 4.2 Analysis of Sewing Section

In the sewing section, the room temperature remained to be high. The illumination level furthest from the window was high as the workers relied more on artificial lighting. In the stitching section, the room temperature remained to be high. The illumination level furthest from the window was high as the workers relied more on artificial lighting. In the KB section, the room temperature remained to be high and the illumination level was high near the window as the workers relied on both natural and artificial lighting.

3. Finishing Section:

From the analysis, it can be concluded that, the temperature level and the illumination level was found to be above the acceptance level and noise level was found to be within the acceptance level as shown in Figure 4.3.



- The minimum value obtained is 29.5.
- The 25th percentile value is 30.125.
- The 50th percentile value is 31.
- The 75th percentile value is 31.5.
- The maximum value obtained is 33.5.

- The minimum value obtained is 541
- The 25th percentile is 800.5.
- The 50th percentile is 982.5.
- The 75th percentile is 1694.75.
- The maximum value obtained is 1764.

- The minimum value obtained is 70.1
- The 25th percentile is 73.825.
- The 50th percentile is 74.
- The 75th percentile is 76.375.
- The maximum value obtained is 84.4.

Figure 4.3: Analysis of Finishing Section

In the Finishing section, the nature of work was heavy and the room temperature was relatively high. The illumination level was high in the centre of the half space of depth and in the furthest from the window regions, as it required bright lighting to examine the finished products. The artificial lighting was utilized for 8 hours. In the measurement section, the room temperature was high. The illumination and noise level was found to be within the recommended level.

4. Ironing Section:

From the analysis, it can be concluded that, the temperature level and the illumination level was found to be above the acceptance level and noise level was found to be within the acceptance level as shown in Figure 4.4.

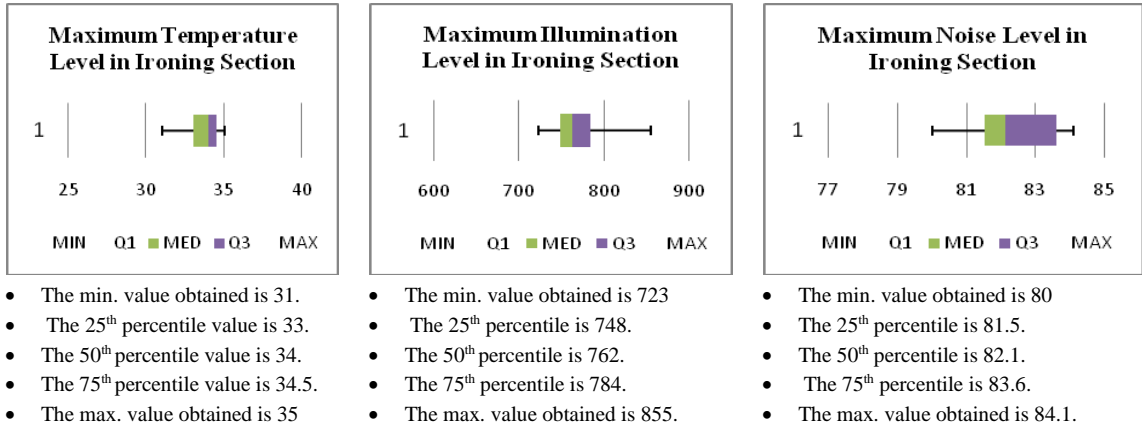
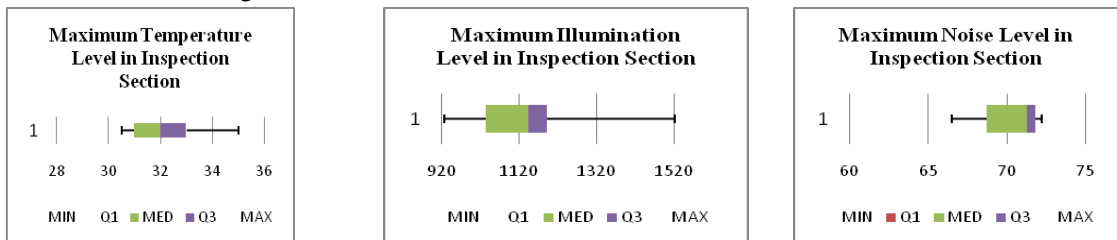


Figure 4.4: Analysis of Ironing Section

The room temperature was relatively high as workers were seen ironing the garments on a steam pressed tables. They were exposed to extreme steam and proper ventilation was not found which resulted in the exhaustion of workers. The illumination level was high as the workers relied on artificial lighting throughout their working hours.

5. Inspection Section:

From the analysis, it can be concluded that, the temperature level was found to be above the acceptance level and illumination level and noise level was found to be within the acceptance level as shown in Figure 4.5



- The min. value obtained is 30.5.
- The 25th percentile value is 31.
- The 50th percentile value is 32.
- The 75th percentile value is 33.
- The max. value obtained is 35.
- The min. value obtained is 926
- The 25th percentile is 1033.
- The 50th percentile is 1143.
- The 75th percentile is 1193.
- The maximum value obtained is 1522.
- The min. value obtained is 66.5
- The 25th percentile is 68.7.
- The 50th percentile is 71.2.
- The 75th percentile is 71.8.
- The max. value obtained is 72.2.

Figure 4.5 Analysis of Inspection Section

The room temperature was high as the area was highly congested. The illumination and noise level was found to be within the recommended value. The illumination is required in order to thoroughly inspect the finished garments before forwarding it to packing section.

6. Packing Section:

From the analysis, it can be concluded that, the temperature level and the illumination level was found to be above the acceptance level and noise level was found to be within the acceptance level as shown in Figure 4.6.

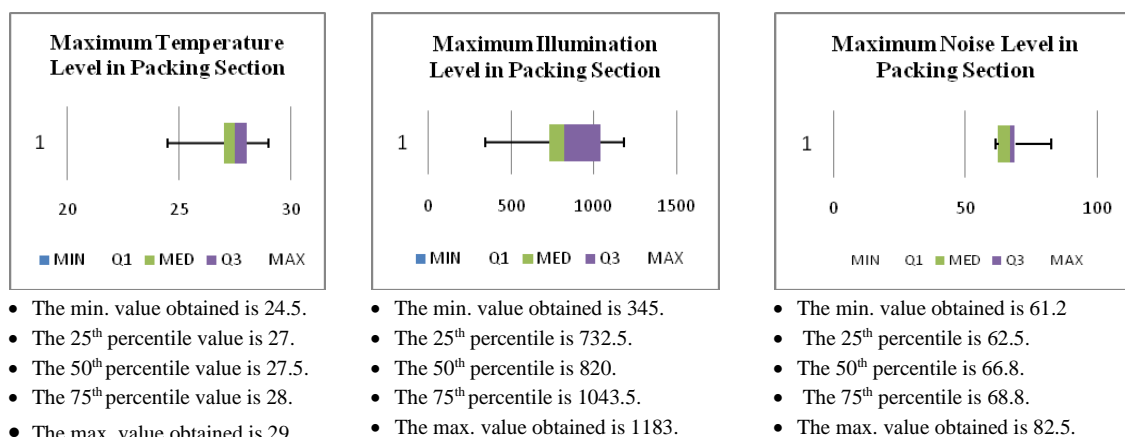


Figure 4.6 Analysis of Packing Section

The room temperature and illumination level was high near Centre of the half space of the depth and at furthest from the window. It was also observed that the activity area was congested and there was little ventilation.

The purpose of this study is to examine the working environment parameters and their effects on the workers. The illumination, temperature and sound are important aspects of our daily life. From the study, it is found that, the workstation is not well designed as per ergonomics standards. Workers compromised their health for various reasons i.e. Family commitment, fear of losing job, harassment from the supervisor, to perform rigorous work in order to gain incentives, promotions etc. Most of the workers failed to use the Personal Protective Equipment for their own reasons and this indirectly contributed to their health issues even though the noise

level was found to be within the recommended level. Workers suffered from headache due to continuous exposure to the noise. The room temperature was comparatively high and the workers were seen exhausted in few hours of their work. The illumination level were high as the workers relied more on artificial lighting which in turn effected their eye sights, contributed to headache and exhaustion of workers.

Some of the observations noticed while measuring the workplace environmental factors includes:

- In every section, the activity areas were poorly designed.
- No proper ventilation or fans were provided.
- Lack of rest periods.
- The workers were seen discouraged by their supervisors.
- Supervisors were seen dominating and harsh over their workers.
- The workers were seen working rigorously irrespective of their health issues.
- In sections like sewing, stitching and KB the fluorescent tubes were used and were placed in a higher depth than required. Hence the workers were seen in a bending position in order to avoid from injuries which in turn contributed for MSDs.
- In sections like ironing, cutting, packing, inspection and finishing the fluorescent tubes were placed a depth above to the workers. But the workers had to work in standing position for a long a duration which in turn contributed for MSDs.

Based on the observations and analysis, it was found that the garment industry was poorly designed with improper basic amenities. The workers were exposed to extreme heat, temperature and poor illumination resulting in headache, dizziness, heat burns, eye strain, stress, depression and exhaustion of the workers. Only few sections within the garment industry were provided with personal protective equipment such as mask, gloves, and goggles. But most of the women workers were seen working in bare hands and foot. It is important to create awareness of health related issues among the workers resulting from work environment. And necessary steps should be taken by the garment industry official in order to increase productivity and wellbeing of garment workers. Work station design of garment industry can be carried out based on Indian anthropometry. Training the supervisor in field of ergonomics so that they act as ergonomists and help in the implementation and supervision of ergonomics in the industry is yet another important scope of this study.

The environmental parameters temperature, illumination and noise levels were measured and analyzed to assess the prevailing levels of standards of the same in the manufacturing units. The measurements and assessment were carried out in cutting, sewing, finishing, ironing, inspection and packing sections of the garment units considered for the study.

Chapter 5

Survey on Ergonomic Practices in Selected Garment Companies

This chapter details about the methodology involved in assessing the ergonomic practices prevailing in the garment units. Also the outcome of the data analysis is documented. Previous research indicates that survey method is appropriate to understand ground reality problems faced by the employees. Keeping this in mind, the study team visited four garment manufacturing units and understood the processes involved and the difficulties faced by employees at gross level. A total of 601 women workers have been surveyed in following four companies. The table 5.1 provides section wise strength of women employees in each of these units selected for the study.

Table 5.1: Section wise strength of women employees in the companies selected for survey.

Company	Magnum Enterprises, Peenya Industrial Area, Bengaluru.	4 Creations, Vadarplya, Gottigere post, JP Nagar 8 th phase, Bengaluru.	MAF Clothing Pvt Ltd, Adakamaranahalli, Near Makali, Tumkur Road, Bengaluru.	Sri Lakshmi Designs, Peenya Industrial Area, Bengaluru.
Section	No. of Women Employees surveyed	No. of Women Employees surveyed	No. of Women Employees surveyed	No. of Women Employees surveyed
Cutting	37	12	44	2
Sewing	36	171	78	84
Ironing	03	3	8	2
Finishing	19	32	31	16
Packing	01	1	17	4
Total	96	219	178	108

5.1 Survey methodology:

It is observed that the average percentage of women working in these four companies totals to 85%. Sewing section is considered critical for the study, as it was observed that this section employs about 70% women. It was decided to administer the questionnaire for 50% of women employees in sewing section and 100% in other sections. The selected companies have given permission to study the processes and administer the questionnaire after conducting awareness training programs, section wise.

These companies have appointed a women employee having qualification of Master of Social Woks (MSW) to look into the women issues and problems. The study team has interacted with her and also field studies have been carried out to understand the processes and environmental factors affecting the employees.

The questionnaire was designed after brainstorming with the employees, management representatives, and experts in the field. This was also supplemented with the research findings. Alpha reliability testing was done before finalizing the questions to be administered. Except the sewing section, the questionnaire is administered with all women employees and the sampling method is not adopted. This is because the type of health issues and problems would be different for different employees. There was initial resistance from both management and employees to fill in the questionnaire. The study team made them understands the importance of the same and convinced the targets. The survey was carried out in the field working environment without disturbing the production process. During the course of survey, women were found to be very active in spite of their continuous production work and targets to be achieved. **The questionnaire used for the survey is provided in the Annexure.**

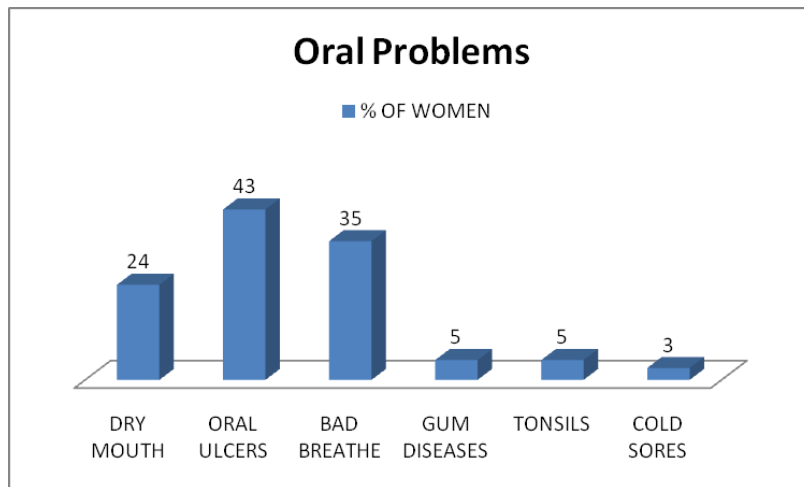
5.2 Questionnaire Format:

A questionnaire was designed to elicit information from women employees pertaining to aspects such as social demographic profile, occupational status, and generic and health profile of the employee. The other portion of questionnaire aims at seeking and documenting the prevailing practices from ergonomic perspective in different functional areas of the garment manufacturing units selected for the study. In this the questionnaire comprises of documenting the physical factor in work environment and their influence on the health aspects of the workers and details about the pain features including their location the human body.

5.3 Data Analysis of the survey carried out at Magnum Enterprises, Bengaluru.

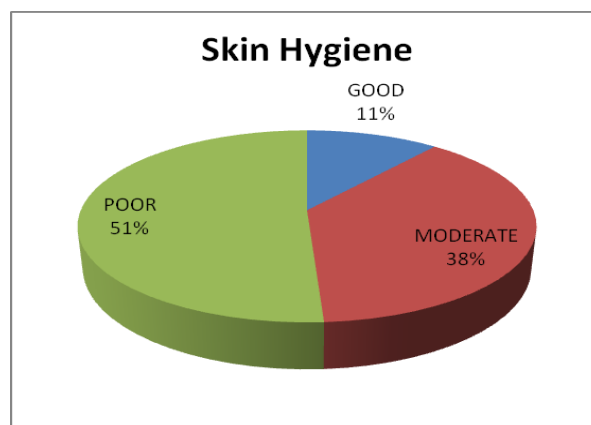
5.3.1 Cutting section:

The survey reveals that 87% of women are married; they need to manage both home and work. 97% of women have nuclear family where there are no elders to help in household chores. 73% of them have children whom have to be looked after. 81% live in rented house and a major part of their salary goes in paying off house rent. 78% come to company by Walk– they will be tired by the time they reach work place. 100% of women working in cutting section are moderately satisfied with their job. 78% women maintain moderate hygiene. 51% maintain moderate oral hygiene whereas 35% maintain poor oral hygiene. Some of the common oral problems are indicated in graph 5.1. The skin hygiene of women varies from good to poor as shown in graph 5.2. The major problems associated with skin are as shown in graph 5.3.

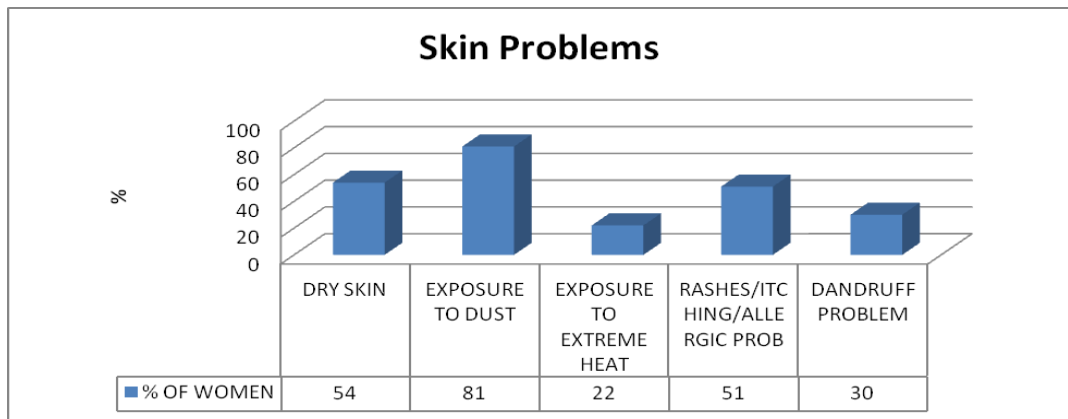


Graph 5.1: Common oral problems faced by women.

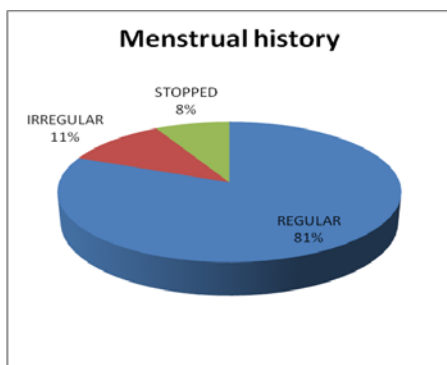
One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.4. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.5. Sickness absenteeism is prevalent after employment as compared to the figures before employment as shown in graph 5.6.



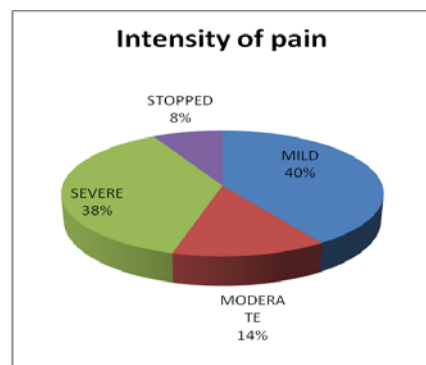
Graph 5.2: Skin Hygiene of women.



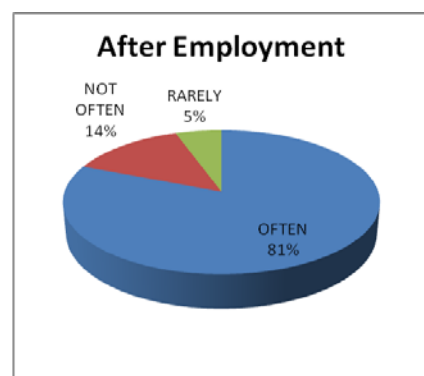
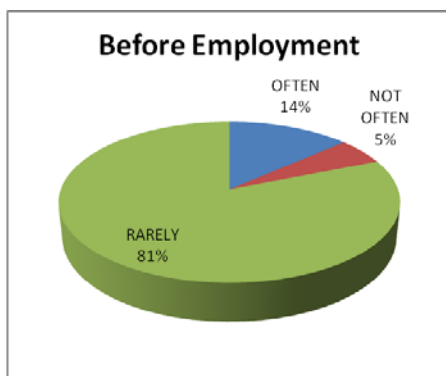
Graph 5.3: Major skin problems faced by women.



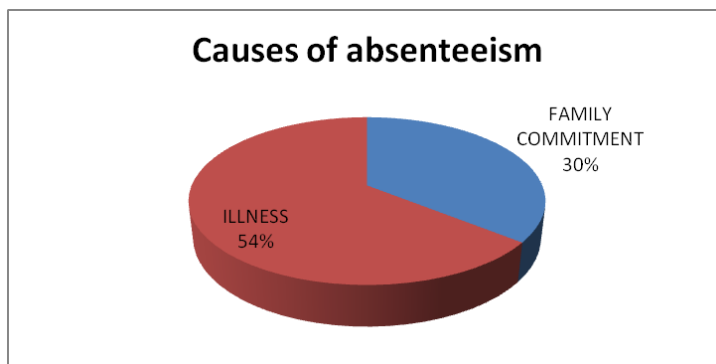
Graph 5.4: Nature of menstrual cycle.



Graph 5.5: Intensity of pain during menstrual cycle.



Graph 5.6: Illness report before and after employment.

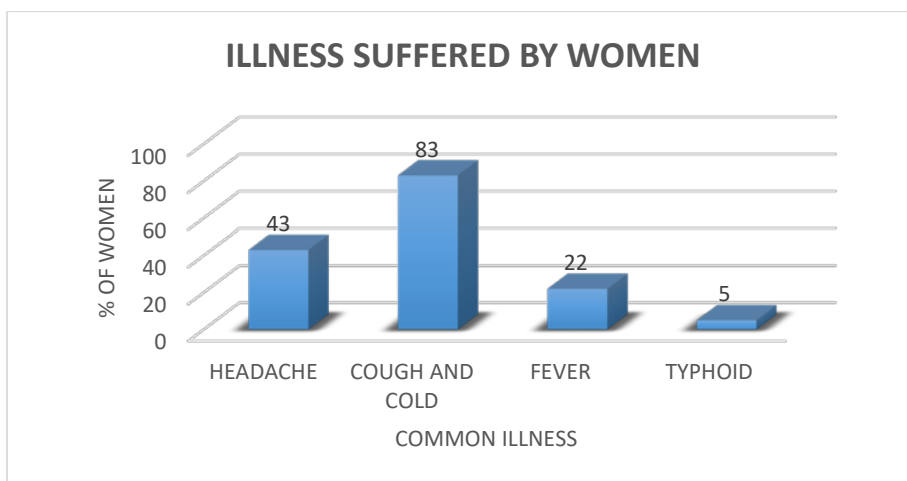


Graph 5.7: Common causes for absenteeism.

On an average 30% of women remain absent for 1 day, 35% for 1-2 days, 11% for 1-3 days and 5% for more than 3 days per month. The common reasons for absenteeism are shown in graph 5.7. In past 6 months' women were victim of the following common illnesses as shown in table 5.2

Table 5.2: List of common illnesses faced by women.

Common illness	Percentage of women
Headache	43%
Cough and cold	83%
Fever	22%
Typhoid	5%

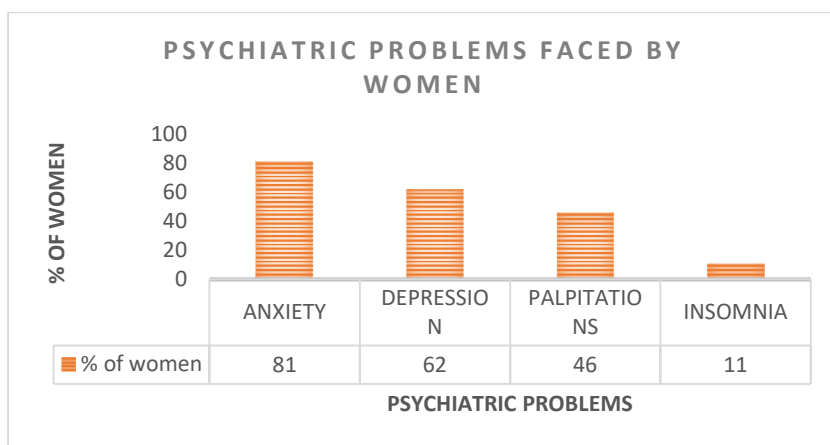


Graph 5.8 Common illness suffered by women.

41% of women are suffering from hypertension, 30% are suffering from Swelling of legs and 3% from diabetes mellitus. Women are often victims of following psychiatric problems as listed in table 5.3.

Table 5.3: List of psychiatric problems faced by women.

Psychiatric Problems faced	Percentage of women
Anxiety	81%
Depression	62%
Palpitations	46%
Insomnia	11%



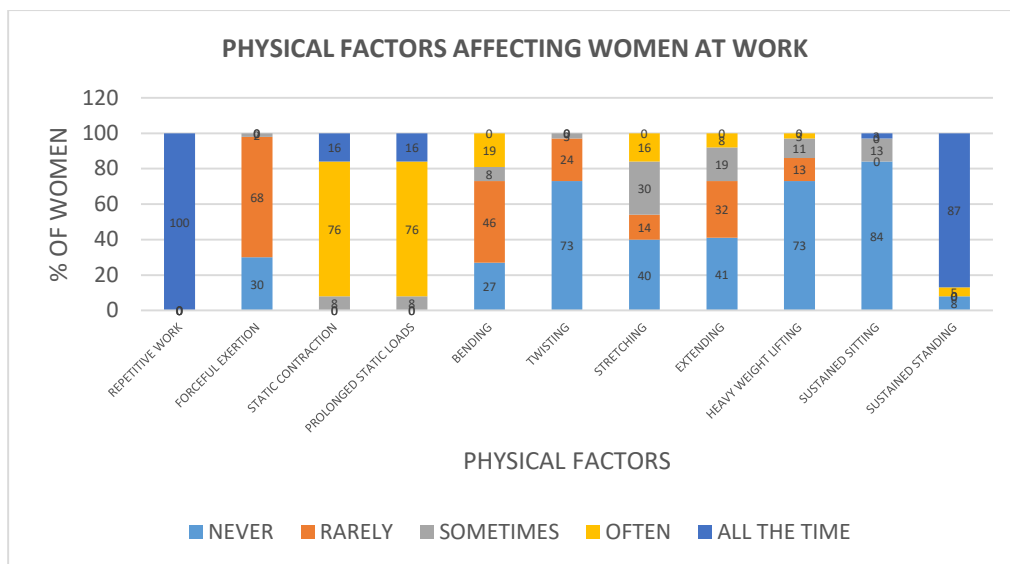
Graph 5.9 Psychiatric problems faced by women.

Table 5.4 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 92% of women feel uncomfortable to work in standing position for long hours. As result women have been victim of various symptoms and injuries as shown in tables 5.5 and 5.6 respectively.

Table 5.4: Physical factors involved at work.

Physical factor	Frequency of activity				
	Never	Rarely	Sometimes	Often	All the time
Repetitive work	-	-	-	-	100%
Forceful exertion	30%	68%	2%	-	-
Static contraction	-	-	8%	76%	16%
Prolonged static loads	-	-	8%	76%	16%
Bending	27%	46%	8%	19%	-

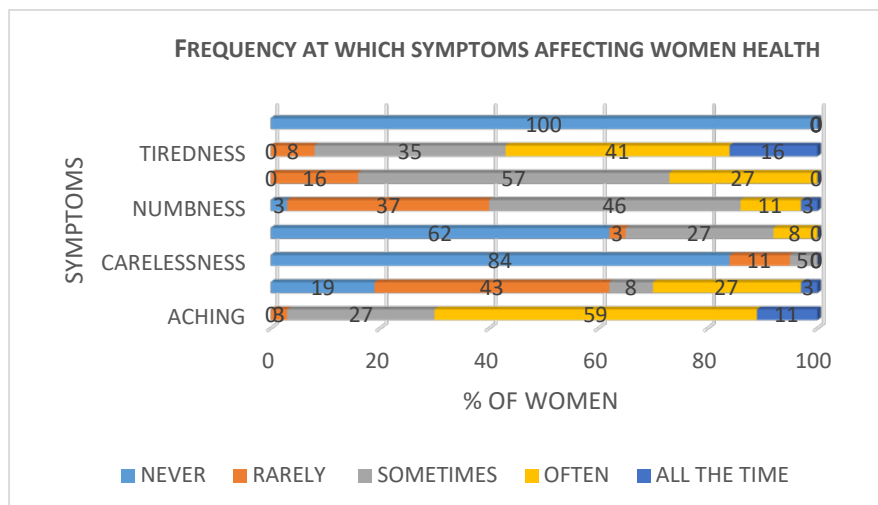
Twisting	73%	24%	3%	-	-
Stretching	40%	14%	30%	16%	-
Extending	41%	32%	19%	8%	-
Heavy weight lifting	73%	13%	11%	3%	-
Sustained sitting	84%	-	13%	-	3%
Sustained standing	8%	-	-	5%	87%



Graph 5.10: Physical factors affecting women at work.

Table 5.5: Common symptoms associated with physical factors affecting women health

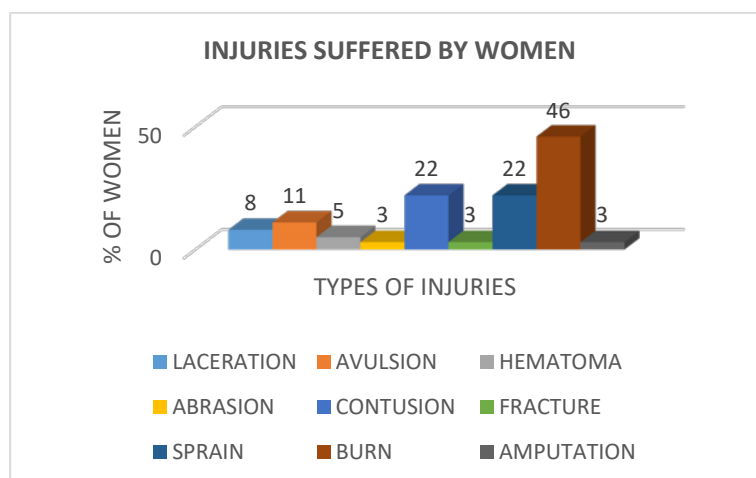
<i>Symptoms</i>	Frequency of occurrence				
	Never	Rarely	Sometimes	Often	All the time
Aching	-	3%	27%	59%	11%
Cramping	19%	43%	8%	27%	3%
Carelessness	84%	11%	5%	-	-
Dizziness	62%	3%	27%	8%	-
Numbness	3%	37%	46%	11%	3%
Stiffness	-	16%	57%	27%	-
Tiredness	-	8%	35%	41%	16%
Tangling	100%	-	-	-	-



Graph 5.11: Frequency of symptoms at which they are affecting women.

Table 5.6: List of injuries.

Type of injury	% of women
Laceration	8%
Avulsion	11%
Hematoma	5%
Abrasion	3%
Contusion	22%
Fracture	3%
Sprain	22%
Burn	46%
Amputation	3%



Graph 5.12: Injuries faced by women.

100% women are suffering from pain in their body. The percentage of women experiencing pain in a particular location is indicated in figure 5.1, where the intensity of pain is classified as no pain, low pain, mild pain, high pain and severe pain. Graph 5.8 indicates the causes of pain. 95% women experienced the pain suddenly and 5% gradually. 84% claim that the pain is intermittent and 16% constant. 100% women believe that physical activities at work are the main reason for pain and hence 59% women remain absent from work due to extreme pain and inadequate rest interval at work are also the contributors to pain for 100% of them. Women face difficulty in carrying out various activities as shown in table 5.4. The difficulty levels are recognized as never, little bit, moderate and extreme.

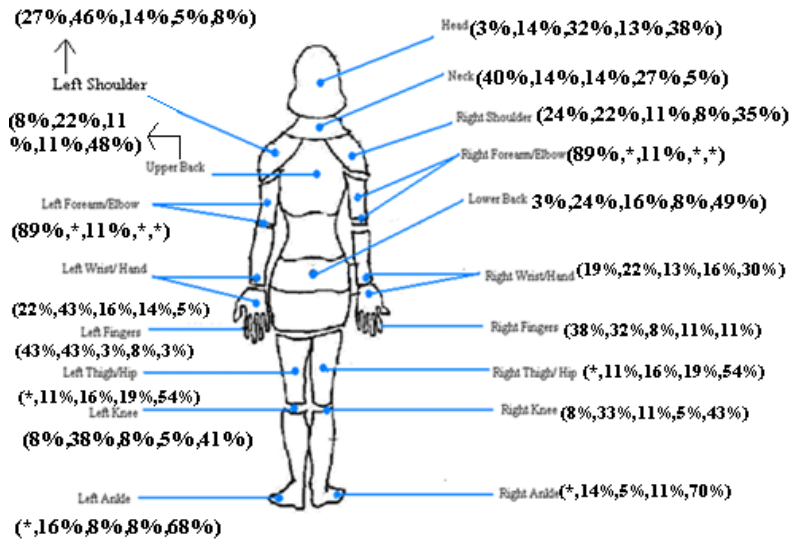
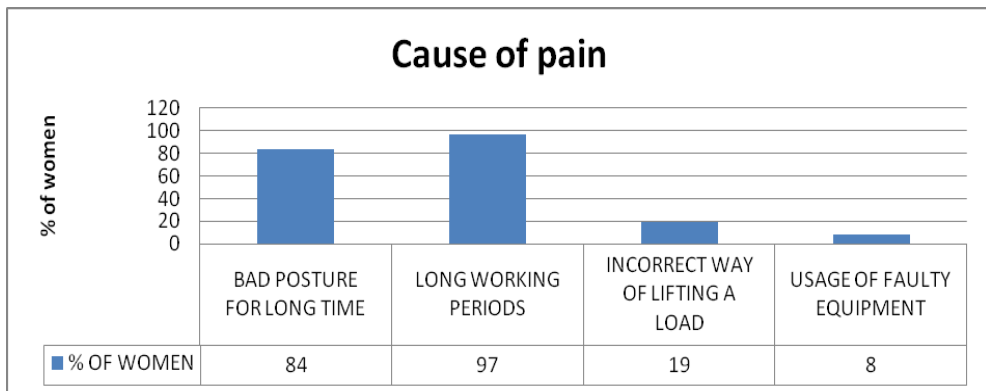








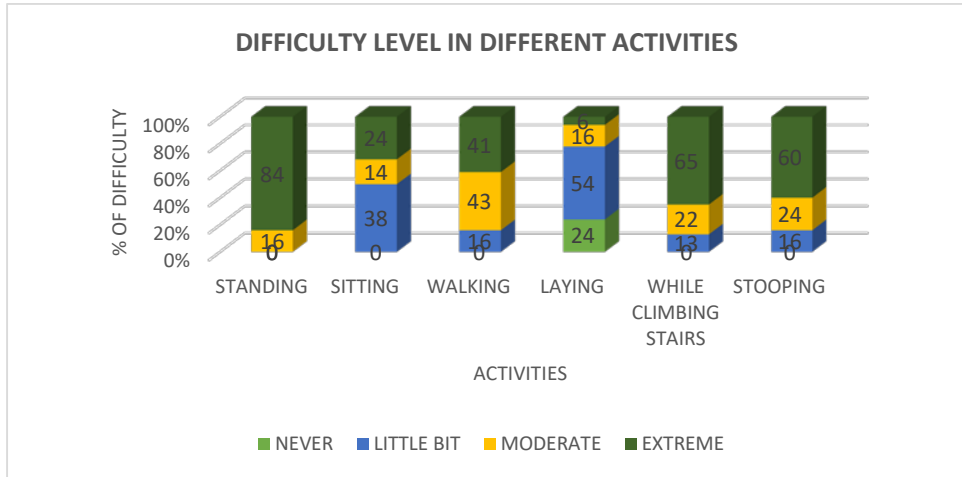
Figure 5.1: Back portion of a human body-Pain features at different body parts in terms of percentage of women experienced pain in that part of body, represented as (1, 2, 3, 4, 5), where; 1-No Pain, 2 - Low Pain, 3-Mild Pain, 4-High Pain, 5-Severe Pain.



Graph 5.13: Causes of pain.

Table 5.7: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	-	-	16%	84%
 Sitting	-	38%	14%	24%
 Walking	-	16%	43%	41%
 Laying	24%	54%	16%	6%
 While climbing stairs	-	13%	22%	65%
 Stooping	-	16%	24%	60%

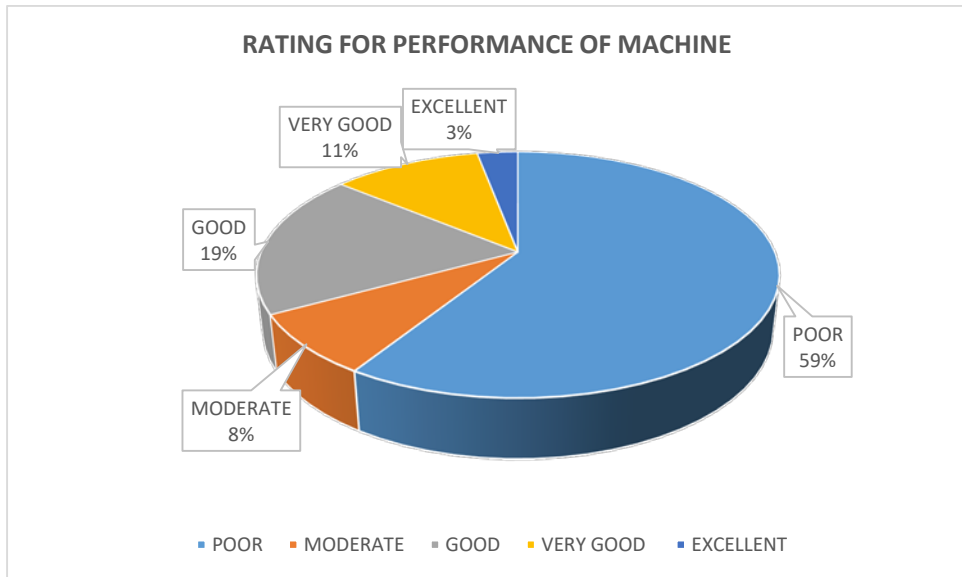


Graph 5.14: Difficulty level in different activities.

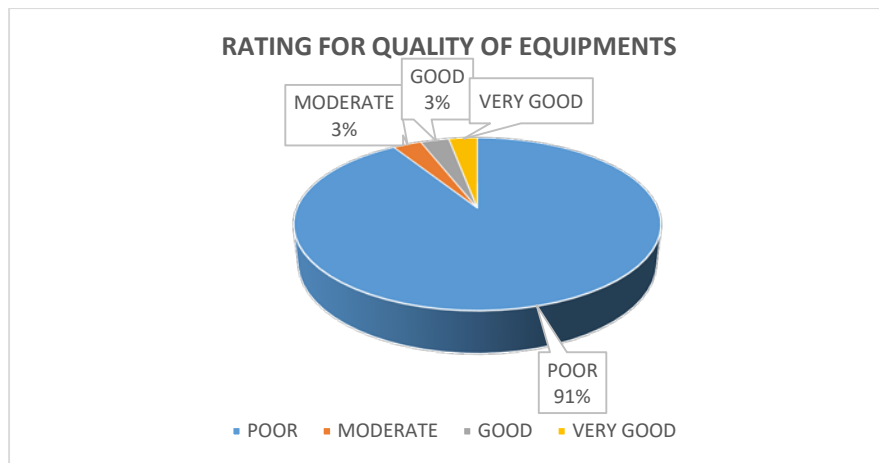
There are few issues concerning general amenities provided to workers. 3% women feel that the toilets have poor hygiene and 8% feel that it is moderately hygiene. 3% women say that the hygiene of canteen is moderate. The availability of sufficient rest periods is poor for 92% of women. The availability of first aid box during injuries is poor for 5% women and moderate for 14% of them. 51% women say that availability of doctor and nurse is poor and for 38% women it is moderate. 100% women rated medical room as poor and 97% women rated working condition of lift as poor. The working condition of fire alarms is poor for 8% women and moderate for 5% of them. The ratings for working condition of machines in terms of performance is as shown in table 5.8 and that for quality of personal protective equipment provided to them as shown in table 5.9.

Table 5.8: Ratings for working condition of machines in terms of performance	
Rating	% of women
Poor	59%
Moderate	8%
Good	19%
Very good	11%
Excellent	3%

Table 5.9: Ratings for quality of personal protective equipment's	
Rating	% of women
Poor	91%
Moderate	3%
Good	3%
Very good	3%



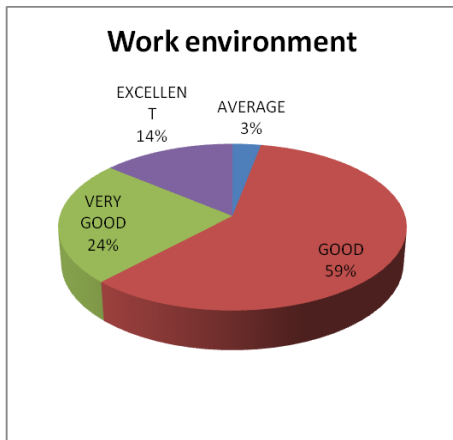
Graph 5.15: Rating for performance of machine.



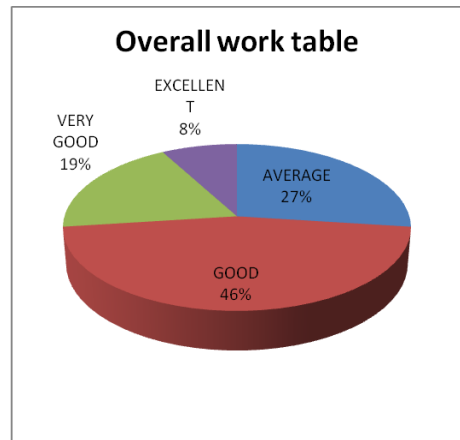
Graph 5.16: Rating for quality of equipments.

In cutting section, 81% women say that the tables are not adjustable. 30% women are not comfortable to work with actual height of table and 100% are not comfortable to work in standing position for long duration. 27% of women say that their work demand extreme bending. There is no seating arrangement in workstation for 89% women. 30% women suffer from extreme heat cramps. 8% women suffered from injury during work since the finger was cut by scissor and edge cutter machine. 41% women have been provided with personal protective equipments like masks and gloves, but none of them (100%) use it. 100% women are not comfortable to work with personal protective equipments. The ratings for work environment and overall work table in terms of height, space and adjustable features given by women in

cutting section is as shown in graphs 5.17 and 5.18 respectively. The rating scale is: poor, average, good, very good and excellent.



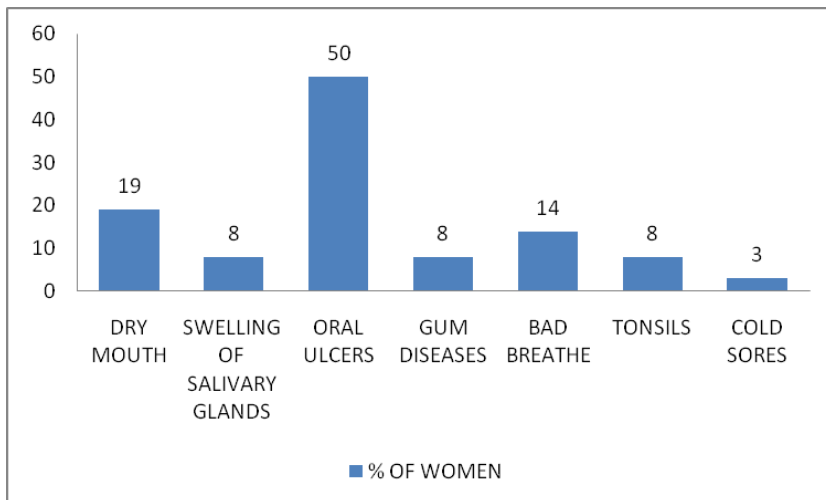
Graph 5.17: Ratings for work environment.



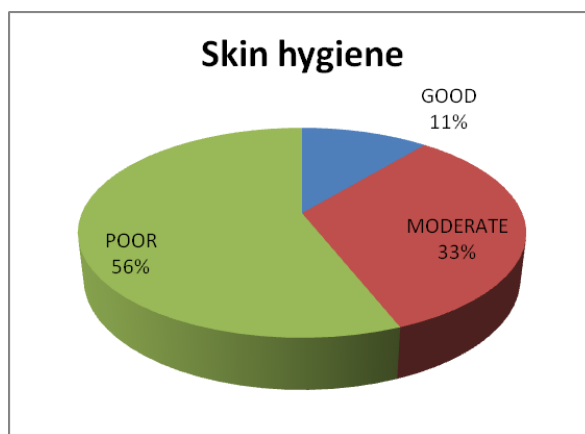
Graph 5.18: Ratings for overall work table in Terms of height, space and adjustable features

5.3.2 Sewing section:

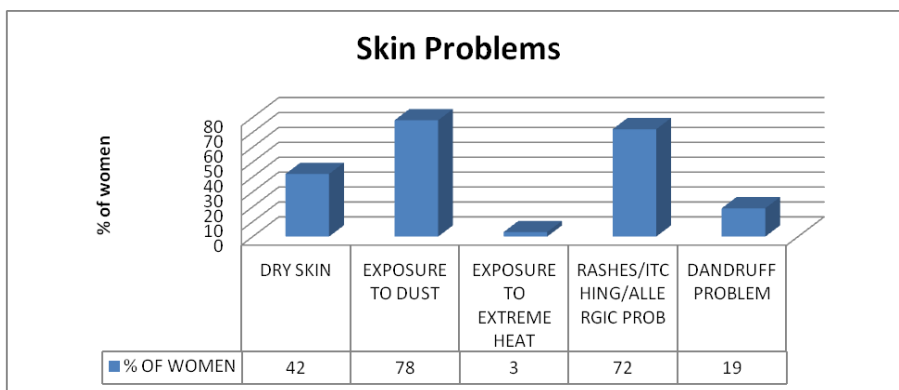
86% of women are married; they need to manage both home and work. 94% of women have nuclear family where there are no elders to help in household chores. 72% of them have children whom have to be looked after. 89% live in rented house and a major part of their salary goes in paying off house rent. 94% come to company by Walk– they will be tired by the time they reach work place. 6% women are addicted to tobacco. 86% of women working in sewing section are moderately satisfied and 4% are not satisfied with their job. 11% have dull vision and 6% have lost hearing ability. 8% women maintain poor hygiene and 75% maintain moderate hygiene. 19% women maintain poor oral hygiene and 67% maintain moderate oral hygiene. Some of the common oral problems are indicated in graph 5.19. The skin hygiene of women varies from good to poor as shown in graph 5.20. The major problems associated with skin are as shown in graph 5.21.



Graph 5.19: Common oral problems faced by women.

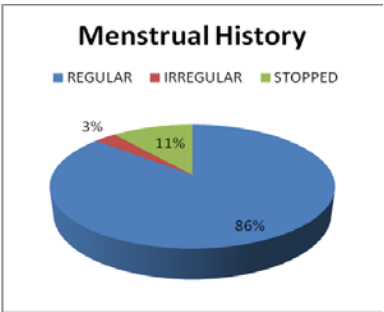


Graph 5.20: Skin Hygiene of women.

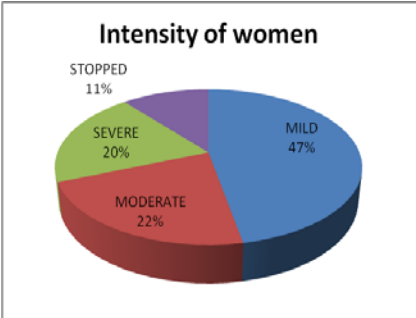


Graph 5.21: Major skin problems faced by women in cutting section.

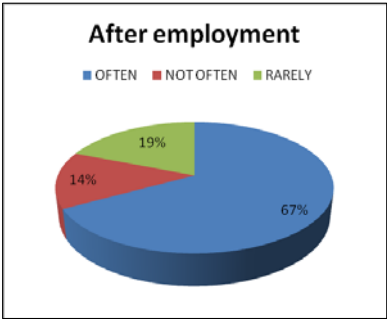
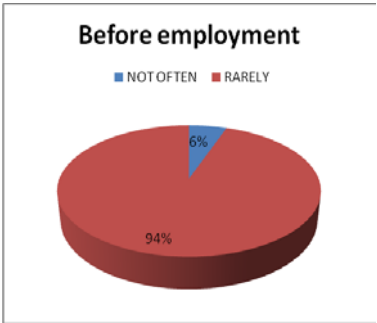
One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.22. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.23. Sickness absenteeism is prevalent after employment as compared to the figures before employment as shown in graph 5.24.



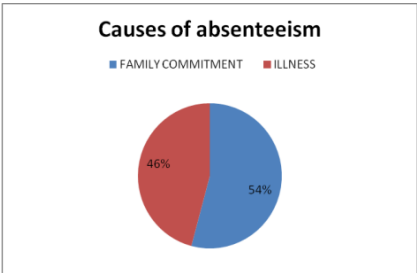
Graph 5.22: Nature of menstrual cycle



Graph 5.23: Intensity of pain during menstrual cycle.



Graph 5.24: Illness report before and after employment.

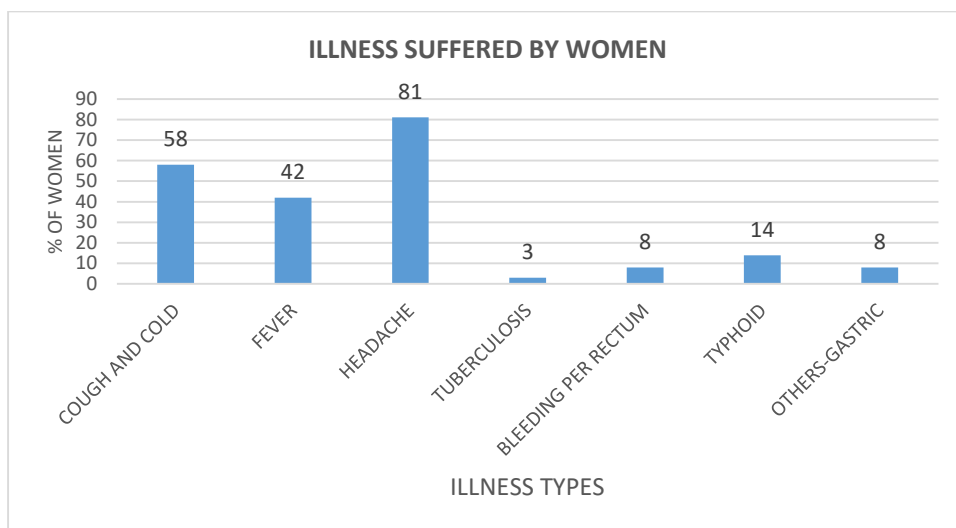


Graph 5.25: Common causes for absenteeism

11% of women remain absent for 1 day, 44% for 1-2 days, 11% for 1-3 days, 11% for 2-4 days and 14% for more than 4 days per month. The common reasons for absenteeism are shown in graph 5.25. In past 6 months' women were victim of the following common illnesses as shown in table 5.10.

Table 5.10: List of common illnesses faced by women.

Common illness	Percentage of women
Cough and cold	58%
Fever	42%
Headache	81%
Tuberculosis	3%
Bleeding per rectum	8%
Typhoid	14%
Others-gastric	8%

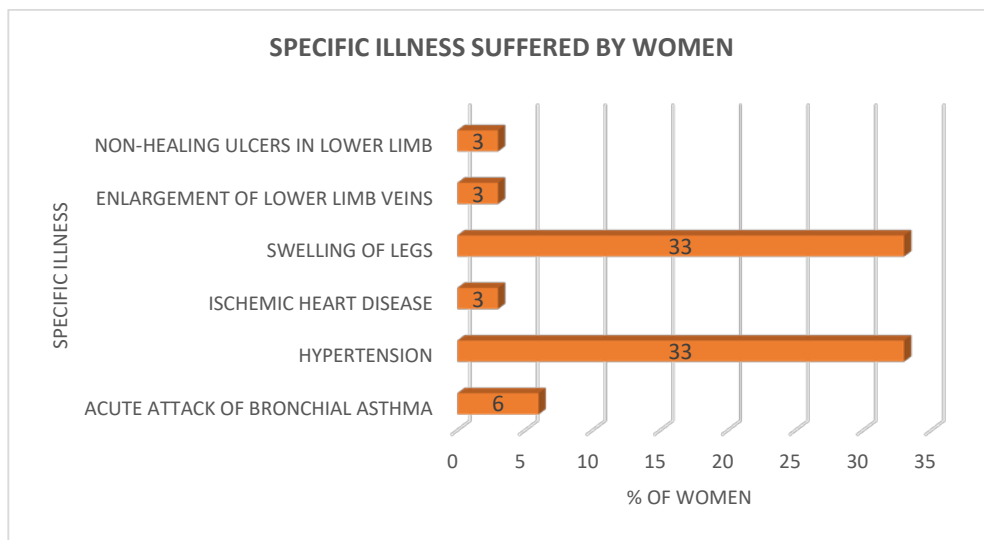


Graph 5.26: Illness suffered by women

Women have been victims of various specific illnesses and psychiatric problems as shown in tables 5.11 and 5.12 respectively.

Table 5.11: List of specific illnesses faced by women.

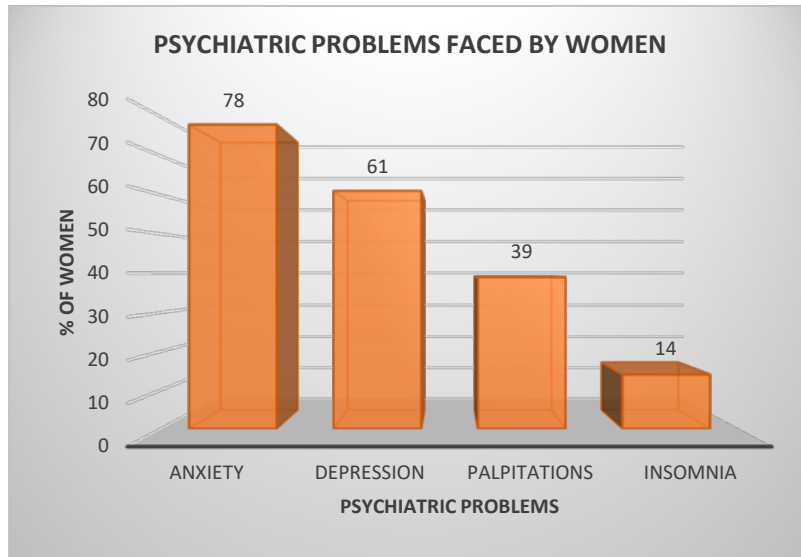
Specific illness	Percentage of women
Acute attack of bronchial asthma	6%
Hypertension	33%
Ischemic heart disease	3%
Swelling of legs	33%
Enlargement of lower limb veins	3%
Non-healing ulcers in lower limb	3%



Graph 5.27: Specific illness faced by women.

Table 5.12: List of Psychiatric problems faced by women.

Psychiatric Problems faced	Percentage of women
Anxiety	78%
Depression	61%
Palpitations	39%
Insomnia	14%

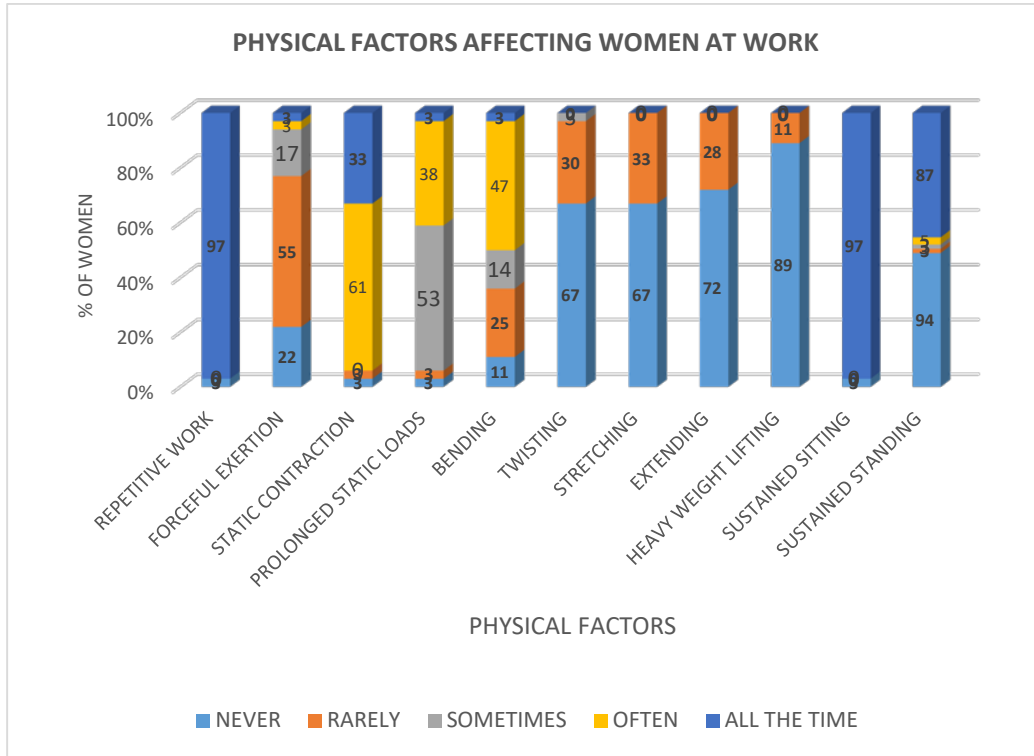


Graph 5.28: Psychiatric problems faced by women.

Table 5.13 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 94% of women feel uncomfortable to work in standing position for long hours. Women have been victim of various symptoms and injuries as shown in tables 5.14 and 5.15 respectively.

Table 5.13: Physical factors involved at work.

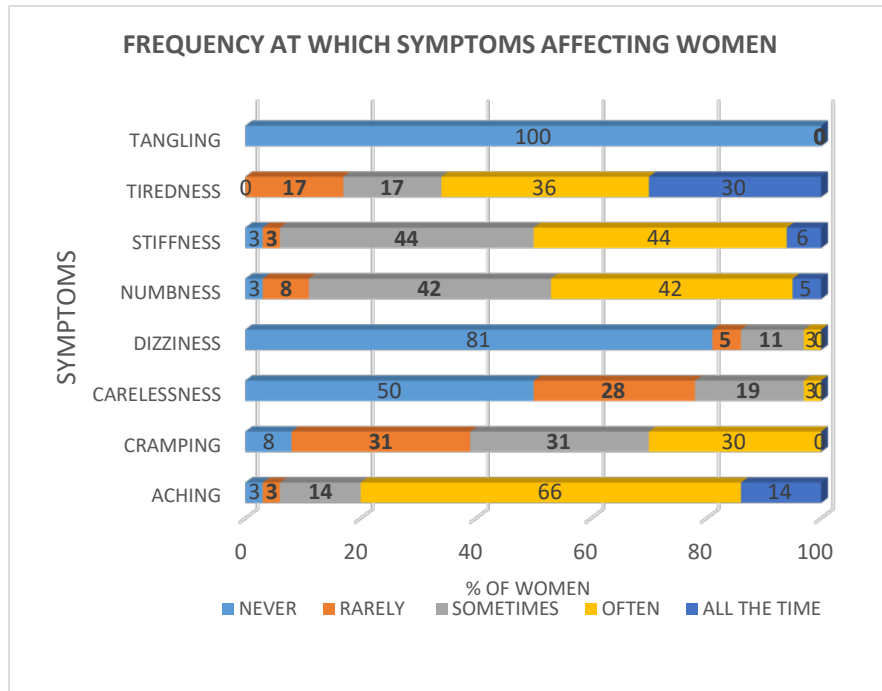
<i>Physical factor</i>	Frequency of activity				
	Never	Rarely	Sometimes	Often	All the time
Repetitive work	3%	-	-	-	97%
Forceful exertion	22%	55%	17%	3%	3%
Static contraction	3%	3%	-	61%	33%
Prolonged static loads	3%	3%	53%	38%	3%
Bending	11%	25%	14%	47%	3%
Twisting	67%	30%	3%	-	-
Stretching	67%	33%	-	-	-
Extending	72%	28%	-	-	-
Heavy weight lifting	89%	11%	-	-	-
Sustained sitting	3%	-	-	-	97%
Sustained standing	94%	3%	3%	-	-



Graph 5.29: Physical factors affecting women at work.

Table 5.14: Common symptoms associated with physical factors affecting women health.

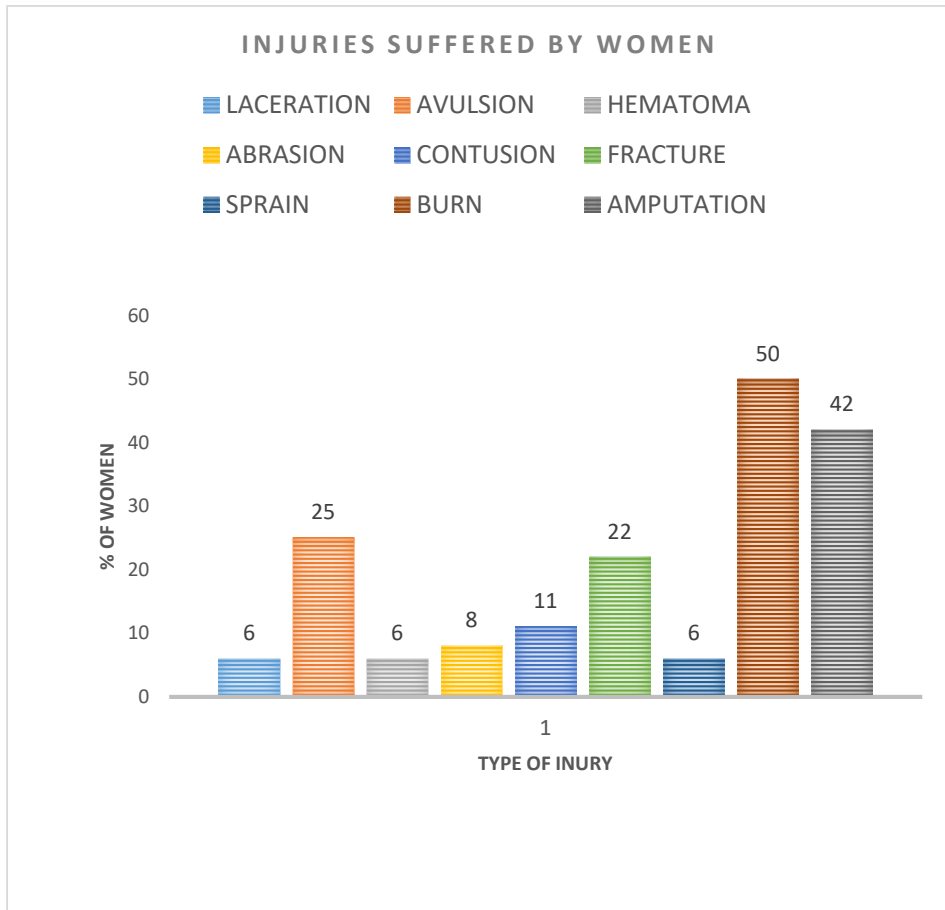
Symptoms	Frequency of occurrence				
	Never	Rarely	Sometimes	Often	All the time
Aching	3%	3%	14%	66%	14%
Cramping	8%	31%	31%	30%	-
Carelessness	50%	28%	19%	3%	-
Dizziness	81%	5%	11%	3%	-
Numbness	3%	8%	42%	42%	5%
Stiffness	3%	3%	44%	44%	6%
Tiredness	-	17%	17%	36%	30%
Tangling	100%	-	-	-	-



Graph 5.30: Frequency of symptoms at which they are affecting women.

Table 5.15: List of injuries.

Type of injury	% of women
Laceration	6%
Puncture	25%
Avulsion	6%
Hematoma	8%
Abrasion	11%
Contusion	22%
Fracture	6%
Sprain	50%
Burn	42%



Graph 31: Injuries suffered by women.

100% women are suffering from pain in their body. The percentage of women experiencing pain in a particular location is indicated in figure 5.2, where the intensity of pain is classified as no pain, low pain, mild pain, high pain and severe pain. Graph 5.32 indicates the causes of pain. 97% women experienced the pain suddenly and 3% gradually. 61% claim that the pain is intermittent and 39% constant. 97% women believe that physical activities at work are the main reason for pain and hence 61% women remain absent from work due to extreme pain and inadequate rest interval at work are also the contributors to pain for 97% of them. Women face difficulty in carrying out various activities as shown in table 5.16. The difficulty levels are recognized as never, little bit, moderate and extreme.

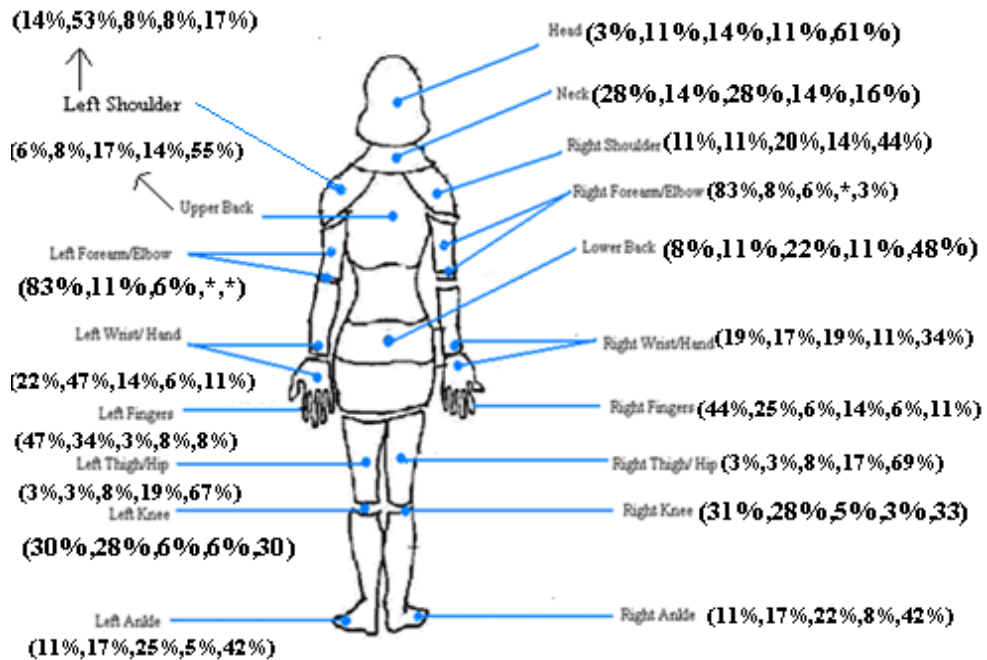
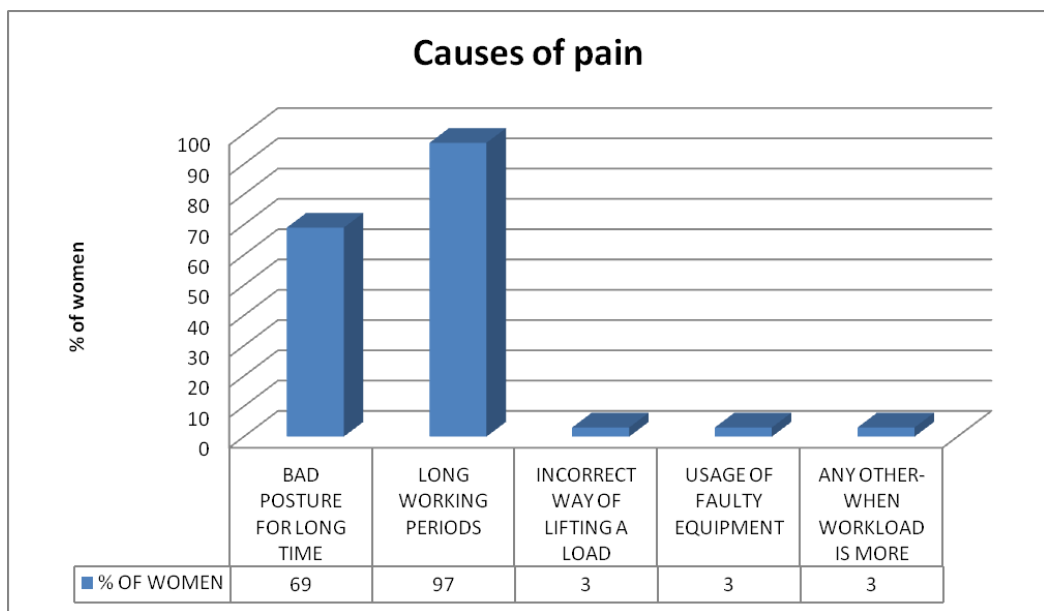








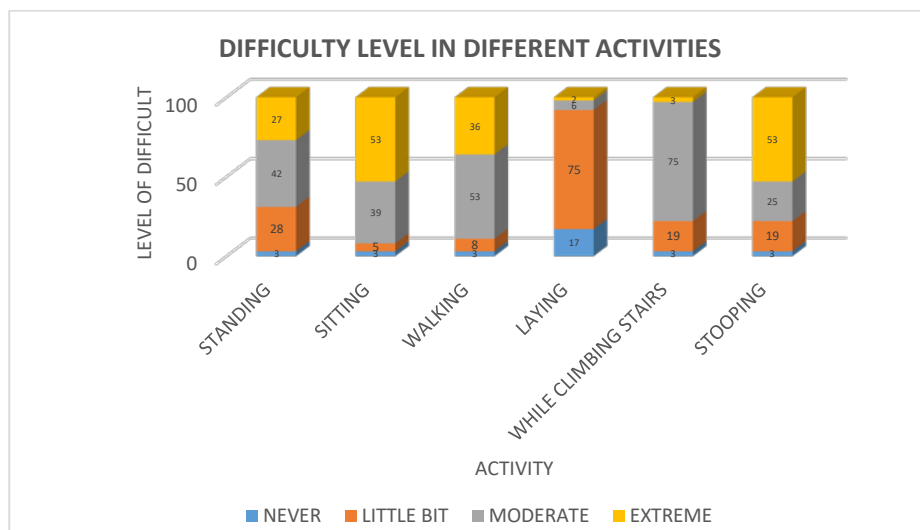
Figure 5.2: Back portion of a human body-Pain features at different body parts in terms of percentage of women experienced pain in that part of body, represented as (1, 2, 3, 4, 5), where; 1-No Pain, 2- Low Pain, 3-Mild Pain, 4-High Pain, 5-Severe Pain.



Graph 5.32: Causes of pain.

Table 5.16: Level of difficulty experienced in carrying out various activities.

Activity	Difficulty level			
	Never	Little bit	Moderate	Extreme
 Standing	3%	28%	42%	27%
 Sitting	3%	5%	39%	53%
 Walking	3%	8%	53%	36%
 Laying	17%	75%	6%	2%
 While climbing stairs	3%	19%	75%	3%
 Stooping	3%	19%	25%	53%

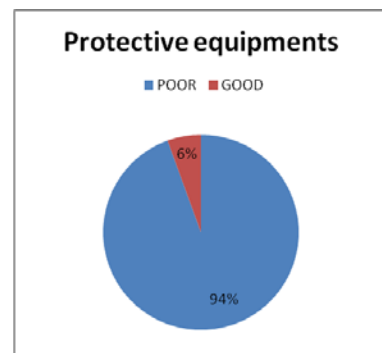


Graph 5.33: Difficulty level in different activities.

There are few issues concerning general amenities provided to workers. 6% women feel that the toilets have poor hygiene and 3% feel that it is moderately hygiene. 3% women say that the hygiene of canteen is poor. The availability of sufficient rest period is poor for 97% of women. The availability of first aid box during injuries is poor for 6% women and moderate for 11% of them. 69% women say that availability of doctor and nurse is poor and for 17% women it is moderate. 100% women rated medical room as poor and 89% women rated working condition of lift as poor. The working condition of fire alarms is poor for 11% women and moderate for 14% of them. The ratings for working condition of machines in terms of performance is as shown in graph 5.34 and that for quality of personal protective equipments provided to them as shown in graph 5.35.



Graph 5.34: Ratings for working condition.

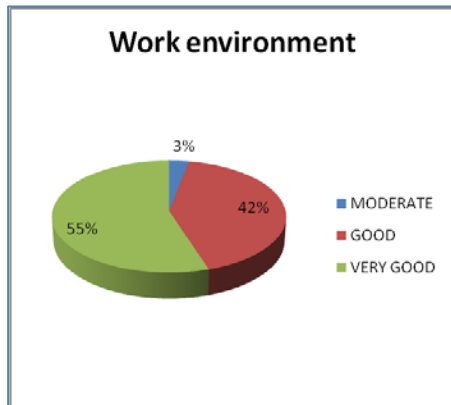


Graph 5.35: Ratings for quality of personal protective equipment of machines in terms of performance.

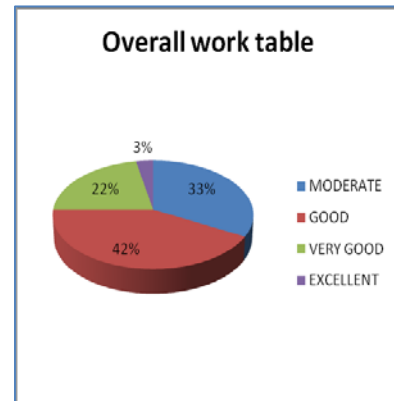
In sewing section, chairs have been provided to all the tailors and operators, 56% women said the chairs provided to them are comfortable and 44% said that it is stable. 44% women say that the chair provided to them is not adjustable. 92% women are not comfortable to work in sitting position for long duration. 47% women say that their work demands them to be in bending position for long duration. 92% women are not comfortable to work in congested area. There is no better seating arrangement for 56 % of women. There is no enough leg space for movement of legs for 6% of women. 19% of women have suffered from various injuries during work like, needle injury. Only 44% women have been provided with personal protective equipments like masks, gloves and goggles and only 92% of them use it. The ratings for chair provided to them, work environment and overall work table in terms of height, space and adjustable features given by women in sewing section is as shown in graphs 5.36, 5.37 and 5.38 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.36: Overall rating of chair.



Graph 5.37: Ratings for work environment



Graph 5.38: Ratings for overall work table in terms of height, space and adjustable features

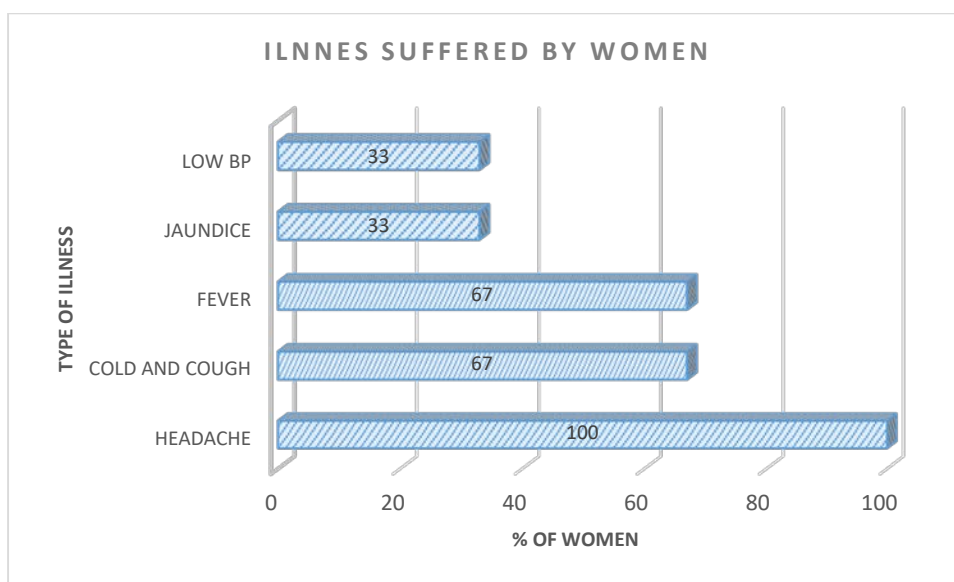
5.3.3 Ironing section:

100% of women are married– they need to manage both home and work. 100% of women have nuclear family – no elders to help in household chores. 100% of them have children – they need to look after kids, do household chores and work. 33% women have no support from their family members. 67% live in rented house – major part of their salary goes in paying off house rent. 100% women come to company by Walk – they will be tired by the time they reach work place. 100% of women working in ironing section are **moderately satisfied**. 100% women have **experience less than 1 year**. 100% women have dull vision. 100% women maintain moderate overall hygiene. 67% women maintain poor oral hygiene and 33% maintain moderate oral hygiene. Dry mouth (33%), oral ulcer (67%) and tonsils (33%) are the major oral problems women face. 33% women maintain moderate skin hygiene and 67% maintain poor skin hygiene. Dry skin (67%), Exposure to dust (100%), exposure to extreme heat (67%) and dandruff (33%), rashes/itching/allergy problem (67%) are the major skin problems women face.

67% women have **regular** menstruation cycles with mild pain in abdomen. In 33% of women illness was **not reported before employment**, whereas **after employment** 67% of women experience **illness often**. 33% women remain absent for 1 day, 33% women remain **absent** for 1-2 days and 33% for 1-3 days per month. Main reasons for absence are: **illness** (67%) and **family commitment** (100%). In past 6 months' women were victim of the following common illness as shown in table 5.17:

Table 5.17: List of common illness

Sl No.	Illness	Percentage (%)
1.	Headache	100%
2.	Cough and cold	67%
3.	Fever	67%
4.	Jaundice	33%
5.	Low BP	33%



Graph 5.39: Illness suffered by women.

100% have undergone proper **treatment** for common illness. Women have been victims of following specific illnesses: Swelling of legs -67%, hypertension – 33% and ischemic heart disease- 33%. 33% women suffer from anxiety, 33% women suffer from depression at work place and 33% women suffer from palpitations.

100% of women need to do repetitive work all the time, forceful exertion- often (33%), sometimes (33%), static contraction- often (33%), all the time (67%), prolonged static load -

often (33%), all the time (67%), bending – rarely (33%), sometimes (33%), often(33%), heavy weight lifting – all the time(33%), sustained sitting – sometimes (100%), sustained standing – sometimes (67%), all the time (33%). 100% of women are uncomfortable to work in standing position for long hours. As a result, they have been experiencing the following:

Aching: 67%-often, 33%-all the time

Cramping: 67%-often

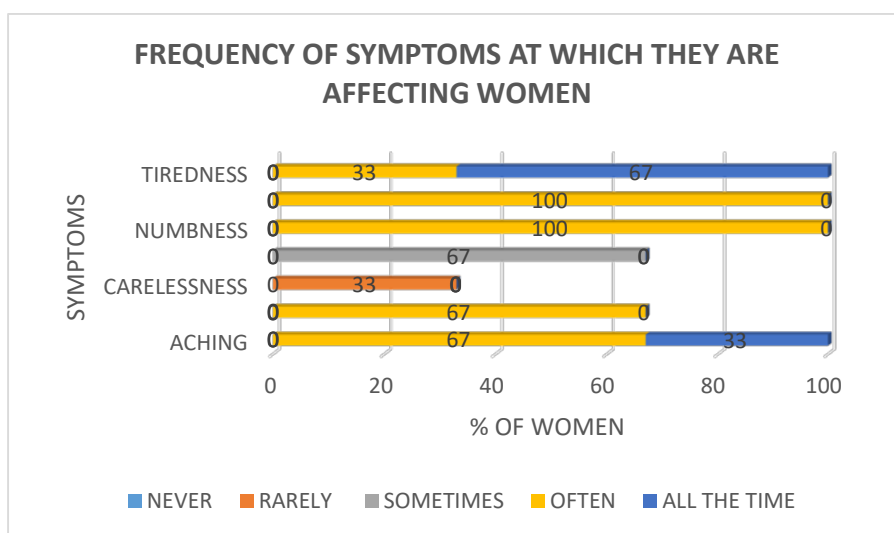
Carelessness: 33% - rarely

Dizziness: 67% -sometimes

Numbness: 100%-often

Stiffness: 100%-often

Tiredness: 33%- often, 67%- all the time

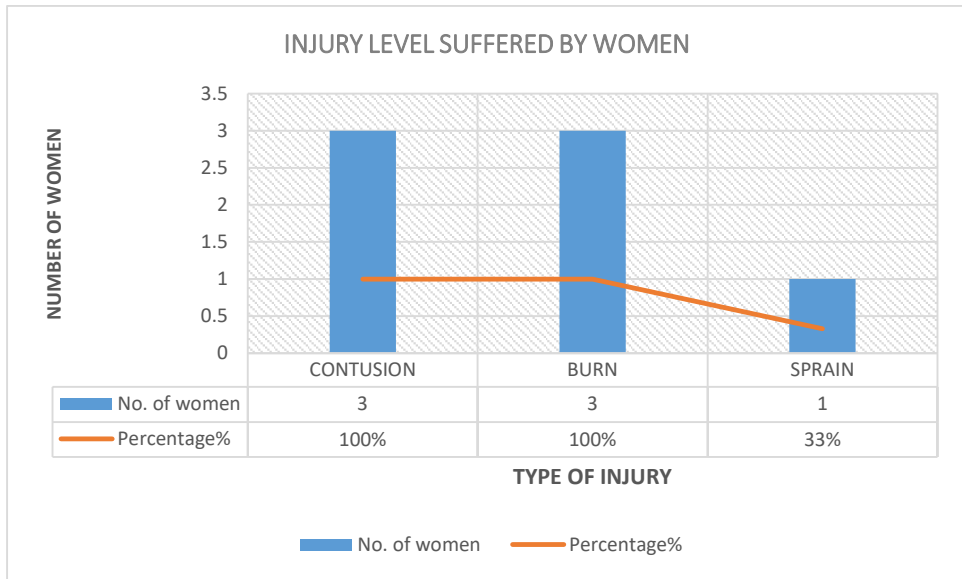


Graph 5.40: Frequency of symptoms at which they are affecting women.

Women have been victim of the following injuries as shown in table 5.18

Table 5.18: List of injuries

Type of injury	No. of women	Percentage%
Contusion	3	100%
Burn	3	100%
Sprain	1	33%

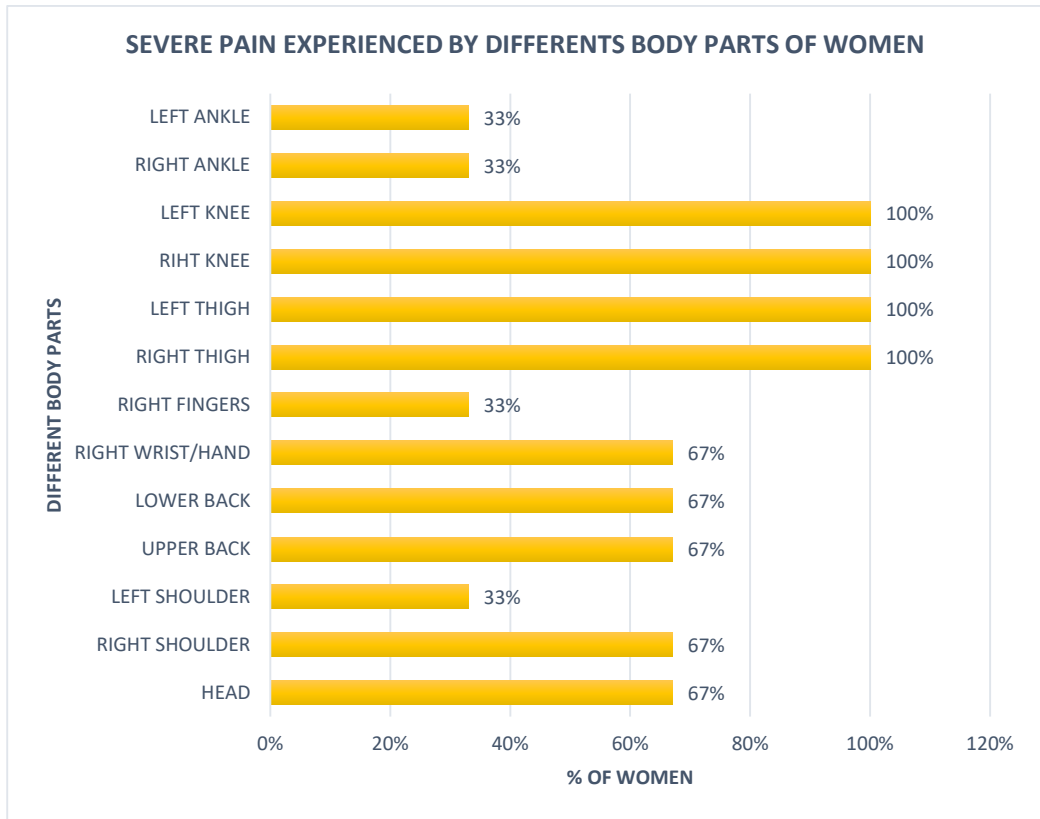


Graph 5.41: Injuries suffered by women.

100% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.19.

Table 5.19: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	67%
Right shoulder	67%
Left shoulder	33%
Upper back	67%
Lower back	67%
Right wrist/hand	67%
Right fingers	33%
Right thigh	100%
Left thigh	100%
Right knee	100%
Left knee	100%
Right ankle	33%
Left ankle	33%

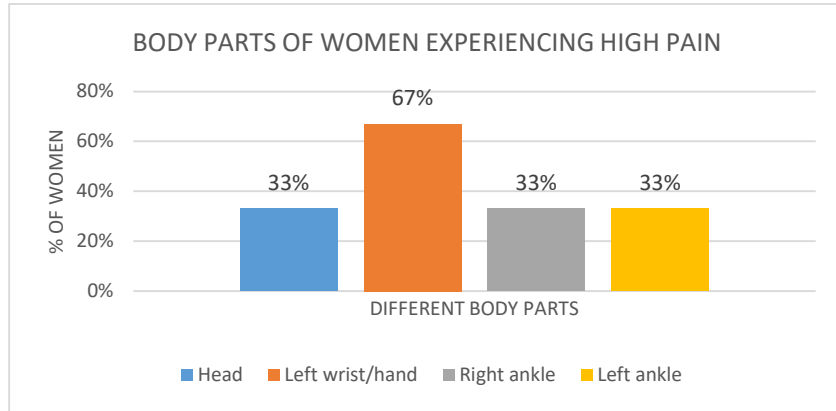


Graph 5.42: Severe pain experienced by different body parts of women.

High pain is experienced in following parts as shown in table 5.20.

Table 5.20: List of body parts with high pain

High pain experienced in-	Percentage (%) of woman
Head	33%
Left wrist/hand	67%
Right ankle	33%
Left ankle	33%

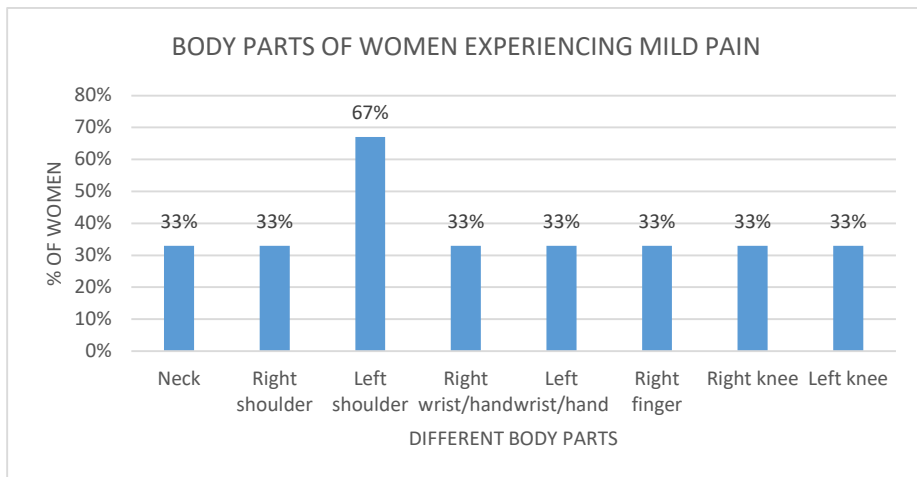


Graph 5.43: Body parts of women experiencing high pain.

Mild pain is experienced in following parts as shown in table 5.21.

Table 5.21: List of body parts with mild pain

Mild pain experienced in-	Percentage (%) of woman
Neck	33%
Right shoulder	33%
Left shoulder	67%
Right wrist/hand	33%
Left wrist/hand	33%
Right finger	33%
Right knee	33%
Left knee	33%

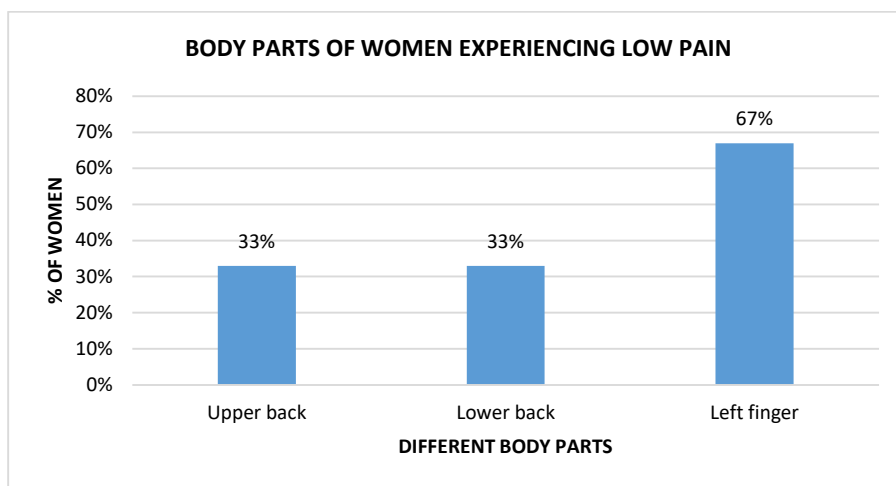


Graph 5.44: Body parts of women experiencing mild pain.

Low pain is experienced in following parts as shown in table 5.22.

Table 5.22: List of body parts with low pain

Low pain experienced in-	Percentage (%) of woman
Upper back	33%
Lower back	33%
Left finger	67%



Graph 5.45: Body parts of women experiencing low pain.

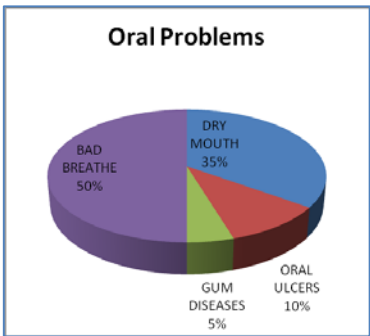
Women think the reason behind their pain is: standing in bad posture for long time - 100%, long working periods-100%, incorrect way of lifting a load- 100%, usage of faulty equipment – 67% 100% women experienced the pain suddenly and 67% claim that the pain is intermittent and 33% say that it remains constant. 100% women believe that physical activities at work and inadequate rest intervals at work are the main contributors to pain. Hence 67% women remain absent from work due to extreme pain. Women face extreme difficulty in: standing (100%), walking(67%) , while climbing stairs(100%), stooping (100%).

The rest period is not sufficiently available for 100% women (poor). During injuries or accidents, the availability of Doctors and Nurses is poor, as felt by 100% women. 100% women say that there is no medical room in the work place. Lift is not in working condition (100% women say this). 33% women say that the working condition of fire alarms/engines is poor. The working condition of machines in terms of performance is poor (100%). The quality of personal protective equipment provided to them is poor (100%). The tables in ironing section are not adjustable. 100% women are not comfortable to work in standing position for long duration. 100% women feel that the level of exposure to heat is high. 67% have not been provided with

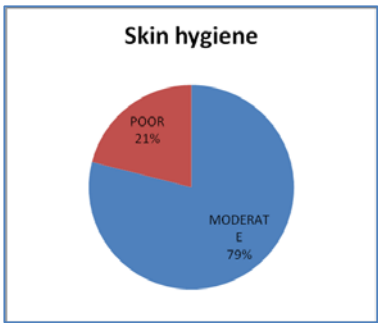
personal protective equipment. 100% women find the iron box heavy to lift. The rating of work environment is: good—100%. The rating of overall work table in terms of height, space, adjustable features is: moderate -67%, good- 33%.

5.3.4 Finishing section:

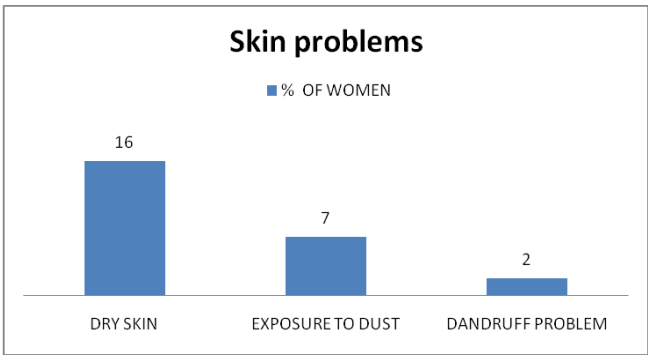
74% of women are married; they need to manage both home and work. 95% of women have nuclear family where there are no elders to help in household chores. 63% of them have children whom have to be looked after. 37% women claim they have no support from family. 100% of women live in rented house and a major part of their salary goes in paying off house rent. 90% of women come to company by Walk, they will be tired by the time they reach work place. 32% of women are addicted to tobacco. 11% of women working in finishing section work 2 hours extra after office time in the interest of getting extra wages. 90% of women working in finishing section are moderately satisfied with their job. 79% of women maintain **moderate** hygiene. 37% of women maintain **moderate oral hygiene** and 58% maintain **poor hygiene**. Graph 5.46 shows some of the common oral problems experienced by women. The skin hygiene of women varies from good to poor as shown in graph 5.47. The major problems associated with skin are as shown in graph 5.48.



Graph 5.46: Common oral problems faced by women.

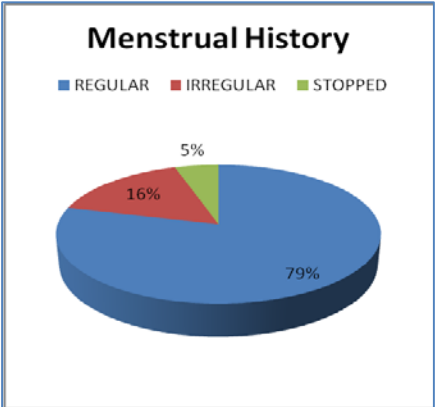


Graph 5.47: Skin Hygiene of women.

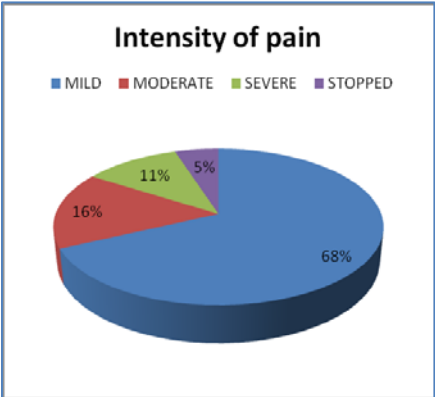


Graph 5.48: Major skin problems faced by women.

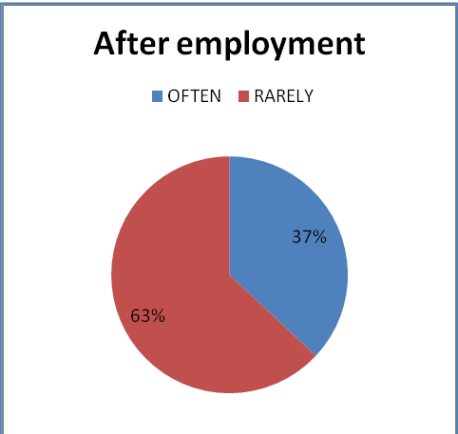
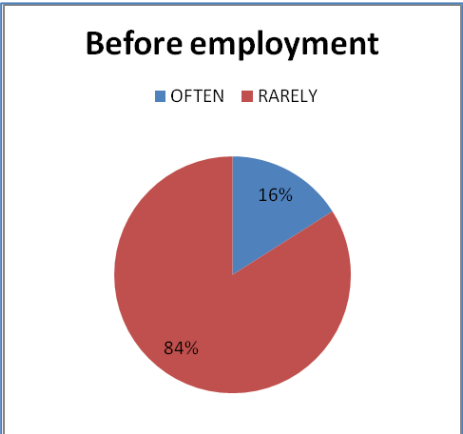
One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.49. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.50. Sickness absenteeism is prevalent after employment as compared to the figures before employment as shown in graph 5.51.



Graph 5.49: Nature of menstrual cycle.



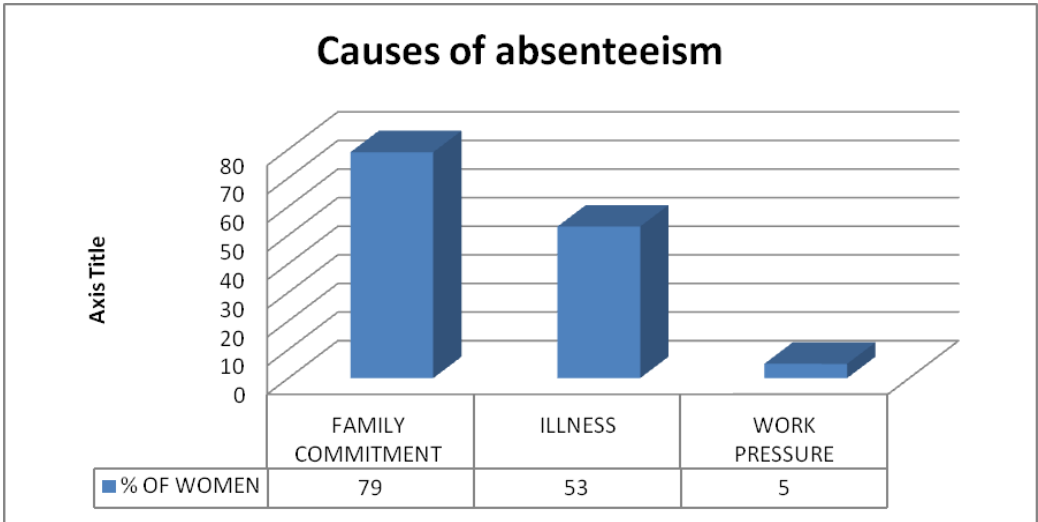
Graph 5.50: Intensity of pain during menstrual cycle.



Graph 5.51: Illness report before and after employment.

On an average 63% of women remain absent for 1-3 days and 26% for 2 to 3 days per month. The causes of absenteeism are as shown in graph 5.52. In past 6 months' women were victim of the following common illnesses as shown in table 5.23. 79% have undergone proper **treatment** for common illness and 21% have not undergone any treatment. Women have been victim of

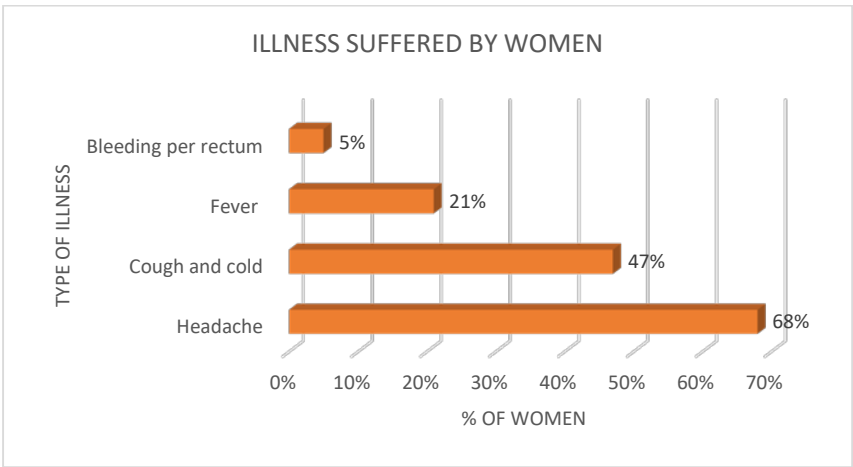
various psychiatric problems as shown in graph 5.54 5% women are victim of specific illness such as swelling of legs.



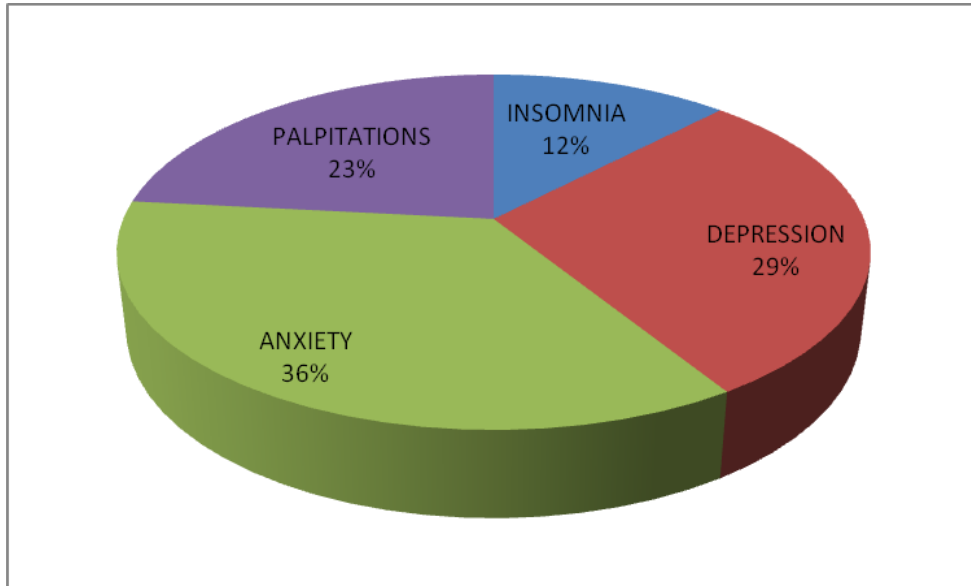
Graph 5.52: Common causes for absenteeism.

Table 5.23: List of common illnesses faced by women.

SI No.	Illness	Percentage (%)
1.	Headache	68%
2.	Cough and cold	47%
3.	Fever	21%
4.	Bleeding per rectum	5%



Graph 5.53: Injuries suffered by women.

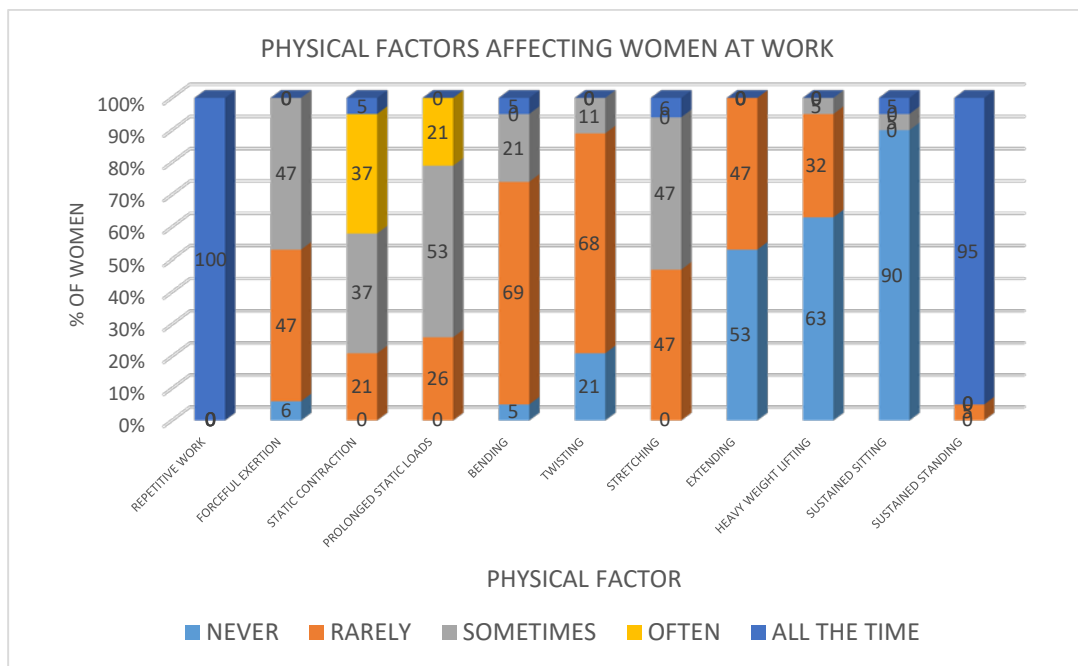


Graph 5.54: Psychiatric problems faced by women.

Table 5.24 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 84% of women feel uncomfortable to work in standing position for long hours. Women have been victim of various symptoms and injuries as shown in tables 5.25 and 5.26 respectively.

Table 5.24: Physical factors involved at work.

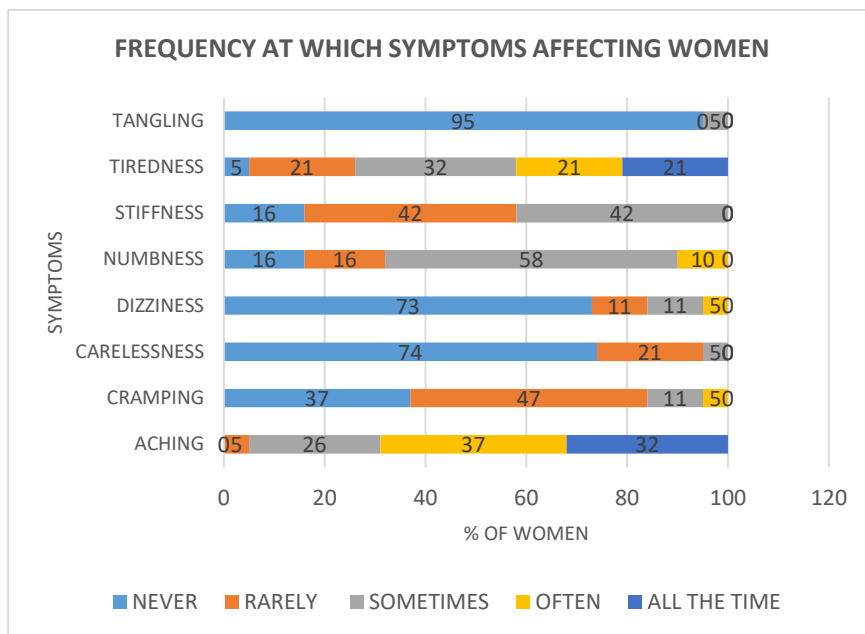
<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	-	-	-	-	100%
Forceful exertion	6%	47%	47%	-	-
Static contraction	-	21%	37%	37%	5%
Prolonged static loads	-	26%	53%	21%	-
Bending	5%	69%	21%	-	5%
Twisting	21%	68%	11%	-	-
Stretching	-	47%	47%	-	6%
Extending	53%	47%	-	-	-
Heavy weight lifting	63%	32%	5%	-	-
Sustained sitting	90%	-	5%	-	5%
Sustained standing	-	5%	-	-	95%



Graph 5.55: Physical factors affecting women at work.

Table 5.25: Common symptoms associated with physical factors affecting women health.

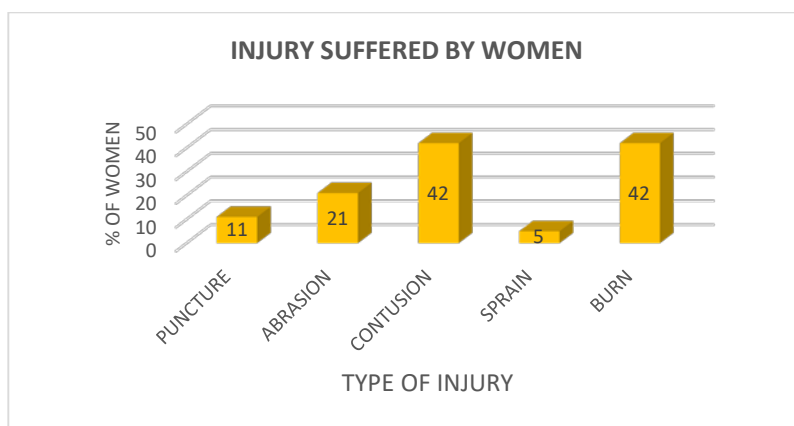
Symptoms	Frequency of occurrence				
	Never	Rarely	Sometimes	Often	All the time
Aching	-	5%	26%	37%	32%
Cramping	37%	47%	11%	5%	-
Carelessness	74%	21%	5%	-	-
Dizziness	73%	11%	11%	5%	-
Numbness	16%	16%	58%	10%	-
Stiffness	16%	42%	42%	-	-
Tiredness	5%	21%	32%	21%	21%
Tangling	95%	-	5%	-	-



Graph 5.56: Frequency of symptoms at which they are affecting women.

Table 5.26: List of injuries.

Type of injury	% of women
Puncture	11%
Abrasion	21%
Contusion	42%
Sprain	5%
Burn	42%



Graph 5.57: Injuries suffered by women.

100% women are suffering from pain in their body. The percentage of women experiencing pain in a particular location is indicated in figure 5.3, where the intensity of pain is classified as no pain, low pain, mild pain, high pain and severe pain. The major causes of pain are bad posture for long time (84%) and long working periods (89%). 84% women experienced the pain suddenly and 16% experienced it gradually. 95% women claim that the pain is intermittent whereas 5% say that their pain is constant. 95% women believe that physical activities at work are the main reason for pain and hence 53% women remain absent from work due to extreme pain. 100% women feel that inadequate rest interval at work are also the contributors to pain. Women face difficulty in carrying out various activities as shown in table 5.27. The difficulty levels are recognized as never, little bit, moderate and extreme. There are a few issues concerning general amenities provided to workers. Moderate hygiene is maintained in canteen as told by 5% of women. The availability of rest period is poor for 32% of women and moderate for 37% of women. 11% women say that the availability of first aid box during injuries is poor. 21% women say that the availability of doctor and nurse during injuries or accidents is poor and 32% women say it is moderate. 69% of women say the lift is in poor working condition and 5% say that the lift is in moderate working condition. 5% of women have rated the working condition of machines provided to them is poor and 100% of women feel that the quality of personal protective equipment provided to them is poor.

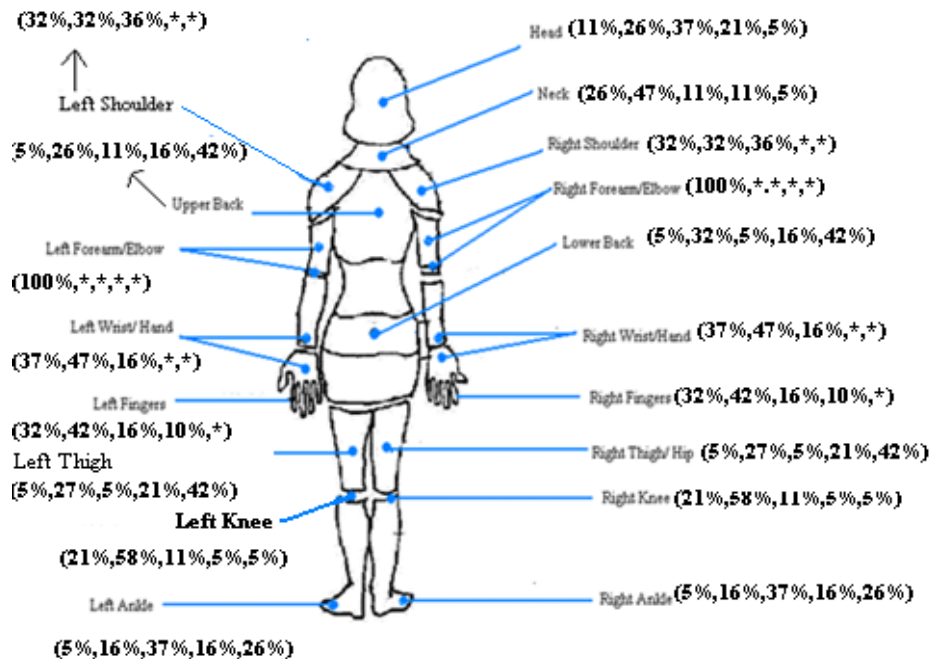






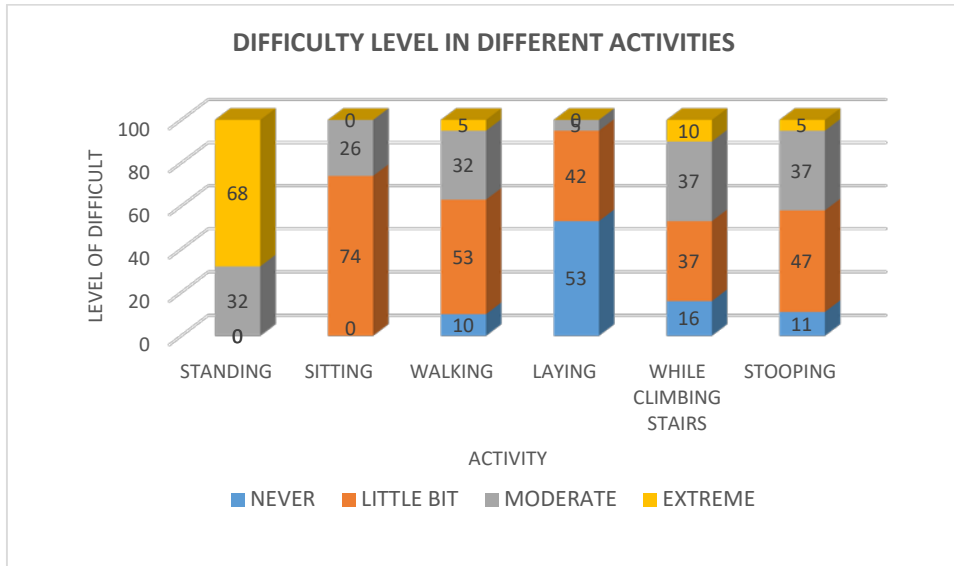


Figure 5.3: Back portion of a human body-Pain features at different body parts in terms of percentage of women experienced pain in that part of body, represented as (1, 2, 3, 4, 5), where; 1-No Pain, 2-Low Pain, 3-Mild Pain, 4-High Pain, 5-Severe Pain.

In finishing section, 100% women say that the tables are not adjustable. 16% women are not comfortable to work with the actual height of the table. 95% women are not comfortable to work in standing position for long duration. 63% women say that their work demand extreme bending. 5% women feel that there are no sufficient windows and doors in activity area and 42% women say that the fans are not in good working condition. There is no seating arrangement in workstation for 95% of women. None of the women working in finishing section are provided with personal protective equipments. The ratings for work environment and overall work table in terms of height, space and adjustable features given by women in finishing section is as shown in graphs 5.58, 5.59 and 5.60 respectively. The rating scale is: poor, average, good, very good and excellent.

Table 5.27: Level of difficulty experienced in carrying out various activities.

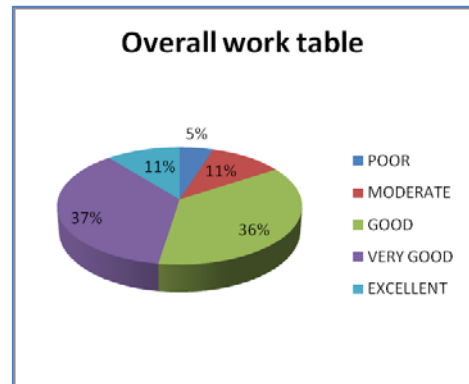
<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	-	-	32%	68%
 Sitting	-	74%	26%	-
 Walking	10%	53%	32%	5%
 Laying	53%	42%	5%	-
 While climbing stairs	16%	37%	37%	10%
 Stooping	11%	47%	37%	5%



Graph 5.58: Difficulty level in different activities.



Graph 5.59: Ratings for work environment.



Graph 5.60: Ratings for overall work table in terms of height, space and adjustable features

5.3.5 Packaging section:

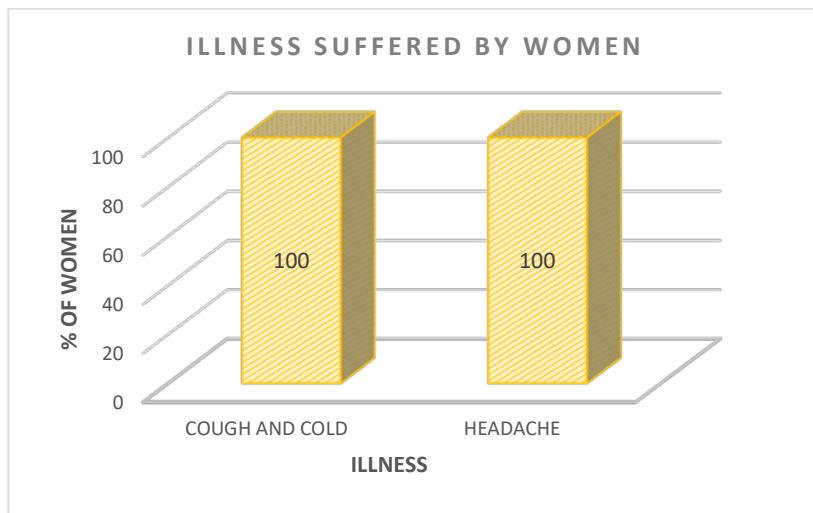
100% of women are married – they need to manage both home and work. 100% of women have nuclear family – no elders to help in household chores. 100% of them have children – they need to look after kids, do household chores and work. 100% live in rented house– major part of their salary goes in paying off house rent. 100 % of them are from within Bangalore. 100% come to company by Walk – they will be tired by the time they reach work place. 100% of women working in packing section are moderately satisfied and 100% women are moderately satisfied. 100% women have experience less than 1 year.

100% have clear vision.100% women maintain good overall hygiene, oral hygiene and skin hygiene. 100% of women have regular menstruation cycles, and 100% of them experience mild pain in abdomen during menstruation. 100% women experienced illness rarely before employment and often after employment. 100% women remain absent for 1-3 days due to illness (100%) and family commitment (100%).

In past 6 months' women were victim of the following common illness as shown in table 5.28.

Table 5.28: list of common illness

Illness	%
Cough and cold	100
Headache	100

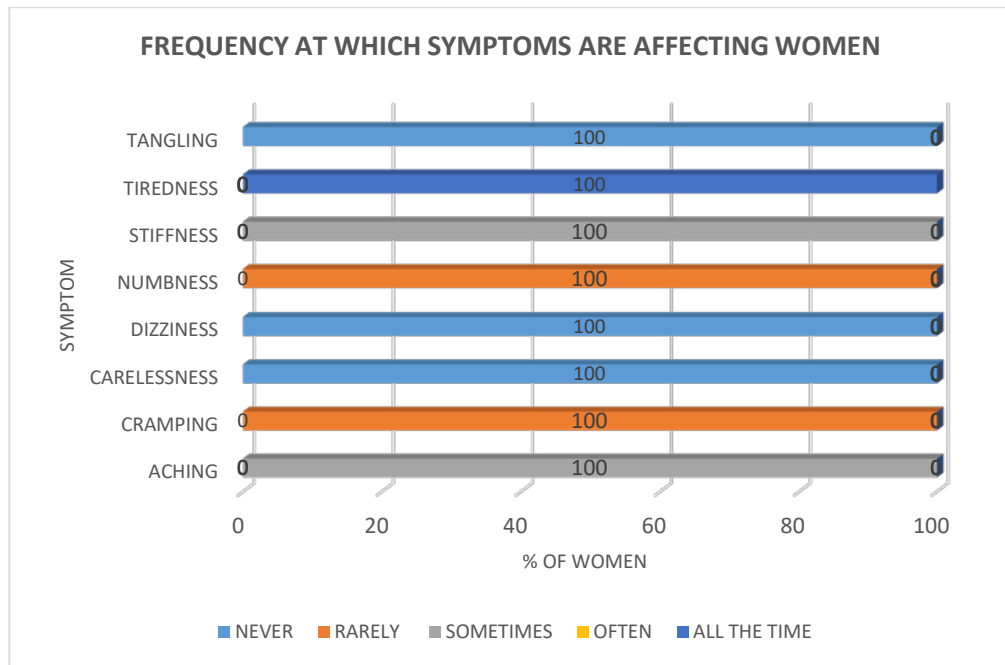


Graph 5.61: Injuries suffered by women.

100% have undergone proper treatment for common illness. 100% women do not suffer from any psychiatric problems. 100% of women need to do repetitive work all the time, experience static contraction often, carry prolonged static loads often and stand all the time. 100% of women feel uncomfortable to work in standing position for long hours. As a result, they have been experiencing following symptoms as shown in table 5.29.

Table 5.29: List of symptoms

<i>Symptoms</i>	Frequency of occurrence				
	Never	Rarely	Sometimes	Often	All the time
Aching	-	-	100%	-	-
Cramping	-	100%	-	-	-
Carelessness	100%	-	-	-	-
Dizziness	100%	-	-	-	-
Numbness	-	100%	-	-	-
Stiffness	-	-	100%	-	-
Tiredness	-	-	-	-	100%
Tangling	100%	-	-	-	-

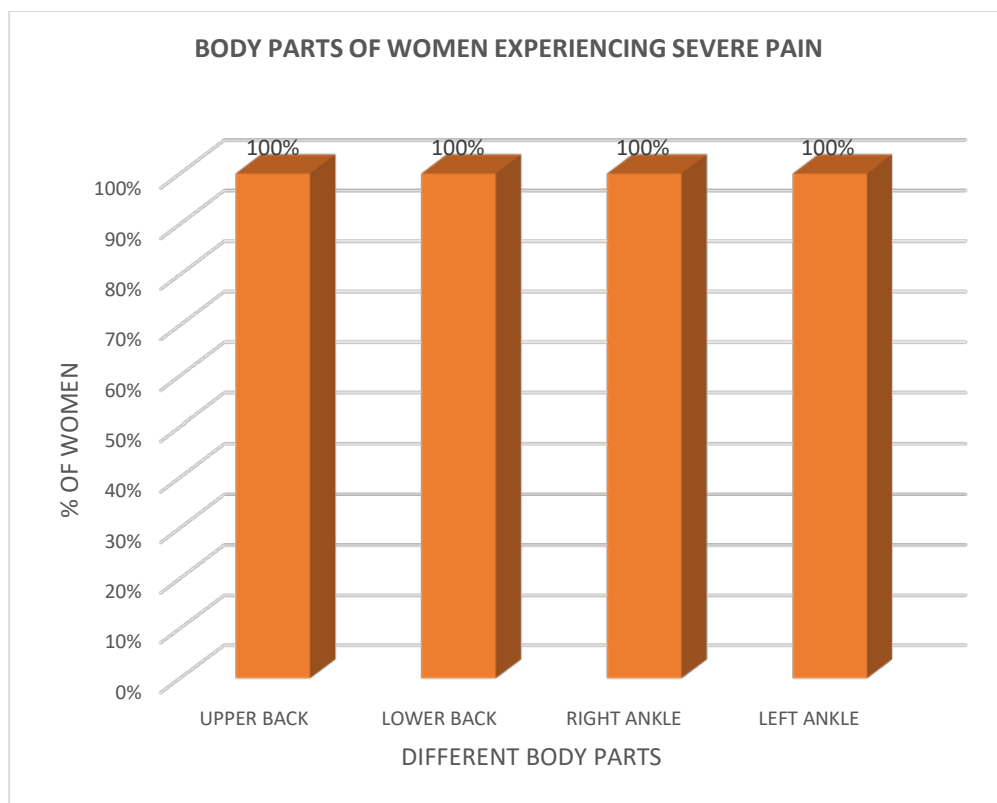


Graph 5.62: Frequency of symptoms at which they are affecting women.

100% women are suffering from pain in their body. **Severe** pain is experienced in following body parts as shown in table 5.30.

Table 5.30: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Upper back	100%
Lower back	100%
Right ankle	100%
Left ankle	100%

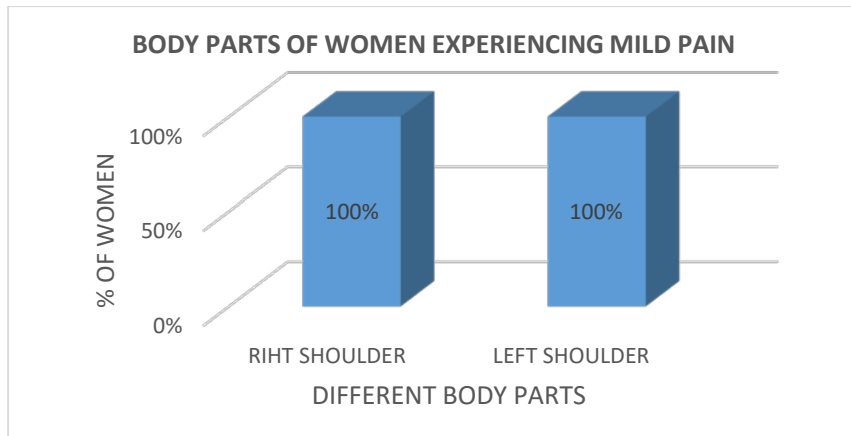


Graph 5.63: Body parts of women experiencing severe pain.

Mild pain is experienced in following body parts as shown in table 5.31.

Table 5.31: List of body parts with mild pain

Mild pain experienced in-	Percentage (%) of woman
Right shoulder	100%
Left shoulder	100%

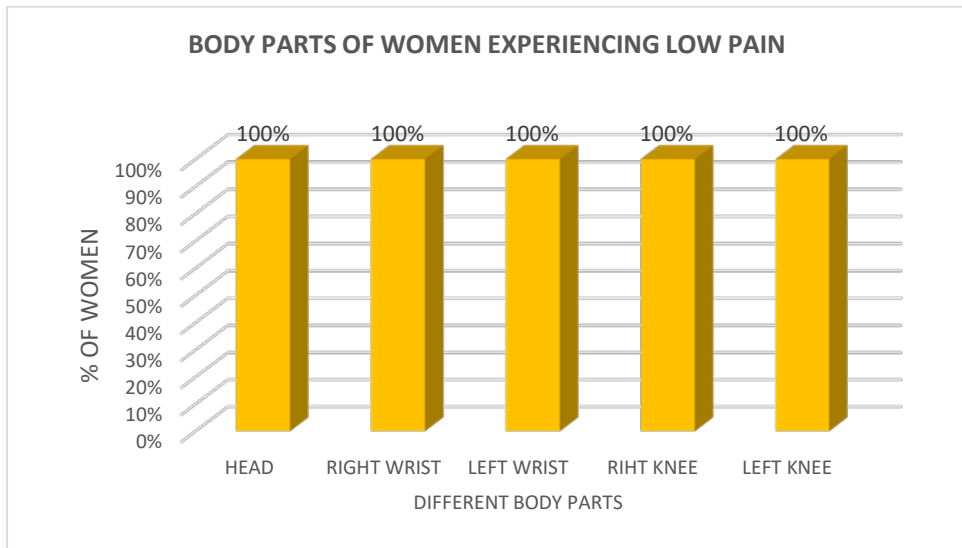


Graph 5.64: Body parts of women experiencing mild pain.

Low pain is experienced in following parts as shown in table 5.32.

Table 5.32: List of body parts with low pain

Low pain experienced in-	Percentage (%) of woman
Head	100%
Right wrist/hand	100%
Left wrist/hand	100%
Right Knee	100%
Left Knee	100%









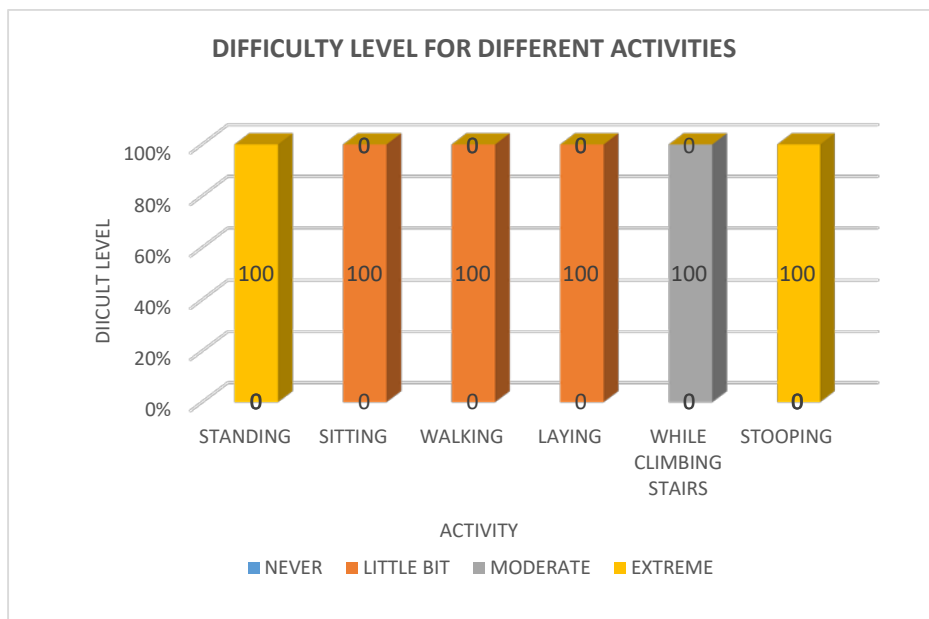
Graph 5.65: Body parts of women experiencing low pain.

Women think the reason behind their pain is: standing in bad posture for long time - 100%, long working periods-100%. 100% women experienced the pain suddenly and 100% claim that the pain is intermittent. 100% women believe that physical activities at work and inadequate rest intervals at work are the main reason for pain and hence 100% women remain absent from work due to extreme pain. As a result, they have been experiencing the pain while doing normal activities as shown in table 5.33.

As far as general amenities are concerned, there are few issues which need to be looked into as suggested by 100% of women working in this section. Those issues are, the availability of sufficient rest periods is moderate and the medical room, working condition of lift, quality of personal protective equipment provided has been rated as poor. 100% women say that the tables are not adjustable, they are not comfortable to work in standing position for long duration, there is no seating arrangement in workstation and they are not provided with personal protective equipment. 100% women have rated the work environment as good and the overall work table in terms of height, space, adjustable features as very good.

Table 5.33: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	-	-	-	100%
 Sitting	-	100%	-	-
 Walking	-	100%	-	-
 Laying	-	100%	-	-
 While climbing stairs	-	-	100%	-
 Stooping	-	-	-	100%

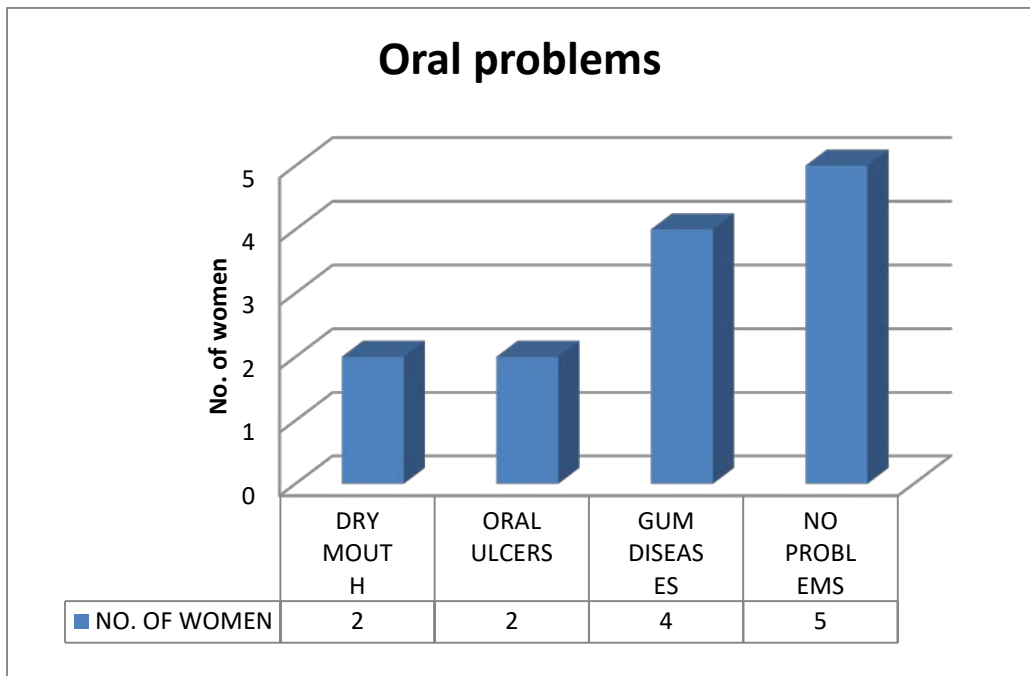


Graph 5.66: Difficulty level in different activities.

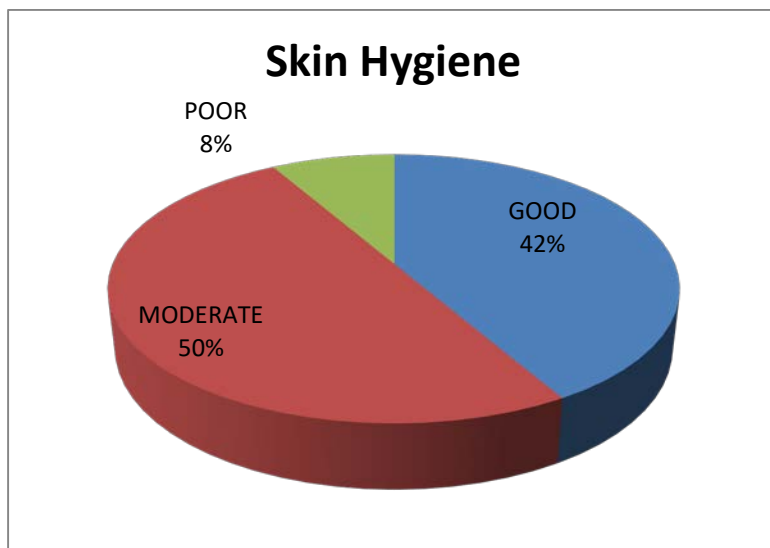
5.4 Data Analysis of the survey carried out at 4 Creations, Bengaluru.

5.4.1 Cutting section:

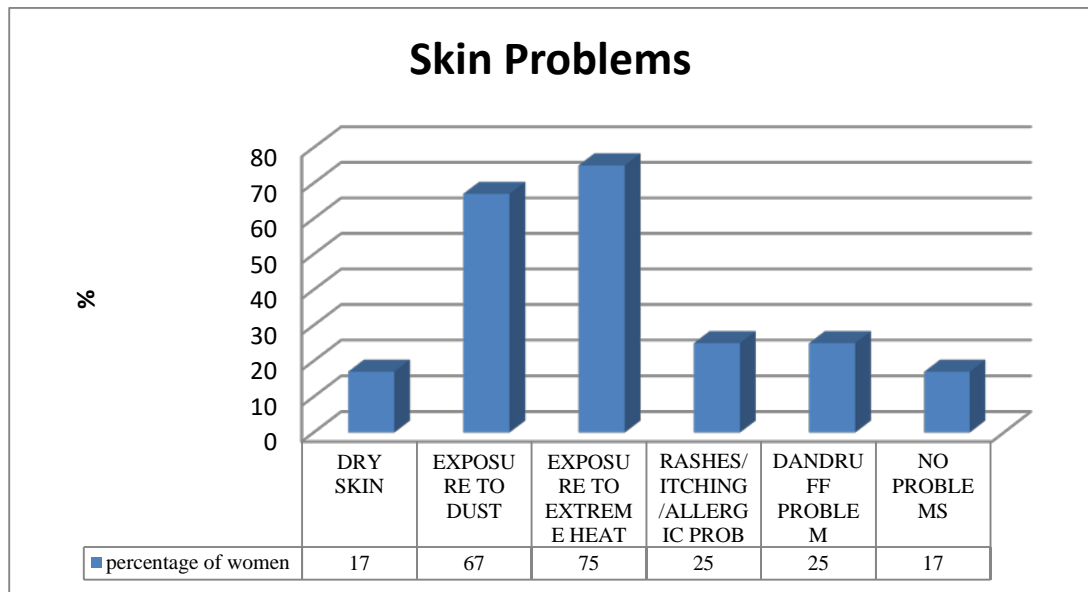
83% of women are married; they need to manage both home and work. 75% of women have nuclear family where there are no elders to help in household chores. 75% of them have children whom have to be looked after. 75% live in rented house and a major part of their salary goes in paying off house rent. 8% come to company by Walk, 8% come by their own vehicle (auto) and 83% come by office transportation (van) – they will be tired by the time they reach work place. 92% of women working in cutting section are satisfied with their job and 8% are moderately satisfied. 58% maintain moderate oral hygiene and graph 5.67 shows some of the common oral problems. The skin hygiene of women varies from good to poor as shown in graph 5.68. The major problems associated with skin are as shown in graph 5.69.



Graph 6.67: Common oral problems faced by women.

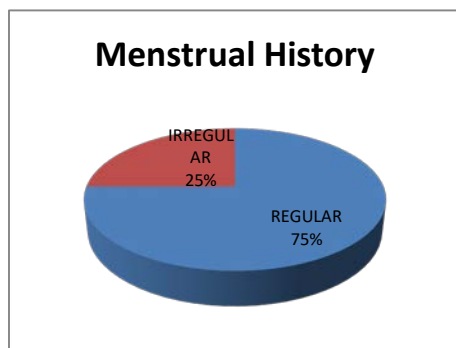


Graph 5.68: Skin Hygiene of women.

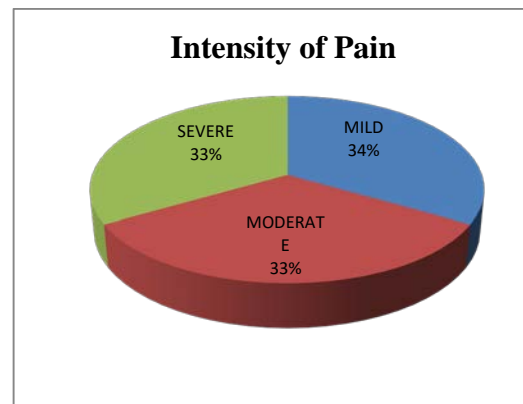


Graph 5.69: Major skin problems faced by women.

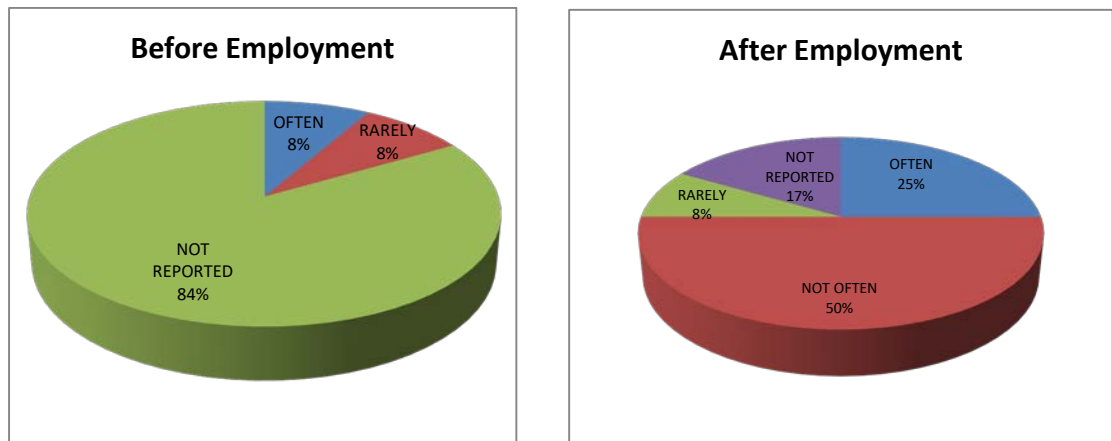
One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.70. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.71. Sickness absenteeism is prevalent after employment as compared to the figures before employment in graph 5.72.



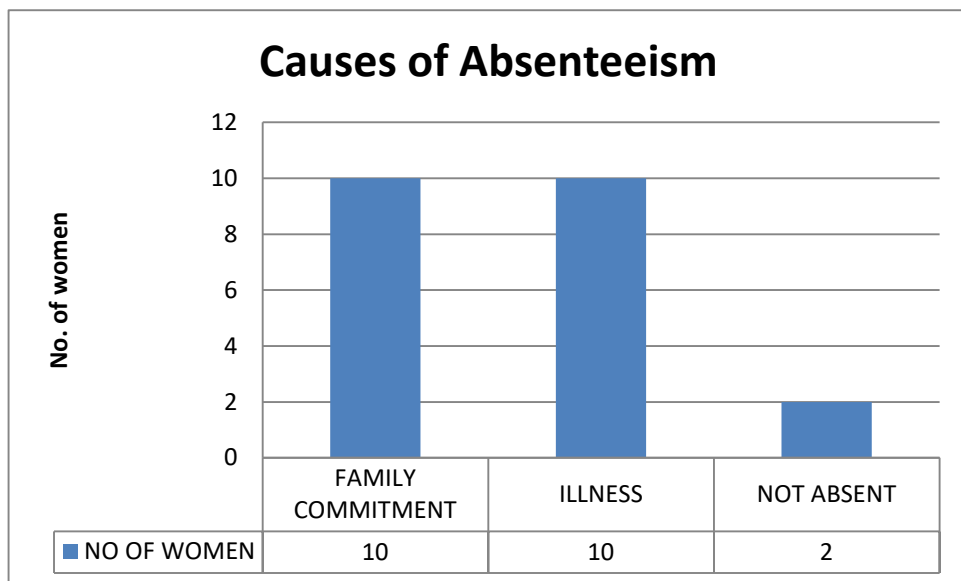
Graph 5.70: Nature of menstrual cycle.



Graph 5.71: Intensity of pain during menstrual cycle



Graph 5.72: Illness report before and after employment.



Graph 5.73: Common causes for absenteeism.

On an average 58% of women remain absent for 1-2 days and 17% for 2 days and per month and graph 5.73 shows common causes for absenteeism. In past 6 months' women were victim of the following common illnesses as shown in table 5.34.

Table: 5.34 List of common illnesses faced by women.

Common illness	Percentage of women
Headache	67%
Cough and cold	83%
Fever	8%
Low BP	42%
Burning sensation while passing urine	25%
Typhoid	8%
Bleeding per rectum	8%
Stomach ulcer	8%
Gastric	8%
Thyroid	8%

8% of women face difficulty in breathing sometimes. Women are often victims of following psychiatric problems as shown in table 5.35.

Table 5.35: List of psychiatric problems faced by women.

Psychiatric Problems faced	Percentage of women
Anxiety	58%
Depression	33%
Palpitations	33%
Insomnia	17%

Table 5.36 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 42% of women feel uncomfortable to work in standing position for long hours. As result women have been victim of various symptoms as shown in table 5.37.

Table 5.36: Physical factors involved at work.

<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	-	-	-	-	100%
Forceful exertion	67%	-	17%	8%	8%
Static contraction	100%	-	-	-	-
Prolonged static loads	100%	-	-	-	-
Bending	67%	-	17%	8%	8%
Twisting	100%	-	-	-	-
Stretching	33%	-	33%	17%	17%
Extending	34%	-	50%	8%	8%
Heavy weight lifting	92%	-	8%	-	-
Sustained sitting	100%	-	-	-	-
Sustained standing	-	-	-	-	100%

Table 5.37: Common symptoms associated with physical factors affecting women health.

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	17%	8%	42%	8%	25%
Cramping	67%	-	33%	-	-
Carelessness	100%	-	-	-	-
Dizziness	50%	-	34%	8%	8%
Numbness	50%	-	33%	17%	-
Stiffness	92%	8%	-	-	-
Tiredness	16.66%	16.66%	16.66%	16.66%	33.33%
Tangling	100%	-	-	-	-

100% women are suffering from pain in their body. The percentage of women experiencing pain in a particular location is indicated in figure 5.4, where the intensity of pain is classified as no pain, low pain, mild pain, high pain and severe pain. Graph 5.74 indicates the causes of pain. 100% women experienced the pain gradually and 92% claim that the pain is intermittent. 83% women believe that physical activities at work are the main reason for pain and hence 33% women remain absent from work due to extreme pain. Women face difficulty in carrying out various activities as shown in table 5.38. The difficulty levels are recognized as never, little bit, moderate and extreme. There are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly.

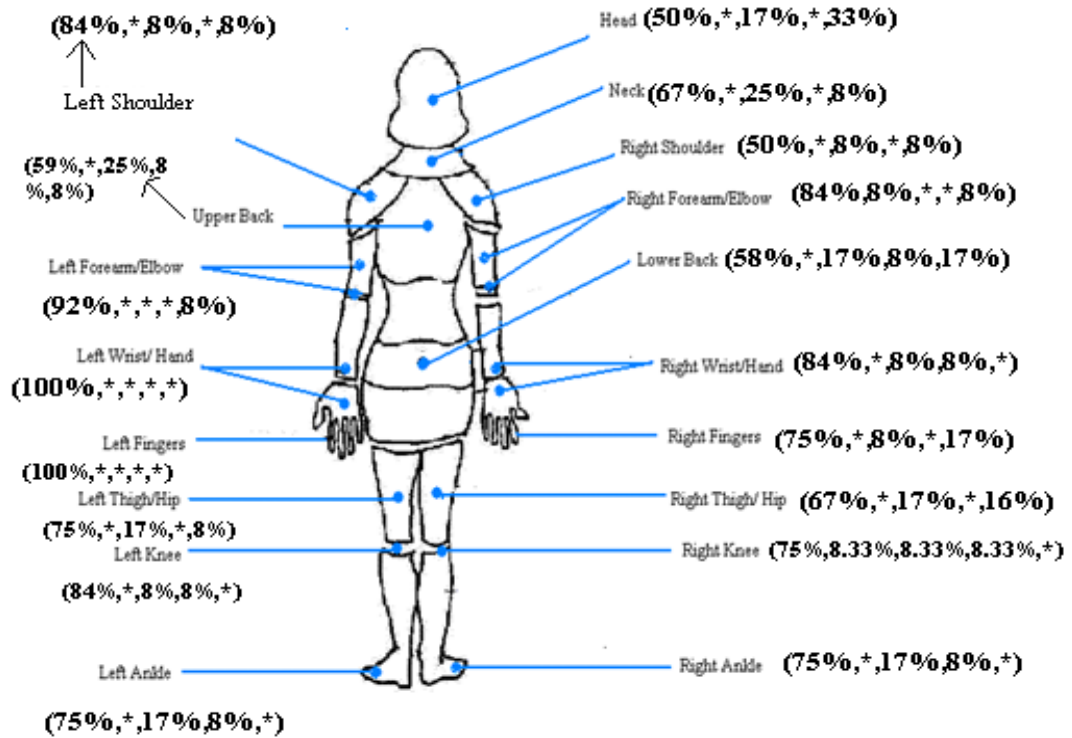
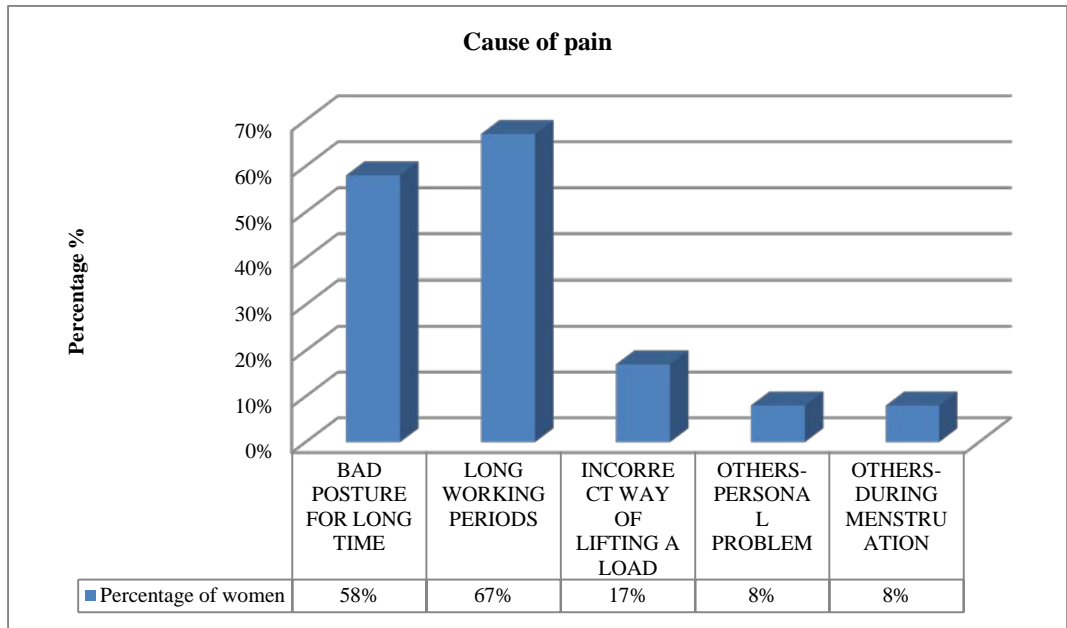








Figure 5.4: Back portion of a human body-Pain features at different body parts in terms of percentage of women experienced pain in that part of body, represented as (1, 2, 3, 4, 5), where; 1-No Pain, 2- Low Pain, 3-Mild Pain, 4-High Pain, 5-Severe Pain.



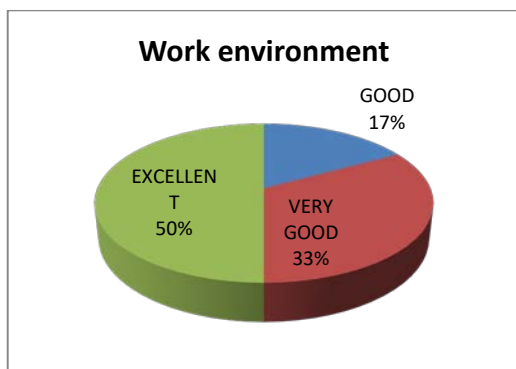
Graph 5.74: Causes of pain.

Table 5.38: Level of difficulty experienced in carrying out various activities.

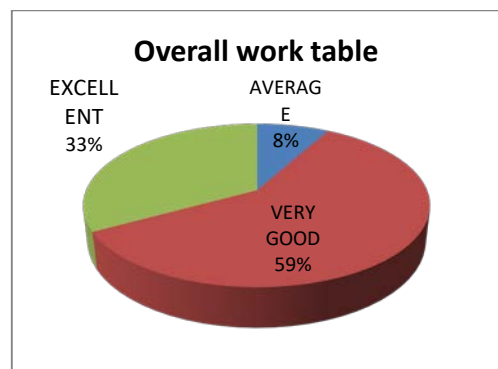
Activity	Difficulty level			
	Never	Little bit	Moderate	Extreme
 Standing	92%	-	-	8%
 Sitting	100%	-	-	-
 Walking	100%	-	-	-

 Laying	84%	8%	-	8%
 While climbing stairs	84%	8%	-	8%
 Stooping	92%	-	-	8%

In cutting section, 100% women say that the tables are not adjustable. 8% women are not comfortable to work with actual height of table and 33% are not comfortable to work in standing position for long duration. There is no seating arrangement in workstation for 100% women. 42% women suffer from extreme heat cramps. 8% women suffered from injury during work since the finger was cut by edge cutter machine. 100% women have been provided with personal protective equipments like masks and gloves, but none of them (100%) use it. 92% women are not comfortable to work with personal protective equipments. The ratings for work environment and overall work table in terms of height, space and adjustable features given by women in cutting section is as shown in graphs 5.75 and 5.76 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.75: Ratings for work environment.

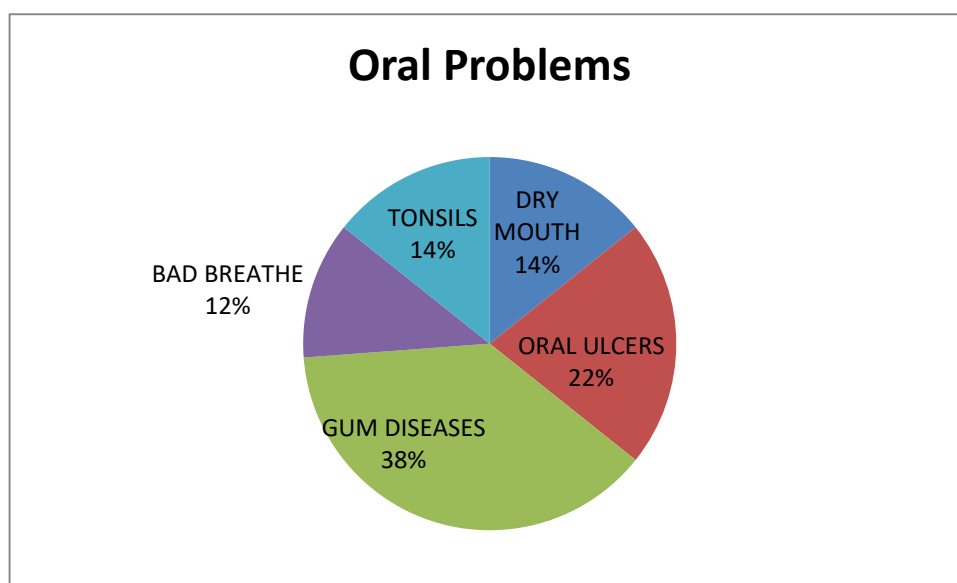


Graph 5.76: Ratings for overall work table in terms of height, space and adjustable features

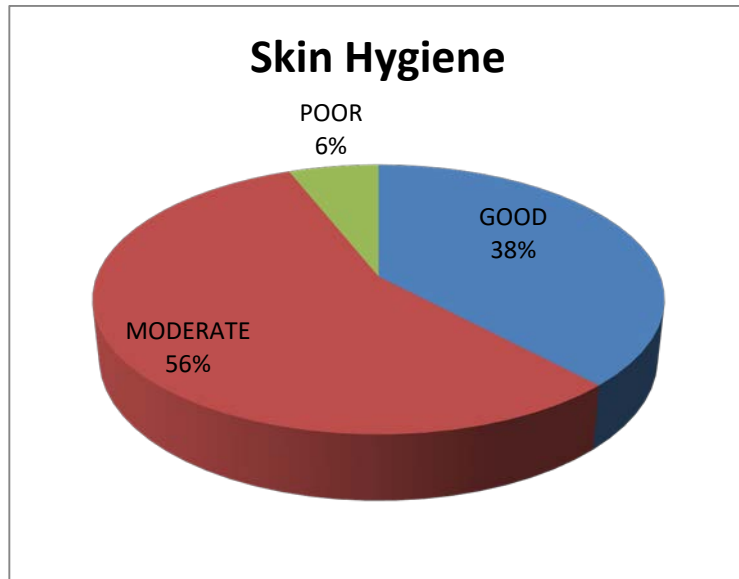
5.4.2 Sewing section:

57% of women are married; they need to manage both home and work. 81% of women have nuclear family where there are no elders to help in household chores. 49% of them have children whom have to be looked after. 62% live in rented house and 22% live in paying guest and a major part of their salary goes in paying off house rent. 29% come to company by Walk and 11 % come by their own transport – they will be tired by the time they reach work place. 2% women are addicted to tobacco. 4% women have no support from their families.

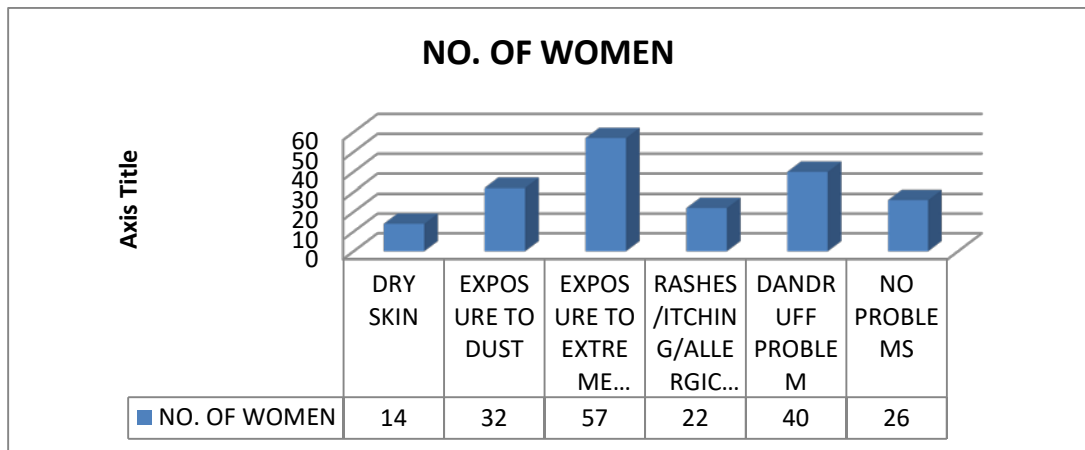
It has to be noted that 22% (37) are from Orissa, 2% (3) are from Assam, 2% (3) from Mizoram, 1.16%(2) from Bihar, 0.6 % (1)from U.P among the total number of women surveyed. 34% of women working in sewing section are moderately satisfied with their job and 1.16% are not satisfied. 11% have dull vision and 2.3% have partial hearing capacity whereas 2.3% have lost hearing ability. 2.3% maintain moderate hygiene, 29% maintain moderate oral hygiene, 4% maintain poor hygiene and graph 5.77 shows some of the common oral problems. The skin hygiene of women varies from good to poor as shown in graph 5.78. The major problems associated with skin are as shown in graph 5.79



Graph 5.77: Common oral problems faced by women-cutting section

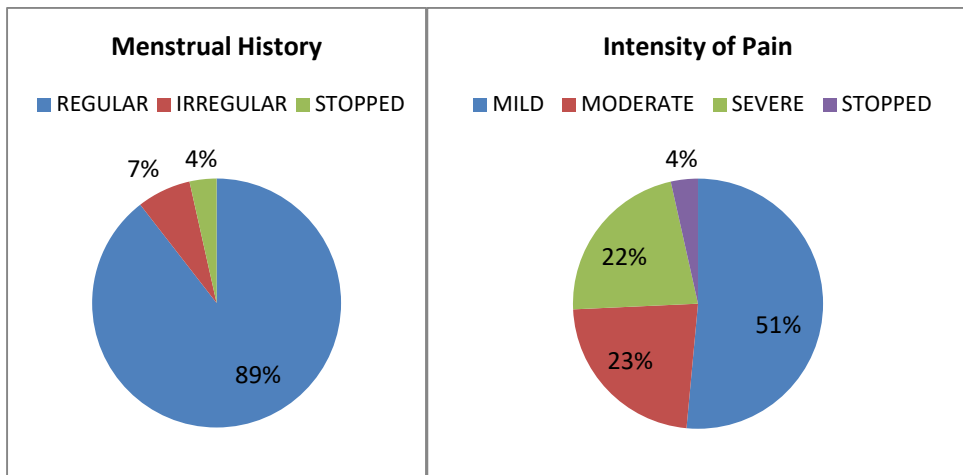


Graph 5.78: Skin Hygiene of women.

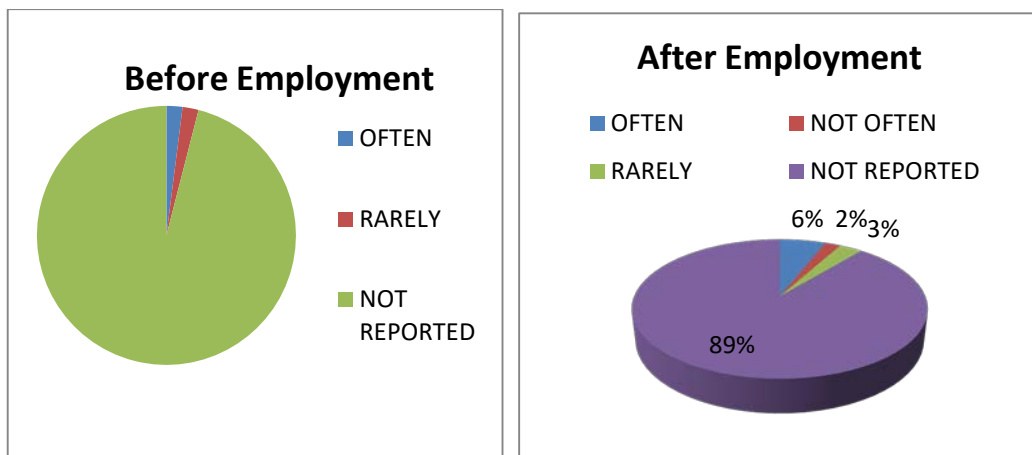


Graph 5.79: Major skin problems faced by women.

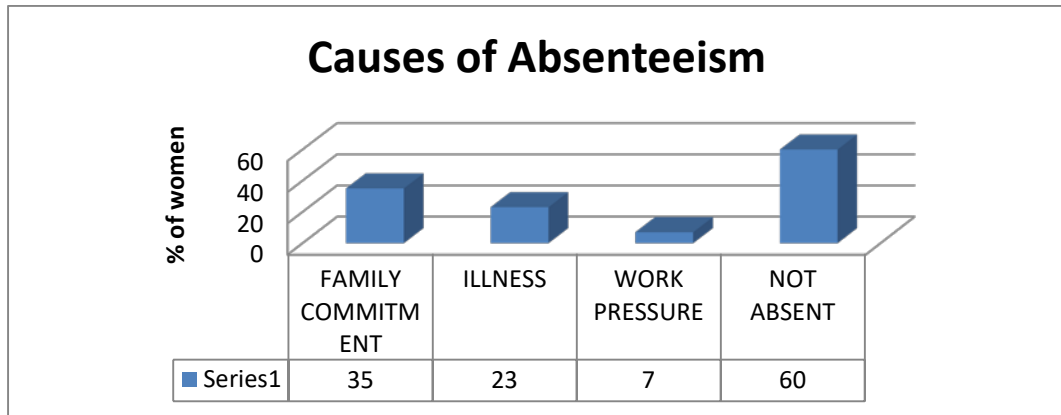
One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.80. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.81. Sickness absenteeism is prevalent after employment as compared to the figures before employment in graph 5.82.



Graph 5.80: Nature of menstrual cycle **Graph5.81:** Intensity of pain during menstrual cycle.



Graph 5.82: Illness report before and after employment.



Graph 5.83: Common causes for absenteeism.

On an average 58% of women remain **absent** for 1-2 days and 17% for 2 days and per month and graph 5.83 shows the common causes for absenteeism. In past 6 months' women were victim of the following common illnesses as shown in table 5.39. 77% have undergone proper **treatment** for common illness and 7% have not undergone any treatment. Women have been victim of various specific illnesses as shown in graph 5.84 and psychiatric problems listed in table 5.40.

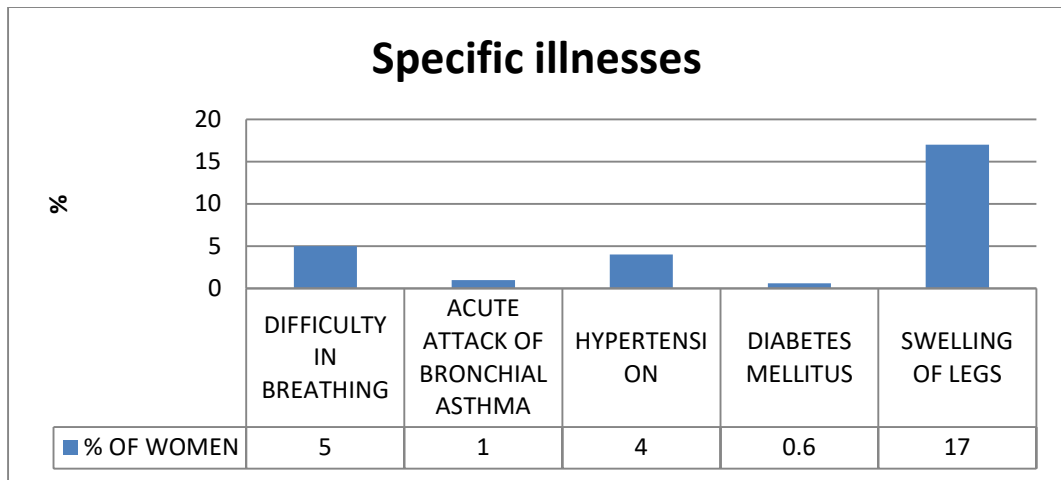
Table 5.39: List of common illnesses faced by women.

SL	Illness	No. of women	Percentage (%)
1)	Headache	93	54%
2)	Cough and cold	62	36%
3)	Fever	39	23%
4)	Dengue	1	0.6%
5)	Low BP	5	3%
6)	Anemia	28	16%
7)	Bleeding per rectum	4	2%
8)	Burning sensation while passing urine	6	4%
9)	Typhoid	2	1.16%
10)	Gastric	28	16%
11)	Mastectomy	1	0.6%
12)	Lump in breast	1	0.6%
13)	Excessive sweating in both palms(hands and legs)	1	0.6%
14)	Water leaks from both ears	1	0.6%
15)	Burning sensation in stomach	2	1.16%
16)	Frequent urination	1	0.6%

17)	Thyroid	2	1.16%
18)	Sinus	1	0.6%
19)	Acidity	3	2%
20)	Burning sensation in hands and legs	1	0.6%
21)	Weakness	1	0.6%
22)	White menstruation	2	1.16%

Table 5.40: List of psychiatric problems faced by women.

Psychiatric Problems faced	Percentage of women
Anxiety	36%
Depression	16%
Palpitations	26%
Insomnia	12%



Graph 5.84: Percentage of women who are victims of specific illnesses.

Table 5.41 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 14% of women feel uncomfortable to work in standing position for long hours. As result women have been victim of various symptoms as shown in table 5.42. Women have been victims of few injuries as shown in table 5.43.

Table 5.41: Physical factors involved at work.

<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	-	-	-	-	100%
Forceful exertion	94%	0.6%	1%	-	4%
Static contraction	100%	-	-	-	-
Prolonged static loads	100%	-	-	-	-
Bending	94%	-	2%	2%	2%
Twisting	86%	2%	4%	5%	3%
Stretching	98%	-	0.6%	-	1%
Extending	99%	-	0.6%	-	0.6%
Heavy weight lifting	98%	0.6%	0.6%	1%	-
Sustained sitting	24%	-	0.6%	1%	74%
Sustained standing	75%-	1%	-	-	24%

Table 5.42: Common symptoms associated with physical factors affecting women health.

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	27%	8%	27%	8%	30%
Cramping	78%	2%	8%	7%	5%
Carelessness	95%	2%	2%	0.6%	0.6%
Dizziness	68%	5%	17%	6%	4%
Numbness	70%	-	16%	9%	5%
Stiffness	95%	-	2%	0.6%	2%
Tiredness	42%	6%	17%	12%	23%
Tangling	100%	-	-	-	-

Table 5.43: List of injuries suffered by women.

Type of injury	No. of women
Puncture	1
Avulsion	2
Hematoma	1
Fracture	6
Burn	8

87% women are suffering from pain in their body. The percentage of women experiencing pain in a particular location is indicated in figure 5.5, where the intensity of pain is classified as no pain, low pain, mild pain, high pain and severe pain. Graph 6.2.9 indicates the cause of pain. 72% women experienced the pain gradually and 15% of them experienced it suddenly. 80% claim that the pain is intermittent and 7% say that their pain is constant. 46% women believe that physical activities at work are the main reason for pain and inadequate rest interval at work are also the contributors to pain for 26% of them. Hence 32% women remain absent from work due to extreme pain. Women face difficulty in carrying out various activities as shown in table 5.44. The difficulty levels are recognized as never, little bit, moderate and extreme. There are a few issues concerning general amenities provided to workers. The toilets have to be cleaned regularly, availability of rest period is poor for 4% of women, 5% of them feel that moderate hygiene is maintained in canteen and 4% of women rate the quality of personal protective equipment provided to them as moderate.

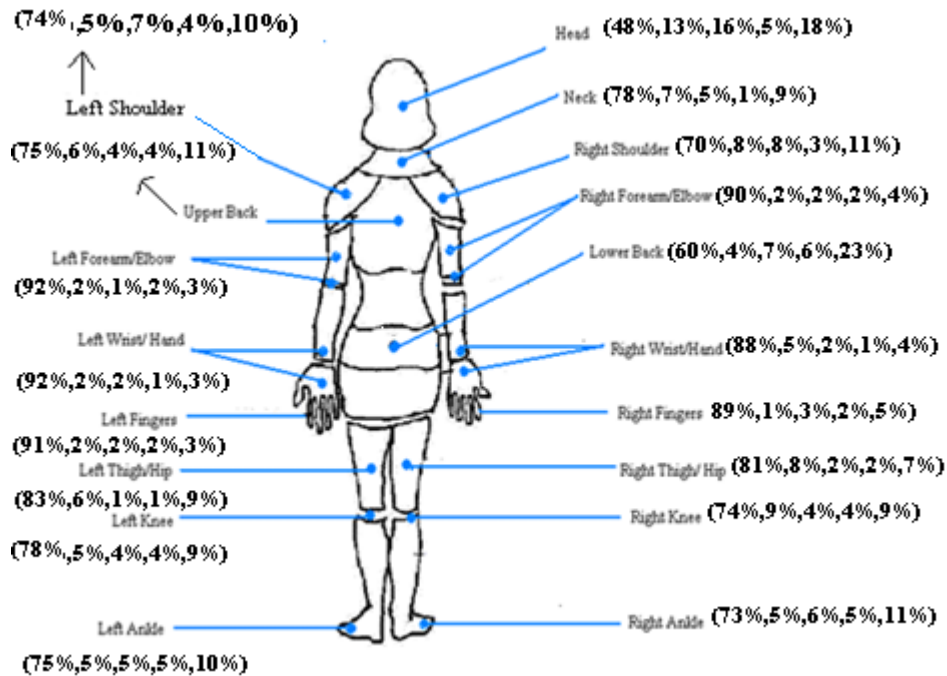
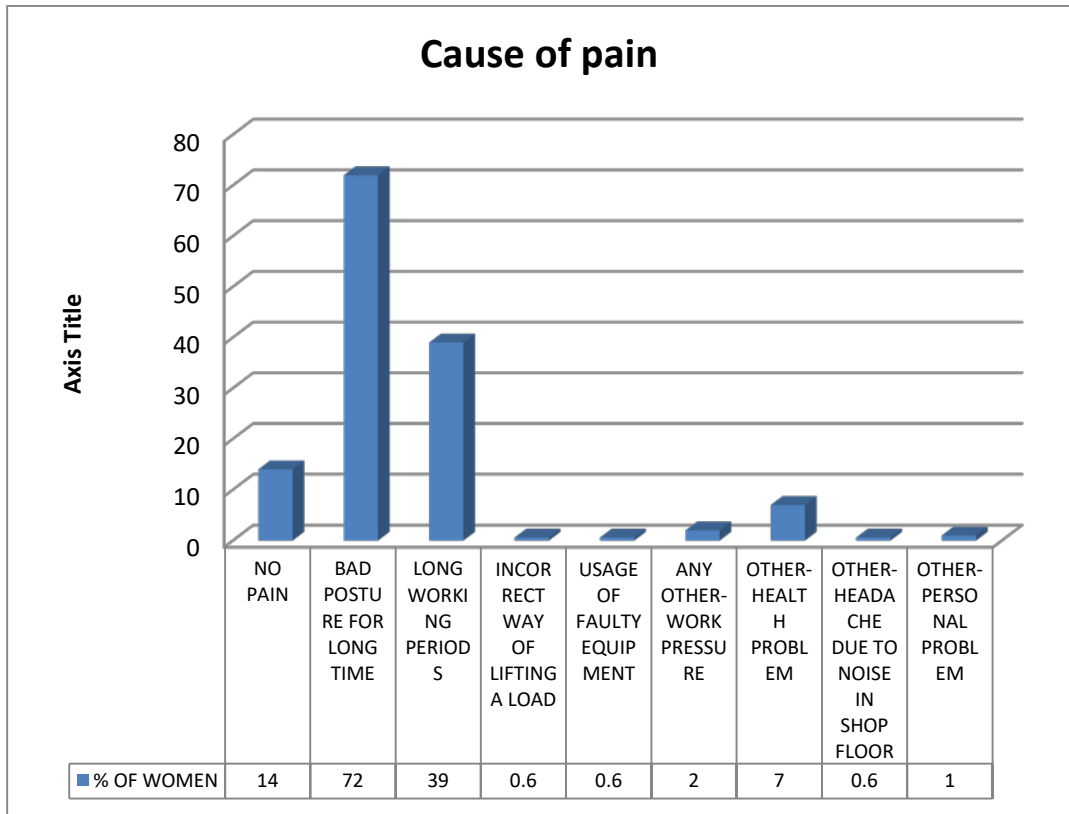








Figure 5.5: Back portion of a human body-Pain features at different body parts in terms of percentage of women experienced pain in that part of body, represented as (1, 2, 3, 4, 5), where; 1-No Pain, 2-Low Pain, 3-Mild Pain, 4-High Pain, 5-Severe Pain.



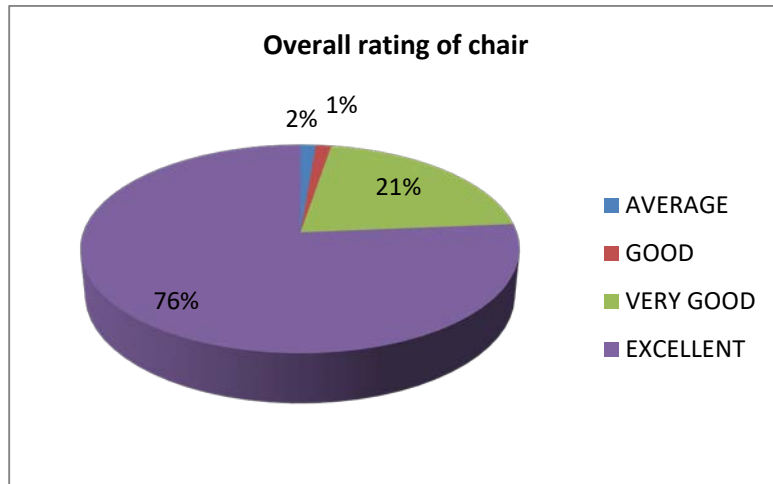
Graph 5.85: Causes of pain.

Table 5.44: Level of difficulty experienced in carrying out various activities.

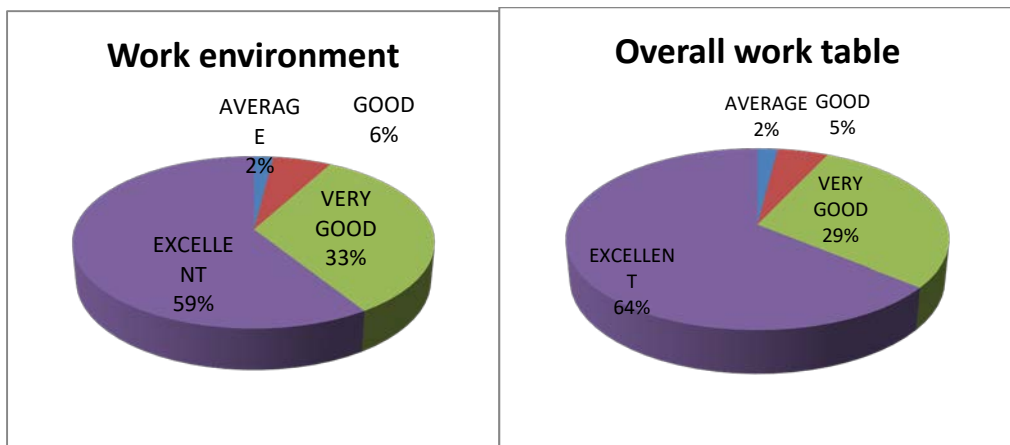
Activity	Difficulty level			
	Never	Little bit	Moderate	Extreme
 Standing	87%	4%	1%	8%
 Sitting	85%	5%	0.6%	1%

 Walking	88%	4%	3%	5%
 Laying	91%	2%	1%	6%
 While climbing stairs	86%	5%	0.6%	8%
 Stooping	91%	2%	2%	5%

In sewing section, chairs have been provided to all the tailors and operators, which cannot be adjusted in terms of height. Women select the chairs based on their convenience and mark it with their names or initials and if their chairs are misplaced they may have to adjust with the stools. 74% women said the chairs provided to them are comfortable. 6% women think that the fans provided to them are not sufficient. 5% women think that the fans provided to them are not in good working condition. 3% women are not comfortable to work in sitting position for long duration. 11 % women are not comfortable to work in congested area. There is no better seating arrangement for 2 % of women. There is no enough leg space for movement of legs for 4% of women. 25% of women have suffered from various injuries during work like, needle injury, trimmer injury, scissor injury, blade injury and fan injury. 54% women have been provided with personal protective equipments like masks and gloves, but only 23% of them use it. The ratings for chair provided to them, work environment and overall work table in terms of height, space and adjustable features given by women in sewing section is as shown in graphs 5.86, 5.87 and 5.88 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.86: Overall rating of chair.



Graph 5.87: Ratings for work environment. **Graph 5.88:** Ratings for overall work table in terms of height, space and adjustable features.

5.4.3 Ironing section:

100% of women are married– they need to manage both home and work. 33% of women have nuclear family – no elders to help in household chores. 100% of them have children – they need to look after kids, do household chores and work. 33% women have no support from their family members. 100% live in rented house – major part of their salary goes in paying off house rent. 33% women come to company by Walk – they will be tired by the time they reach work place.

67% of women working in ironing section are satisfied and 33% are moderately satisfied. 33% women have experience less than 1 year. 67% women have dull vision. 33% women maintain poor oral hygiene. Dry mouth (33%), bad breath (33%) and gum diseases (33%) are the major oral problems women face. 100% women maintain moderate skin hygiene. Exposure to dust (67%), exposure to extreme heat (100%) and dandruff (33) are the major skin problems women face. 100% women have regular menstruation cycles with mild pain in abdomen. In 67% of women illness was not reported before employment, whereas after employment 33% of women experience illness often. 67% women remain absent for 1-2 days and 33% for 2-3 days per month. Main reasons for absence are: illness (100%) and family commitment (100%). In past 6 months' women were victim of the following common illness as shown in table 5.45.

Table 5.45: List of common illness

Sl no.	Illness	Percentage (%)
1.	Headache	67%
2.	Gastric	67%
3.	Fever	33%
4.	Anemia	33%

67% have undergone proper **treatment** for common illness and 33% have not undergone any treatment. Women have been victims of following specific illnesses: Swelling of legs -33%. 50% women suffer from anxiety, 50% women suffer from depression at work place, 50% women suffer from palpitations and 50% women suffer from insomnia. 100% of women need to do repetitive work all the time, forceful exertion all the time (100%) and sustained standing all the time (100%). 100% of women are comfortable to work in standing position for long hours. But some of them have been experiencing the following:

Aching: 67%-sometimes, 33%-all the time

Cramping: 67%-sometimes

Dizziness: 33% -sometimes

Numbness: 33%-rarely, 33%- sometimes

Stiffness: 50%- sometimes

Tiredness: 33%- sometimes, 67%- all the time

Women have been victim of the following injuries as shown in table 5.46.

Table 5.46: List of injuries

Type of injury	No. of women	Percentage%
Fracture	1	33%
Burn	2	67%

67% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.47. And **high** pain is experienced in head (33%).

Table 5.47: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	33%
Neck	33%
Lower back	33%
Right wrist/hand	33%
Left wrist/hand	33%
Right fingers	33%
Left fingers	33%
Right thigh	33%
Left thigh	33%
Right knee	33%
Left knee	33%
Right ankle	33%
Left ankle	33%

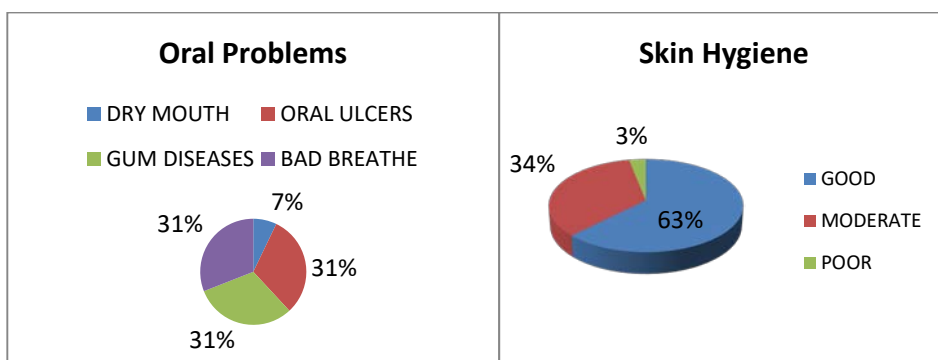
Women think the reason behind their pain is: standing in bad posture for long time - 67%, long working periods-33%. 67% women experienced the pain gradually and 67% claim that the pain is intermittent. 33% women believe that physical activities at work and inadequate rest intervals at work are the main contributors to pain. Hence 67% women remain absent from work due to extreme pain. Women face extreme difficulty in : standing (33%), sitting(33%) , walking(33%) ,laying(33%) , while climbing stairs(33%), stooping (33%). As per the survey there are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly.

The tables in ironing section are not adjustable. 67% women feel that the level of exposure to heat is high. 67% have not been provided with personal protective equipment. The rating of work environment is: excellent—100%. The rating of overall work table in terms of height, space, adjustable features is: excellent -50%.

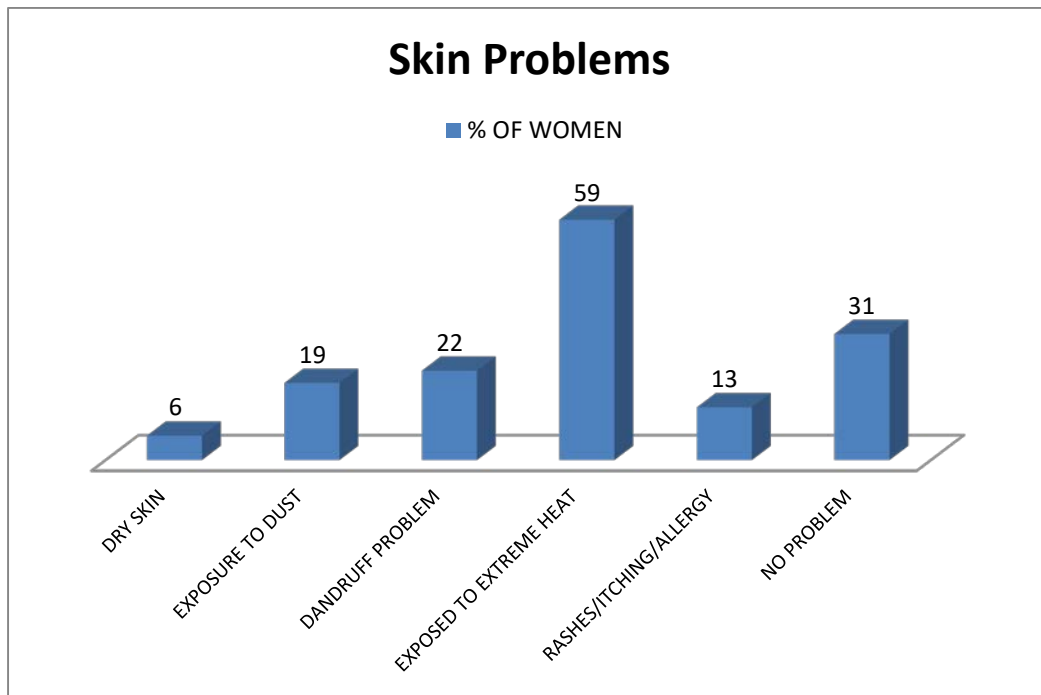
5.4.4 Finishing section

59% of women are married and 6% women are widowed. They need to manage both home and work. 84% of women have nuclear family where there are no elders to help in household chores. 56% of them have children whom have to be looked after. 69% live in rented house and 19% live in paying guest and a major part of their salary goes in paying off house rent. 59% come to company by Walk, they will be tired by the time they reach work place. 6% women have no support from their families.

It has to be noted that 31% are from Orissa and 3% are from Assam among the total number of women surveyed in finishing section. 34% of women working in finishing section are moderately satisfied with their job. 6% have dull vision and 3% maintain moderate hygiene, 19% maintain moderate oral hygiene, 3% maintain poor hygiene and graph 5.89 shows some of the common oral problems. The skin hygiene of women varies from good to poor as shown in graph 5.90. The major problems associated with skin are as shown in graph 5.91.

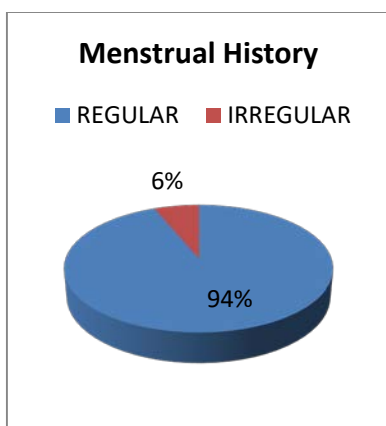


Graph 5.89: Common oral problems faced by women **Graph 5.90:** Skin Hygiene of women.

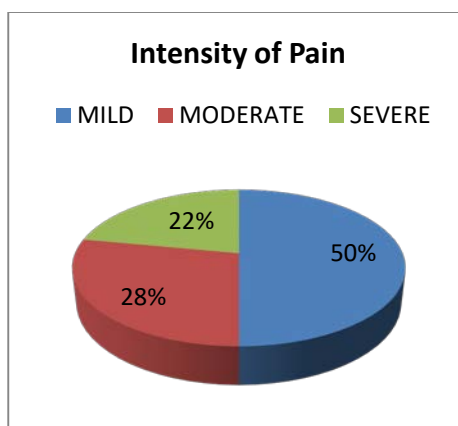


Graph 5.91: Major skin problems faced by women.

One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.92. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.93.

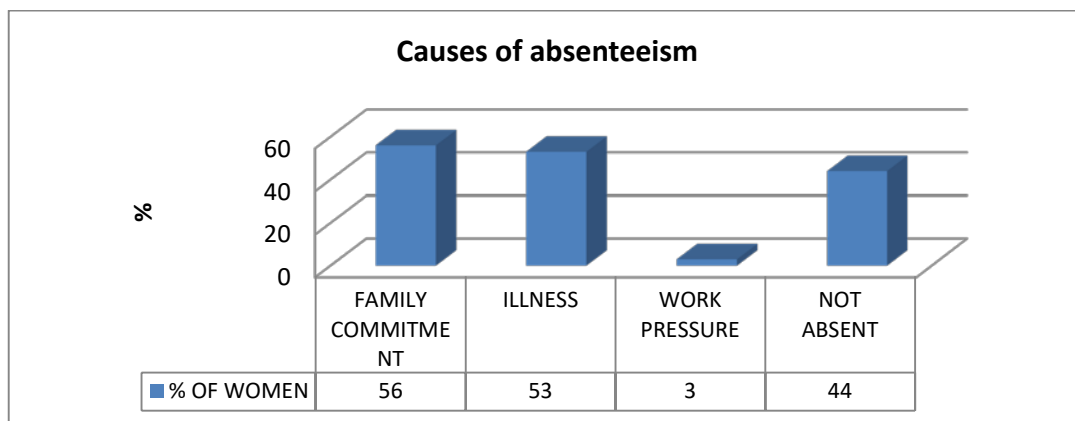


Graph 5.92: Nature of menstrual cycle.



Graph 5.93: Intensity of pain during menstrual cycle.

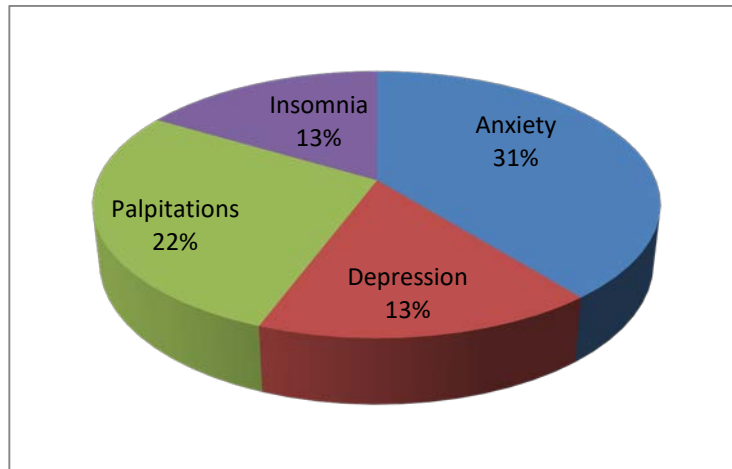
On an average 9% of women remain **absent** for 1 day, 16% for 1-2 days, 9% for 2 to 3 days and 9% for 3 to 4 days per month. The causes of absenteeism are as shown in graph 5.94. In past 6 months' women were victim of the following common illnesses as shown in table 5.48. 84% have undergone proper **treatment** for common illness and 16% have not undergone any treatment. Women have been victim of various psychiatric problems as shown in graph 5.95 and specific illnesses as shown in graph 5.96.



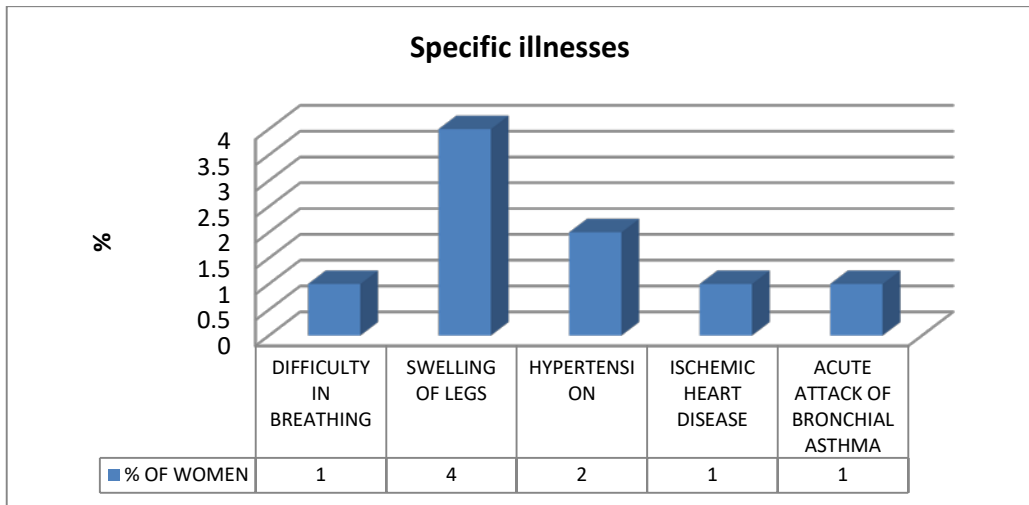
Graph 5.94: Common causes for absenteeism.

Table 5.48: List of common illnesses faced by women.

Sl no.	Illness	Percentage (%)
1.	Headache	81%
2.	Cough and cold	47%
3.	Fever	31%
4.	Low BP	6%
5.	Anemia	25%
6.	Burning sensation in both palms (hands & legs)	3%
7.	Acidity	6%
8.	Sore throat	3%
9.	Bleeding from nose	6%
10.	Stomach pain	3%
11.	Gastric	22%
12.	Scalp Problem	3%
13.	Abnormal abdominal pain	3%



Graph 5.95: Psychiatric problems faced by women.



Graph 5.96: Percentage of women who are victims of specific illnesses.

Table 5.49 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 16% of women feel uncomfortable to work in standing position for long hours. As result women have been victim of various symptoms as shown in table 5.50.

Table 5.49: Physical factors involved at work.

<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	6%	-	-	-	94%
Forceful exertion	84%	-	-	-	5%
Static contraction	100%	-	-	-	-
Prolonged static loads	100%	-	-	-	-
Bending	94%	-	3%	-	3%
Twisting	100%	-	-	-	-
Stretching	97%	-	-	-	3%
Extending	97%	-	-	-	3%
Heavy weight lifting	97%	-	-	-	3%
Sustained sitting	88%	-	3%	-	9%
Sustained standing	9%	-	3%	-	88%

Table 5.50: Common symptoms associated with physical factors affecting women health.

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	22%	16%	38%	-	25%
Cramping	66%	-	25%	-	9%
Carelessness	100%	-	-	-	-
Dizziness	81%	3%	6%	3%	6%
Numbness	81%	3%	9%	3%	3%
Stiffness	97%	3%	-	-	-
Tiredness	47%	-	28%	9%	16%
Tangling	100%	-	-	-	-

66% women are suffering from pain in their body. The percentage of women experiencing pain in a particular location is indicated in figure 5.6, where the intensity of pain is classified as no pain, low pain, mild pain, high pain and severe pain. Table 5.51 indicates the cause of pain. 63% women experienced the pain gradually and 56% claim that the pain is intermittent whereas 9% say that their pain is constant. 47% women believe that physical activities at work are the main reason for pain and hence 56% women remain absent from work due to extreme pain. 19% women feel that inadequate rest interval at work are also the contributors to pain. Women face difficulty in carrying out various activities as shown in table 5.52. The difficulty levels are

recognized as never, little bit, moderate and extreme. There are a few issues concerning general amenities provided to workers. The toilets have to be cleaned regularly and availability of rest period is poor for 6% of women.

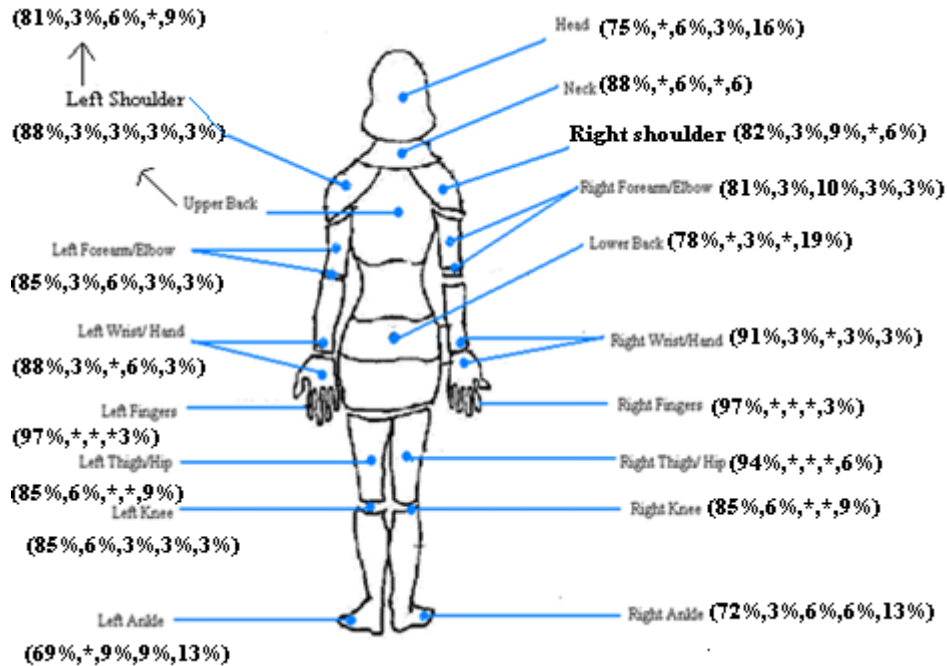








Figure 5.6: Back portion of a human body-Pain features at different body parts in terms of percentage of women experienced pain in that part of body, represented as (1, 2, 3, 4, 5), where; 1-No Pain, 2-Low Pain, 3-Mild Pain, 4-High Pain, 5-Severe Pain.

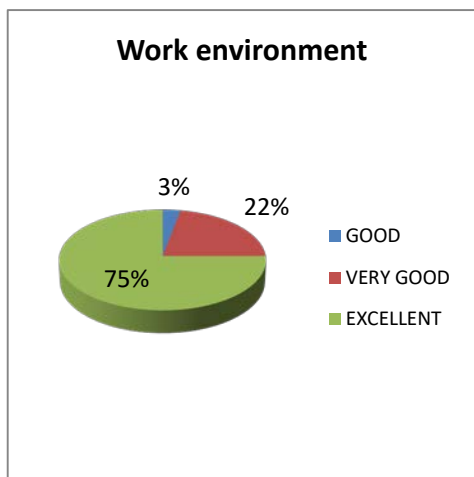
Table 5.51: Causes of pain.

Sl no.	Illness	Percentage (%)
1.	Bad posture for long time	53%
2.	Long working periods	34%
3.	Usage of faulty equipment	3%
4.	Incorrect way of lifting load	3%
5.	Other-personal problem	3%
6.	Other-work pressure at home	3%
7.	Other-work pressure at company	6%
8.	Other-accident	3%

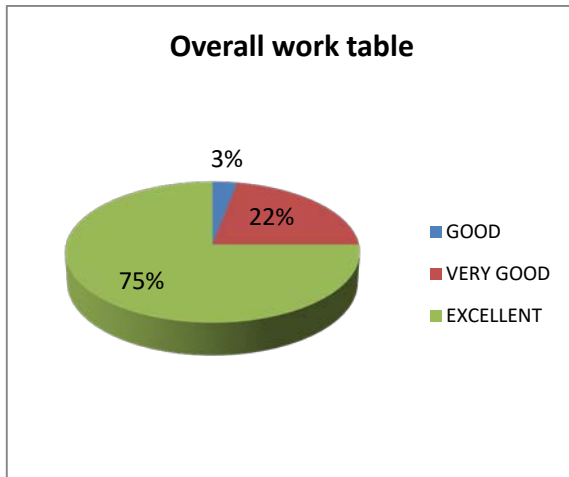
Table 5.52: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	81%	3%	9%	6%
 Sitting	84%	3%	9%	3%
 Walking	97%	-	-	3%
 Laying	94%	-	-	6%
 While climbing stairs	94%	3%	-	3%
 Stooping	91%	3%	-	6%

In finishing section, the tables are not adjustable. There is no seating arrangement in workstation for 84% women. 84% women have been provided with personal protective equipments like masks and gloves, but only 63% of them use it. The ratings for work environment and overall work table in terms of height, space and adjustable features given by women in finishing section is as shown in graphs 5.97 and 5.98 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.97: Ratings for work environment.



Graph 5.98: Ratings for overall work table in terms of height, space and adjustable features.

5.4.5 Packaging section:

100% of women are unmarried, have nuclear family and live in rented house. A major part of their salary goes in paying off house rent. 100 % of them are from within Bangalore and come to company by office van. 100% of women working in packing section are moderately satisfied and have experience of five years.

100% have clear vision. 100% women maintain good overall hygiene and moderate oral hygiene. 100% women suffer from tonsils problem. 100% women maintain moderate skin hygiene. Some of the common skin problems they suffer are dry skin, exposure to dust, exposure to extreme heat, and dandruff. 100% of women have regular menstruation cycles, and 100% of them experience severe pain in abdomen during menstruation. In past 6 months' women were victim of the following common illness as shown in table 5.53.

Table 5.53: List of common illness

Illness	%
Cough and cold	100
Headache	100
Fever	100
Low BP	100

100% have undergone proper treatment for common illness. 100% women suffer from psychiatric problems such as palpitations and anxiety. The following are the physical factors, which 100% women claim, are associated with their work all the time. They are repetitive work, forceful exertion, bending, twisting, stretching and extending. Sometimes they need to do heavy weight lifting also and stand all the time. 100% of women feel uncomfortable to work in standing position for long hours. As a result they have been experiencing the following symptoms as shown in table 5.54.

Table 5.54: List of symptoms

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	-	-	-	-	100%
Cramping	-	-	-	-	100%
Carelessness	100%	-	-	-	-
Dizziness	-	-	-	-	100%
Numbness	100%	-	-	-	-
Stiffness	-	-	-	-	100%
Tiredness	-	-	-	-	100%
Tangling	100%	-	-	-	-







100% women are suffering from pain in their body. **Severe** pain is experienced in following body parts as shown in table 5.55.

Table 5.55: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	100%
Upper back	100%
Lower back	100%
Right knee	100%
Left knee	100%

Women think the reason behind their pain is: standing in bad posture for long time - 100%, long working periods-100%. 100% women experienced the pain gradually and claim that the pain is intermittent. 100% women believe that physical activities at work and inadequate rest intervals at work are the main reason for pain and hence 100% women remain absent from work due to extreme pain. As a result they have been experiencing pain in doing the following activities as shown in table 5.56.

Table 5.56: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	100%	-	-	-
 Sitting	-	-	-	100%
 Walking	100%	-	-	-
 Laying	100%	-	-	-
 While climbing stairs	100%	-	-	-
 Stooping	-	-	-	100%

As far as general amenities are concerned, except that the hygiene of toilets is poor there are no other problems as said by 100% women. 100% women say that there are no tables in packing section. They are not comfortable to work in standing position for long duration, there is no

seating arrangement in workstation and they are not provided with personal protective equipment. 100% women have rated the work environment as excellent.

5.5 Data Analysis of the survey carried out at MAF Clothing, Bengaluru.

5.5.1 Cutting section:

90% of women are married; they need to manage both home and work. 95% of women have nuclear family where there are no elders to help in household chores. 86% of them have children whom have to be looked after. 90% live in rented house and a major part of their salary goes in paying off house rent. 8% come to company by Walk - they will be tired by the time they reach work place. 92% of women working in cutting section are satisfied with their job and 8% are moderately satisfied. 95% women maintain good overall hygiene. 92% maintain moderate oral hygiene. Bad breath is the common problem among women. 90% women maintain good skin hygiene and 8% maintain moderate skin hygiene. Exposure to dust, exposure to extreme heat and dandruff are the major problems women face. 92% women have regular menstruation cycles and 10% have irregular cycles. 25% women experience severe pain during menstruation and for 75% of women it is mild. While 50% women does not remain absent, 12% women remain absent for 1 day and 38% for 2-3 days per month. Main reasons for absence are: illness -50% and family commitment-50%. In past 6 months' women were victim of the following common illness as shown in table 5.57

Table 5.57: List of common illness

Sl No	Illness	Percentage (%)
1.	Headache	75%
2.	Cough and cold	38%
3.	Fever	25%
4.	Stomach pain	12%
5.	Anemia	12%

100% have undergone proper **treatment** for common illness. Women have been victim of following specific illnesses: swelling of legs (12%). 75% women suffer from anxiety, 63% women suffer from depression at work place, 50% women suffer from palpitations and 38% women suffer from insomnia. Table 5.58 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 92% of women feel uncomfortable to work in standing position for long hours. As result women have been victim of various symptoms as shown in table 5.59.

Table 5.58: Physical factors involved at work.

<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	-	-	-	-	100%
Forceful exertion	100%	-	-	-	-
Static contraction	100%	-	-	-	-
Prolonged static loads	100%	-	-	-	-
Bending	92%	-	8%	-	-
Twisting	100%	-	-	-	-
Stretching	100%	-	-	-	-
Extending	100%	-	-	-	-
Heavy weight lifting	100%	-	-	-	-
Sustained sitting	100%	-	-	-	-
Sustained standing	-	-	-	-	100%

Table 5.59: Common symptoms associated with physical factors affecting women health.

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	22%	-	44%	-	34%
Cramping	66%	-	34%	-	-
Carelessness	100%	-	-	-	-
Dizziness	82%	18%	-	-	-
Numbness	85%	15%	-	-	-
Stiffness	92%	8%	-	-	-
Tiredness	-	-	46%	48%	6%
Tangling	100%	-	-	-	-

88% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.60.

Table 5.60: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	25%
Neck	50%
Right shoulder	38%
Left shoulder	38%
Upper back	38%

Lower back	38%
Right forearm	25%
Left forearm	25%
Right wrist	25%
Left wrist	25%
Right fingers	25%
Left fingers	25%
Right thigh	50%
Left thigh	50%
Right knee	50%
Left knee	50%
Right ankle	88%
Left ankle	88%

High pain is experienced in following parts as shown in table 5.61.

Table 5.61: List of body parts with severe pain

High pain experienced in-	Percentage (%) of woman
Head	12%
Lower back	12%







Low pain is experienced in following parts as shown in table 5.62.

Table 5.62: List of body parts with severe pain

Low pain experienced in-	Percentage (%) of woman
Head	12%
Right fingers	12%
Left fingers	12%

Women think the reason behind their pain is: standing in bad posture for long time - 88%, long working periods-88%. 86% women experienced the pain gradually and 86% claim that the pain is intermittent.100% women believe that physical activities at work and 68% feel that inadequate rest intervals at work are the main contributors to pain. Hence 76% women remain absent from work due to extreme pain. As a result they have been experiencing pain in doing following activities as shown in table 5.63.

Table 5.63: Level of difficulty experienced in carrying out various activities.

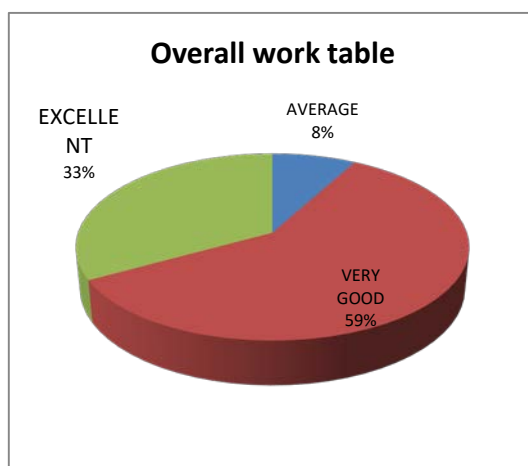
<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	14%	50%	-	36%
 Sitting	36%	38%	26%	-
 Walking	90%	10%	-	-
 Laying	92%	8%	-	-
 While climbing stairs	92%	8%	-	-
 Stooping	12%	88%	-	-

As per the survey there are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly.

In cutting section, 100% women say that the tables are not adjustable. Women are comfortable to work with actual height of table. 36% are not comfortable to work in standing position for long duration. There is no seating arrangement in workstation for 100% women. 36% women have been provided with personal protective equipments like masks and gloves. The ratings for work environment and overall work table in terms of height, space and adjustable features given by women in cutting section is as shown in graphs 5.99 and 5.100 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.99: Ratings for work environment.

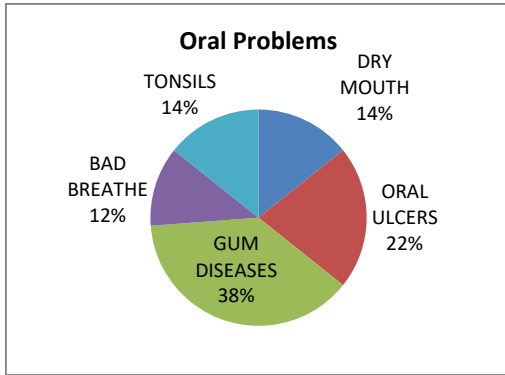


Graph 5.100: Ratings for overall work table in terms of height, space and adjustable features.

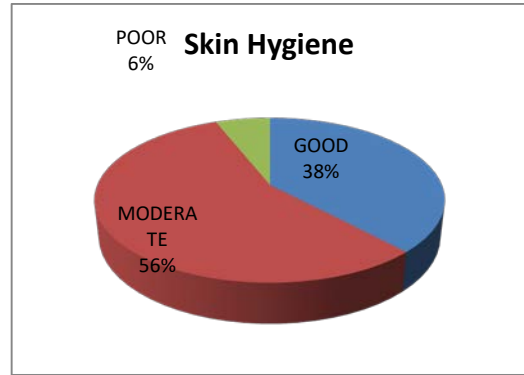
5.5.2 Sewing section:

95% of women are married; they need to manage both home and work. 92% of women have nuclear family where there are no elders to help in household chores. 86% of them have children whom have to be looked after. 88% women live in rented house - a major part of their salary goes in paying off house rent. 12% come to company by Walk - they will be tired by the time they reach work place. 9% women have no support from their families.

88% of women working in sewing section are moderately satisfied and 12% are satisfied with their job. 100% of them have clear vision and good hearing capacity. 95% women maintain good overall hygiene. 66% women maintain good oral hygiene, 28% maintain moderate oral hygiene and 6% maintain poor oral hygiene. Graph 5.101 shows some of the common oral problems. The skin hygiene of women varies from good to poor as shown in graph 5.102. The major problems associated with skin are as shown in graph 5.103.

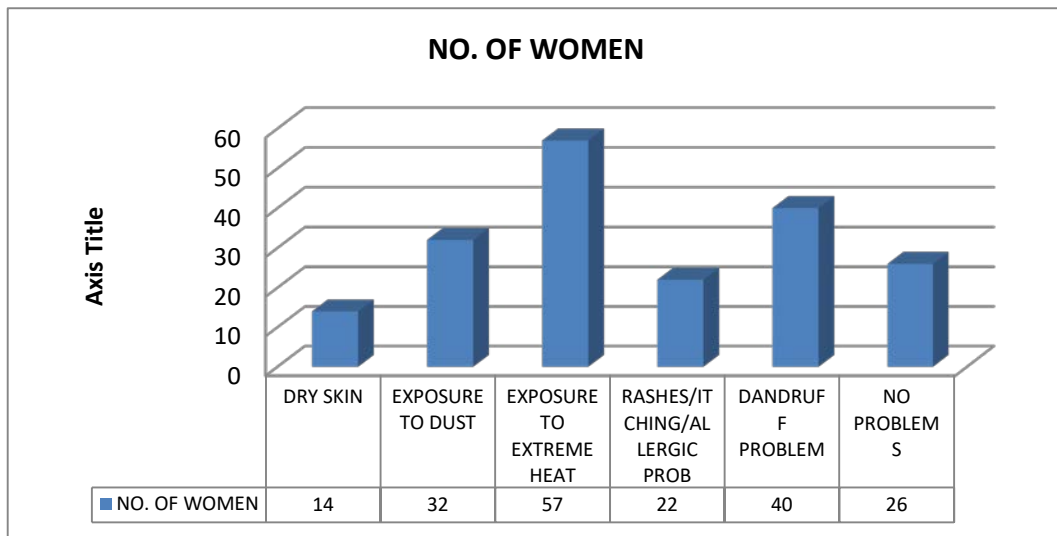


Graph 5.101: Common oral problems faced by women-cutting section

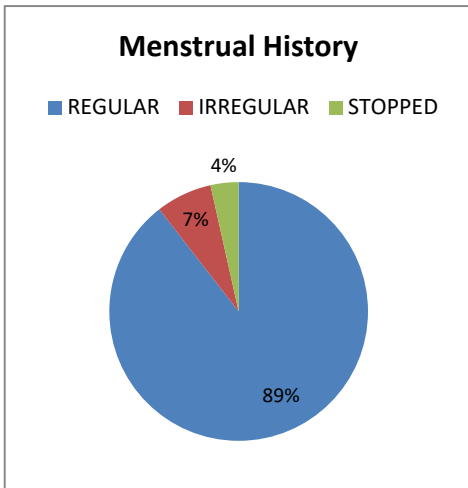


Graph 5.102: Skin Hygiene of women.

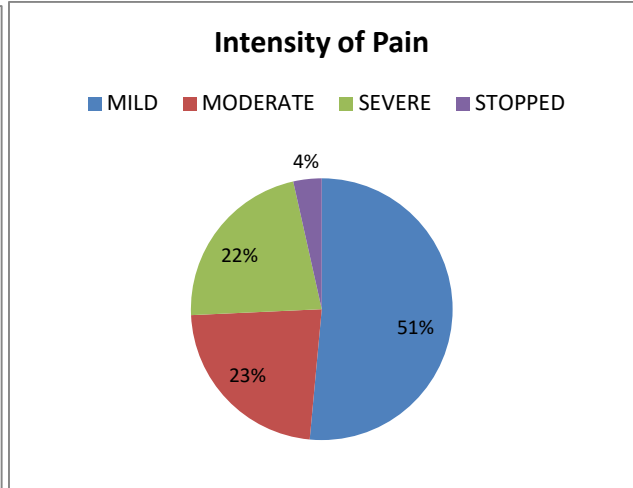
One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular. Some women have stopped getting their menstrual cycle because of either menopause or hysterectomy as shown in graph 5.104. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.105.



Graph 5.103: Major skin problems faced by women.

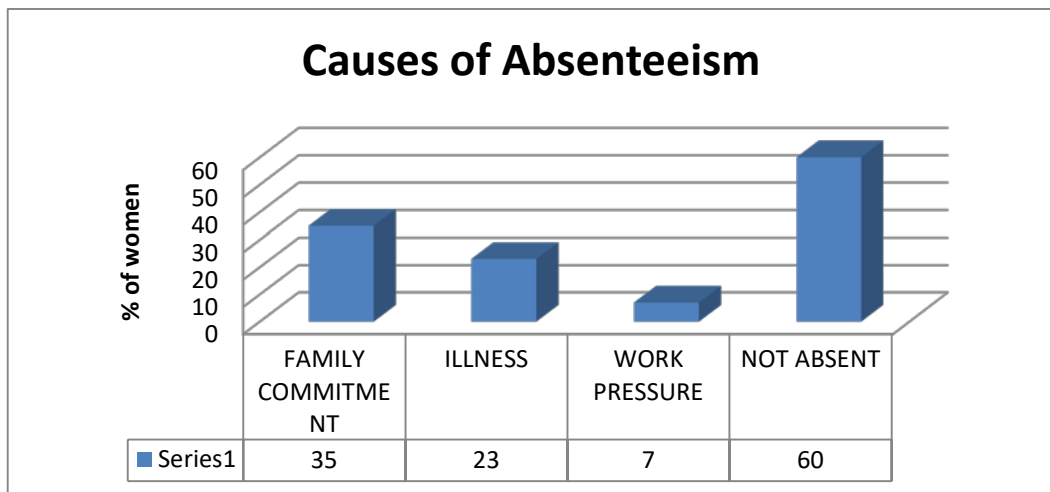


Graph 5.104: Nature of menstrual cycle



Graph 5.105: Intensity of pain during menstrual cycle

On an average 58% of women remain **absent** for 1-2 days and 17% for 2 days per month and graph 5.106 shows the common causes for absenteeism. In past 6 months women were victim of the following common illnesses as shown in table 5.64. All of them have undergone proper **treatment** for common illness. Women have been victim of various specific illnesses such as swelling in legs, hypertension and diabetes mellitus and psychiatric problems as listed in table 5.65.



Graph 5.106: Common causes for absenteeism.

Table 5.64: List of common illnesses faced by women.

Sl no.	Illness	Percentage (%)
1.	Headache	54%
2.	Cough and cold	36%
3.	Fever	23%
4.	Low BP	3%
5.	Anemia	16%
6.	Burning sensation while passing urine	4%
7.	Typhoid	1.16%
8.	Gastric	16%
9.	Thyroid	1.16%
10.	Acidity	2%

Table 5.65: List of psychiatric problems faced by women.

Psychiatric Problems faced	Percentage of women
Anxiety	38%
Depression	18%
Palpitations	24%
Insomnia	10%

Table 5.66 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 14% of women feel uncomfortable to work in sitting position for long hours. As result women have been victim of various symptoms as shown in table 5.67.

Table 5.66: Physical factors involved at work.

<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	-	-	-	-	100%
Forceful exertion	100%	-	-	-	-
Static contraction	100%	-	-	-	-
Prolonged static loads	100%	-	-	-	-
Bending	100%	-	-	-	-
Twisting	100%	-	-	-	-
Stretching	100%	-	-	-	-
Extending	100%	-	-	-	-
Heavy weight lifting	100%	-	-	-	-
Sustained sitting	-	-	-	-	100%
Sustained standing	100%	-	-	-	-

Table 5.67: Common symptoms associated with physical factors affecting women health.

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	37%	12%	42%	-	9%
Cramping	74%	6%	12%	8%	-
Carelessness	100%	-	-	-	-
Dizziness	76%	6%	18%	-	-
Numbness	84%	16%	-	-	-
Stiffness	96%	-	4%	-	-
Tiredness	22%	6%	18%	12%	42%
Tangling	100%	-	-	-	-

71% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.68.

Table 5.68: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Right shoulder	36%
Left shoulder	36%
Upper back	48%
Lower back	96%
Right forearm	14%
Left forearm	14%
Right thigh	56%
Left thigh	56%
Right ankle	88%
Left ankle	88%

High pain is experienced in following parts as shown in table 5.69.

Table 5.69: List of body parts with high pain

High pain experienced in-	Percentage (%) of woman
Head	12%
Lower back	74%




Low pain is experienced in following parts as shown in table 5.70.




Table 5.70: List of body parts with low pain

Low pain experienced in-	Percentage (%) of woman
Neck	12%
Right ankle	8%
Left ankle	8%

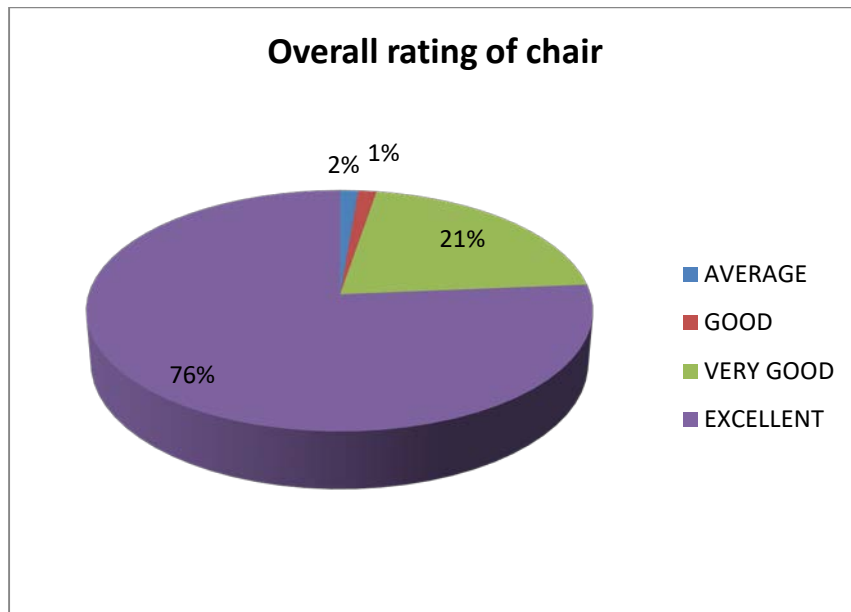
Bad posture for long time and long working periods are the major causes of pain. 76% women experienced the pain gradually and 76% claim that the pain is intermittent. 100% women believe that physical activities at work are the main reason for pain and hence 51% women remain absent from work due to extreme pain. 42% women feel that inadequate rest interval at work are also the contributors to pain. Women face difficulty in carrying out various activities as shown in table 5.71. The difficulty levels are recognized as never, little bit, moderate and extreme. As per the survey there are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly.

Table 5.71: Level of difficulty experienced in carrying out various activities.

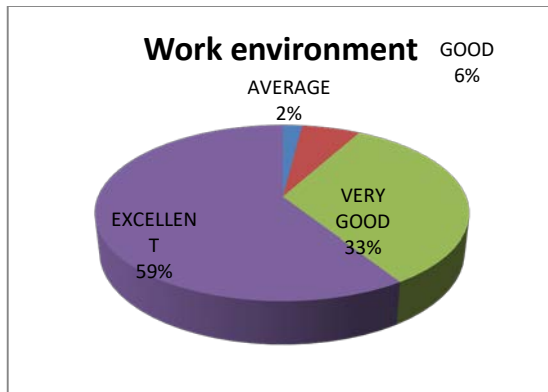
<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	96%	4%	-	-
 Sitting	96%	4%	-	-
 Walking	100%	-	-	-

 Laying	88%	6%	6%	-
 While climbing stairs	100%	-	-	-
 Stooping	90%	8%	2%	-

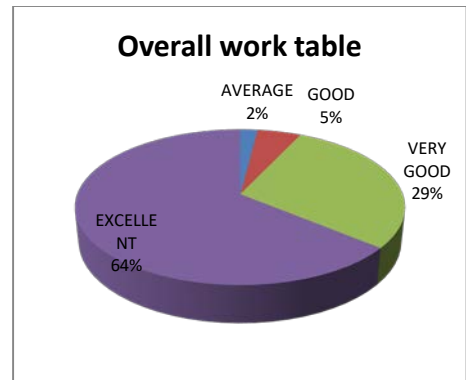
In sewing section, chairs have been provided to all the tailors and operators, which cannot be adjusted in terms of height. 100% women said the chairs provided to them are comfortable. 18% women think that the fans provided to them are not sufficient. Women are comfortable to work in sitting position for long duration. 56% women have been provided with personal protective equipments like masks and gloves, but only 18% of them use it. The ratings for chair provided to them, work environment and overall work table in terms of height, space and adjustable features given by women in sewing section is as shown in graphs 5.107, 5.108 and 5.109 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.107: Overall rating of chair.



Graph 5.108: Ratings for work environment.



Graph 5.109: Ratings for overall work table in terms of height, space and adjustable features

5.5.3 Ironing section:

100% of women are married. – they need to manage both home and work. 75% of women have nuclear family – no elders to help in household chores. 88% of them have children – they need to look after kids, do household chores and work. 100% live in rented house – major part of their salary goes in paying off house rent. 12% women come to company by walk- they will be tired by the time they reach work place. 50% of women working in ironing section are satisfied and 50% women are moderately satisfied. 88% women have experience less than one year. 12% women have dull vision. 100% women maintain good overall hygiene. 25% women maintain moderate oral hygiene and the problem of bad breath prevails in 12% of the women. 62% women maintain moderate skin hygiene. Exposure to dust (12%), exposure to extreme heat (100%), rashes/itching/allergies (12%), and dandruff (63%) are the major problems women face. 63% women have regular menstruation cycles and 25% have irregular cycles, while 12% have attained menopause. 25% women experience severe pain during menstruation and for 63% of women it is mild. In 100% of women illness was not reported before employment, whereas after employment 12% of women experience illness not so often. While 50% women does not remain absent, 12% women remain absent for 1 day and 38% for 2-3 days per month. Main reasons for absence are: illness (38%) and family commitment (38%). In past 6 months' women were victim of the following common illness as shown in table 5.72.

Table 5.72: List of common illness

Sl no.	Illness	Percentage (%)
1.	Headache	75%
2.	Cough and cold	38%
3.	Fever	25%
4.	Stomach pain	12%
5.	Anemia	12%

100% have undergone proper **treatment** for common illness. Women have been victim of following specific illnesses: Difficulty in breathing (12%), swelling of legs (12%), diabetes mellitus (12%). 75% women suffer from anxiety, 63% women suffer from depression at work place, 50% women suffer from palpitations and 38% women suffer from insomnia. 100% of women need to do repetitive work all the time, 63% women experience forceful exertion all the time, stretching- often (12%), all the time (25%); extending- often (12%), all the time (25%); and sustained standing all the time (100%). 25% women have suffered from burns. 75% of women are uncomfortable to work in standing position for long hours. As a result, they have been experiencing the following:

Aching: 100%-all the time

Cramping: 25%-sometimes, 50%-often, 25%-all the time

Dizziness: 25% -often

Numbness: 25%-sometimes, 25%-often, 38%-all the time

Stiffness: 38%-sometimes, 38%-often, 12%-all the time

Tiredness: 12%-rarely, 38%-sometimes, 25%-all the time

88% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.73.

Table 5.73: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	25%
Neck	50%
Right shoulder	38%
Left shoulder	38%
Upper back	38%
Lower back	38%

Right forearm	25%
Left forearm	25%
Right wrist	25%
Left wrist	25%
Right fingers	25%
Left fingers	25%
Right thigh	50%
Left thigh	50%
Right knee	50%
Left knee	50%
Right ankle	88%
Left ankle	88%

High pain is experienced in following parts as shown in table 5.74.

Table 5.74: List of body parts with high pain

High pain experienced in-	Percentage (%) of woman
Head	12%
Lower back	12%







Low pain is experienced in following parts as shown in table 5.75.

Table 5.75: List of body parts with low pain

Low pain experienced in-	Percentage (%) of woman
Head	12%
Right fingers	12%
Left fingers	12%

Women think the reason behind their pain is: standing in bad posture for long time - 88%, long working periods-88% and incorrect way of lifting a load – 12%. 88% women experienced the pain gradually and 88% claim that the pain is intermittent.100% women believe that physical activities at work and 63% feel that inadequate rest intervals at work are the main contributors to pain. Hence 75% women remain absent from work due to extreme pain. As a result, they have been experiencing pain in doing activities as shown in table 5.76.

Table 5.76: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	-	12%	25%	38%
 Sitting	-	12%	25%	38%
 Walking	-	12%	25%	25%
 Laying	-	12%	25%	38%
 While climbing stairs	-	12%	25%	25%
 Stooping	-	12%	25%	25%

As per the survey there are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly.

The tables in ironing section are not adjustable. 63% women say that they are not comfortable to work in standing position for long duration. 25% women say that there are no sufficient fans and ventilation in the activity area. 88% women feel that the level of exposure to heat is high. None

of them have been provided with personal protective equipment. 75% women say that the iron box is heavy to lift and 50% say that it is not heavy. The overall rating of chair is: Excellent - 12%, very good—50%, good – 38%. The rating of overall work table in terms of height, space, adjustable features is: Excellent - 12%, very good—50%, good – 38%.

5.5.4 Finishing section:

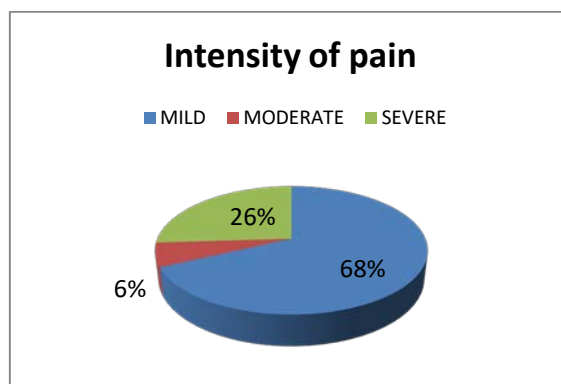
90% of women are married, 7% are single and 3% women are widowed. They need to manage both home and work. 94% of women have nuclear family and 6% live in joint family. 93% of them have children whom have to be looked after. 100% live in rented house and a major part of their salary goes in paying off house rent. 29% come to company by Walk, they will be tired by the time they reach work place.

61% of women working in finishing section are moderately satisfied whereas 36% are completely satisfied and 3% women are not satisfied with their job. 10% women have dull vision. 100% women have good overall hygiene. 97% maintain good and 3% maintain moderate oral hygiene. Oral ulcer, gum disease and bad breathe are the common oral problems women face. 100% women maintain good skin hygiene. But exposure to dust and heat are two common problems women face who work in finishing section.

One of the common issues associated with women health is their menstrual cycle. The nature of menstrual cycle may vary from regular to irregular as shown in graph 5.110. The intensity of pain associated with the menstrual cycle for each woman also varies as shown in graph 5.111.



Graph 5.110: Nature of menstrual cycle.

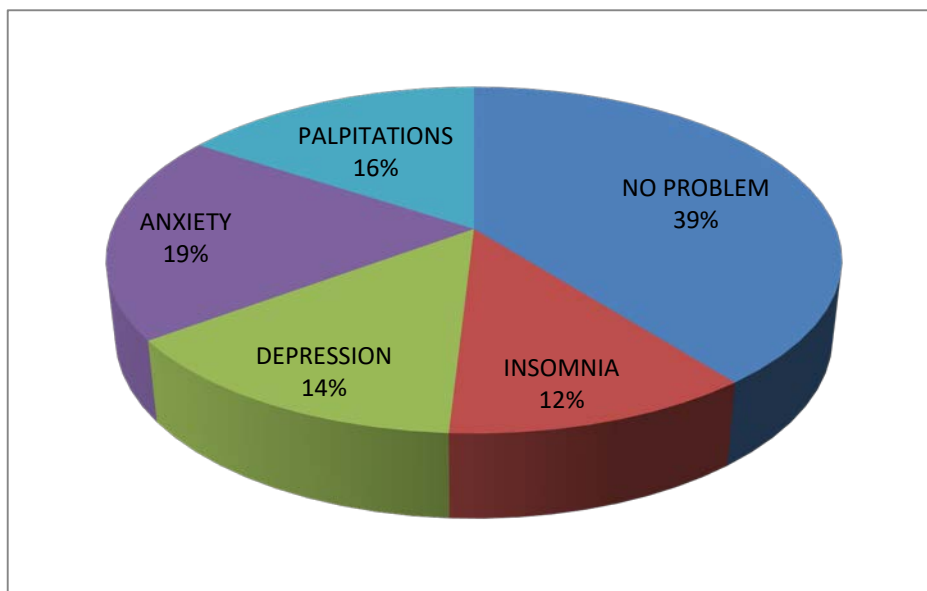


Graph 5.111: Intensity of pain during menstrual cycle.

On an average 6% of women remain absent for 1 day, 3% for 1-2 days, 3% for 2 days, 23% for 2 to 3 days and 3% for 3 days and 6% for more than 4 days per month. The causes of absenteeism are family commitment (45%) and illness (45%). In past 6 months women were victim of the following common illnesses as shown in table 5.77. 71% have undergone proper treatment for common illness whereas 29% had no illness. Swelling of legs and hypertension are two major specific illnesses faced by women. They have been victim of various psychiatric problems as shown in graph 5.112.

Table 5.77: List of common illnesses faced by women.

Sl no.	Illness	Percentage (%)
5.	Headache	61%
6.	Cough and cold	29%
7.	Fever	26%
8.	Others – chest pain due to gastric	3%
9.	Others – gastric	6%
10.	Others – appendix operation & hysterectomy	3%



Graph 5.112: Psychiatric problems faced by women.

Table 5.78 shows the physical factors involved at work which in turn affect women health and the percentage of women who claim such a constraint during their work. 26% of women feel uncomfortable to work in standing position for long hours. As result women have been victim of various symptoms as shown in table 7.4.3.

Table 5.78: Physical factors involved at work.

<i>Physical factor</i>	<i>Frequency of activity</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Repetitive work	-	-	-	-	100%
Forceful exertion	100%	-	-	-	5%
Static contraction	100%	-	-	-	-
Prolonged static loads	100%	-	-	-	-
Bending	100%	-	3%	-	3%
Twisting	100%	-	-	-	-
Stretching	100%	-	-	-	3%
Extending	100%	-	-	-	3%
Heavy weight lifting	100%	-	-	-	3%
Sustained sitting	97%	-	-	-	3%
Sustained standing	3%	-	-	-	97%

Table 5.79: Common symptoms associated with physical factors affecting women health.

<i>Symptoms</i>	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	6%	6%	3%	10%	75%
Cramping	23%	10%	51%	13%	3%
Carelessness	100%	-	-	-	-
Dizziness	100%	-	-	-	-
Numbness	23%	10%	51%	13%	3%
Stiffness	39%	13%	35%	10%	3%
Tiredness	26%	6%	23%	42%	3%
Tangling	100%	-	-	-	-

71% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.80.

Table 5.80: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Right shoulder	33%
Left shoulder	33%
Upper back	94%
Lower back	94%

Right forearm	26%
Left forearm	26%
Right thigh	71%
Left thigh	71%
Right ankle	96%
Left ankle	96%

High pain is experienced in following parts as shown in table 5.81.

Table 5.81: List of body parts with high pain

High pain experienced in-	Percentage (%) of woman
Head	19%
Lower back	74%







Low pain is experienced in following parts as shown in table 5.82.

Table 5.82: List of body parts with low pain

Low pain experienced in-	Percentage (%) of woman
Neck	12%

Bad posture for long time and long working periods are the major causes of pain. 100% women experienced the pain gradually and 100% claim that the pain is intermittent. 100% women believe that physical activities at work are the main reason for pain and hence 51% women remain absent from work due to extreme pain. 42% women feel that inadequate rest interval at work are also the contributors to pain. Women face difficulty in carrying out various activities as shown in table 5.83. The difficulty levels are recognized as never, little bit, moderate and extreme. As per the survey there are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly.

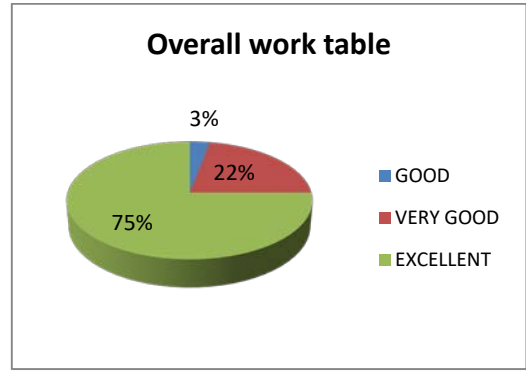
Table 5.83: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	81%	3%	9%	6%
 Sitting	84%	3%	9%	3%
 Walking	97%	-	-	3%
 Laying	94%	-	-	6%
 While climbing stairs	94%	3%	-	3%
 Stooping	91%	3%	-	6%

In finishing section, the tables are not adjustable. There is no seating arrangement in workstation for 100% women. None of them have been provided with personal protective equipments like masks and gloves. The ratings for work environment and overall work table in terms of height, space and adjustable features given by women in finishing section is as shown in graphs 5.113 and 5.114 respectively. The rating scale is: poor, average, good, very good and excellent.



Graph 5.113: Ratings for work environment.



Graph 5.114: Ratings for overall work table in terms of height, space and adjustable features.

5.5.5 Packaging section:

65% of women are married – they need to manage both home and work. 76% of women have nuclear family – no elders to help in household chores. 65% of them have children – they need to look after kids, do household chores and work. 12% women have no support from their family. 94% live in rented house– major part of their salary goes in paying off house rent. 92 % of them are from within Bangalore and 8% are from outskirts of Bangalore (from Ramanagara). 18% come to company by Walk – they will be tired by the time they reach work place. 82% of women working in packing section are moderately satisfied and 18% women are satisfied. 59% women have experience less than 1 year.

24% have dull vision. 100% women maintain good overall hygiene. 12% women maintain moderate oral hygiene. Bad breathe (18%) and gum diseases (18%) are the major oral problems women face. 6% women maintain moderate skin hygiene. Exposure to dust (76%), exposure to extreme heat (76%) and dandruff (6%) are the major oral and skin problems women face. 70% of women have regular menstruation cycles, 12% have irregular cycles and 18% have attained menopause. 41% experience severe pain in abdomen during menstruation, and 41% experience mild pain. 53% women does not remain absent and 29% of women remain absent for 1-2 days, 6% for 2 days, and 12% for more than 4 days per month. Main reasons for absence are illness (47%), family commitment (47%). In past 6 months' women were victim of the following common illness as shown in table 5.84.

Table 5.84: List of common illness

Illness	Total	%
Cough and cold	10	59
Headache	10	59
Fever	2	12
Bleeding per rectum	2	12
No problem	3	18
Others-eye pain	1	6
Others-asthma	1	6
Others-gastric	4	24
Others- stomach pain due to heat	1	6

100% have undergone proper treatment for common illness. Women have been victims of following specific illnesses: Swelling of legs - 18%, hypertension 6%, diabetes mellitus 6%, difficulty in breathing 6%. 29% women suffer from anxiety, 24% women suffer from depression at work place, 18% women suffer from palpitations and 18% women suffer from insomnia. 100% of women need to do repetitive work and forceful exertion all the time and sustained standing (100%) all the time. 12% of women feel uncomfortable to work in standing position for long hours. As a result, they have been experiencing the following symptoms as shown in table 5.85.

Table 5.85: List of symptoms

Symptoms	<i>Frequency of occurrence</i>				
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>All the time</i>
Aching	-	12%	47%	29%	12%
Cramping	12%	12%	65%	12%	-
Carelessness	94%	6%	-	-	-
Dizziness	100%	-	-	-	-
Numbness	29%	-	65%	6%	-
Stiffness	18%	6%	65%	12%	-
Tiredness	12%	-	41%	41%	6%
Tangling	94%	-	6%	-	-

76% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.86

Table 5.86: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	24%
Neck	24%
Right shoulder	24%
Left shoulder	24%
Upper back	29%
Lower back	29%
Right forearm	41%
Left forearm	41%
Right wrist	41%
Left wrist	41%
Right fingers	41%
Left fingers	41%
Right thigh	47%
Left thigh	53%
Right knee	76%
Left knee	76%
Right ankle	65%
Left ankle	65%

High pain is experienced in following parts as shown in table 5.87.

Table 5.87: List of body parts with high pain

High pain experienced in-	Percentage (%) of woman
Right shoulder	6%
Left shoulder	6%

Mild pain is experienced in following parts as shown in table 5.88.







Table 5.88: List of body parts with mild pain

Mild pain experienced in-	Percentage (%) of woman
Head	6%

Women think the reason behind their pain is: standing in bad posture for long time - 76%, long working periods-76%. 76% women experienced the pain gradually and 76% claim that the pain is intermittent. 94% women believe that physical activities at work and 59% say that inadequate

rest intervals at work are the main reason for pain and hence 100% women remain absent from work due to extreme pain. As a result, they have been experiencing pain in doing activities as shown in table 5.89.

Table 5.89: Level of difficulty experienced in carrying out various activities.

<i>Activity</i>	<i>Difficulty level</i>			
	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
 Standing	65%	12%	6%	17%
 Sitting	65%	17%	-	17%
 Walking	65%	17%	-	17%
 Laying	65%	17%	-	17%
 While climbing stairs	71%	17%	-	12%
 Stooping	71%	17%	-	12%

As per the survey there are no issues concerning general amenities provided to workers, except that the toilets have to be cleaned regularly. The tables are not adjustable (100%). 6% women are not comfortable to work in standing position for long duration. 25% women say that there are no sufficient fans and ventilation in activity area. There is no seating arrangement in workstation for 100% women. None of them have been provided with personal protective equipment like masks. 12% have rated the work environment as excellent, 59% as very good and 29% as good. The rating of overall work table in terms of height, space, adjustable features is: excellent -12%, very good – 59%, good -29%.

5.6 Data Analysis of the survey carried out at Sri Lakshmi Designs, Bengaluru.

5.6.1 Cutting section:

50% of women are married and 50% are widowed; they need to manage both home and work. 50% of women have nuclear family where there are no elders to help in household chores. 100% of them have children whom have to be looked after. 50% women have no support from their family. 100% women live in rented house and major part of their salary goes in paying off house rent. 100% women come to company by Walk - they will be tired by the time they reach work place. 50% of women working in cutting section are satisfied with their job and 50% are moderately satisfied. 50% women have experience less than 1 year. 50% women have dull vision. 100% of women maintain good skin hygiene. Exposure to dust and exposure to extreme heat are the major problems women face. 100% of women remain absent for 2-3 days and the main reasons for absence is illness (100%) and family commitment (100%). 100% women have regular menstruation cycles. 50% women experience severe pain during menstruation and for 50% of women it is mild. In past 6 months women were victim of the following common illness: Headache -50%, cough and cold - 50%, fever -50%, anemia – 50%. The percentage of women who underwent treatment for common illness is 50% and that who took proper treatment is 50%. 50% women suffer from anxiety, 50% women suffer from depression at work place, 50% women suffer from palpitations and 50% women suffer from insomnia.

100% of women need to do repetitive work all the time, experience forceful exertion often (100%), need to bend often (100%) and sustained standing (100%) all the time. As a result they have been experiencing aching (100%)-all the time, cramping (50%)- often, numbness (100%)-often, stiffness – rarely(50%) and often (50%)and tiredness (100%) –often. 100% women are NOT suffering from pain in their body, though they believe that physical activities at work are the main reason for pain(100%) and hence they (100%) remain absent from work due to extreme pain. Women face moderate difficulty in standing (8%) and extreme difficulty in laying (8%) , while climbing stairs (8%)and stooping (8%). There is no canteen facility; availability of first aid box is moderate, no medical room and thus no doctor / nurse available in case of injuries or accident. Working condition of fire alarms and availability of first aid boxes is moderate

In cutting section, the tables are not adjustable (100%). There is no seating arrangement in workstation for 100% women. 100% women have been provided with personal protective equipment like masks and cotton hand gloves, but only 50% of them use it. 50% women are not comfortable to work with personal protective equipment. 100% have rated the work environment as very good. The rating of overall work table in terms of height, space, adjustable features is: very good – 100%.

5.6.2 Sewing section:

85% of women are married and 2% women are widowed – they need to manage both home and work. 89% of women have nuclear family where there are no elders to help in household chores. 77% of them have children – they need to look after kids, do household chores and work. 5% women have no support from their family members. 87% live in rented house – major part of their salary goes in paying off house rent. 33% come to company by Walk and 11 % come by city bus, 1% by private bus and 1% by Tata Ace– they will be tired by the time they reach work place. 54% of women working in sewing section are moderately satisfied and 46% are satisfied. 11% women have experience less than 1 year. 6% have dull vision. 5% maintain moderate oral hygiene - Dry mouth (2%), oral ulcers (8%), bad breathe (2%) , gum diseases (10%) and tonsils (1%) are the major problems women face. 4% (3) maintain moderate skin hygiene.

Exposure to dust (82%), Dry skin (1%), rashes/itching/allergies (2%), dandruff (21%) and exposure to extreme heat (57%) and hair fall (2%) are the major problems women face.

96% of women have regular menstruation cycles, 2% women have irregular cycles and 1% have attained menopause. 23% experience severe pain in abdomen during menstruation, 23% experience moderate pain and 52% experience mild pain. On an average 4% of women remain absent for 1 day, 27% for 1-2 days, 1% for 2 days, 6% for 2-3 days, 2% for 3-4 days and 4% for more than 5 days per month. Main reasons for absence are: illness (44%), family commitment (44%) and lack of transportation service (1%). In past 6 months' women were victim of the following common illness as shown in table 5.90.

Table 5.90: List of common illness

SL	Illness	No. of women	Percentage %)
1.	Headache	52	62%
2.	Cough and cold	38	45%
3.	Fever	31	37%
4.	Dengue	1	1%
5.	Low BP	6	7%
6.	Anemia	15	18%
7.	Chickungunya	1	1%
8.	Burning sensation while	2	2%

	passing urine		
9.	Typhoid	1	1%
10.	Gastric	4	5%
11.	Excess body heat + body pain	1	1%
12.	Sore throat	2	2%
13.	Hyper thyroid + vomiting	1	1%
14.	Less WBC count	1	1%
15.	Backache	1	1%
16.	Hypo Thyroid	1	1%
17.	White menstruation	3	4%

81% have undergone proper treatment for common illness and 8% have not undergone any treatment. Women have been victims of following specific illnesses: Swelling of legs - 14%, diabetes mellitus- 1%. 38% women suffer from anxiety, 10% women suffer from depression at work place, 17% women suffer from palpitations and 15% women suffer from insomnia.

100% of women need to do repetitive work all the time; experience forceful exertion - all the time (4%) and often (2%); bending - all the time (2%), often (2%), sometimes (2%); stretching - often (1%), heavy weight lifting – sometimes (1%), often (1%), all the time (4%); sustained sitting – rarely (1%), sometimes (7%), often (5%), all the time (62%); sustained standing – sometimes (6%), often (5%), all the time (27%). 12% of women feel uncomfortable to work in standing position for long hours. As a result, they have been experiencing the following:

Aching: 21%-rarely, 32%-sometimes, 30%-often & 12% -all the time

Cramping: 7%-rarely, 17%-sometimes, 24%-often & 2% -all the time

Carelessness: 1%- rarely

Dizziness: 4% -sometimes, 2% -often, 1%-all the time,

Numbness: 4%-rarely, 18%- sometimes, 19%- often, 2% - all the time

Stiffness: 5%-rarely, 13%- sometimes, 22%- often, 2% - all the time

Tiredness: 25%-rarely, 42%- sometimes, 20%- often, 9% - all the time.

45% women are suffering from pain in their body. Severe pain is experienced in all body parts as shown in table 5.91.

Table 5.91: List of body parts with severe pain

Severe experienced in-	pain	Percentage (%) of woman
Head		6%
Neck		5%
Right shoulder		10%
Left shoulder		10%
Upper back		20%
Lower back		20%
Right forearm		6%
Left forearm		6%
Right wrist		2%
Left wrist		2%
Right fingers		4%
Left fingers		4%
Right thigh		5%
Left thigh		5%
Right knee		19%
Left knee		19%
Right ankle		22%
Left ankle		22%

Women think the reason behind their pain is: standing in bad posture for long time - 45%, long working periods-45%, incorrect way of lifting a load- 1%, health problem -2%. 45% women experienced the pain gradually and 42% claim that the pain is intermittent and 4% claim that pain is constant. 90% women believe that physical activities and 10% think that inadequate rest intervals at work are the main contributors to pain. Hence 57% women remain absent from work due to extreme pain. Women face extreme difficulty in : standing (12%), sitting(7%), walking(4%) ,laying(8%) and stooping (6%). There is no canteen facility; no medical room and thus no doctor / nurse available in case of injuries or accident. Working condition of fire alarms and availability of first aid boxes is moderate.

Chairs have been provided to all the tailors and operators in sewing section. They cannot be adjusted in terms of height. 100% women said the chairs provided to them are comfortable, their sewing machines are in good condition, there are sufficient windows/doors in activity area which consists of sufficient fans and ventilation and the fans are in good working condition. 30% women claim they have suffered from various injuries during work such as, needle injury, trimmer injury, scissor injury, blade injury, thread injury and toe nail got cut because of chair injury. Only 11% women have been provided with personal protective equipment like masks, , but only 4% of them use it. The overall rating of chair is: excellent-44%, very good—26%,

average – 1% and not applicable – 29%. 49% have rated the work environment as excellent, 43% as very good and 8% as good. The rating of overall work table in terms of height, space, adjustable features is: excellent -55%, very good – 39%, good -6%.

5.6.3 Ironing section:

50% of women are married and 50% women are divorced – they need to manage both home and work. 50% of women have nuclear family – no elders to help in household chores. 100% of them have children – they need to look after kids, do household chores and work. 50% women have no support from their family members. 100% live in rented house – major part of their salary goes in paying off house rent. 100% of women working in ironing section are satisfied. 100% women have dull vision. 100% women maintain good overall hygiene and oral and skin hygiene. Exposure to dust (50%) and exposure to extreme heat (100%) are the major problems women face. 50% women have regular menstruation cycles while 50% have attained menopause. 50% women remain absent for 1-2 days and 50% for 3-4 days per month. Main reasons for absence are: illness (100%) and family commitment (100%). In past 6 months women were victim of the following common illness as shown in table 5.92.

Table 5.92: List of common illness

Sl no.	Illness	Percentage (%)
1.	Headache	100%
2.	Cough and cold	50%
3.	Fever	50%
4.	Low BP	50%

50% have undergone proper **treatment** for common illness and 50% have not undergone any treatment. 50% women suffer from anxiety, 50% women suffer from depression at work place, 50% women suffer from palpitations and 50% women suffer from insomnia. 100% of women need to do repetitive work all the time and sustained standing all the time(100%). 100% of women are comfortable to work in standing position for long hours. But some of them have been experiencing the following:

Aching: 50%-sometimes, 50%-often

Cramping: 50%-sometimes

Dizziness: 50% -often

Numbness: 50%- sometimes

Stiffness: 50%- sometimes

Tiredness: 50%- sometimes, 50%- often.

100% women are suffering from pain in their body. Severe pain is experienced in following body parts as shown in table 5.93. And **high** pain is experienced in right and left forearm/elbow.

Table 5.93: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Neck	50%
Right shoulder	50%
Left shoulder	50%
Upper back	100%
Right knee	100%
Left knee	100%
Right ankle	22%
Left ankle	22%

Women think the reason behind their pain is: standing in bad posture for long time - 100%, long working periods-100%. 100% women experienced the pain gradually and 100% claim that the pain is intermittent and 4% claim that pain is constant. 100% women believe that physical activities at work are the main contributors to pain. Hence 100% women remain absent from work due to extreme pain. There is no canteen facility; no medical room and thus no doctor / nurse available in case of injuries or accident. Working condition of fire alarms is moderate and availability of first aid boxes is poor (50%) and moderate (50%). The tables in ironing section are not adjustable. 50% women say that there are sufficient windows/doors in activity area while 50% say that they are not sufficient. 100% women say that there are no sufficient fans and ventilation in the activity area and 100% women say that the fans are not in good working condition. 100% women feel that the level of exposure to heat is high. None of them have been provided with personal protective equipment. 50% women say that the iron box is heavy to lift and 50% say that it is not heavy. None of them have been provided with mats to prevent from electric shock. The overall rating of chair is: very good—50%, good – 50%. The rating of overall work table in terms of height, space, adjustable features is: excellent -50% and good - 50%.

5.6.4 Finishing section:

75% of women are married– they need to manage both home and work. 100% of women have nuclear family – no elders to help in household chores. 56% of them have children – they need to look after kids, do household chores and work. 94% live in rented house and 6% live in paying guest – major part of their salary goes in paying off house rent. 38% come to company by Walk – they will be tired by the time they reach work place. 69% of women working in finishing section are moderately satisfied and 31% are satisfied. 50% women have experience

less than 1 year. 19% have dull vision. 12% maintain moderate oral hygiene. Dry mouth (6%), oral ulcers (6%) and gum diseases (19%) are the major problems women face. 12% maintain moderate skin hygiene. Exposure to dust (75%), dandruff (13%), rashes/itching/allergies (13%), and exposure to extreme heat (63%) are the major problems women face. 88% of women have regular menstruation cycles, 6% women have irregular cycles and 6% have attained menopause. 13% experience moderate pain and 81% experience mild pain. The following table 5.94 gives details of frequency of absence in a month.

Table 5.94: Frequency of absence in a month

Absence	Total	%
Not absent	6	38
1	2	12
1 TO 2	2	12
1 TO 3	*	
2	1	7
2 TO 3	2	12
3 DAYS	1	6
3 TO 4	2	7

Main reasons for absence are illness (63%), family commitment (50%). In past 6 months' women were victim of the following common illness as shown in table 5.95.

Table 5.95: List of common illness

Illness	No of women	%
No illness	6	38
Cough and cold	5	31
Fever	3	19
Headache	8	50
Typhoid	1	6
Others-anaemia	1	6
Others-gastric	1	6
Others- bodypain	1	6

The percentage of women who underwent treatment for common illness is 50% and that who took proper treatment is 56%. Women have been victims of following specific illnesses: Swelling of legs - 19%. 31% women suffer from anxiety, 19% women suffer from depression at work place, 25% women suffer from palpitations and 31% women suffer from insomnia. 100% of women need to do repetitive work - all the time, experience forceful exertion - all the time (6%), bending - all the time (6%), stretching – all the time (6%), extending - all the time (6%), heavy weight lifting – all the time (6%), sustained sitting – all the time (19%) and sustained standing- all the time (81%). 100% of women feel comfortable to work in standing position for long hours. Though they have been experiencing the following:

Aching: 13%-sometimes, 56%-often & 25% -all the time

Cramping: 6%-rarely, 6%-sometimes, 31%-often

Dizziness: 12% -sometimes

Numbness: 6%-rarely, 13%- sometimes, 25%- often

Stiffness: 6%-rarely, 13%- sometimes, 25%- often

Tiredness: 6%-rarely, 31%- sometimes, 44%- often, 6% - all the time.

69% women are suffering from pain in their body. Severe pain is experienced in all body parts as shown in table 5.96. And **high** pain is experienced in right and left forearm/elbow.

Table 5.96: List of body parts with severe pain

Severe pain experienced in-	Percentage (%) of woman
Head	12%
Neck	6%
Right shoulder	19%
Left shoulder	19%
Upper back	12%
Lower back	19%
Right forearm	19%
Left forearm	19%
Right wrist	12%
Left wrist	12%
Right fingers	6%
Left fingers	6%
Right thigh	19%
Left thigh	19%
Right knee	31%
Left knee	31%
Right ankle	56%
Left ankle	56%

Women think the reason behind their pain is: standing in bad posture for long time - 69%, long working periods-69%. 69% women experienced the pain gradually, 63% claim that the pain is intermittent and 6% say that the pain is constant. 100% women believe that physical activities at work are the main reason for pain and hence 88% women remain absent from work due to extreme pain. 100% women feel that inadequate rest intervals at work are the main contributors to pain. As a result, women face little difficulty in standing, sitting, walking, laying, while climbing stairs and stooping (6% each) and 6% women face extreme difficulty in laying. There is no canteen facility; no medical room and thus no doctor / nurse available in case of injuries or accident. Working condition of fire alarms is moderate and availability of first aid boxes is poor (12%) and moderate (88%). The working condition of machines in terms of performance is: good (19%), very good (6%). The tables are not adjustable (100%). There is no seating arrangement in workstation for 75% women. Only 6% women have been provided with personal protective equipment like masks, and none of them use it. 50% have rated the work environment as excellent, 44% as very good and 6% as good. The rating of overall work table in terms of height, space, adjustable features is: excellent -88%, very good – 12%.

5.6.5 Packaging section:

75% of women are married – they need to manage both home and work. 50% of women have nuclear family – no elders to help in household chores. 50% of them have children – they need to look after kids, do household chores and work. 100% live in rented house– major part of their salary goes in paying off house rent. 92% of them are from within Bangalore and 8% are from outskirts of Bangalore (from Ramanagara). 100% come to company by Walk – they will be tired by the time they reach work place. 50% of women working in packing section are moderately satisfied and 50% women are satisfied. 74% (3) women have experience less than 1 year. 25% have dull vision. 100% women maintain good overall hygiene and good oral and skin hygiene. Dry mouth (25%), exposure to dust (75%), rashes/itching/allergies (25%), exposure to extreme heat (25%) are the major oral and skin problems women face. 50% of women have regular menstruation cycles, 25 % have irregular cycles and 25% have attained menopause. 25% experience severe pain in abdomen during menstruation, and 50% experience mild pain. 75% women does not remain absent and 25% of women remain absent for 5 days per month. Main reasons for absence are illness (25%), family commitment (25%). In past 6 months' women were victim of the following common illness: Headache -50%, fever - 25%. The percentage of women who underwent treatment for common illness is 50% and that who took proper treatment is 50%. Women have been victims of following specific illnesses: Swelling of legs - 20%. 25% women suffer from anxiety, 25% women suffer from depression at work place, 25% women suffer from palpitations and 25% women suffer from insomnia. 100% of women need to do repetitive work all the time and sustained standing (100%) all the time. 75% of women feel uncomfortable to work in standing position for long hours. As a result, they have been experiencing:

Aching: 25%-sometimes, 50%-often & 25% -all the time

Cramping: 50%-sometimes

Numbness: 50%- sometimes

Stiffness: 25%-rarely, 25%- sometimes

Tiredness: 50%- sometimes.

75% women are suffering from pain in their body. Severe pain is experienced in - head(25%),neck (25%), right and left shoulder(25% each), upper and lower back (25% each), right and left forearm/elbow (25% each), right and left wrist/hand (25% each), right and left fingers (25% each), right and left thigh (25% each), right and left knee(25% each), right and left ankle (50% each). High pain is felt in – right and left forearm/elbow (25% each). Women think the reason behind their pain is: standing in bad posture for long time - 75%, long working periods-75%. 75% women experienced the pain gradually and 75% claim that the pain is intermittent. 100% women believe that physical activities at work are the main reason for pain and hence 50% women remain absent from work due to extreme pain. There is no canteen facility; no medical room and thus no doctor / nurse available in case of injuries or accident. Working condition of fire alarms is moderate and availability of first aid boxes is poor (25%) and moderate (75%). The tables are not adjustable (100%). 25% women are not comfortable to work in standing position for long duration. There is no seating arrangement in workstation for 100% women. Only 25% women have been provided with personal protective equipment like masks. 25% have rated the work environment as excellent, 50% as very good and 25% as good. The rating of overall work table in terms of height, space, adjustable features is: excellent -25%, very good – 50%, good -25%.

A comprehensive survey was carried out with the help of a predesigned questionnaire. The questionnaire was administered to the women workers in different sections of the four garment manufacturing units selected for the conduction of the research study. The data obtained through the questionnaire was summarized suitably using various graphical tools for better understanding of the prevailing practices, health problems faced by the workers and the difficulty levels perceived by the employees in carrying out different tasks.

Chapter 6

Factors affecting women's health in the selected manufacturing units

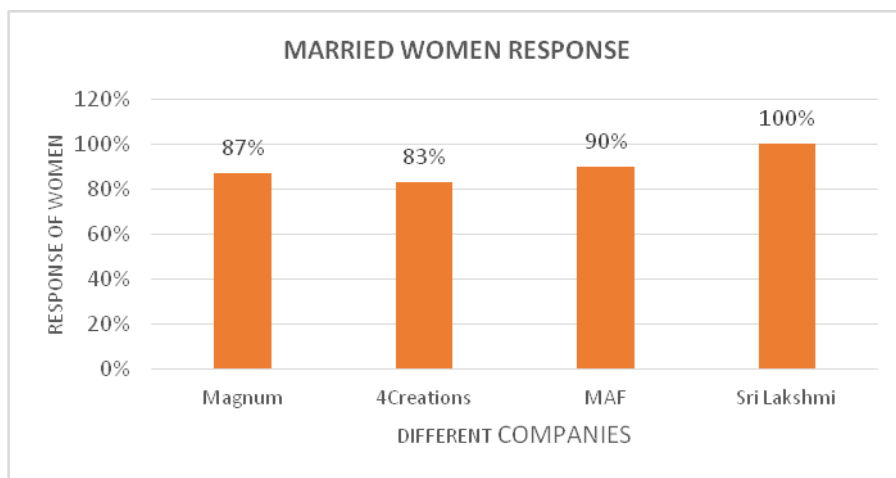
Analysis of the data obtained through the administration of questionnaire survey is documented for identifying the predominant factors affecting the health of women employees in the garment manufacturing units selected for the study. Along with the social- demographic profile of the workers, job satisfaction levels and overall hygiene including menstrual history, and reasons for absenteeism have been documented and analyzed. The questionnaire also elicited details pertaining to physical work such as repetitive nature of work, postures in doing work, work related body symptoms and the type of injuries employees were prone to earlier.

To corroborate the link between symptoms and physical work, the pain experiencing areas of the human body was also documented, along with the perceived cause of pain, frequency of pain occurrence. The difficulty levels experienced in carrying out different types of activity was also recorded. The details of physical workstation design associated comfort and availability of general amenities including doctor/nurse is collected. The following sections show the data and suitable analysis.

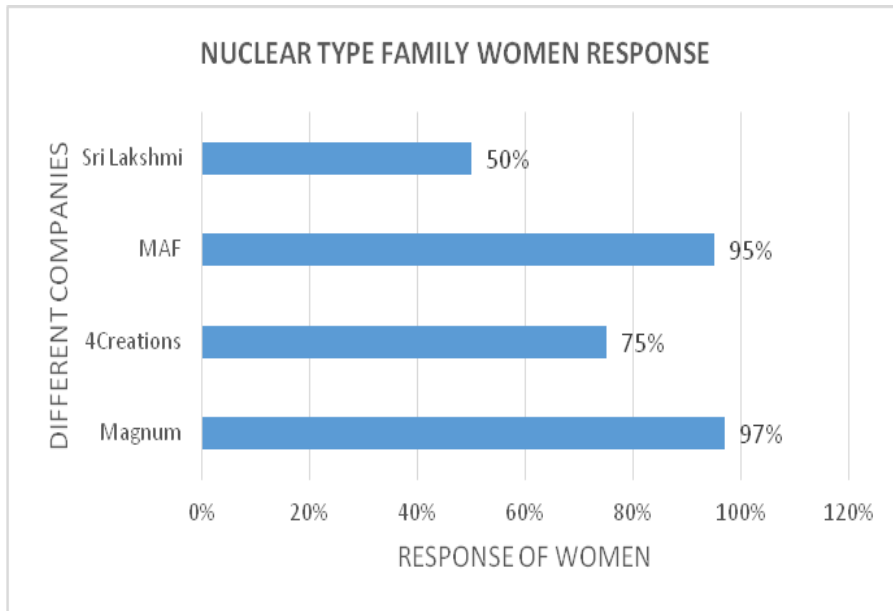
6.1 Cutting section:

A. Social-Demographic Profile of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Marital status- MARRIED	Magnum	87%	Women need to manage both home and work
	4Creations	83%	
	MAF	90%	
	Sri Lakshmi	100%	
Family Type – NUCLEAR FAMILY	Magnum	97%	No elders/other family members to help in household chores.
	4Creations	75%	
	MAF	95%	
	Sri Lakshmi	50%	
Children at home	Magnum	73%	Children need more care and attention than any other family member.
	4Creations	75%	
	MAF	86%	
	Sri Lakshmi	100%	

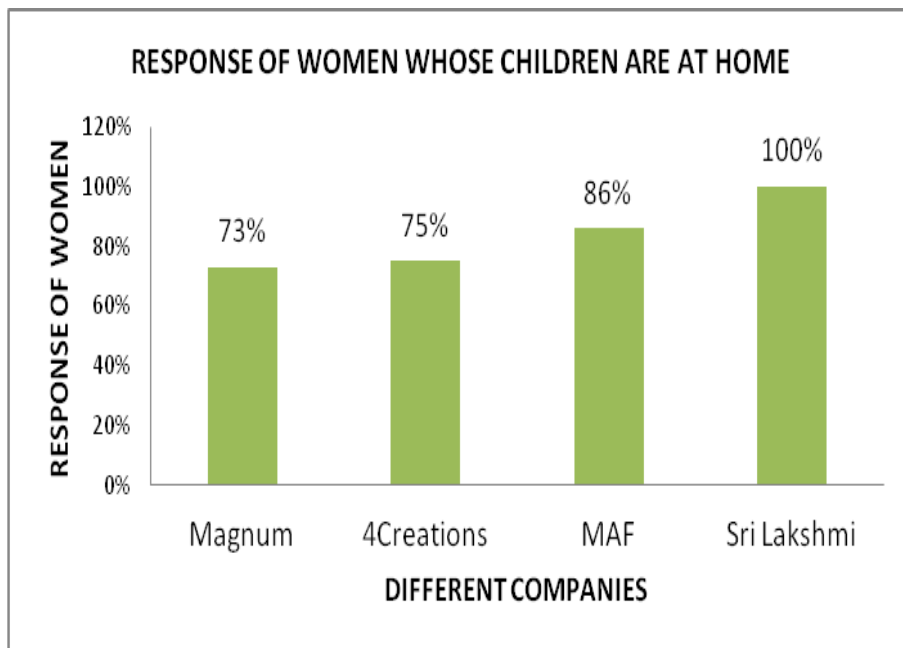
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Family Members Support - NO	Magnum	-	Having no support from their family members may put women under mental and physical stress because of the need to manage both household work and their career.
	4Creations	-	
	MAF	-	
	Sri Lakshmi	50%	
Accommodation– RENTED/PAYING GUEST	Magnum	81%	Major part of their salary goes in paying off house rent thus causing stress to earn more money.
	4Creations	75%	
	MAF	90%	
	Sri Lakshmi	100%	
Mode of Transportation to Office - WALK	Magnum	78%	They will be tired by the time they reach work place
	4Creations	8%	
	MAF	8%	
	Sri Lakshmi	100%	
Addiction- TOBACCO	Magnum	-	--
	4Creations	-	
	MAF	-	
	Sri Lakshmi	-	



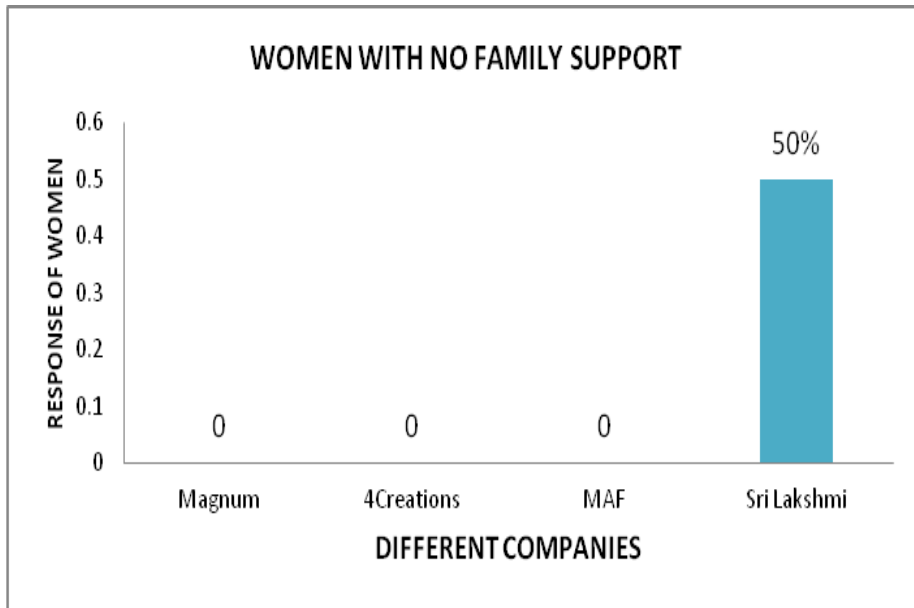
Graph 6.1: Married women response



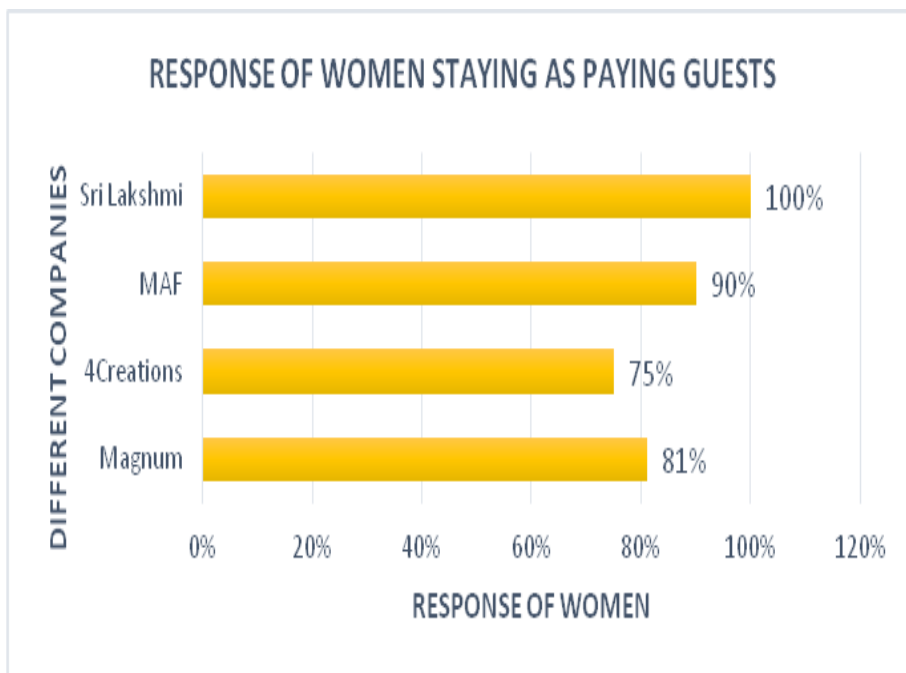
Graph 6.2: Nuclear type women response



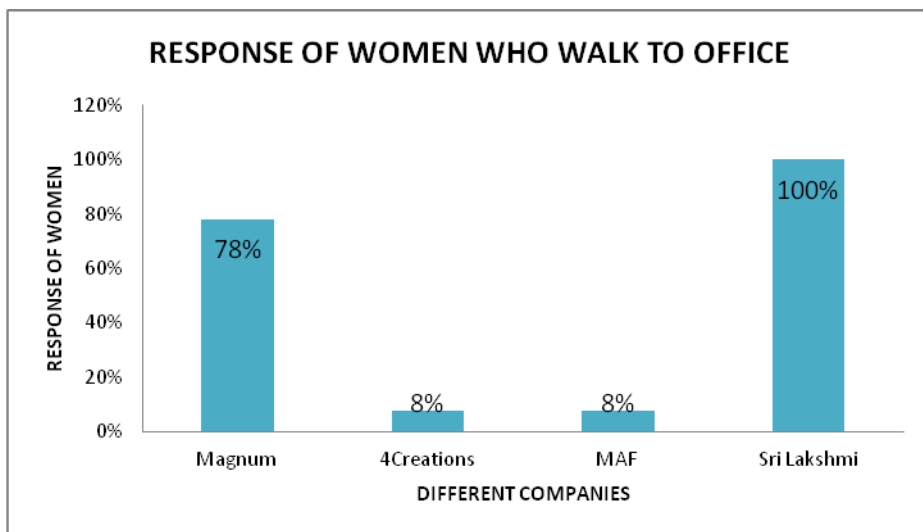
Graph 6.3: Response of women whose children are at home



Graph 6.4: Women with no family support

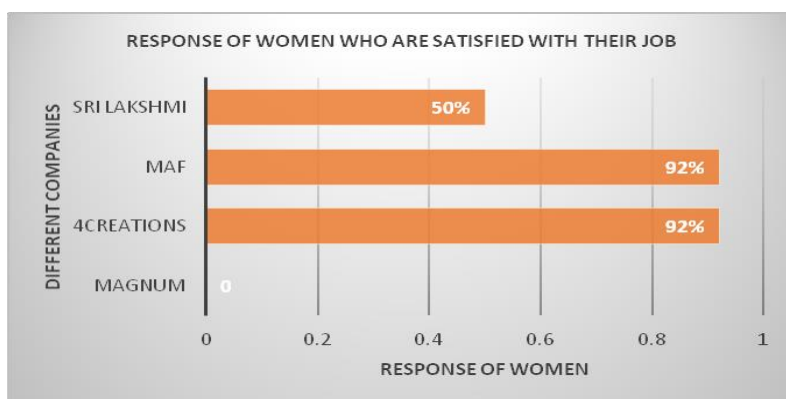


Graph 6.5: Response of women stayin as paying guests

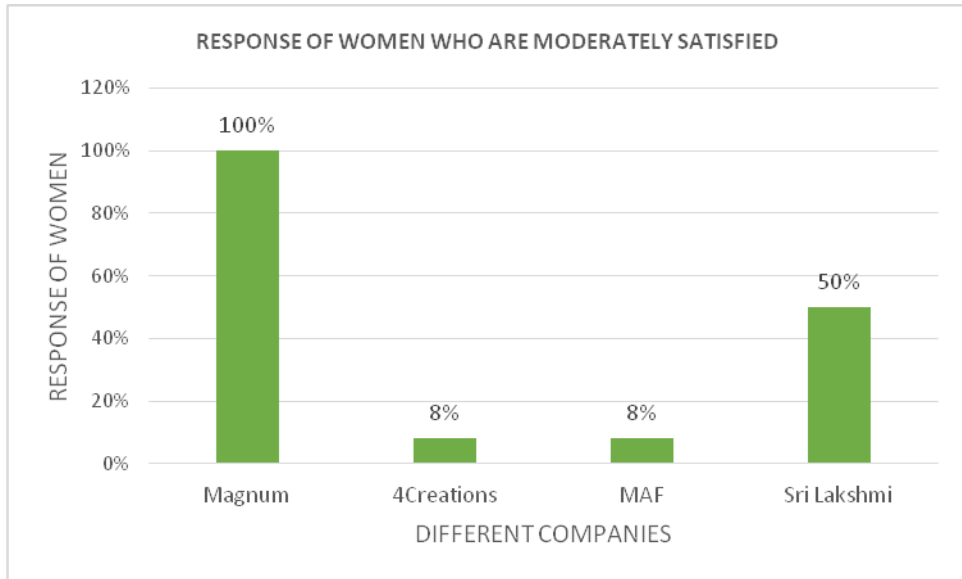


Graph 6.6 : Response of women who walk to office

B. Occupational Status of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Job Satisfaction Level - SATISFIED	Magnum	-	--
	4Creations	92%	
	MAF	92%	
	Sri Lakshmi	50%	
Job Satisfaction Level – MODERATELY SATISFIED	Magnum	100%	Women said they were not satisfied with their salaries, facilities like chairs, fans, break during work.
	4Creations	8%	
	MAF	8%	
	Sri Lakshmi	50%	



Graph 6.7: Response of women who are satisfied with their jobs



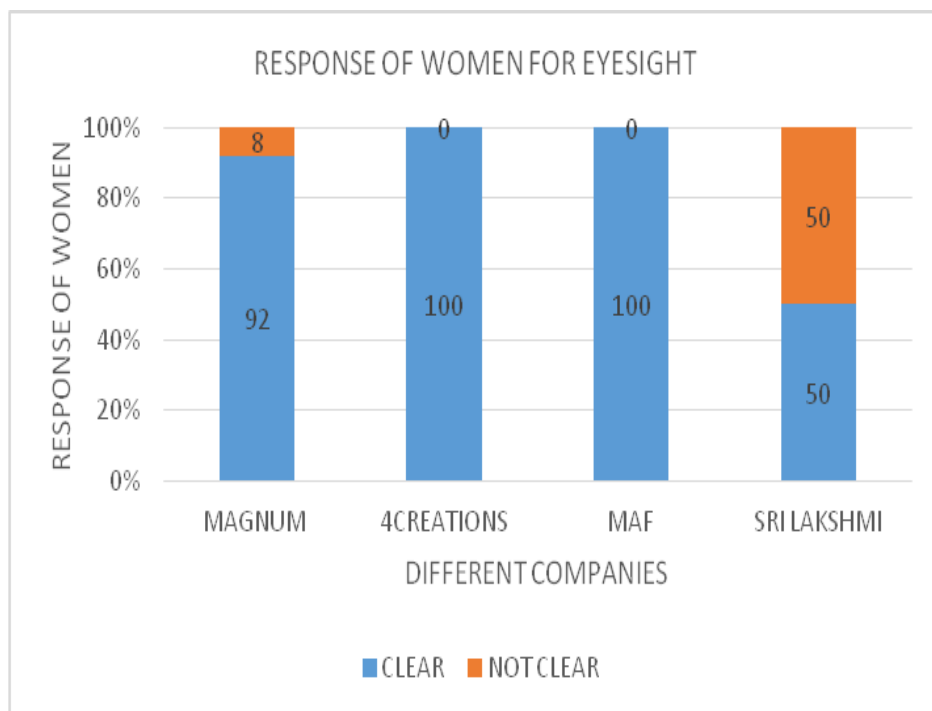
Graph 6.8: Response of women who are moderately satisfied

C. Women-Oriented Profile			
Identified factor affecting women health & productivity	Garment company	Response of women in %	Remarks
Eyesight *Clear-C *Dull-D	Magnum	C-92%, D-8%	
	4Creations	C-100%	
	MAF	C-100%	
	Sri Lakshmi	C-50%, D-50%	
	Lakshmi		
Hearing *Audible - A *Not audible – NA	Magnum	A-95%, NA-5%	
	4Creations	A-100%	
	MAF	A-100%	
	Sri Lakshmi	A-100%	
	Lakshmi		
Hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-14%, M-78%, P-8%	
	4Creations	G-100%	
	MAF	G-95%, M-5%	
	Sri Lakshmi	G-100%	
	Lakshmi		
Oral hygiene *Good-G	Magnum	G-14%, M-51%, P-35%	Common Oral problems faced by women:
	4Creations	G-42%, M-58%	

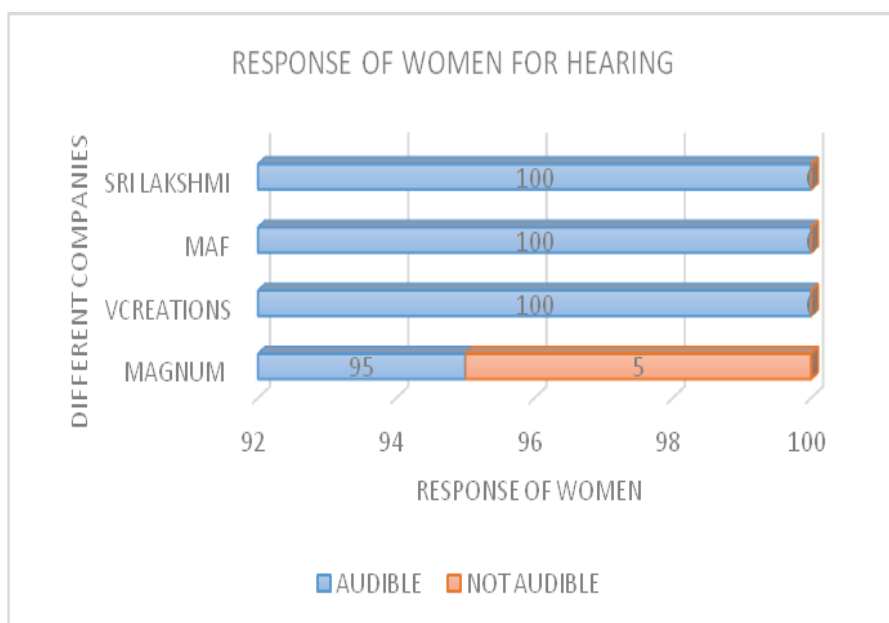
*Moderate-M *Poor- P	MAF	M-92%,P-8%		Dry mouth, oral ulcers, bad breathe, gum diseases, tonsils, cold sores
	Sri Lakshmi	G-100%		
Skin hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-11%,M-38%,P-51%		Common Skin problems faced by women: Dry skin, exposure to dust, exposure to extreme heat, rashes/itching/allergic problem, dandruff.
	4Creations	G-42%,M-50%,P-8%		
	MAF	G-90%,M-10%		
	Sri Lakshmi	G-100%		
Menstrual history: (i) Nature of cycle *Regular-R *Irregular-IR *Stopped-S) (ii) Intensity of pain *Mild-M *Moderate-MOD *Severe-Sv	Magnum	Cycle: R-81%, IR-11%, S-8% Pain: M-40%, MOD-14%,Sv-38%		
	4Creations	Cycle: R-75%, IR-25% Pain: M-34%, MOD-33%, Sv-33%		
	MAF	Cycle: R-92%, IR-8% Pain: M-75%, Sv-25%		
	Sri Lakshmi	Cycle: R-100%, Pain: M-50%, Sv-50%		
Frequency of Illness Experienced- Before Employment *Often-O *Not Often-NO *Rarely-R *Not reported -NR	Magnum	O-14%, N.O-5%,R-81%		
	4Creations	O-8%,R-8%, NR-84%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Illness Experienced- After Employment *Often-O *Not Often-NO *Rarely-R *Not reported -NR	Magnum	O-81%, N.O-14%,R-5%		
	4Creations	O-25%, N.O-50%,R-8%, NR-17%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Absence in a month	Magnum	Absence (in days)	%	
		Not Ab	11%	
		1	30%	
		1-2	36%	

		1-3	11%	
		2-3	3%	
		2-4	3%	
		Upto 3	3%	
		>3	5%	
	4Creations	Absence (in days)	%	
		Not Ab	17%	
		1-2	58%	
		2	17%	
		2-3	8%	
	MAF	Absence (in days)	%	
		Not Ab	50%	
		1	12%	
		2-3	38%	
	Sri Lakshmi	Absence (in days)	%	
Not Ab		100%		
Causes of absenteeism	Magnum	FC-30%, IL-54%		
	4Creations	FC-10%, IL-10%		
	MAF	FC-50%, IL-50%		
	Sri Lakshmi	FC-100%, IL-100%		
*Family commitment-FC; *Illness-IL				
Victim of common illness	Magnum	Common illness: Cough and cold, Headache, Fever, Typhoid	Other common illnesses : Bleeding per rectum, Burning sensation while passing urine, Stomach ulcer, Gastric, Thyroid, stomach pain, Low BP, Anemia	
	4Creations			
	MAF			
	Sri Lakshmi			
Victim of specific illness	Magnum	Hypertension-41%, Swelling of legs- 30%, diabetes mellitus-3%		
	4Creations	Difficulty in breathing (sometimes) – 8%		
	MAF	Swelling of legs - 12%		
	Sri Lakshmi	No illness		
Undergone treatment for common illness	Magnum	Yes – 89%, No – 11%		
	4Creations	Yes – 100%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 50%, No – 50%		
Category of medical services	Magnum	First aid – 100%		
	4Creations	First aid- 100%		

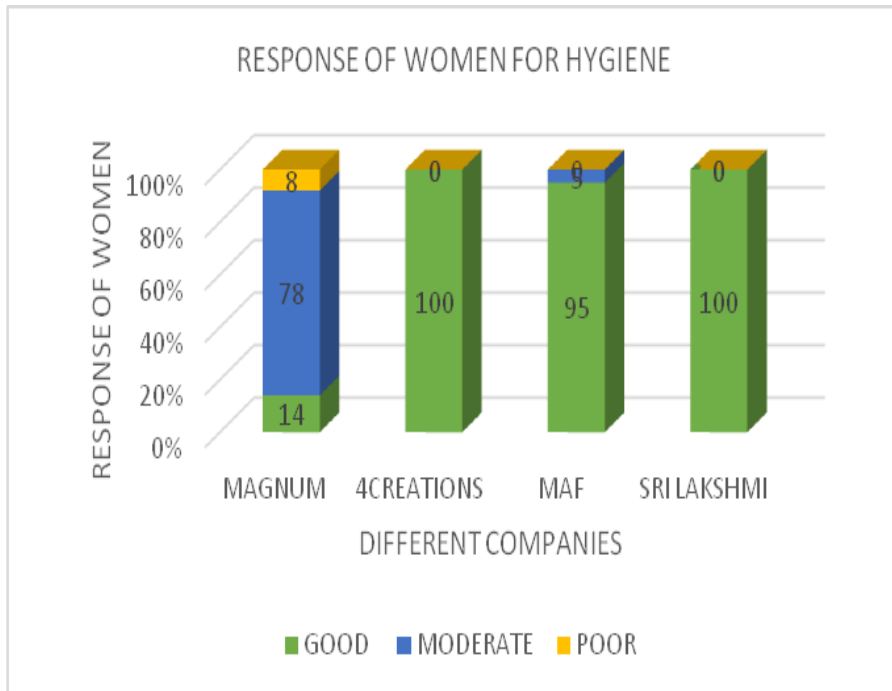
		Primary care – 100%	
	MAF	First aid- 100%	
	Sri Lakshmi	First aid- 100%	
Psychiatric problems suffered	Magnum	Insomnia-11% Depression-62% Anxiety-81% Palpitations-46%	
	4Creations	Insomnia-17% Depression-33% Anxiety-58% Palpitations-33%	
	MAF	Insomnia-38% Depression-63% Anxiety-75% Palpitations-50%	
	Sri Lakshmi	Insomnia-50% Depression-50% Anxiety-50% Palpitations-50%	



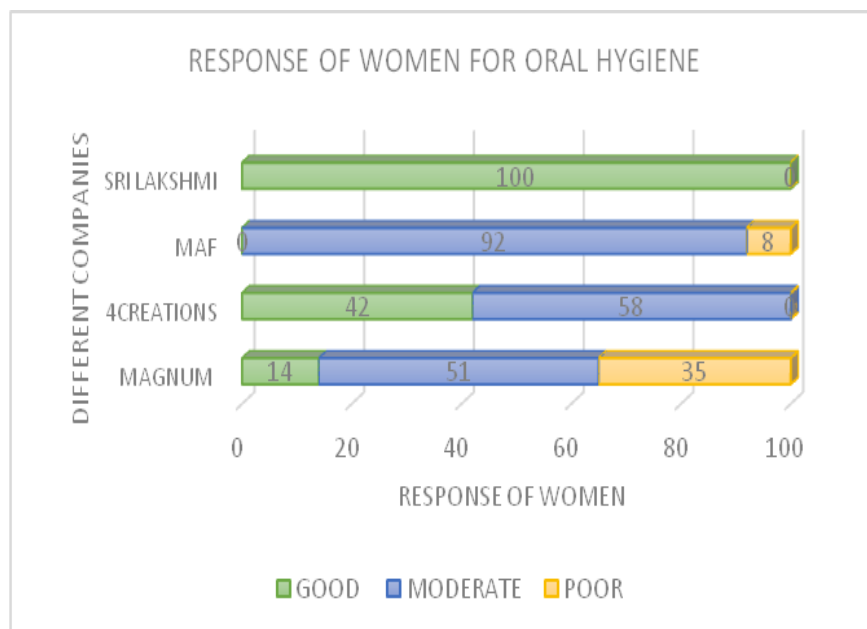
Graph 6.9: Response of women for eyesight



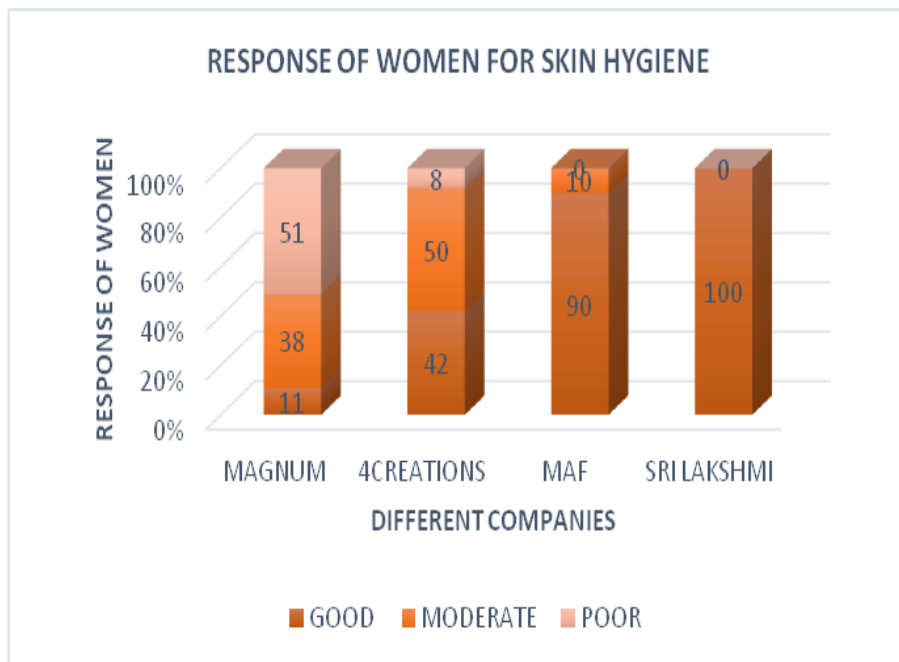
Graph 6.10: Response of women for hearing



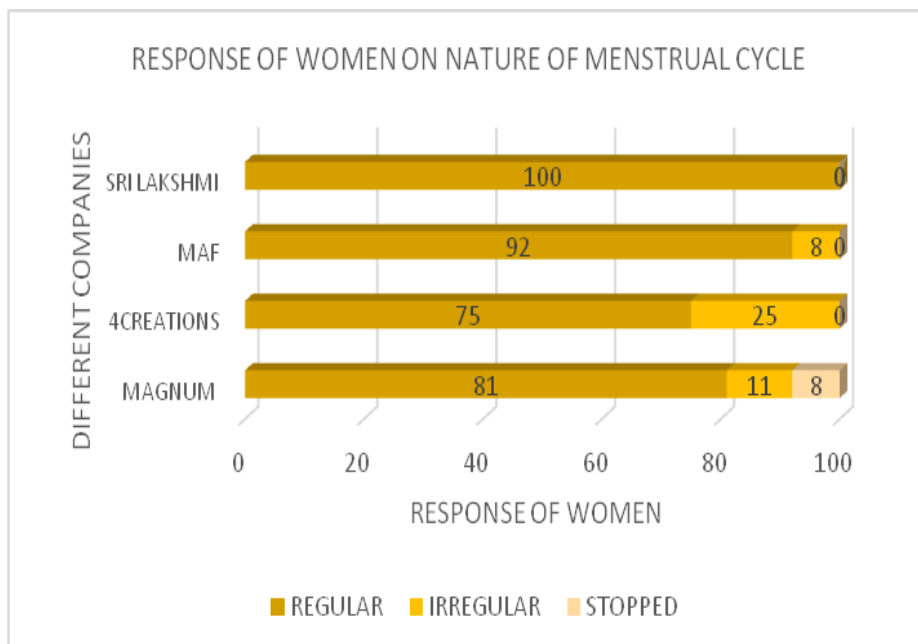
Graph 6.11: Response of women for hygiene



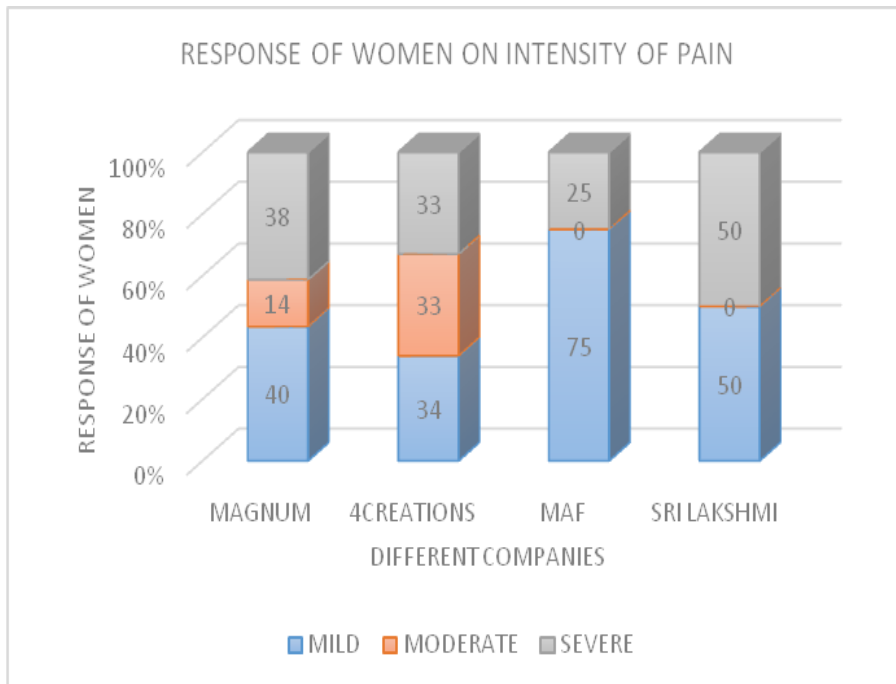
Graph 6.12: Response of women for Oral Hygiene



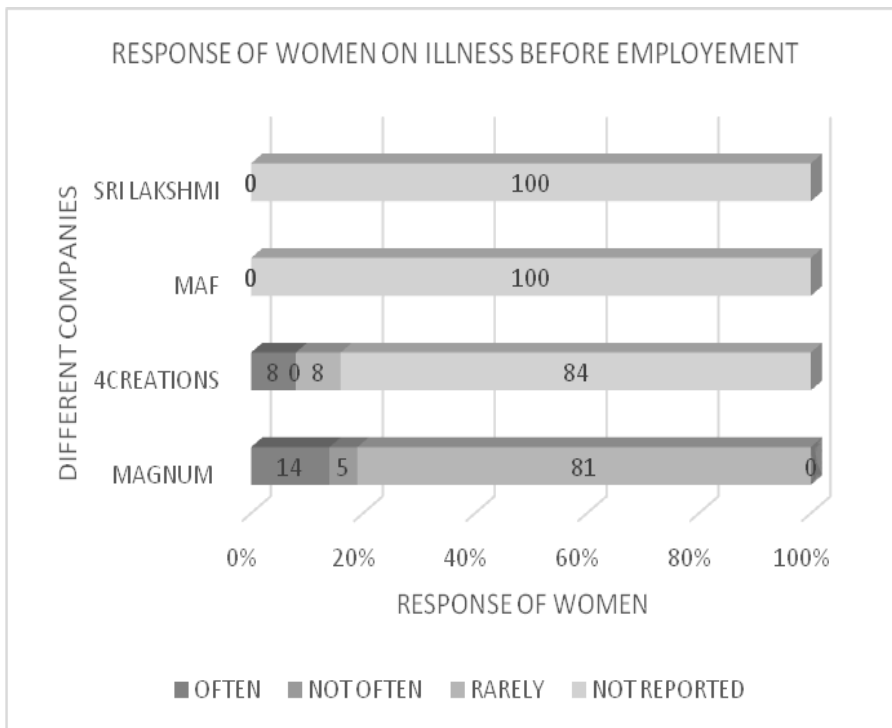
Graph 6.13: Response of women for Skin Hygiene



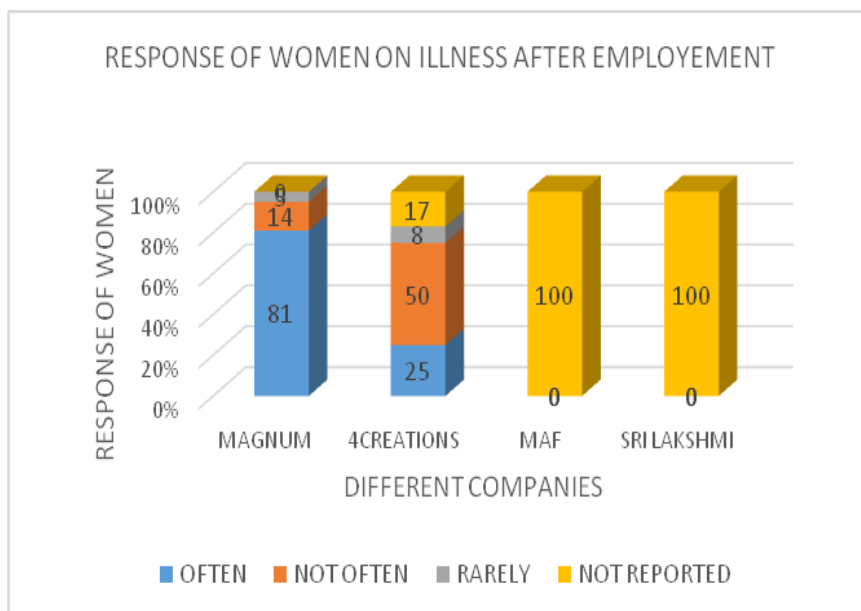
Graph 6.14: Response of women on Nature of Menstrual Cycle



Graph 6.15: Response of women on Intesity of Pain



Graph 6.16: Response of women on Illness Before Employment



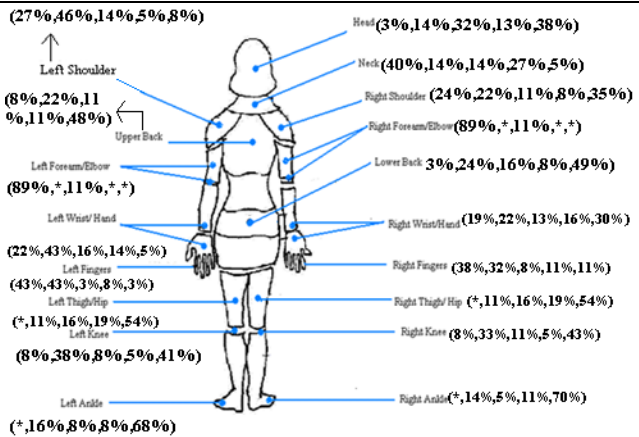
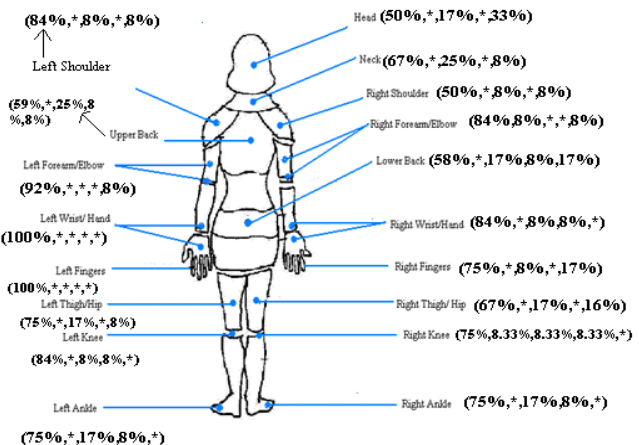
Graph 6.17: Response of women on Illness After Employment

D. Physical factors at work								
Identified factor affecting women health & productivity	Garment company	Response of women in %						Remarks
Work involves following constraints *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	30%	68%	2%	-	-	
		Static contraction	-	-	8%	76%	16%	
		Prolonged static loads	-	-	8%	76%	16%	
		Bending	27%	46%	8%	19%	-	
		Twisting	73%	24%	3%	-	-	
		Stretching	40%	14%	30%	16%	-	
		Extending	41%	32%	19%	8%	-	
		Heavy weight lifting	73%	13%	11%	3%	-	
		Sustained sitting	84%	-	13%	-	3%	
		Sustained standing	8%	-	-	5%	87%	
	4Creations	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	67%	-	17%	8%	8%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	67%	-	17%	8%	8%	
		Twisting	100%	-	-	-	-	
		Stretching	33%	-	33%	17%	17%	
		Extending	34%	-	50%	8%	8%	
		Heavy weight lifting	92%	-	8%	-	-	
		Sustained sitting	100%	-	-	-	-	
		Sustained standing	-	-	-	-	100%	
















	MAF	Physical factor	N	R	S	O	A
		Repetitive work	-	-	-	-	100%
		Forceful exertion	100%	-	-	-	-
		Static contraction	100%	-	-	-	-
		Prolonged static loads	100%	-	-	-	-
		Bending	92%	-	8%	-	-
		Twisting	100%	-	-	-	-
		Stretching	100%	-	-	-	-
		Extending	100%	-	-	-	-
		Heavy weight lifting	100%	-	-	-	-
		Sustained sitting	100%	-	-	-	-
		Sustained standing	-	-	-	-	100%
	Sri Lakshmi	Physical factor	N	R	S	O	A
		Repetitive work	-	-	-	-	100%
		Forceful exertion	-	-	-	100%	-
		Static contraction	100%	-	-	-	-
		Prolonged static loads	100%	-	-	-	-
		Bending	-	-	-	100%	-
		Twisting	100%	-	-	-	-
		Stretching	100%	-	-	-	-
		Extending	100%	-	-	-	-
		Heavy weight lifting	100%	-	-	-	-
		Sustained sitting	100%	-	-	-	-
		Sustained standing	-	-	-	-	100%
Comfortable to work in standing/sitting position for long working hours	Magnum	Yes – 8%, No – 92%					
	4Creations	Yes – 58%, No – 42%					
	MAF	Yes – 8%, No – 92%					
	Sri Lakshmi	Yes – 100%					
Victim of following	Magnum	Symptoms	N	R	S	O	A
		Aching	-	3%	27%	59%	11%




















symptoms *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time		Cramping	19%	43%	8%	27%	3%
		Carelessness	84%	11%	5%	-	-
		Dizziness	62%	3%	27%	8%	-
		Numbness	3%	37%	46%	11%	3%
		Stiffness	-	16%	57%	27%	-
		Tiredness	-	8%	35%	41%	16%
		Tangling	100%	-	-	-	-
	4Creations	Symptoms	N	R	S	O	A
		Aching	17%	8%	42%	8%	25%
		Cramping	67%	-	33%	-	-
		Carelessness	100%	-	-	-	-
		Dizziness	50%	-	34%	8%	8%
		Numbness	50%	-	33%	17%	-
		Stiffness	92%	8%	-	-	-
		Tiredness	16%	17%	17%	17%	33%
		Tangling	100%	-	-	-	-
	MAF	Symptoms	N	R	S	O	A
		Aching	22%	-	44%	-	34%
		Cramping	66%	-	34%	-	-
		Carelessness	100%	-	-	-	-
		Dizziness	82%	18%	-	-	-
		Numbness	85%	15%	-	-	-
		Stiffness	92%	8%	-	-	-
		Tiredness	-	-	46%	48%	6%
		Tangling	100%	-	-	-	-
	Sri Lakshmi	Symptoms	N	R	S	O	A
		Aching	-	-	-	-	100%
		Cramping	50%	-	-	50%	-
		Carelessness	100%	-	-	-	-
		Dizziness	100%	-	-	-	-
		Numbness	-	-	-	100%	-
		Stiffness	-	50%	-	50%	-
		Tiredness	-	-	-	100%	-
		Tangling	100%	-	-	-	-
Victim of following injuries	Magnum	Injury	Yes		No		
		Laceration	8%		92%		
		Puncture	-		100%		
		Avulsion	11%		89%		
		Hematoma	5%		95%		
		Abrasions	3%		97%		
		Contusions	22%		78%		
		Fracture	3%		97%		
		Sprain	22%		78%		
		Burn	46%		54%		
		Amputation	3%		97%		








	4Creations	Injury	Yes	No
		Laceration	-	100%
		Puncture	-	100%
		Avulsion	-	100%
		Hematoma	-	100%
		Abrasions	-	100%
		Contusions	-	100%
		Fracture	-	100%
		Sprain	-	100%
		Burn	-	100%
		Amputation	-	100%
	MAF	Injury	Yes	No
		Laceration	-	100%
		Puncture	-	100%
		Avulsion	-	100%
		Hematoma	-	100%
		Abrasions	-	100%
		Contusions	-	100%
		Fracture	-	100%
		Sprain	-	100%
		Burn	-	100%
	Sri	Amputation	-	100%
		Injury	Yes	No
		Laceration	-	100%
		Puncture	-	100%
		Avulsion	-	100%
		Hematoma	-	100%
		Abrasions	-	100%
		Contusions	-	100%
		Fracture	-	100%
		Sprain	-	100%
		Burn	-	100%
		Amputation	-	100%






E.			
Identified factor affecting women health & productivity	Garment company	Response of women in %	Remarks
Suffer from pain at present	Magnum	Yes – 100%	
	4Creations	Yes – 100%	
	MAF	Yes – 88%, No- 12%	
	Sri Lakshmi	No – 100%	
Pain experienced in a particular location (No pain, Low pain, Mild pain, High pain, Severe pain)	Magnum		
	4Creations		

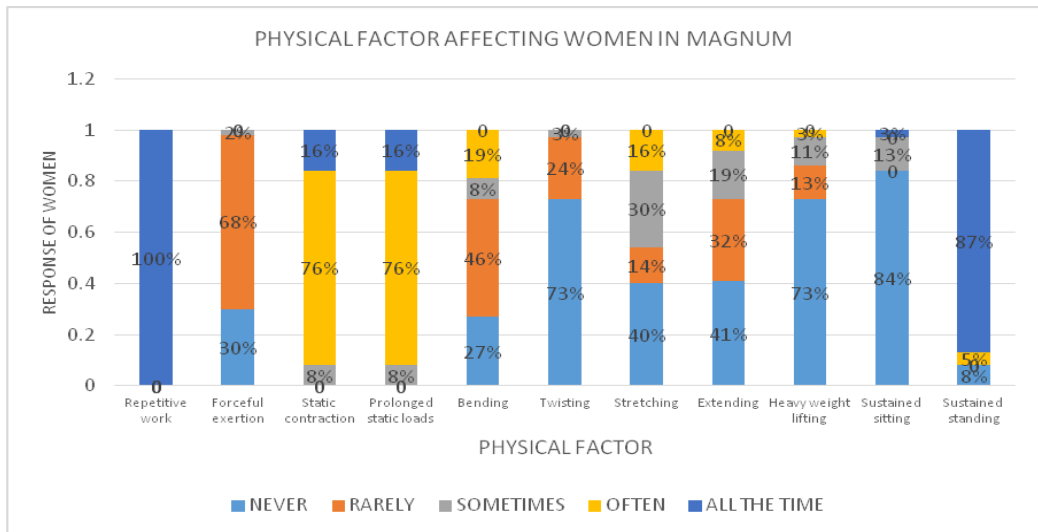
	Sri Lakshmi	No Pain		
Cause of pain	Magnum	Cause	%	
		Bad posture for long time	84%	
		Long working periods	97%	
		Incorrect way of lifting a load	19%	
		Usage of faulty equipment	8%	
	4Creations	Cause	%	
		Bad posture for long time	58%	
		Long working periods	67%	
		Incorrect way of lifting a load	17%	
		Personal problem	8%	
		During menstruation	8%	
	MAF	Cause	%	
		Bad posture for long time	88%	
		Long working periods	88%	
	Sri Lakshmi	Not suffering from pain		
Occurrence of pain	Magnum	Suddenly - 95%, Gradually - 5%		
	4Creations	Gradually - 100%		
	MAF	Gradually - 86%		
	Sri Lakshmi	No Pain		
Interval of pain	Magnum	Intermittent - 84%, Constant - 16%		
	4Creations	Intermittent - 92%, Constant - 8%		
	MAF	Intermittent - 86%, Constant - 14%		
	Sri Lakshmi	No Pain		
Physical activities at work are	Magnum	Yes -100%		
	4Creations	Yes-83%, No – 17%		
	MAF	Yes -100%		

main reason for pain?	Sri Lakshmi	Yes -100%																																			
Inadequate rest intervals at work are the main contributors to pain?	Magnum	Yes -100%																																			
	4Creations	Yes-8%, No – 92%																																			
	MAF	Yes – 68%, No- 32%																																			
	Sri Lakshmi	No-100%																																			
Have you been absent from work due to extreme pain?	Magnum	Yes – 59%, No-41%																																			
	4Creations	Yes – 33%, No-67%																																			
	MAF	Yes – 76%, No-24%																																			
	Sri Lakshmi	Yes -100%																																			
Facing difficulty in carrying out following activity?	Magnum	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td> Standing</td><td>-</td><td>-</td><td>16%</td><td>84%</td></tr><tr><td> Sitting</td><td>-</td><td>38%</td><td>14%</td><td>24%</td></tr><tr><td> Walking</td><td>-</td><td>16%</td><td>43%</td><td>41%</td></tr><tr><td> Laying</td><td>24%</td><td>54%</td><td>16%</td><td>6%</td></tr><tr><td> While climbing stairs</td><td>-</td><td>13%</td><td>22%</td><td>65%</td></tr></table>	Activity	Difficulty level				Never	Little bit	Moderate	Extreme	 Standing	-	-	16%	84%	 Sitting	-	38%	14%	24%	 Walking	-	16%	43%	41%	 Laying	24%	54%	16%	6%	 While climbing stairs	-	13%	22%	65%	
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 Laying	24%	54%	16%	6%																																	
 While climbing stairs	-	13%	22%	65%																																	

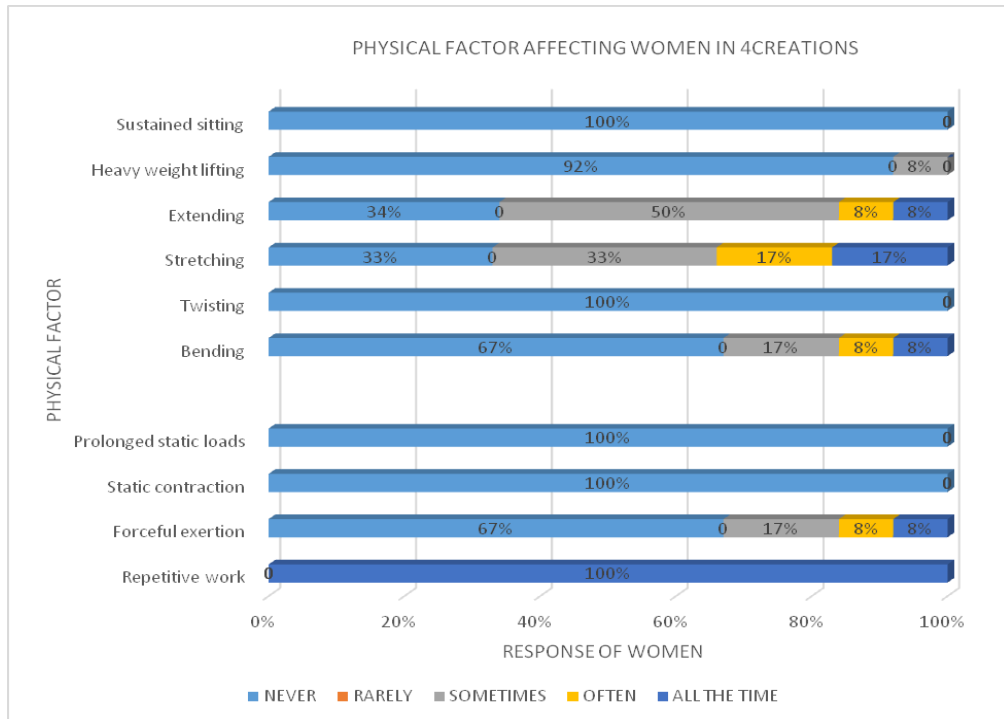
		<div></div> <div>Stooping</div>	-	16%	24%	60%																																									
4Creations	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td><div></div><div>Standing</div></td><td>92%</td><td>-</td><td>-</td><td>8%</td></tr><tr><td><div></div><div>Sitting</div></td><td>100%</td><td>-</td><td>-</td><td>-</td></tr><tr><td><div></div><div>Walking</div></td><td>100%</td><td>-</td><td>-</td><td>-</td></tr><tr><td><div></div><div>Laying</div></td><td>84%</td><td>8%</td><td>-</td><td>8%</td></tr><tr><td><div></div><div>While climbing stairs</div></td><td>84%</td><td>8%</td><td>-</td><td>8%</td></tr><tr><td><div></div><div>Stooping</div></td><td>92%</td><td>-</td><td>-</td><td>8%</td></tr></table>							Activity	Difficulty level				Never	Little bit	Moderate	Extreme	<div></div> <div>Standing</div>	92%	-	-	8%	<div></div> <div>Sitting</div>	100%	-	-	-	<div></div> <div>Walking</div>	100%	-	-	-	<div></div> <div>Laying</div>	84%	8%	-	8%	<div></div> <div>While climbing stairs</div>	84%	8%	-	8%	<div></div> <div>Stooping</div>	92%	-	-	8%	
	Activity	Difficulty level																																													
		Never	Little bit	Moderate	Extreme																																										
	<div></div> <div>Standing</div>	92%	-	-	8%																																										
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	<div></div> <div>Walking</div>	100%	-	-	-																																										
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	<div></div> <div>Stooping</div>	92%	-	-	8%																																										
	MAF	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr></table>							Activity	Difficulty level				Never	Little bit	Moderate	Extreme																														
Activity	Difficulty level																																														
	Never	Little bit	Moderate	Extreme																																											

			14%	50%	-	36%
		Standing				
			36%	38%	26%	-
		Sitting				
			90%	10%	-	-
		Walking				
			92%	8%	-	-
Laying						
			92%	8%	-	-
		While climbing stairs				
			12%	88%	-	-
Stooping						
Sri Lakshmi						
		Activity	Difficulty level			
			Never	Little bit	Moderate	Extreme
			100%	-	-	-
		Standing				

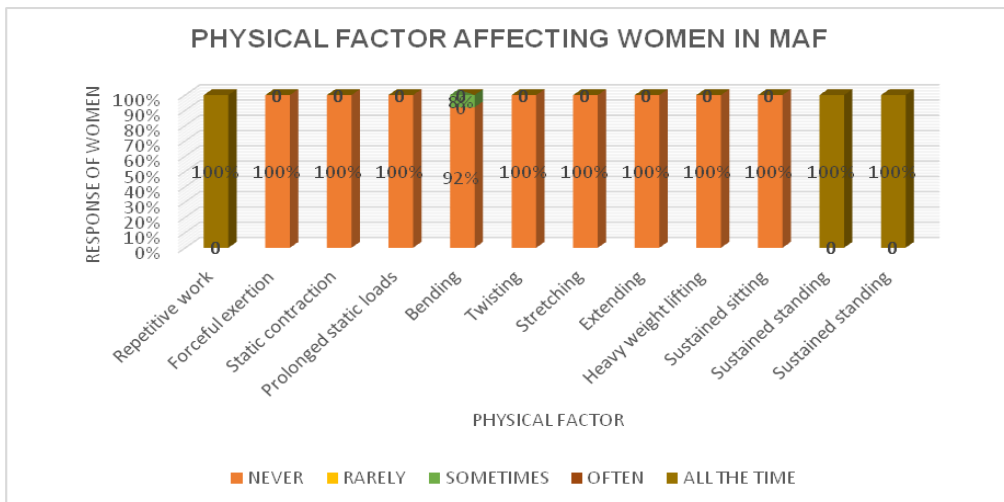
			100%	-	-	-	
		Sitting					
			100%	-	-	-	
		Walking					
			100%	-	-	-	
		Laying					
			100%	-	-	-	
		While climbing stairs					
			100%	-	-	-	
		Stooping					



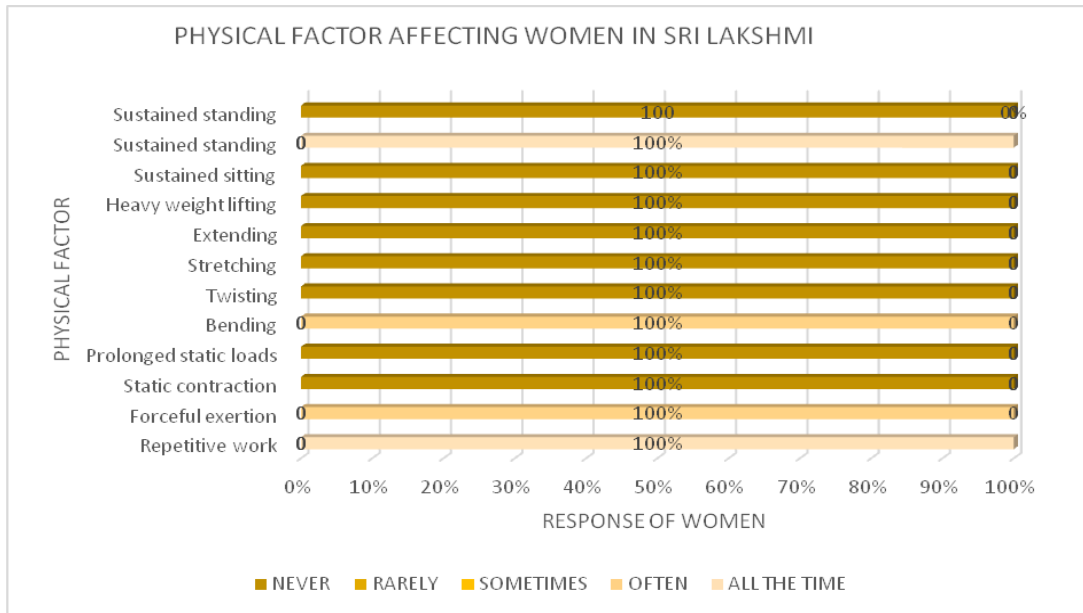
Graph 6.18: Physical Factors Affecting Women in Magnum



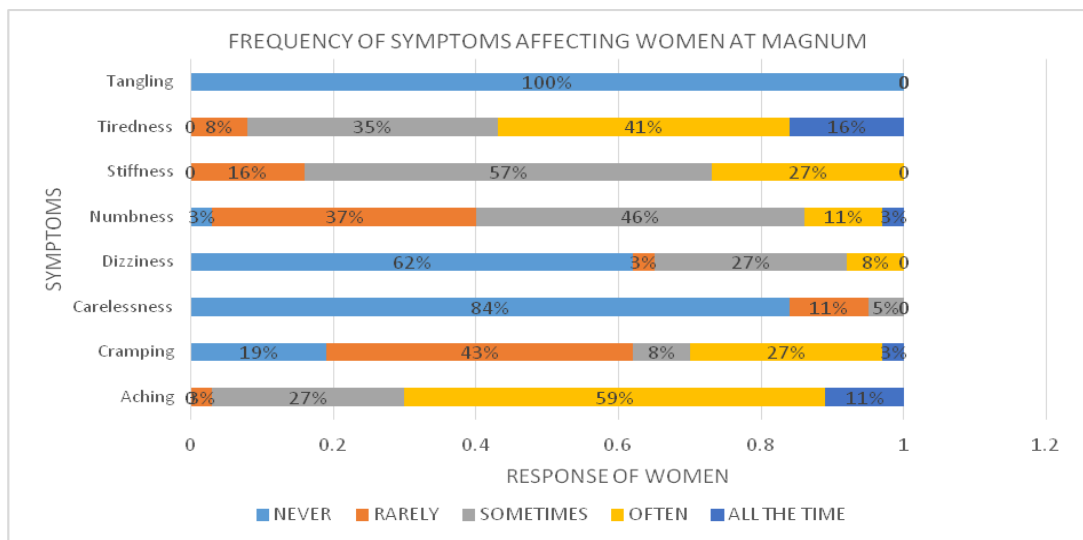
Graph 6.19: Physical Factors Affecting Women in 4creations



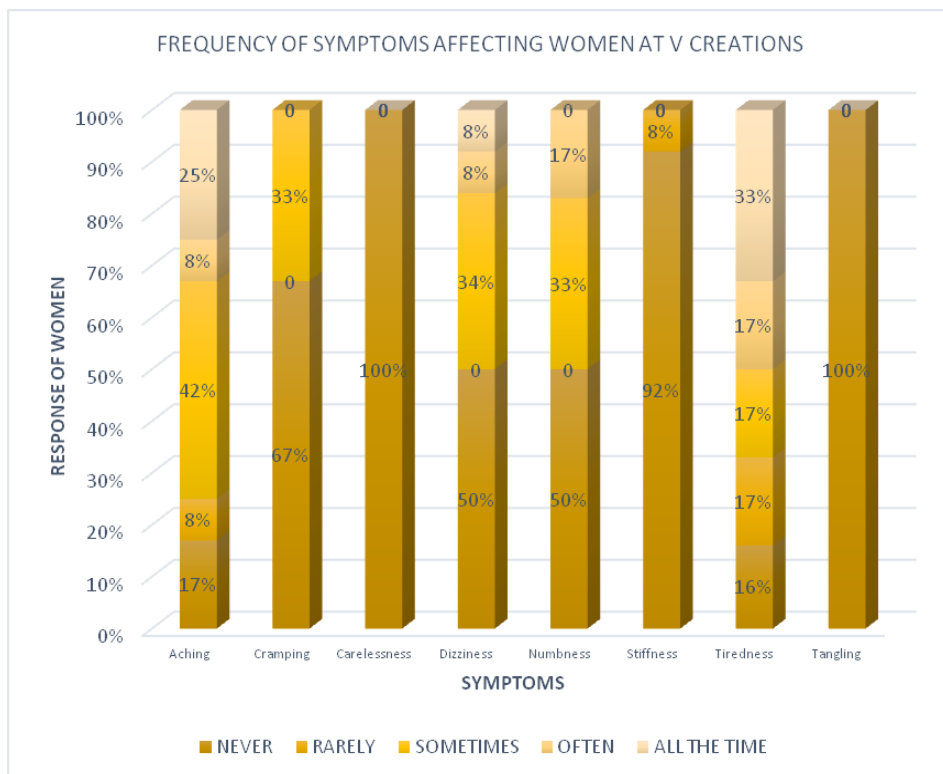
Graph 6.20: Physical Factors Affecting Women in Maf



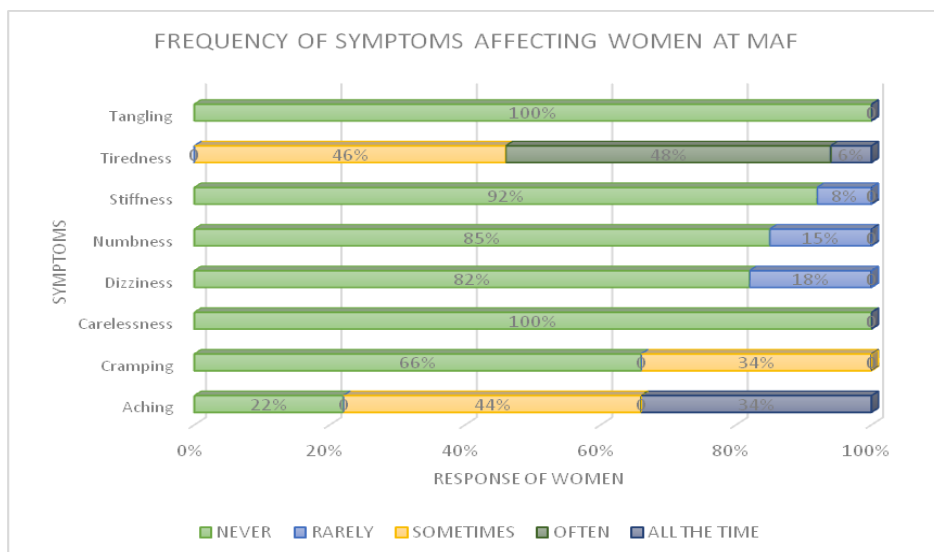
Graph 6.21: Physical Factors Affecting Women in Sri lakshmi



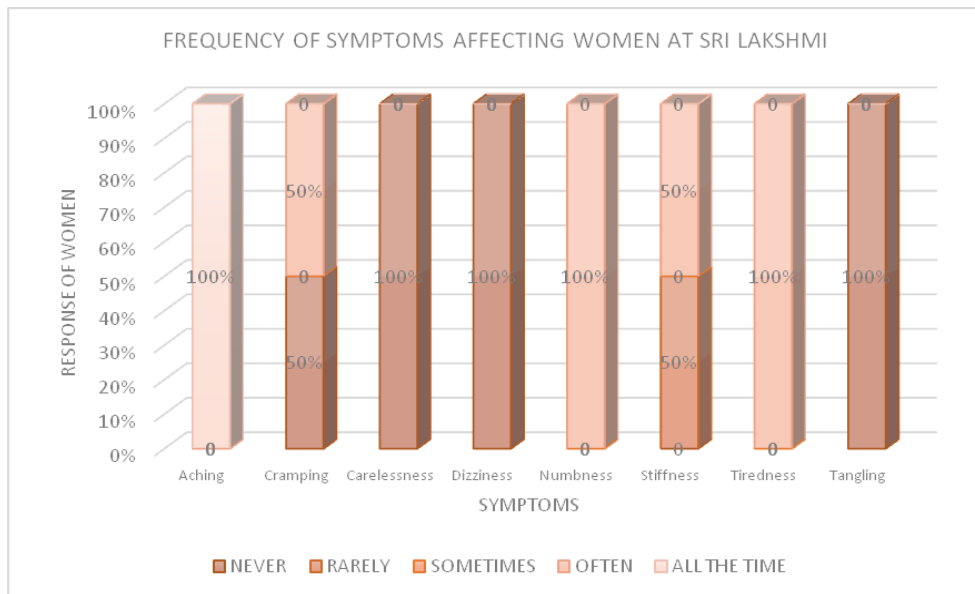
Graph 6.22: Frequency of symptoms Affecting Women at Magnum



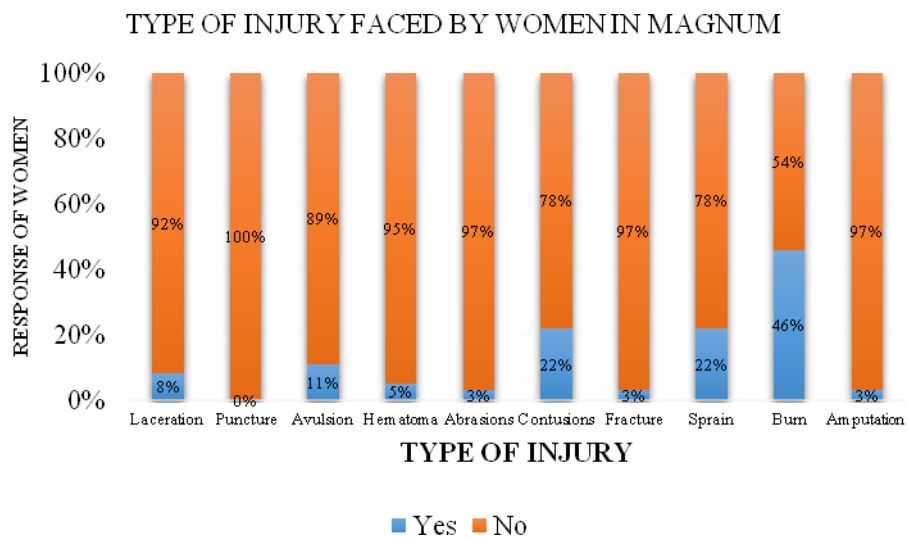
Graph 6.23: Frequency of symptoms Affecting Women at 4 creations



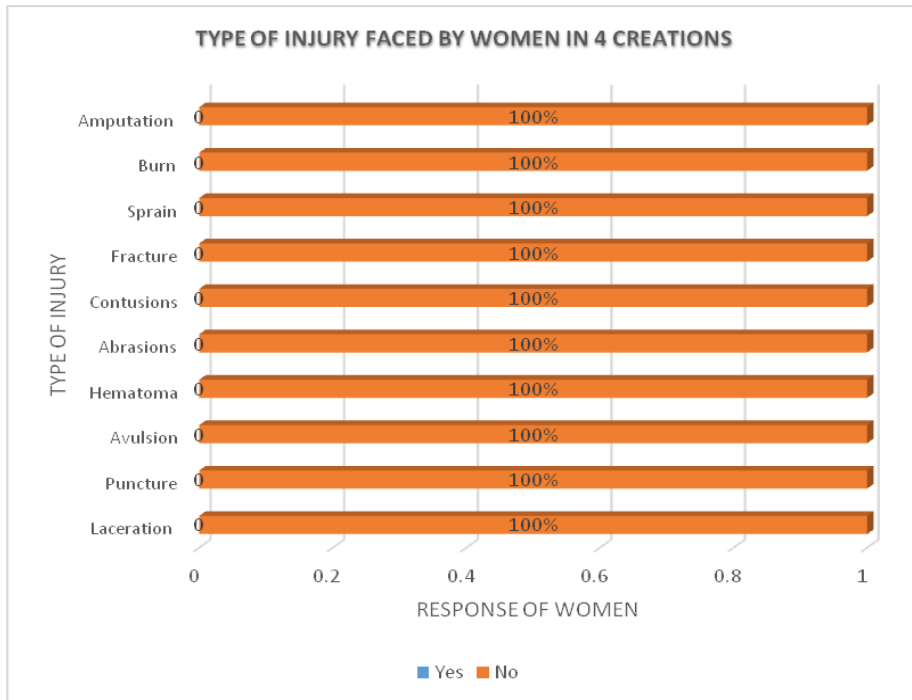
Graph 6.24: Frequency of symptoms Affecting Women at Maf



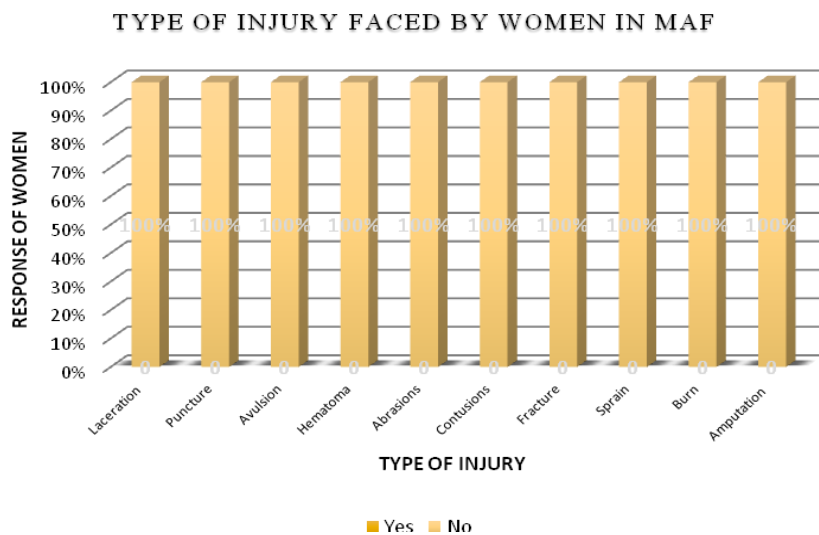
Graph 6.25: Frequency of symptoms Affecting Women at Sri lakshmi



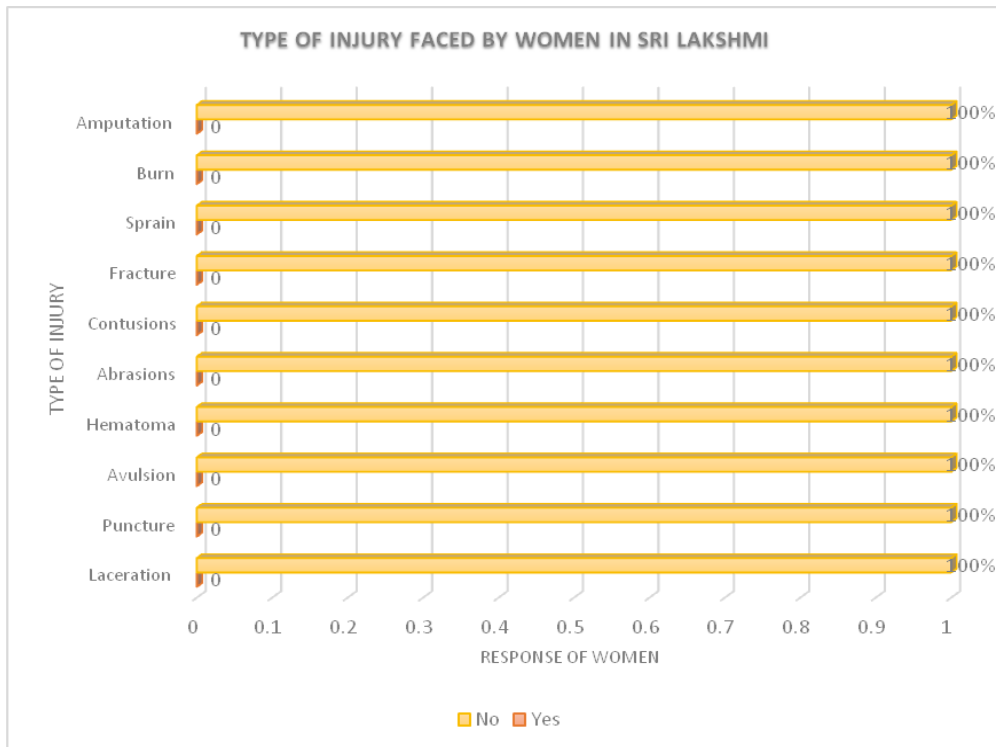
Graph 6.26: Type of injury faced by Women in Magnum



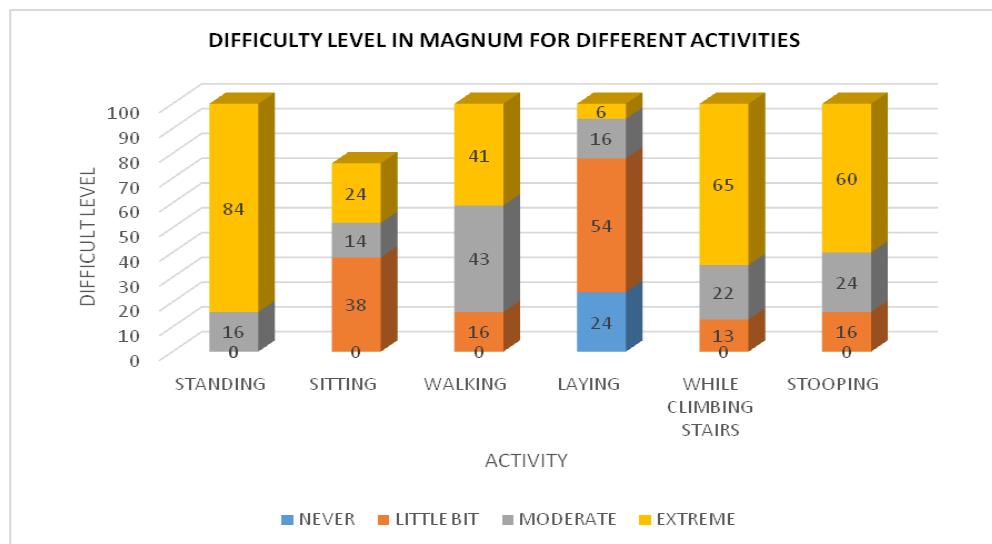
Graph 6.27: Type of injury faced by Women in 4 creations



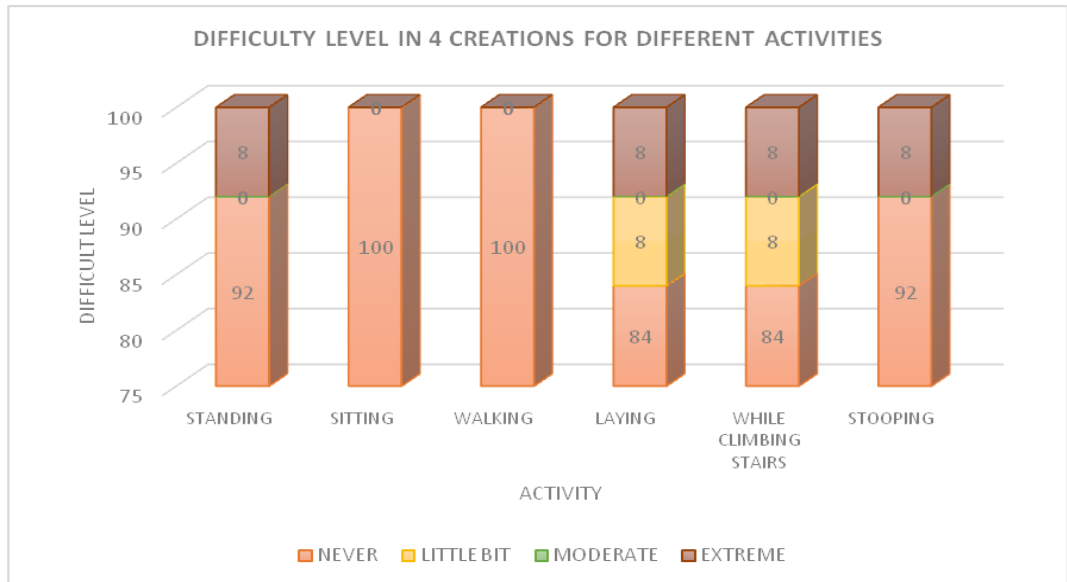
Graph 6.28: Type of injury faced by Women in Maf



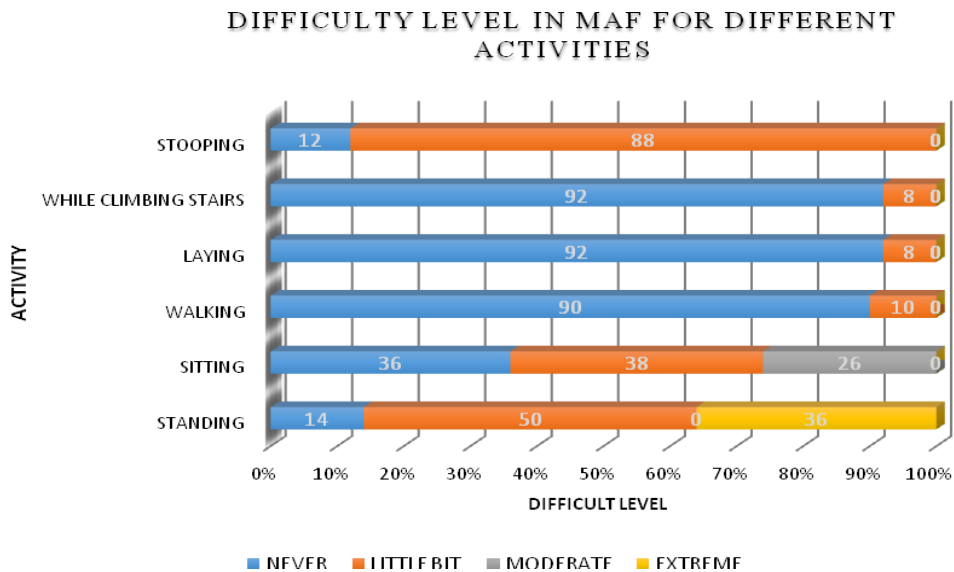
Graph 6.29: Type of injury faced by Women in Sri lakshmi



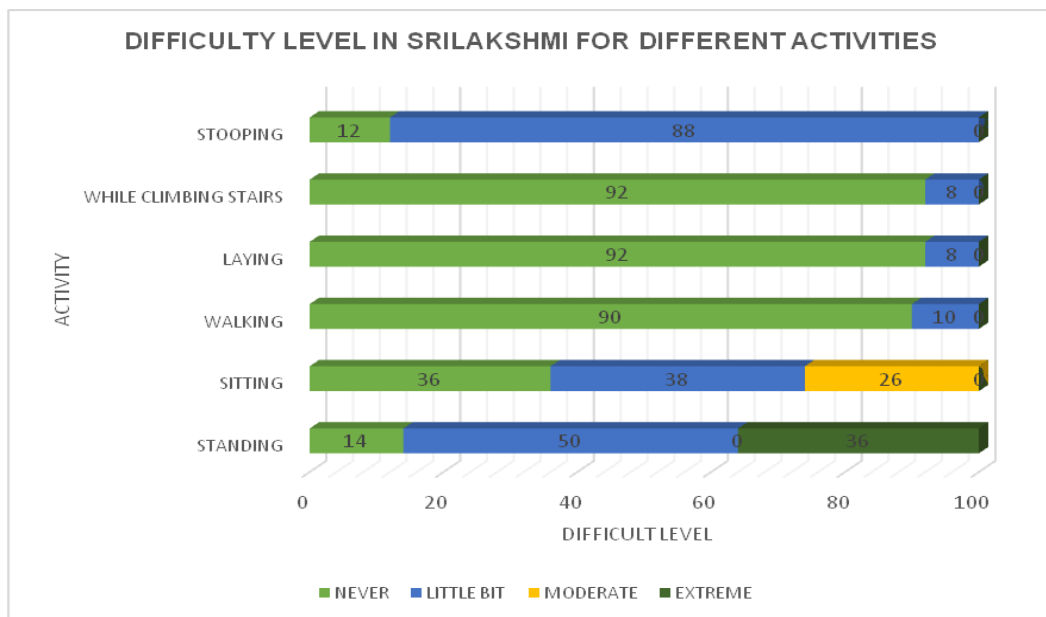
Graph 6.30: Difficulty level in magnum for different activities



Graph 6.31: Difficulty level in 4 creations for different activities



Graph 6.32: Difficulty level in maf for different activities

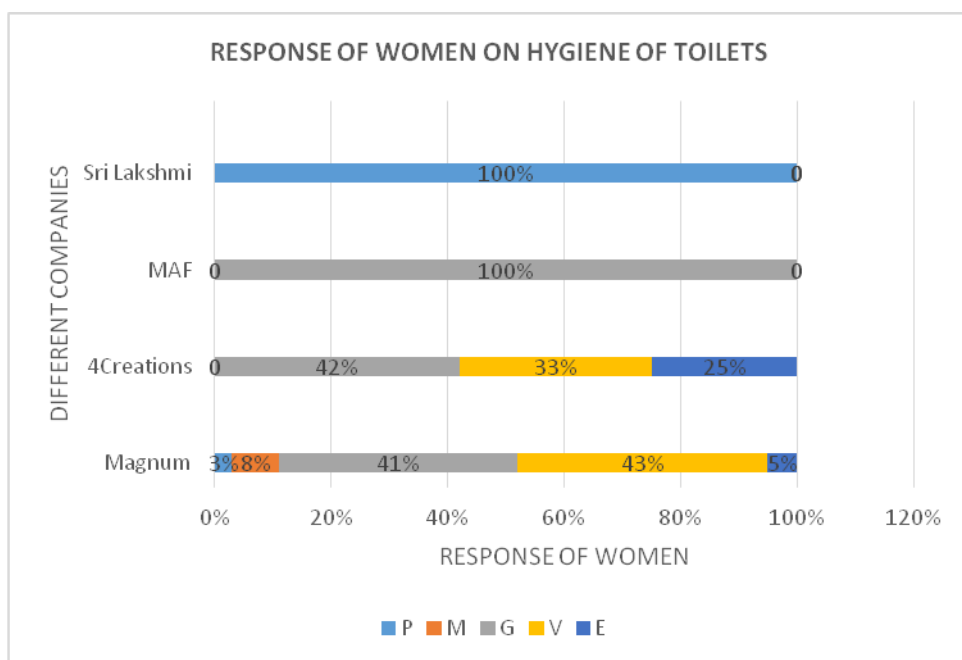


Graph 6.33: Difficulty level in sri lakshmi for different activities

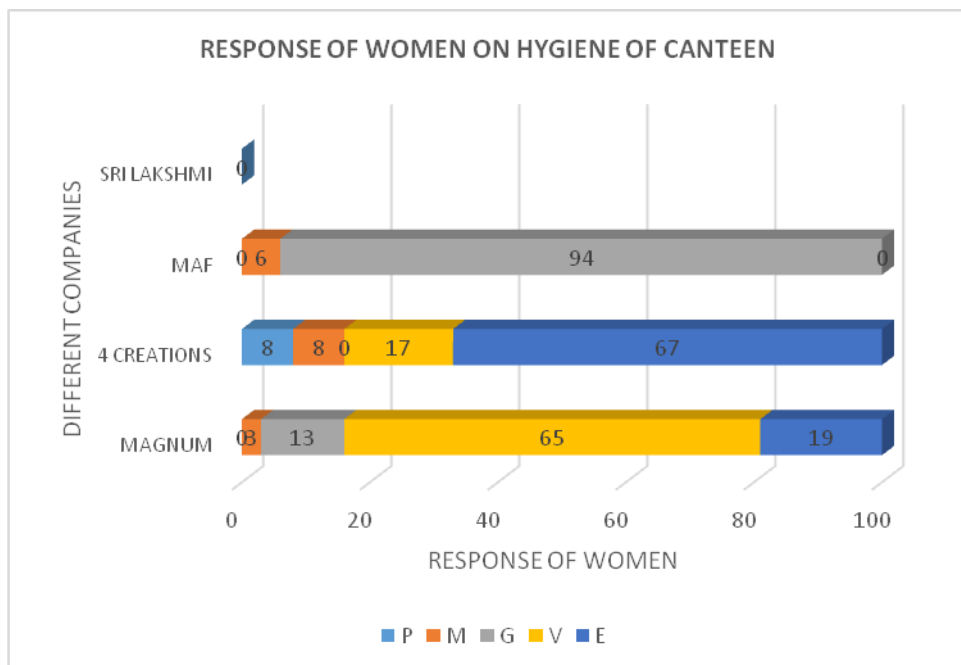
F. General Amenities							
Identified factor affecting women health& productivity	Garment company	Response of women in %					Remarks
Hygiene of toilets used *P-Poor *M-Moderate *G-Good *V-Very good *E-Excellent	Magnum	P	M	G	V	E	
		3%	8%	41%	43%	5%	
	4Creations	P	M	G	V	E	
		-	-	42%	33%	25%	
	MAF	P	M	G	V	E	
		-	-	100%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		100%	-	-	-	-	
Hygiene of canteen	Magnum	P	M	G	V	E	
		-	3%	13%	65%	19%	
	4Creations	P	M	G	V	E	
		8%	8%	-	17%	67%	
	MAF	P	M	G	V	E	
		-	6%	94%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		No canteen at premises					
Availability of drinking water	Magnum	P	M	G	V	E	
		-	-	-	3%	97%	
	4Creations	P	M	G	V	E	
		-	-	-	8%	92%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
Availability of sufficient rest periods	Magnum	P	M	G	V	E	
		92%	-	8%	-	-	
	4Creations	P	M	G	V	E	
		-	8%	17%	25%	50%	
	MAF	P	M	G	V	E	
		-	-	14%	86%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	100%	-	-	
Availability of first aid box during injuries	Magnum	P	M	G	V	E	
		5%	14%	73%	8%	-	
	4Creations	P	M	G	V	E	
		-	-	8%	-	92%	
	MAF	P	M	G	V	E	

		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	100%	-	-	-	
Availability of doctor/nurse	Magnum	P	M	G	V	E	
		51%	38%	11%	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	17%	83%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		No such facility					
How much do you rate medical room?	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	
		-	8%	-	8%	84%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		No medical room					
Rate working condition of lift	Magnum	P	M	G	V	E	
		93%	-	3%	-	-	
	4Creations	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	MAF	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	Sri Lakshmi	P	M	G	V	E	
		No lift facility					
Rate working condition of fire alarms/engines	Magnum	P	M	G	V	E	
		8%	5%	84%	3%	-	
	4Creations	P	M	G	V	E	
		-	-	-	8%	92%	
	MAF	P	M	G	V	E	
		-	-	-	6%	94%	
	Sri Lakshmi	P	M	G	V	E	
		-	100%	-	-	-	
Rate working condition of machines in terms of performance	Magnum	P	M	G	V	E	
		59%	8%	19%	11%	3%	
	4Creations	P	M	G	V	E	
		-	-	8%	33%	59%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	

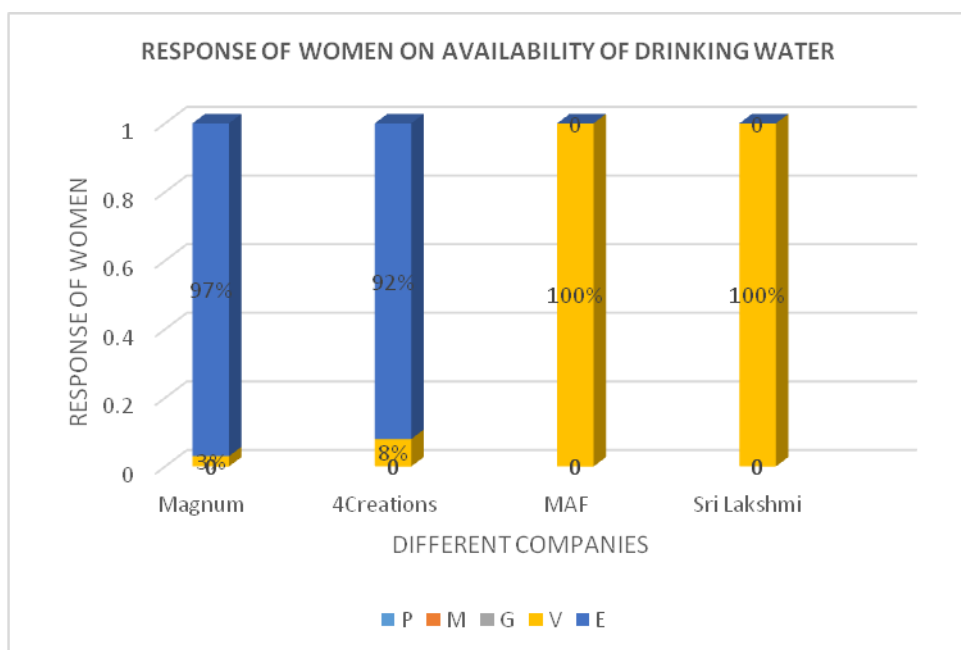
Rate quality of personal protective equipment provided to you	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
	Magnum	P	M	G	V	E	
		91%	3%	3%	3%	-	
	4Creations	P	M	G	V	E	
		-	-	-	8%	92%	
	MAF	P	M	G	V	E	Most of them were either not using or have not been provided with personal protective equipment
		-	-	23%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	100%	-	-	



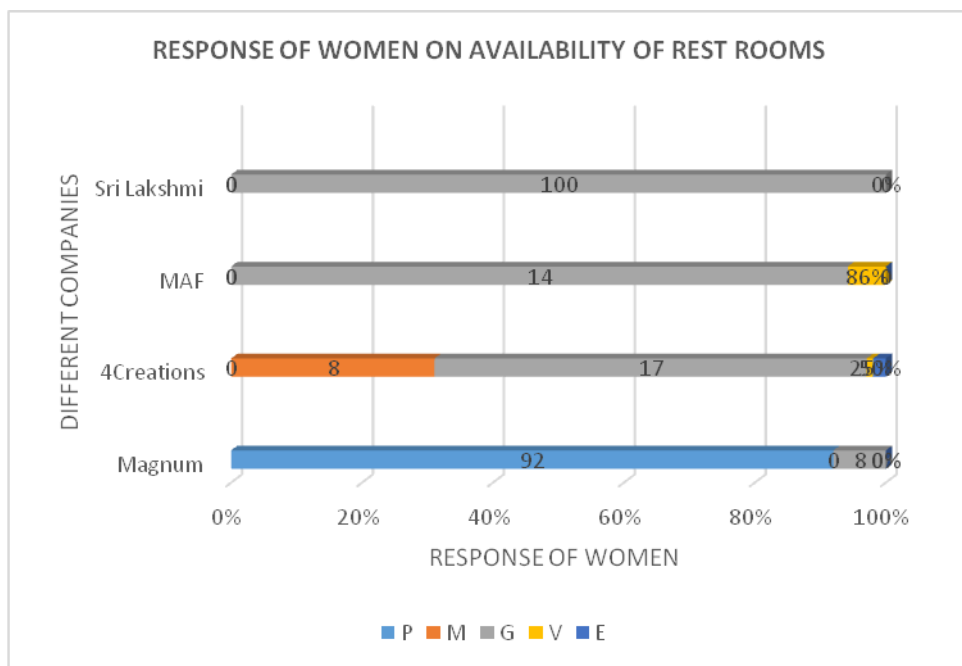
Graph 6.34: Response of women on hygiene of toilets



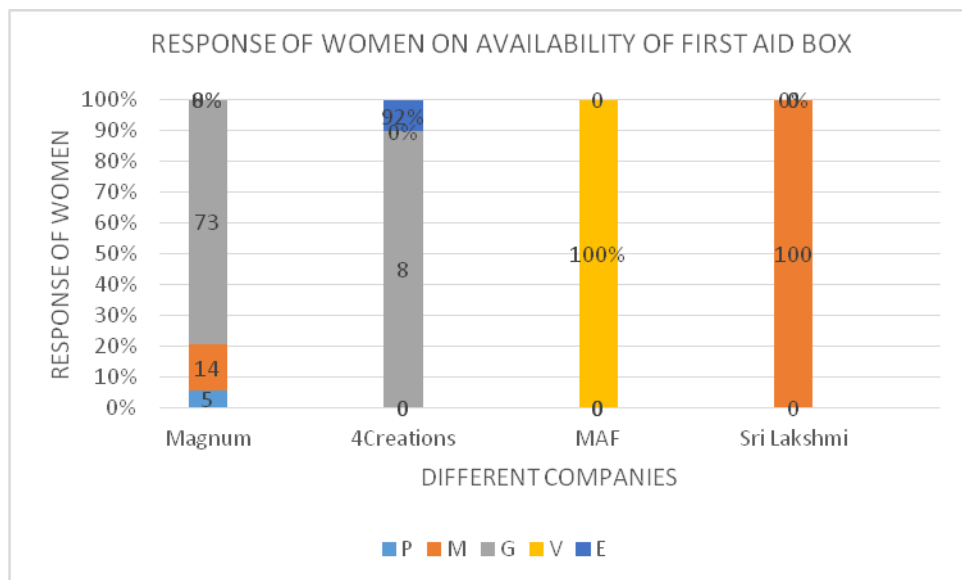
Graph 6.35: Response of women on hygiene of canteen



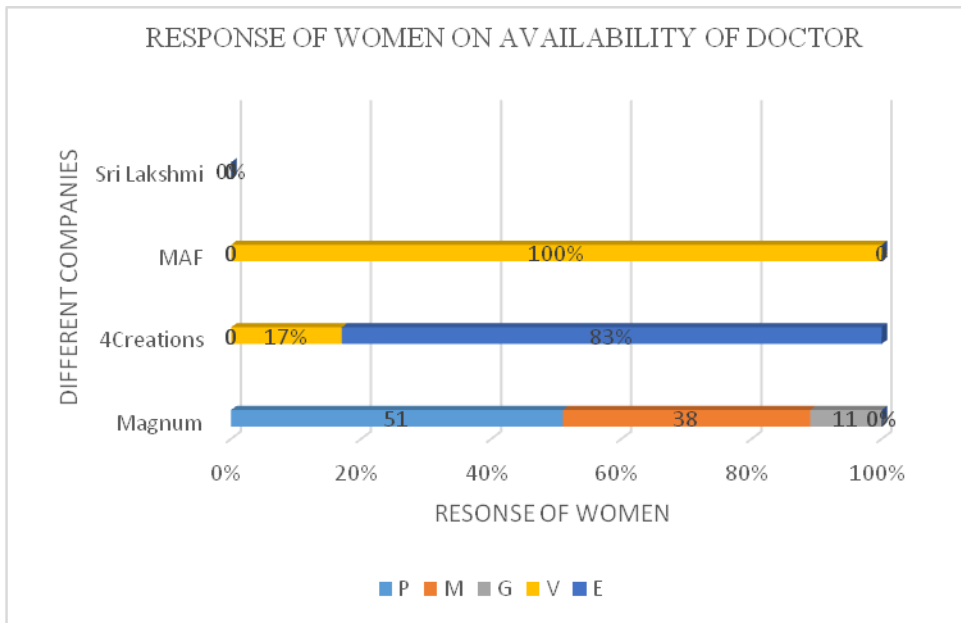
Graph 6.36: Response of women on availability of drinking water



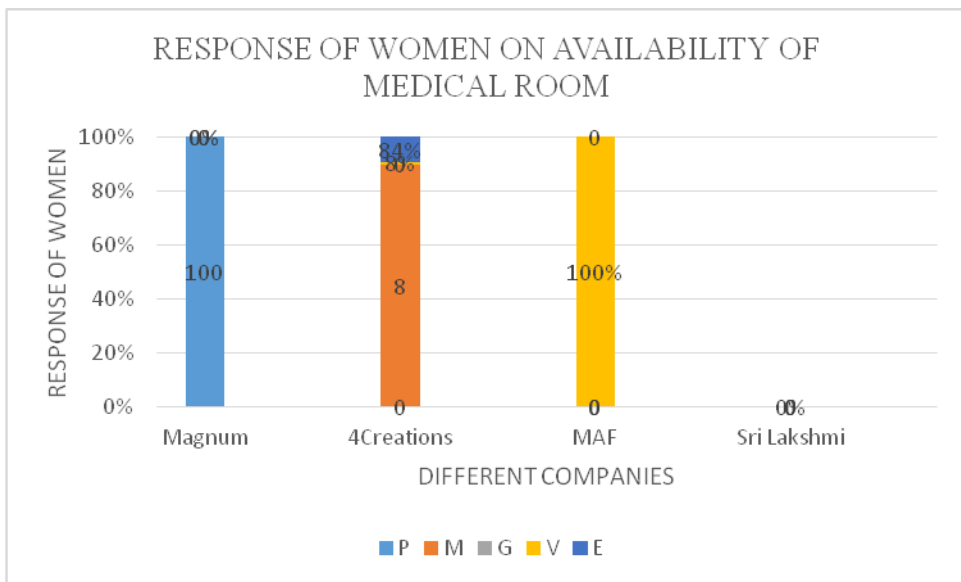
Graph 6.37: Response of women on availability of rest rooms



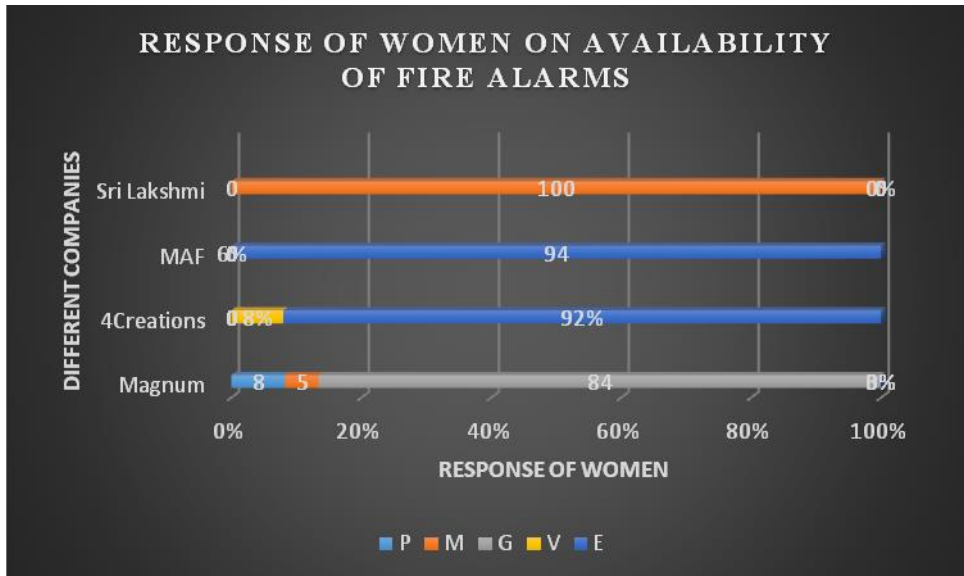
Graph 6.38: Response of women on availability of first aid box



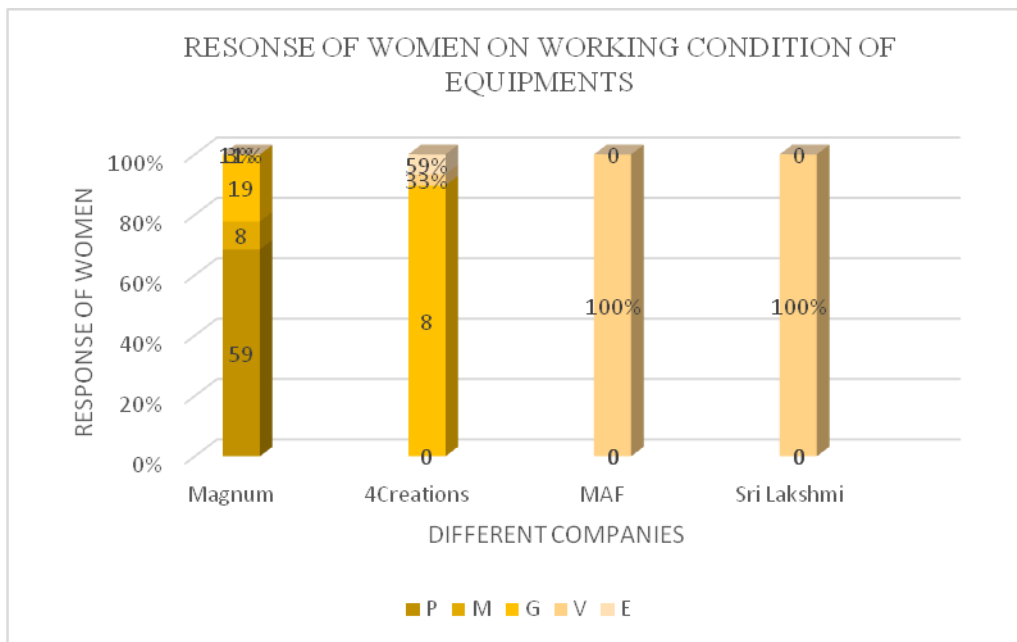
Graph 6.39: Response of women on availability of doctor



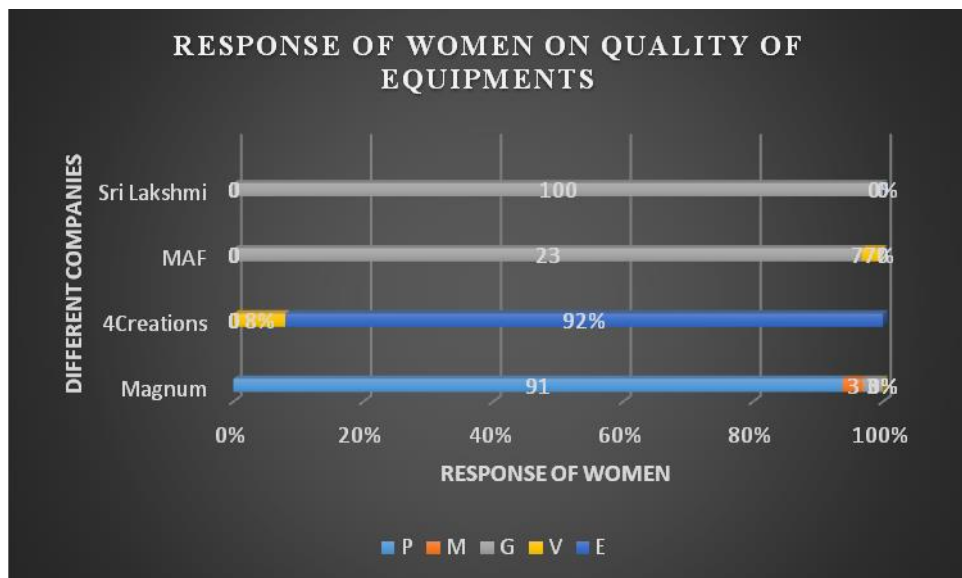
Graph 6.40: Response of women on availability of medical room



Graph 6.41: Response of women on availability of fire alarms



Graph 6.42: Response of women on working condition of equipments



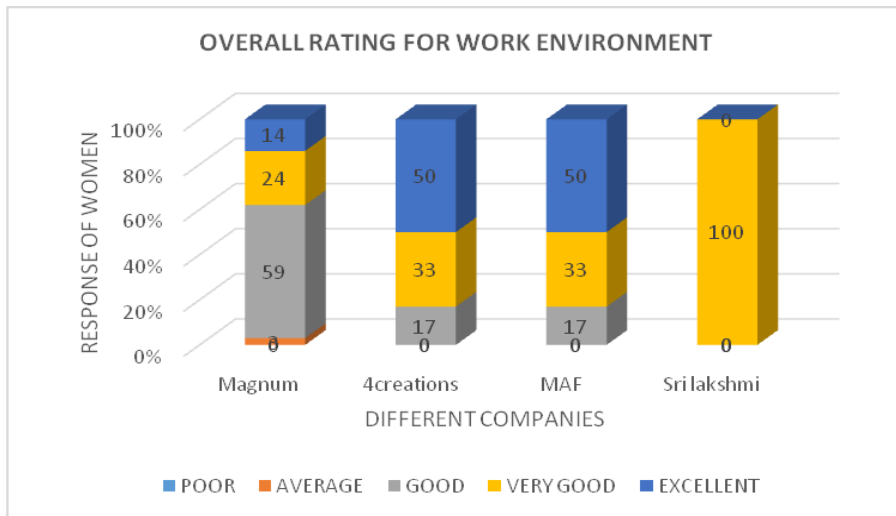
Graph 6.43: Response of women on quality of equipments

Section wise survey – Cutting section

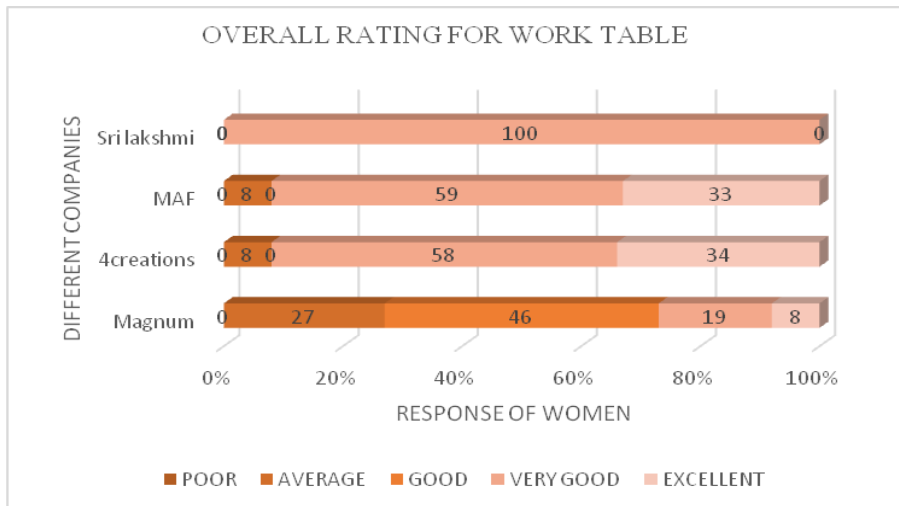
Cutting section survey				
Identified factor affecting women health& productivity	Garment company	Response of women in %		Remarks
Tables in cutting section *A-Adjustable *NA-Not Adjustable	Magnum	A	NA	
		19%	81%	
	4Creations	A	NA	
		-	100%	
	MAF	A	NA	
		-	100%	
	Sri Lakshmi	A	NA	
		-	100%	
Comfortable with actual height of table?	Magnum	Yes - 70%, N0- 30%		
	4Creations	Yes - 92%, N0- 8%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 100%		
Comfortable to work in standing position for long duration?	Magnum	No – 100%		
	4Creations	Yes - 67%, N0- 33%		
	MAF	Yes – 64%, No -36%		
	Sri Lakshmi	Yes – 100%		
Sufficient windows or doors in activity area?	Magnum	Yes – 100%		
	4Creations	Yes – 100%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 100%		
Sufficient fans and ventilation in activity area?	Magnum	Yes – 100%		
	4Creations	Yes – 100%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 100%		
Are fans in good working condition?	Magnum	Yes – 100%		
	4Creations	Yes – 100%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 100%		
Does your work demand extreme bending?	Magnum	Yes – 27%,No – 73%		
	4Creations	No – 100%		
	MAF	No – 100%		
	Sri	No – 100%		

	Lakshmi						
Do you have seating arrangement in your workstation?	Magnum	Yes – 11%, No-89%					
	4Creations	No – 100%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Do you suffer from extreme heat cramps in fusing section?	Magnum	Yes – 30%, No-70%					
	4Creations	Yes – 42%, No-58%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Have you suffered from some injury during work?	Magnum	Yes-8%, No-92%					<ul style="list-style-type: none">Finger was cut by edge cutter machine
	4Creations	Yes-8%, No-92%					
	MAF	No -100%					
	Sri Lakshmi	No – 100%					
Have you been provided with personal protective equipments?	Magnum	Yes-41%, No-59%					Equipments provided: <ul style="list-style-type: none">MaskCotton hand gloves
	4Creations	Yes – 100%					
	MAF	Yes – 36%, No-64%					
	Sri Lakshmi	Yes – 100%					
Do you use them in work?	Magnum	No- 100%					
	4Creations	No- 100%					
	MAF	Yes – 9%, No- 91%					
	Sri Lakshmi	Yes – 50%, No- 50%					
Do you find comfortable to work with personal protective equipments?	Magnum	No- 100%					
	4Creations	No- 100%					
	MAF	Yes – 9%, No- 91%					
	Sri Lakshmi	Yes – 50%, No- 50%					
Ratings for work environment *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	Magnum	P	A	G	V	E	
		-	3%	59%	24%	14%	
	4Creations	P	A	G	V	E	
		-	-	17%	33%	50%	
	MAF	P	A	G	V	E	
		-	-	17%	33%	50%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	-	100%	-	
Ratings for overall work table in terms of height, space,	Magnum	P	A	G	V	E	
		-	27%	46%	19%	8%	
	4Creations	P	A	G	V	E	
		-	8%	-	58%	34%	
	MAF	P	A	G	V	E	
		-	-	-	-	-	

adjustable features *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent		-	8%	-	59%	33%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	-	100%	-	



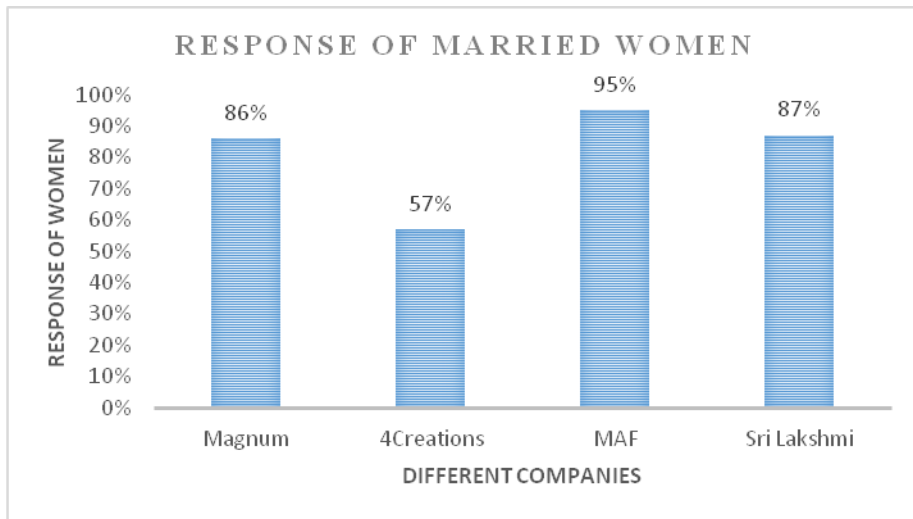
Graph 6.44: Overall rating for work environment



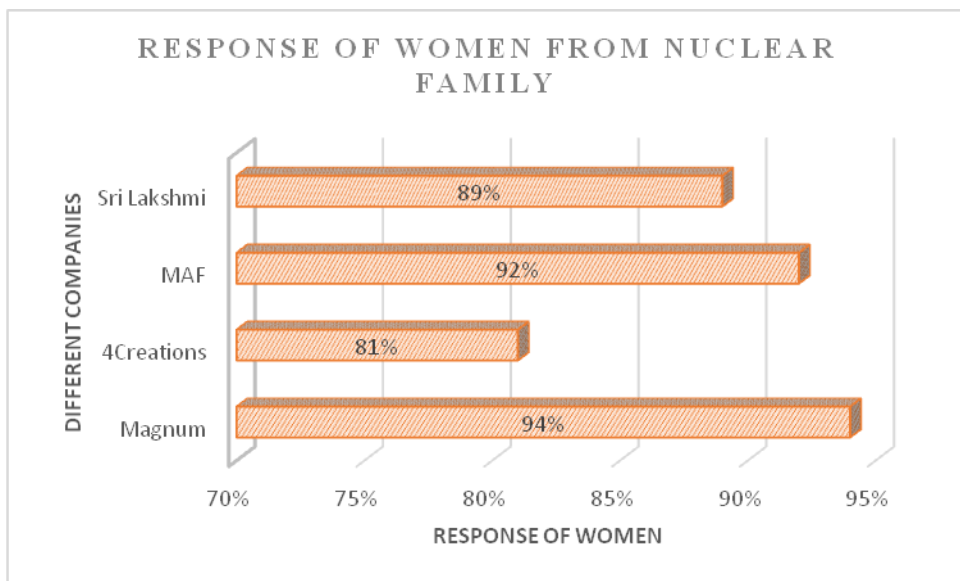
Graph 6.45: Overall rating for work table

6.2 Sewing section:

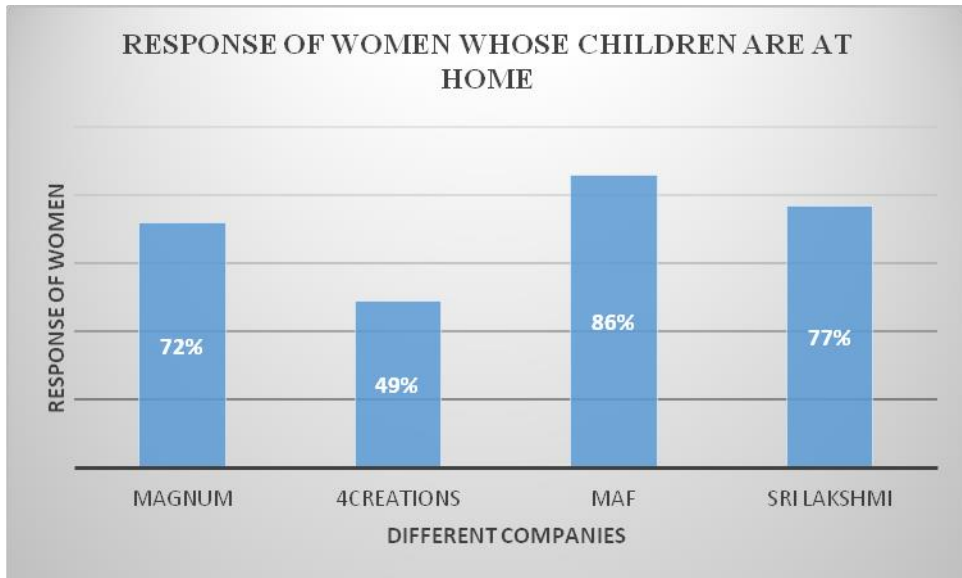
A. Social-Demographic Profile of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Marital status- MARRIED	Magnum	86%	Women need to manage both home and work
	4Creations	57%	
	MAF	95%	
	Sri Lakshmi	87%	
Family Type – NUCLEAR FAMILY	Magnum	94%	No elders/other family members to help in household chores.
	4Creations	81%	
	MAF	92%	
	Sri Lakshmi	89%	
Children at home	Magnum	72%	Children need more care and attention than any other family member.
	4Creations	49%	
	MAF	86%	
	Sri Lakshmi	77%	
Family Members Support - NO	Magnum	20%	Having no support from their family members may put women under mental and physical stress because of the need to manage both household work and their career.
	4Creations	4%	
	MAF	9%	
	Sri Lakshmi	5%	
Accommodation– RENTED/PAYING GUEST	Magnum	89%	Major part of their salary goes in paying off house rent thus causing stress to earn more money.
	4Creations	84%	
	MAF	88%	
	Sri Lakshmi	87%	
Mode of Transportation to Office - WALK	Magnum	94%	They will be tired by the time they reach work place
	4Creations	29%	
	MAF	12%	
	Sri Lakshmi	33%	
Addiction- TOBACCO	Magnum	6%	
	4Creations	2%	
	MAF	-	
	Sri Lakshmi	-	



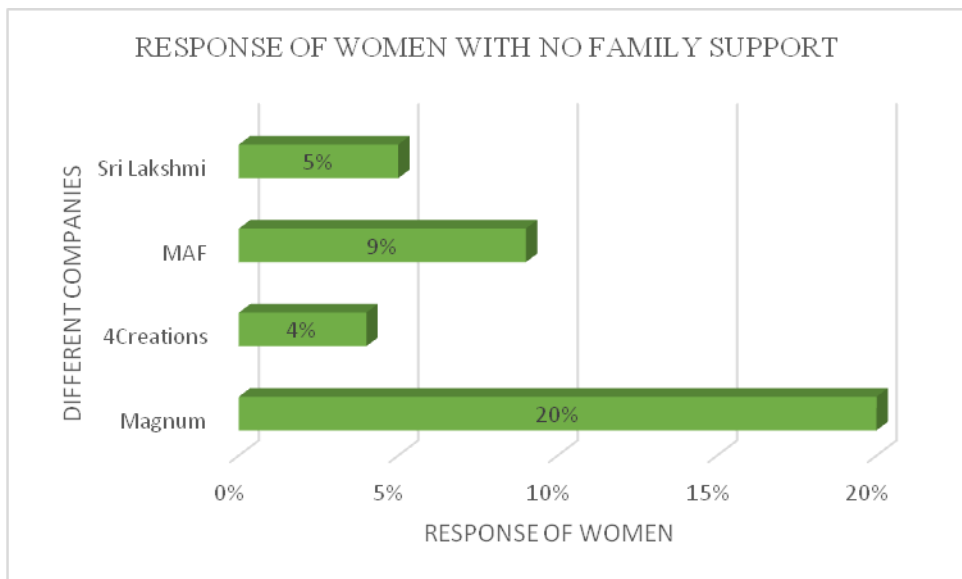
Graph 6.46 Married women response



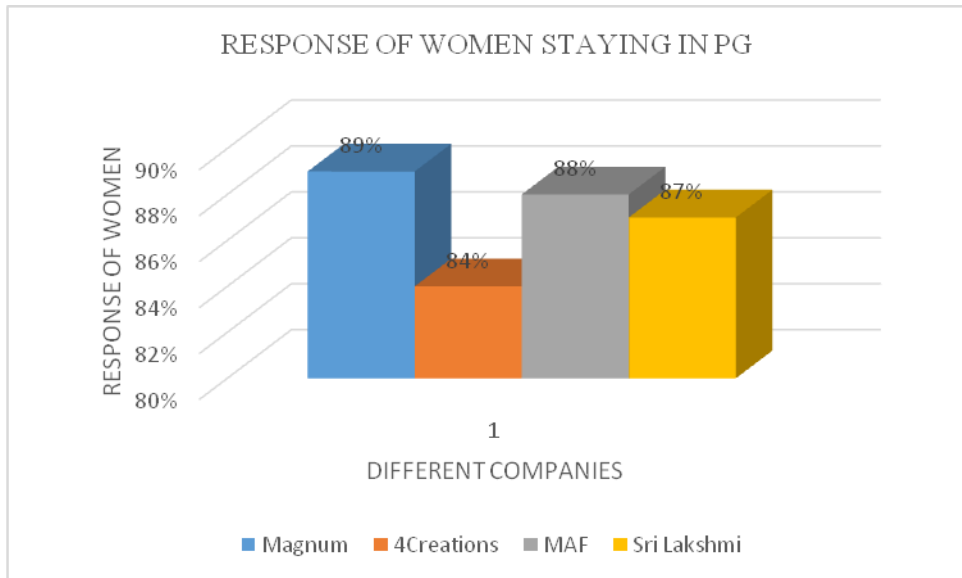
Graph 6.47: Nuclear type women response



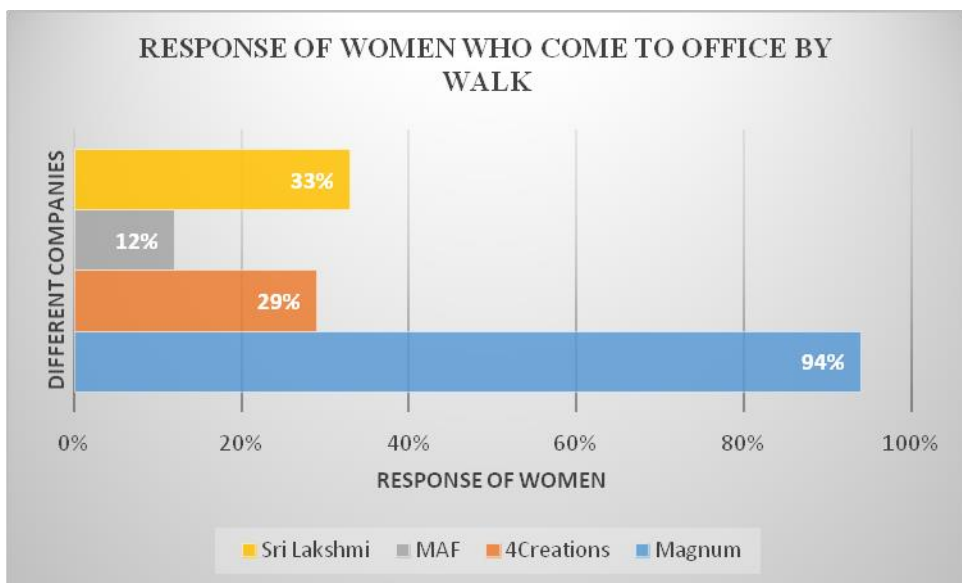
Graph 6.48: Response of women whose children are at home



Graph 6.49: Women with no family support

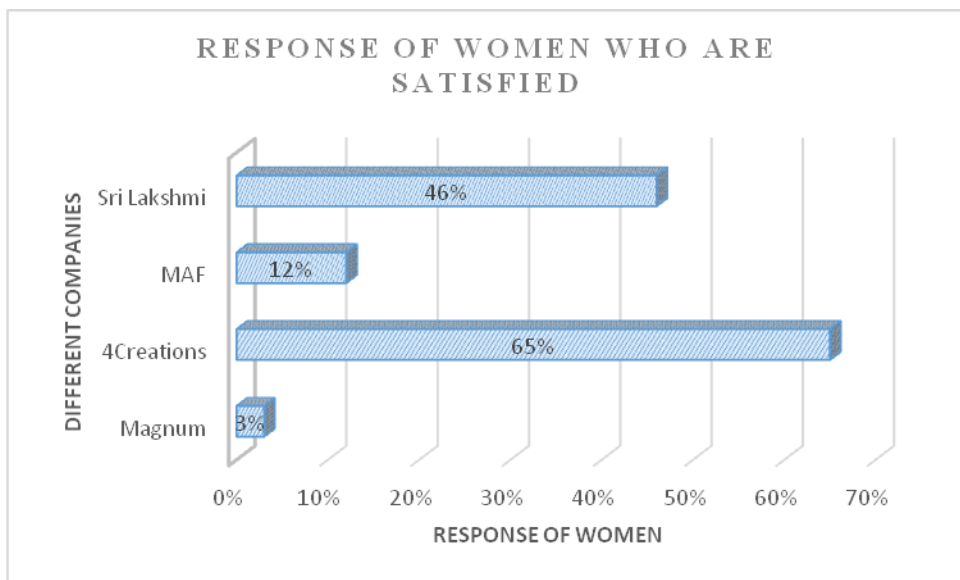


Graph 6.50: Response of women stayin as paying guests

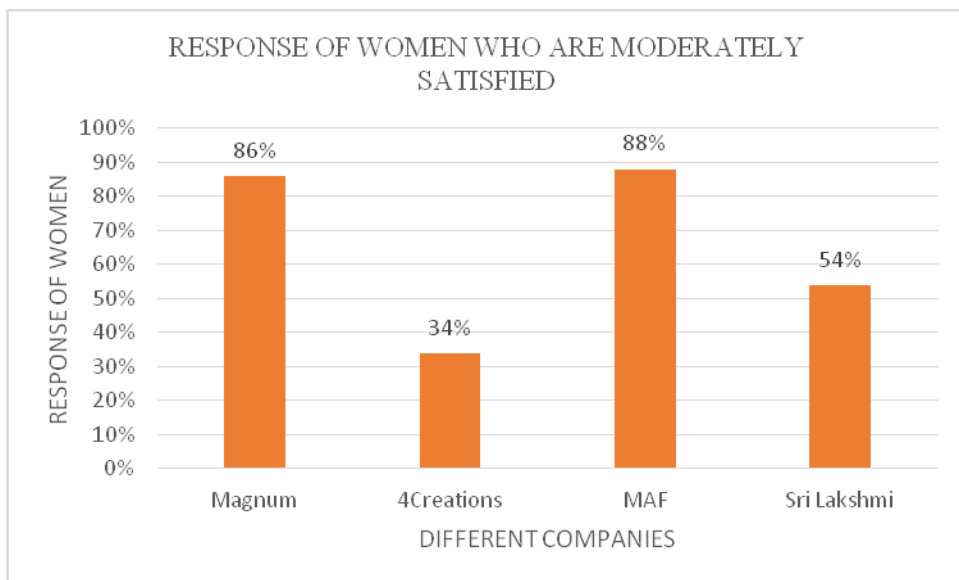


Graph 6.51: Response of women who walk to office

B. Occupational Status of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Job Satisfaction Level - SATISFIED	Magnum	3%	--
	4Creations	65%	
	MAF	12%	
	Sri Lakshmi	46%	
Job Satisfaction Level – MODERATELY SATISFIED	Magnum	86%	Women said they were not satisfied with their salaries, facilities like chairs, fans, break during work.
	4Creations	34%	
	MAF	88%	
	Sri Lakshmi	54%	
Job Satisfaction Level – NOT SATISFIED	Magnum	11%	
	4Creations	1%	
	MAF	-	
	Sri Lakshmi	-	



Graph 6.52: Response of women who are satisfied with their jobs



Graph 6.53: Response of women who are moderately satisfied

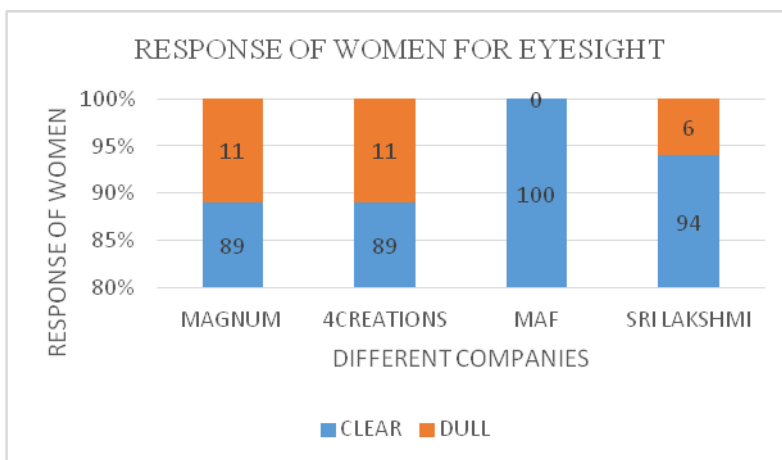
C. Women-Oriented Profile			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Eyesight *Clear-C *Dull-D	Magnum	C-89%, D-11%	
	4Creations	C-89%, D-11%	
	MAF	C-100%	
	Sri Lakshmi	C-94%,D-6%	
Hearing *Audible - A *Not audible – NA *Partially Audible - PA	Magnum	A-94%,NA-6%	
	4Creations	A-96%, NA-2%, PA-2%	
	MAF	A-100%	
	Sri Lakshmi	A-100%	
Hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-17%,M-75%, P-8%	
	4Creations	G-94%,M-2%, P-4%	
	MAF	G-95%,M-5%	
	Sri Lakshmi	G-100%	
Oral hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-14%,M-67%,P-19%	Common Oral problems faced by women: Dry mouth, swelling of salivary glands, oral ulcers, bad breathe, gum diseases, tonsils, cold sores
	4Creations	G-67%,M-29%,P-4%	
	MAF	G-66%, M-28%,P-6%	

	Sri Lakshmi	G-95%, M-5%		
Skin hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-11%,M-33%,P-56%		Common Skin problems faced by women: Dry skin, exposure to dust, exposure to extreme heat, rashes/itching/allergic problem, dandruff, hair fall problem
	4Creations	G-38%,M-56%,P-6%		
	MAF	G-38%,M-56%,P-6%		
	Sri Lakshmi	G-96%, M-4%		
Menstrual history: (i) Nature of cycle *Regular-R *Irregular-IR *Stopped-S) (ii) Intensity of pain *Mild-M *Moderate-MOD *Severe-Sv *Pregnant - Preg	Magnum	Cycle: R-86%, IR-3%, S-11% Pain: M-47%, MOD-22%, Sv-20%		
	4Creations	Cycle: R-90%, IR-7%, S-3% Pain: M-51%, MOD-23%, Sv-22%		
	MAF	Cycle: R-89%, IR-7%, S-4% Pain: M-51%,MOD-23%, Sv-22%		
	Sri Lakshmi	Cycle: R-96%, IR-2%, S-1%, Preg-1% Pain: M-52%,MOD-23%, Sv-23%		
Frequency of Illness Experienced- Before Employment *Often-O *Not Often-NO *Rarely-R *Not reported -NR	Magnum	N.O-6%,R-94%		
	4Creations	O-3%,R-1%, NR-96%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Illness Experienced- After Employment *Often-O *Not Often-NO *Rarely-R *Not reported -NR	Magnum	O-67%, N.O-14%,R-19%		
	4Creations	O-6%, N.O-2%,R-4%, NR-88%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Absence in a month	Magnum	Absence (in days)	%	

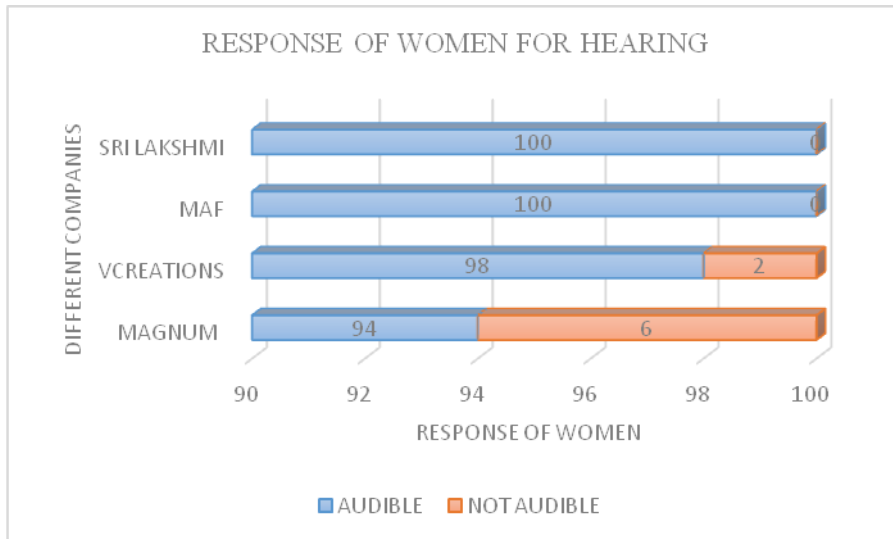
		Not Ab	3%	
		1	11%	
		1-2	44%	
		1-3	11%	
		2-3	8%	
		2-4	3%	
		Upto 3	6%	
		>4	14%	
	4Creations	Absence (in days)	%	
		Not Ab	64%	
		1	11%	
		1-2	5%	
		1-3	1%	
		2	9%	
		2- 3	2%	
		2 - 4	1%	
		2 to 5	1%	
		3	2%	
		3-4	1%	
		4	1%	
		>4	2%	
	MAF	Absence (in days)	%	
		Not Ab	25%	
		1-2	58%	
		2	17%	
	Sri Lakshmi	Absence (in days)	%	
		Not Ab	56%	
		1	4%	
		1-2	27%	
		2	1%	
		2-3	6%	
		3-4	2%	
		>5	4%	
Causes of absenteeism	Magnum	FC-72%, IL-61%		
*Family commitment-FC; *Illness-IL * Work Pressure – WP *Lack of Transportation-L	4Creations	FC-35%, IL-23%, WP-6%		
	MAF	FC-36%, IL-36%		
	Sri Lakshmi	FC-44%, IL-44% L-1%		
Victim of common illness	Magnum	Common illness: Cough and cold, Headache, Fever,	Other common illnesses: Bleeding per rectum, Burning sensation while passing urine,	
	4Creations			
	MAF			

	Sri Lakshmi	Typhoid, TB	Stomach ulcer, Gastric, Thyroid, stomach pain, Low BP, Anemia, dengue, mastectomy, diagnosed with lump in left breast, excessive sweating in both palms, water leaks from both ears, burning sensation in stomach, frequent urination, sinus, acidity, burning sensation in hands and legs, weakness, excessive white menstruation, Chickungunya, excess body heat, body pain, sore throat, vomiting, less WBC count, backache
Victim of specific illness	Magnum	Hypertension-34%, Swelling of legs-34%, acute attack of bronchial asthma – 6%, ischemic heart disease – 3%, enlargement of lower limb veins – 3%, non-healing ulcers in lower limb – 3%	
	4Creations	Difficulty in breathing – 5%, acute attack of bronchial asthma – 1%, Hypertension-4%, diabetes mellitus – 1%, Swelling of legs - 17%	
	MAF	Hypertension-6%, diabetes mellitus – 6%, Swelling of legs - 18%	
	Sri Lakshmi	Diabetes mellitus – 1%, Swelling of legs - 14%	
Undergone treatment for common illness	Magnum	Yes – 100%	
	4Creations	Yes – 77%, No -6%	
	MAF	Yes – 100%	
	Sri Lakshmi	Yes –81%, No – 8%	
Category of medical services	Magnum	First aid – 100%	
	4Creations	First aid- 100% Primary care – 100%	
	MAF	First aid- 100%	
	Sri Lakshmi	First aid- 100%	

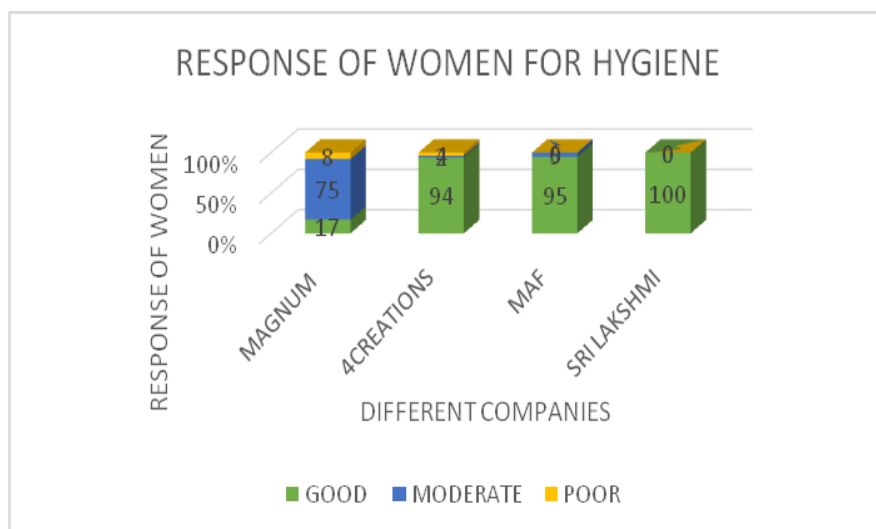
Psychiatric problems suffered	Magnum	Insomnia-14% Depression-61% Anxiety-78% Palpitations-39%	
	4Creations	Insomnia-12% Depression-16% Anxiety-36% Palpitations-26%	
	MAF	Insomnia-10% Depression-18% Anxiety-38% Palpitations-24%	
	Sri Lakshmi	Insomnia-15% Depression-10% Anxiety-38% Palpitations-17%	



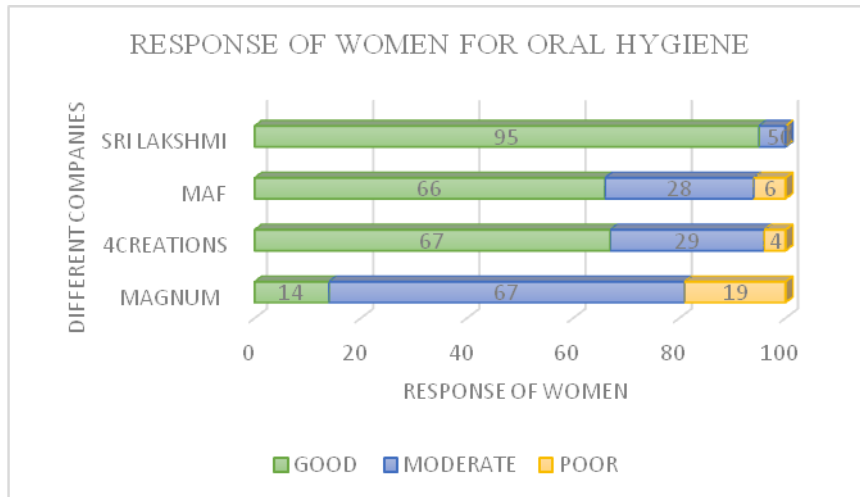
Graph 6.54: Response of women for eyesight



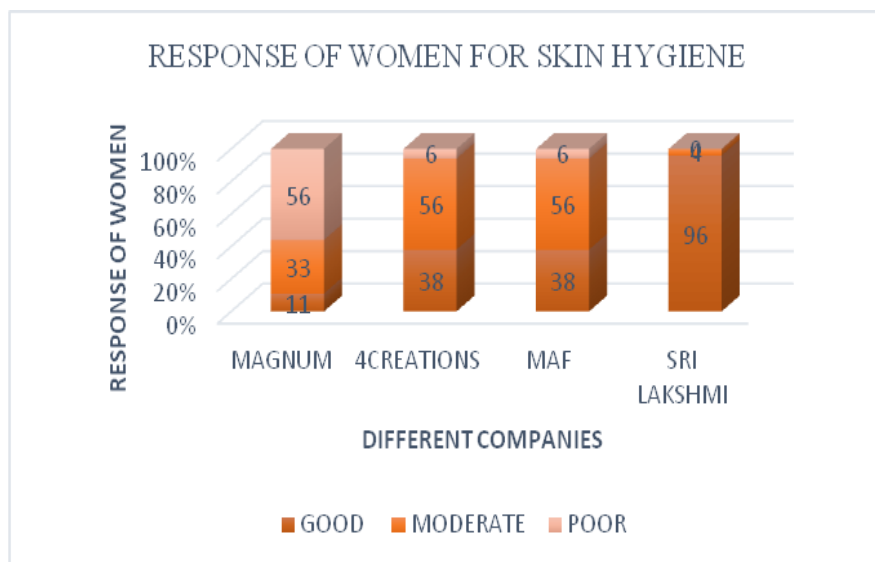
Graph 6.55: Response of women for hearing



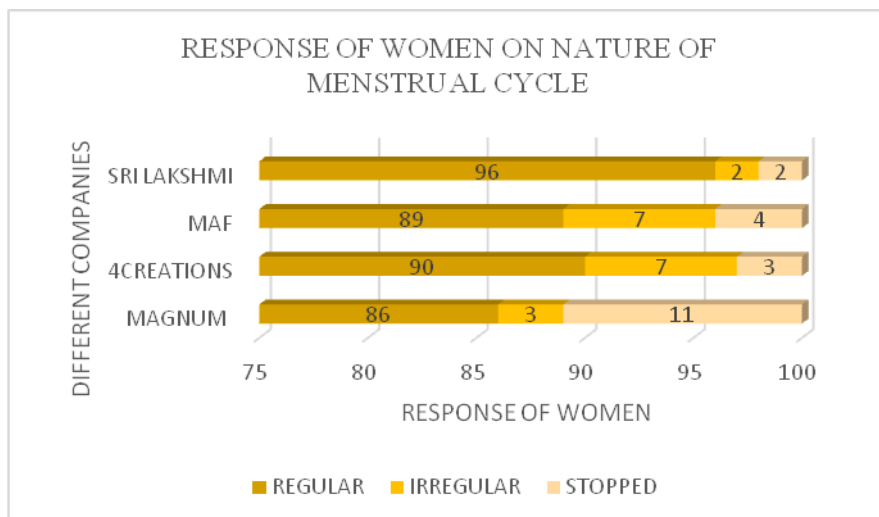
Graph 6.56: Response of women for hygiene



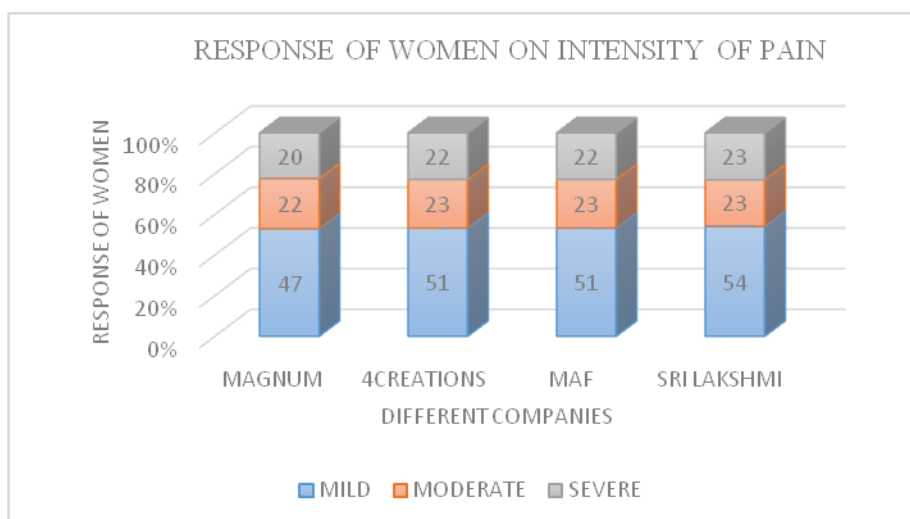
Graph 6.57: Response of women for Oral Hygiene



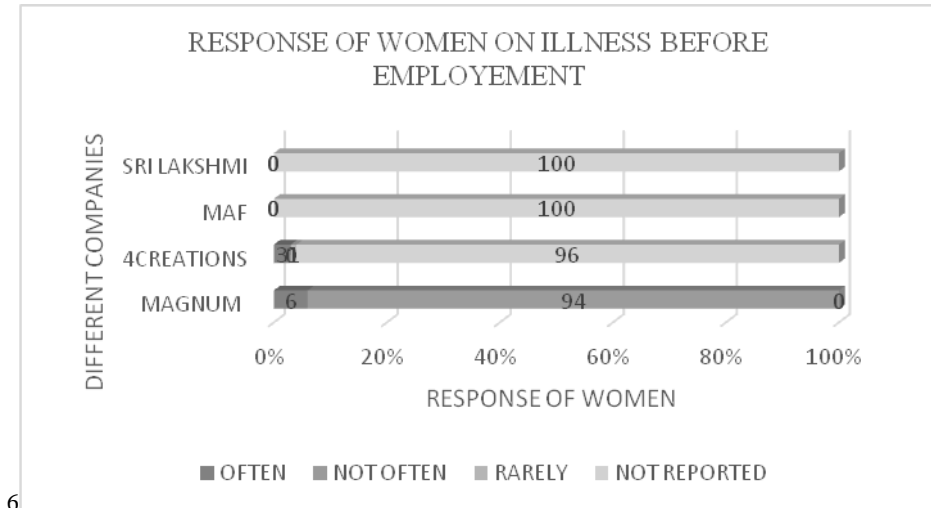
Graph 6.58: Response of women for Skin Hygiene



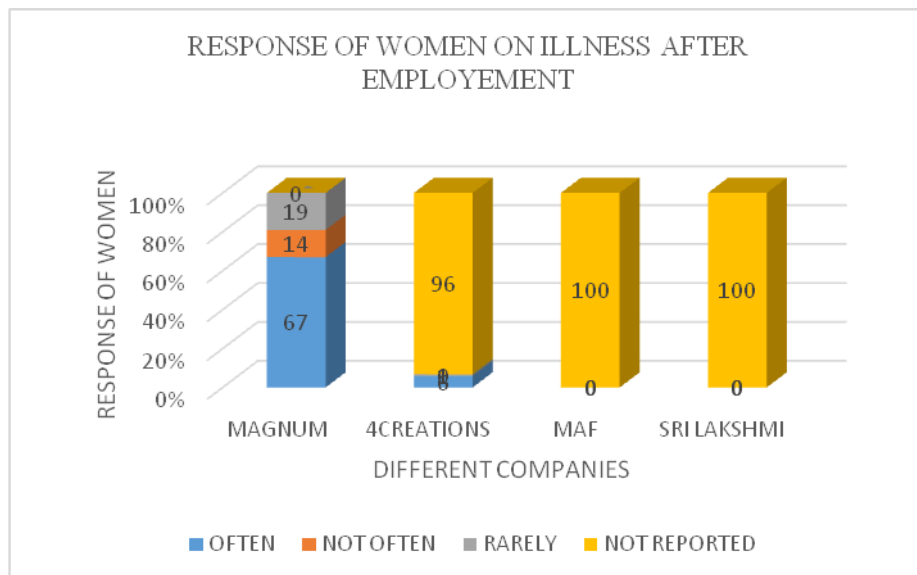
Graph 6.59: Response of women on Nature of Menstrual Cycle



Graph 6.60: Response of women on Intensity of Pain



Graph 6.61: Response of women on Illness Before Employment



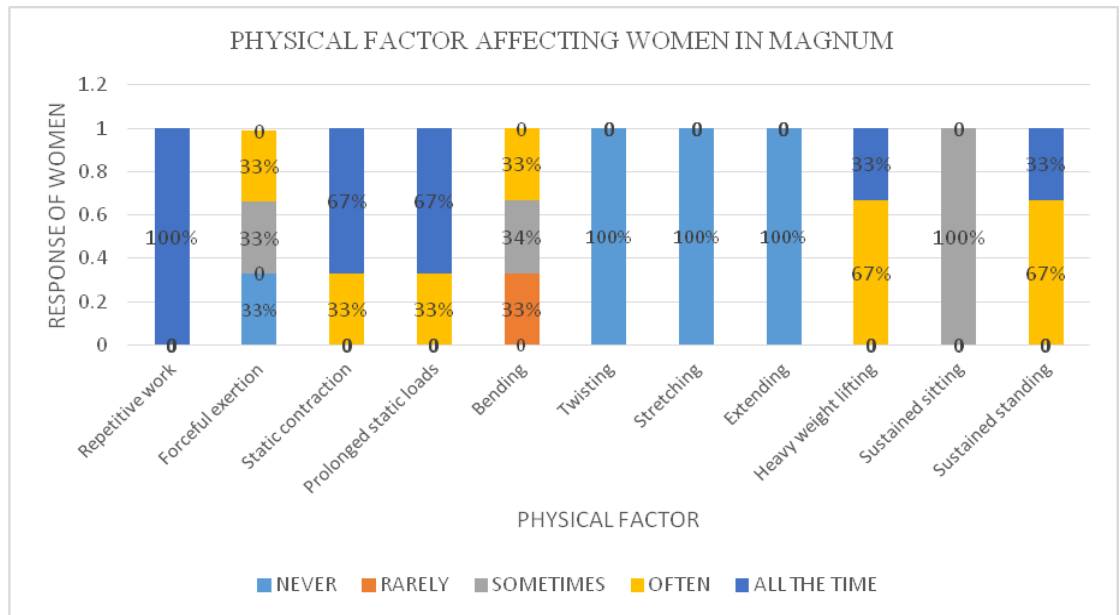
Graph 6.62: Response of women on Illness After Employment

D. Physical factors at work								
Identified factor affecting women health & productivity	Garment company	Response of women in %						Remarks
Work involves following constraints *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Physical factor	N	R	S	O	A	
		Repetitive work	3%	-	-	-	97%	
		Forceful exertion	22%	55%	17%	3%	3%	
		Static contraction	3%	3%	-	61%	33%	
		Prolonged static loads	3%	3%	53%	38%	3%	
		Bending	11%	25%	14%	47%	3%	
		Twisting	67%	30%	3%	-	-	
		Stretching	67%	33%	-	-	-	
		Extending	72%	28%	-	-	-	
		Heavy weight lifting	89%	11%	-	-	-	
		Sustained sitting	3%	-	-	-	97%	
		Sustained standing	94%	3%	3%	-	-	
	4Creations	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	94%	0.6%	1%	-	4%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	94%	-	2%	2%	2%	
		Twisting	86%	2%	4%	5%	3%	
		Stretching	98%	-	0.6%	-	1%	
		Extending	99%	-	0.6%	-	0.6%	
		Heavy weight lifting	98%	0.6%	0.6%	1%	-	
		Sustained sitting	24%	-	0.6%	1%	74%	
		Sustained standing	75%-	1%	-	-	24%	
	MAF	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	100%	-	-	-	-	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	100%	-	-	-	-	
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	-	

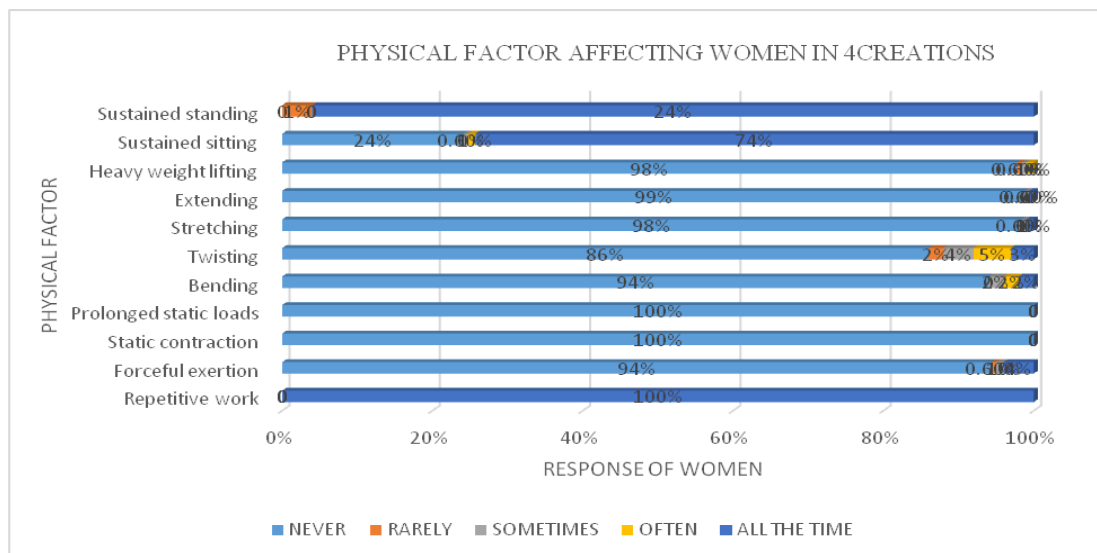
		Extending	100%	-	-	-	-	
		Heavy weight lifting	100%	-	-	-	-	
		Sustained sitting	-	-	-	-	100%	
		Sustained standing	100%	-	-	-	-	
	Sri Lakshmi	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	94%	-	-	2%	4%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	94%	-	2%	2%	2%	
		Twisting	100%	-	-	-	-	
		Stretching	99%	-	-	1%	-	
		Extending	100%	-	-	-	-	
		Heavy weight lifting	94%	-	1%	1%	4%	
Sustained sitting	-	-	-	-	100%			
Sustained standing	100%	-	-	-	-			
Comfortable to work in standing/sitting position for long working hours	Magnum	Yes – 6%, No – 94%						
	4Creations	Yes – 86%, No – 14%						
	MAF	Yes – 86%, No – 14%						
	Sri Lakshmi	Yes – 88%, No- 12%						
Victim of following symptoms *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Symptoms	N	R	S	O	A	
		Aching	3%	3%	14%	66%	14%	
		Cramping	8%	31%	31%	30%	-	
		Carelessness	50%	28%	19%	3%	-	
		Dizziness	81%	5%	11%	3%	-	
		Numbness	3%	8%	42%	42%	5%	
		Stiffness	3%	3%	44%	44%	6%	
		Tiredness	-	17%	17%	36%	30%	
	Tangling	100%	-	-	-	-		
	4Creations	Symptoms	N	R	S	O	A	
		Aching	27%	8%	27%	8%	30%	
		Cramping	78%	2%	8%	7%	5%	
		Carelessness	95%	2%	2%	0.6%	0.6%	
		Dizziness	68%	5%	17%	6%	4%	
		Numbness	70%	-	16%	9%	5%	
		Stiffness	95%	-	2%	0.6%	2%	
		Tiredness	42%	6%	17%	12%	23%	
	Tangling	100%	-	-	-	-		
	MAF	Symptoms	N	R	S	O	A	
		Aching	37%	12%	42%	-	9%	

		Cramping	74%	6%	12%	8%	-
		Carelessness	100%	-	-	-	-
		Dizziness	76%	6%	18%	-	-
		Numbness	84%	16%	-	-	-
		Stiffness	96%	-	4%	-	-
		Tiredness	22%	6%	18%	12%	42%
		Tangling	100%	-	-	-	-
	Sri Lakshmi	Symptoms	N	R	S	O	A
		Aching	5%	21%	32%	30%	12%
		Cramping	50%	7%	17%	24%	2%
		Carelessness	99%	1%	-	-	-
		Dizziness	93%	-	4%	2%	1%
		Numbness	57%	4%	18%	19%	2%
		Stiffness	58%	5%	13%	22%	2%
		Tiredness	4%	25%	42%	20%	9%
		Tangling	100%	-	-	-	-
Victim of following injuries	Magnum	Injury	Yes		No		
		Laceration	6%		94%		
		Puncture	25%		75%		
		Avulsion	6%		94%		
		Hematoma	8%		92%		
		Abrasions	11%		89%		
		Contusions	22%		88%		
		Fracture	6%		94%		
		Sprain	50%		50%		
		Burn	42%		58%		
		Amputation	-		100%		
	4Creations	Injury	Yes		No		
		Laceration	-		100%		
		Puncture	1%		99%		
		Avulsion	1%		99%		
		Hematoma	1%		99%		
		Abrasions	-		100%		
		Contusions	-		100%		
		Fracture	4%		96%		
		Sprain	-		100%		
		Burn	5%		95%		
		Amputation	-		100%		
	MAF	Injury	Yes		No		
		Laceration	-		100%		
		Puncture	-		100%		
		Avulsion	-		100%		
		Hematoma	-		100%		
		Contusions	-		100%		

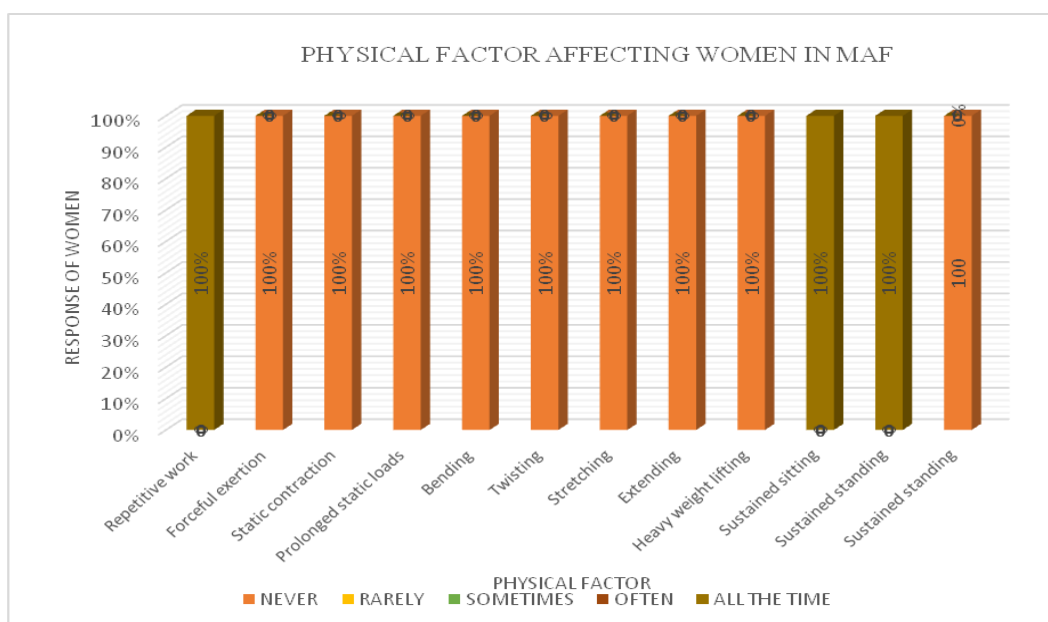
		Fracture	-	100%	
		Sprain	-	100%	
		Burn	-	100%	
		Amputation	-	100%	
	Sri Lakshmi	Injury	Yes	No	
		Laceration	-	100%	
		Puncture	-	100%	
		Avulsion	-	100%	
		Hematoma	-	100%	
		Abrasions	-	100%	
		Contusions	-	100%	
		Fracture	-	100%	
		Sprain	-	100%	
		Burn	-	100%	
		Amputation	-	100%	



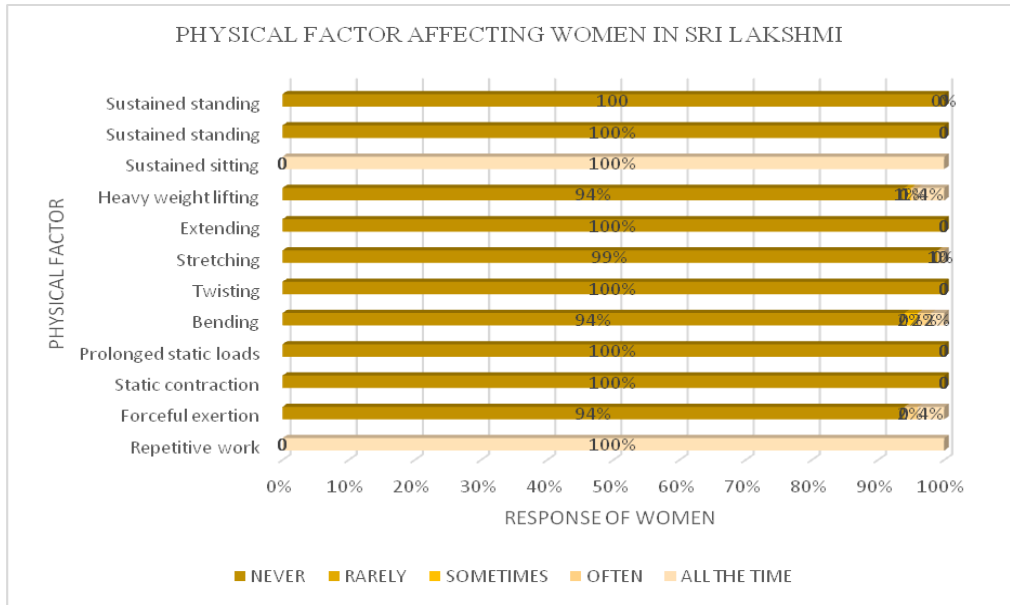
Graph 6.63: Physical Factors Affecting Women in Magnum



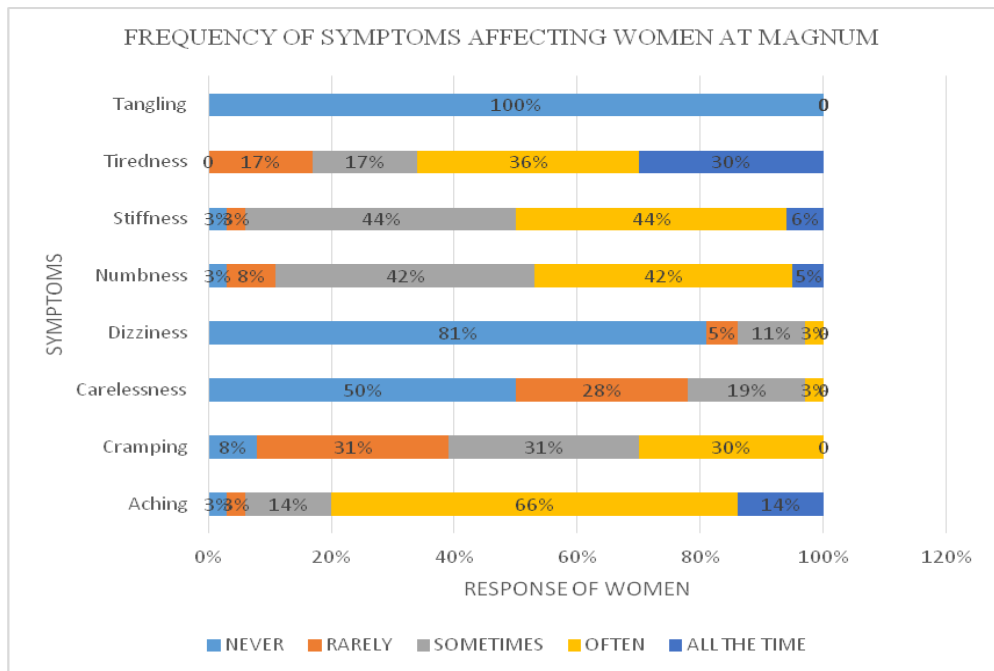
Graph 6.64: Physical Factors Affecting Women in 4 creations



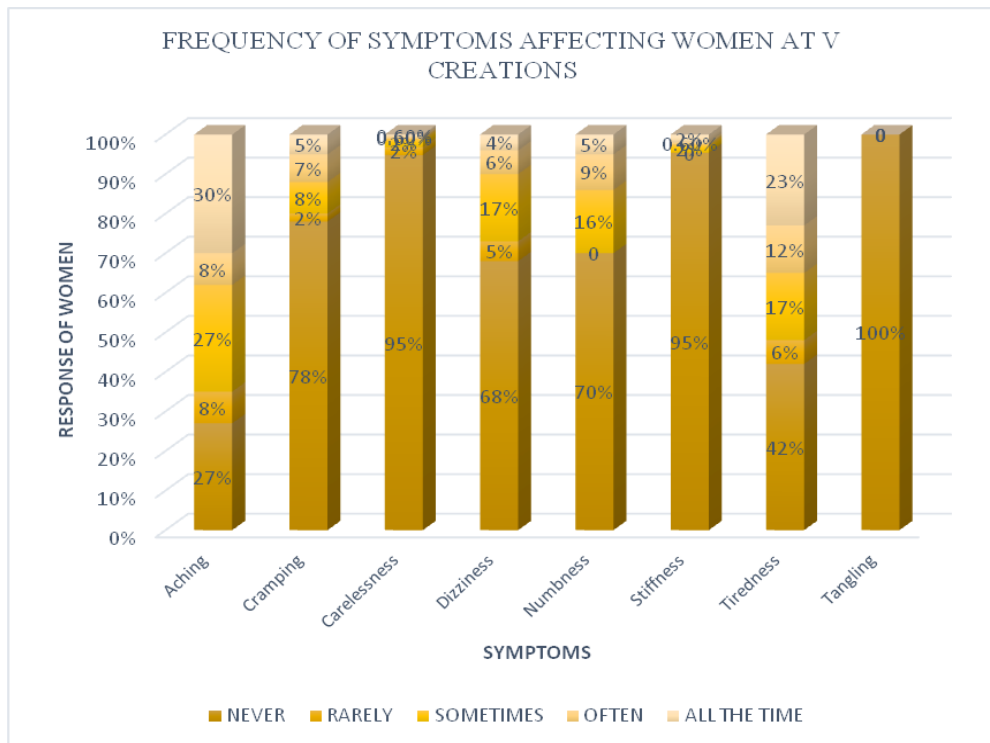
Graph 6.65: Physical Factors Affecting Women in Maf



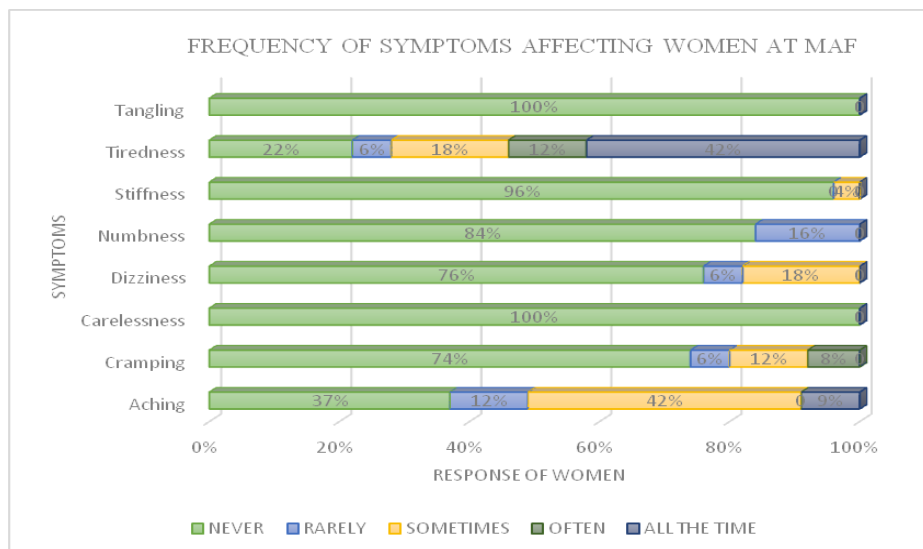
Graph 6.66: Physical Factors Affecting Women in Sri lakshmi



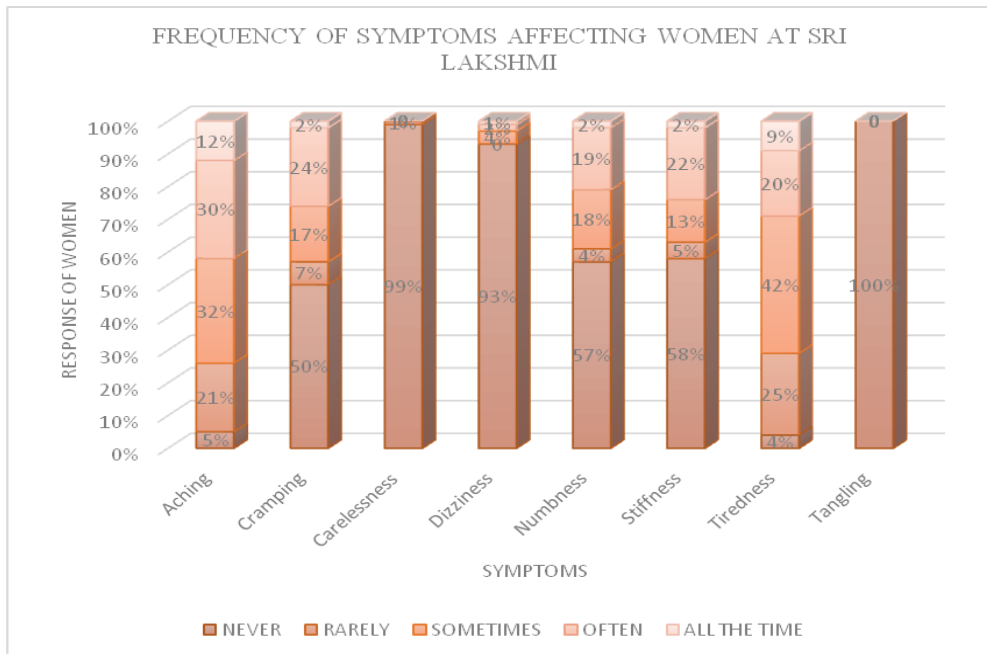
Graph 6.67: Frequency of symptoms Affecting Women at Magnum



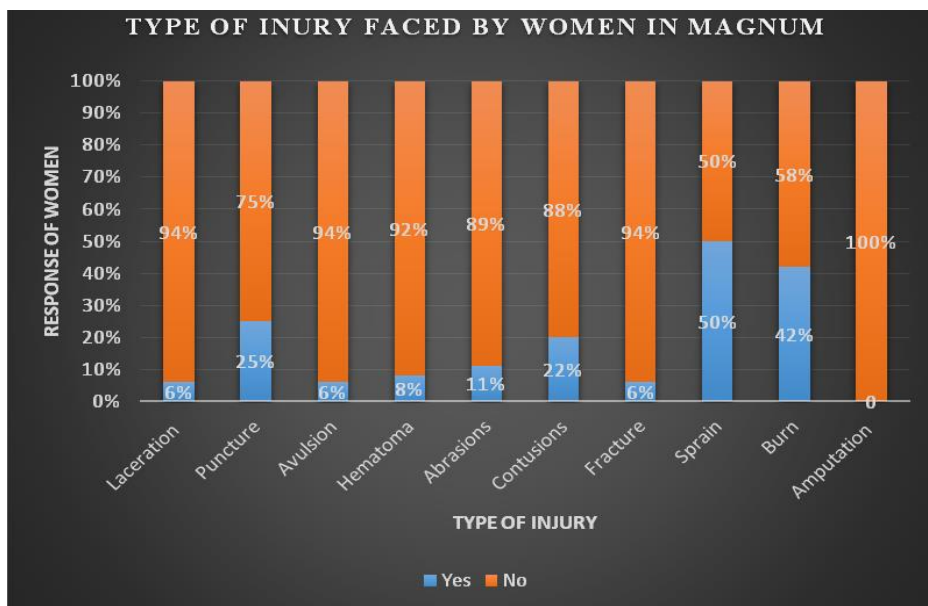
Graph 6.68: Frequency of symptoms Affecting Women at 4 creations



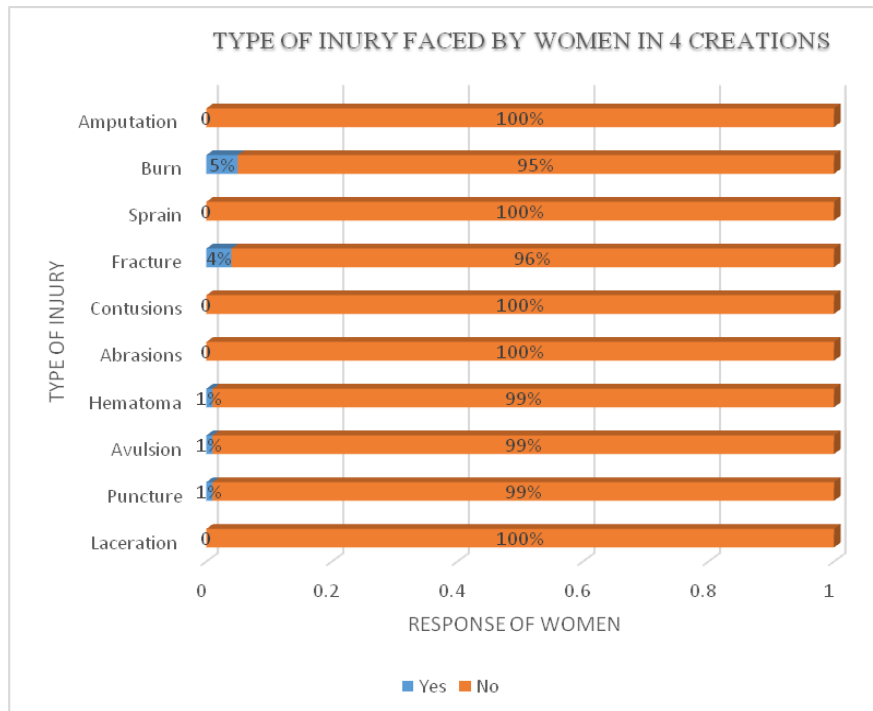
Graph 6.69: Frequency of symptoms Affecting Women at Maf



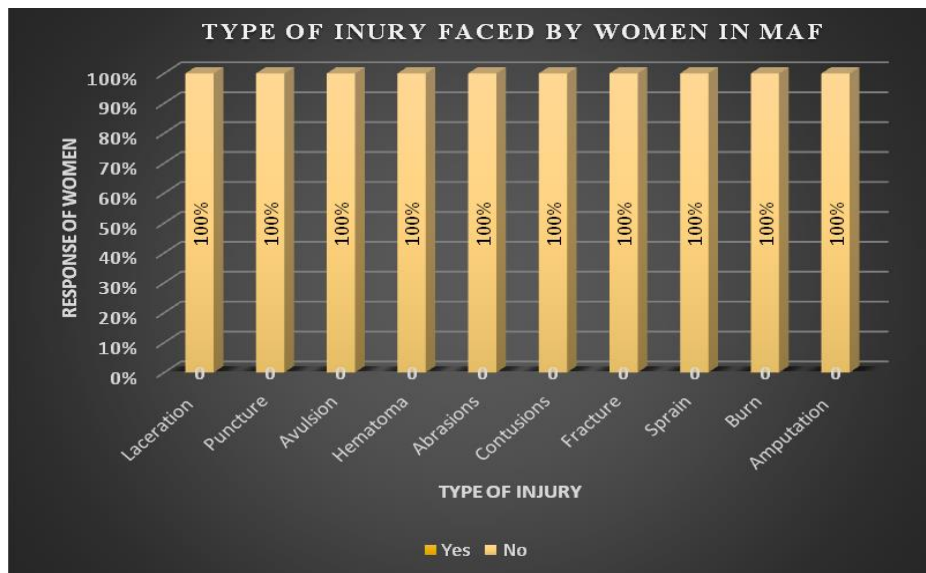
Graph 6.70: Frequency of symptoms Affecting Women at Sri lakshmi



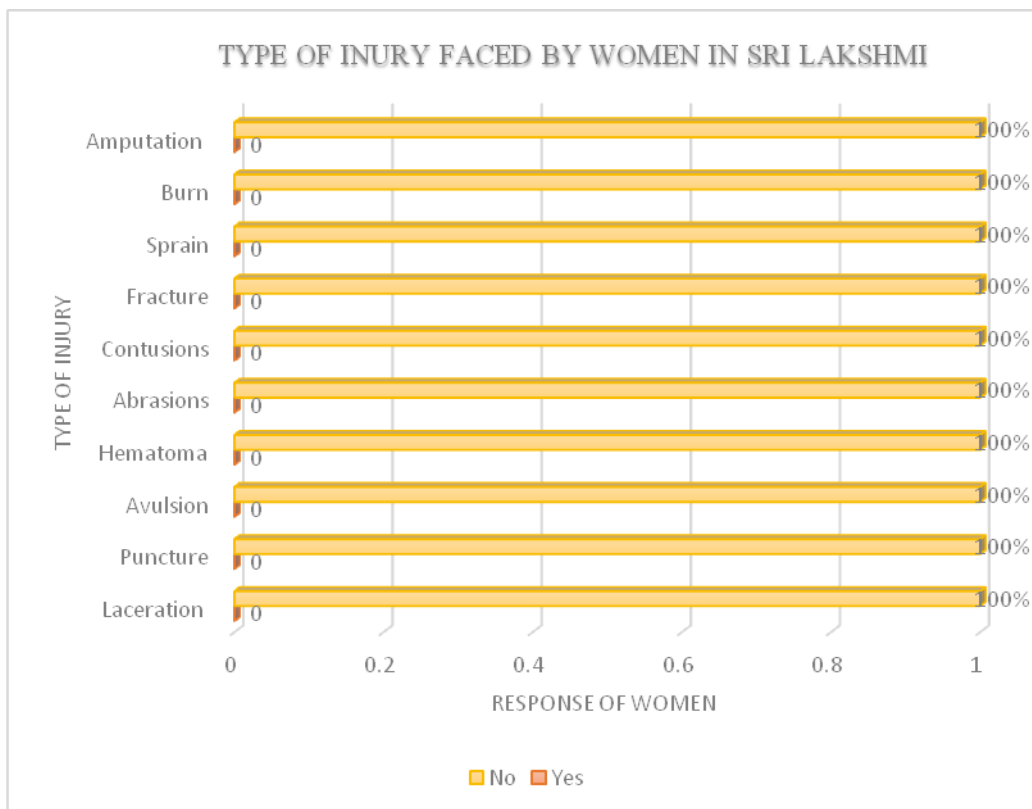
Graph 6.71: Type of injury faced by Women in Magnum



Graph 6.72: Type of injury faced by Women in 4 creations



Graph 6.73: Type of injury faced by Women in Maf


















Graph 6.74: Type of injury faced by Women in Sri lakshmi















E. Pain features			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Suffer from pain at present	Magnum	Yes – 100%	
	4Creations	Yes – 87%, No- 13%	
	MAF	Yes – 88%, No- 12%	
	Sri Lakshmi	Yes – 45%, No- 55%	
Pain experienced in a particular location (No pain, Low pain, Mild pain, High pain, Severe pain)	Magnum		
	4Creations	<p> Head (48%, 13%, 16%, 5%, 18%) Neck (78%, 7%, 5%, 1%, 9%) Right Shoulder (70%, 8%, 8%, 3%, 11%) Right Forearm/Elbow (90%, 2%, 2%, 2%, 4%) Lower Back (60%, 4%, 7%, 6%, 23%) Right Wrist/Hand (88%, 5%, 2%, 1%, 4%) Right Fingers (89%, 1%, 3%, 2%, 5%) Right Thigh/ Hip (81%, 8%, 2%, 2%, 7%) Right Knee (74%, 9%, 4%, 4%, 9%) Right Ankle (73%, 5%, 6%, 5%, 11%) Left Shoulder (74%, 5%, 6%, 7%, 10%) Left Forearm/Elbow (92%, 2%, 1%, 2%, 3%) Left Wrist/Hand (92%, 2%, 2%, 1%, 3%) Left Fingers (91%, 2%, 2%, 2%, 3%) Left Thigh/ Hip (83%, 6%, 1%, 1%, 9%) Left Knee (78%, 5%, 4%, 4%, 9%) Left Ankle (75%, 5%, 5%, 5%, 10%) </p>	




	MAF		
	Sri Lakshmi		
Cause of pain	Magnum	Cause	%
		Bad posture for long time	69%
		Long working periods	97%
		Incorrect way of lifting a load	3%
	4Creations	Usage of faulty equipment	3%
		Cause	%
		Bad posture for long time	72%
		Long working periods	39%
		Incorrect way of lifting a load	1%

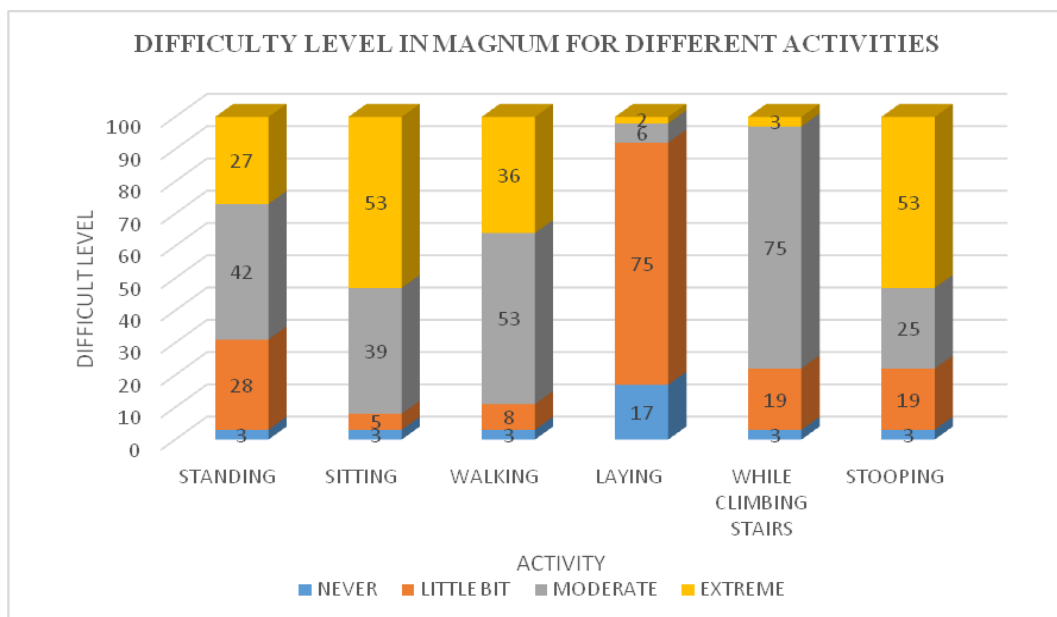
		Usage of faulty equipment	1%	
		Work pressure	2%	
		Health problem	7%	
		Headache due to noise in shop floor	1%	
		Personal problem	1%	
	MAF	Cause	%	
		Bad posture for long time	96%	
		Long working periods	96%	
	Sri Lakshmi	Cause	%	
		Bad posture for long time	45%	
Long working periods		45%		
Incorrect way of lifting a load		1%		
Occurrence of pain	Magnum	Suddenly - 97%, Gradually - 3%		
	4Creations	Suddenly - 15%, Gradually - 72%		
	MAF	Suddenly - 24%, Gradually - 76%		
	Sri Lakshmi	Gradually - 45%		
Interval of pain	Magnum	Intermittent - 61%, Constant - 39%		
	4Creations	Intermittent - 80%, Constant - 7%		
	MAF	Intermittent - 76%, Constant - 24%		
	Sri Lakshmi	Intermittent - 42%, Constant - 4%		
Physical activities at work are main reason for pain?	Magnum	Yes -97%, No-3%		
	4Creations	Yes-46%, No – 54%		
	MAF	Yes -100%		
	Sri Lakshmi	Yes -90%		
Inadequate rest intervals at work are the main contributors to pain?	Magnum	Yes -97%, No-3%		
	4Creations	Yes-26%, No – 74%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes106%, No – 90%		
Have you been absent from work due to extreme pain?	Magnum	Yes – 61%, No-39%		
	4Creations	Yes – 32%, No-68%		
	MAF	Yes – 51%, No-49%		
	Sri Lakshmi	Yes – 57%, No-43%		

Facing difficulty in carrying out following activity?	Magnum		<i>Difficulty level</i>			
		Activity	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>
		 Standing	3%	28%	42%	27%
		 Sitting	3%	5%	39%	53%
		 Walking	3%	8%	53%	36%
		 Laying	17%	75%	6%	2%
		 While climbing stairs	3%	19%	75%	3%
		 Stooping	3%	19%	25%	53%
	4Creations		<i>Difficulty level</i>			
		Activity	<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>

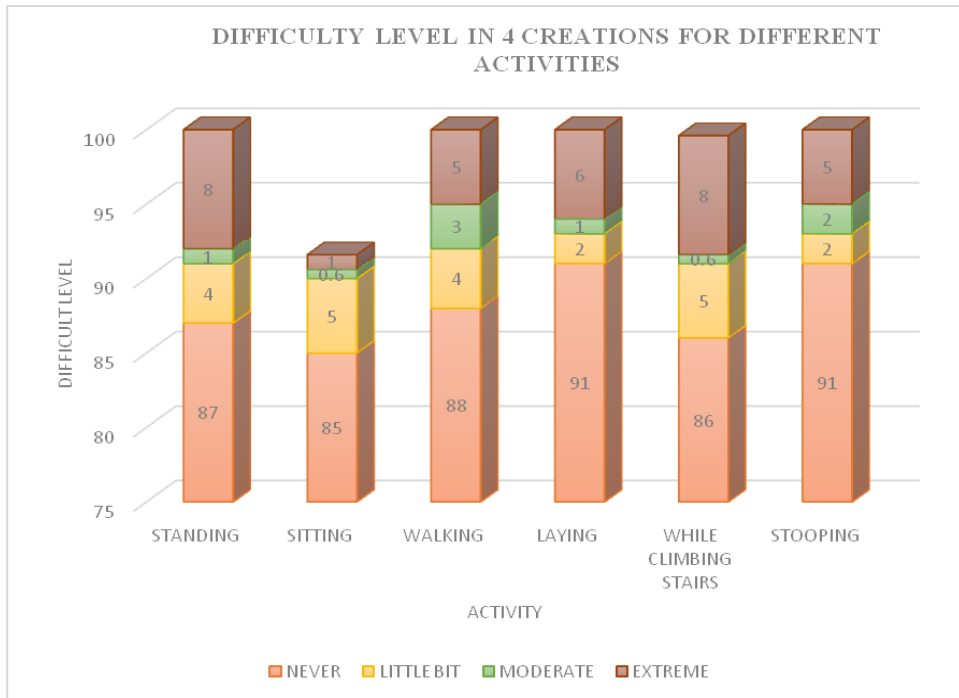
		<div></div> <div>Standing</div> <div>87%</div> <div>4%</div> <div>1%</div> <div>8%</div>																		
		<div></div> <div>Sitting</div> <div>85%</div> <div>5%</div> <div>0.6%</div> <div>1%</div>																		
		<div></div> <div>Walking</div> <div>88%</div> <div>4%</div> <div>3%</div> <div>5%</div>																		
		<div></div> <div>Laying</div> <div>91%</div> <div>2%</div> <div>1%</div> <div>6%</div>																		
		<div></div> <div>While climbing stairs</div> <div>86%</div> <div>5%</div> <div>0.6%</div> <div>8%</div>																		
		<div></div> <div>Stooping</div> <div>91%</div> <div>2%</div> <div>2%</div> <div>5%</div>																		
	MAF	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td><div></div><div>Standing</div></td><td>96%</td><td>4%</td><td>-</td><td>-</td></tr></table>				Activity	Difficulty level				Never	Little bit	Moderate	Extreme	<div></div> <div>Standing</div>	96%	4%	-	-	
Activity	Difficulty level																			
	Never	Little bit	Moderate	Extreme																
<div></div> <div>Standing</div>	96%	4%	-	-																

		<div></div> <div>Sitting</div> <div>96%</div> <div>4%</div> <div>-</div> <div>-</div>																									
		<div></div> <div>Walking</div> <div>100%</div> <div>-</div> <div>-</div> <div>-</div>																									
		<div></div> <div>Laying</div> <div>88%</div> <div>6%</div> <div>6%</div> <div>-</div>																									
		<div></div> <div>While climbing stairs</div> <div>100%</div> <div>-</div> <div>-</div> <div>-</div>																									
		<div></div> <div>Stooping</div> <div>90%</div> <div>8%</div> <div>2%</div> <div>-</div>																									
	Sri Lakshmi	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td><div></div><div>Standing</div></td><td>80%</td><td>4%</td><td>4%</td><td>12%</td></tr><tr><td><div></div><div>Sitting</div></td><td>88%</td><td>1%</td><td>4%</td><td>7%</td></tr><tr><td><div></div></td><td>92%</td><td>4%</td><td>-</td><td>4%</td></tr></table>	Activity	Difficulty level				Never	Little bit	Moderate	Extreme	<div></div> <div>Standing</div>	80%	4%	4%	12%	<div></div> <div>Sitting</div>	88%	1%	4%	7%	<div></div>	92%	4%	-	4%	
Activity	Difficulty level																										
	Never	Little bit	Moderate	Extreme																							
<div></div> <div>Standing</div>	80%	4%	4%	12%																							
<div></div> <div>Sitting</div>	88%	1%	4%	7%																							
<div></div>	92%	4%	-	4%																							

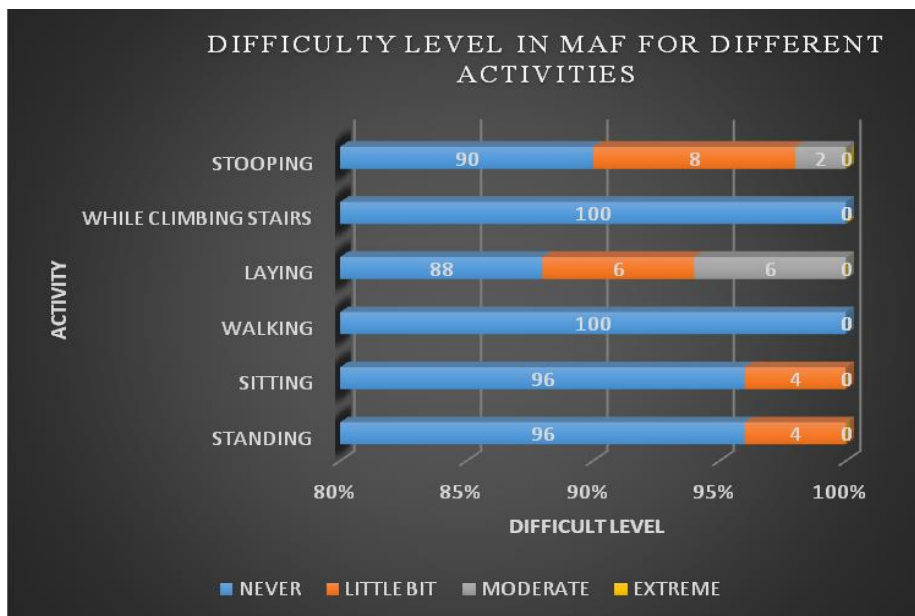
		Walking					
			88%	2%	2%	8%	
		Laying					
			94%	2%	-	4%	
		While climbing stairs					
			92%	1%	1%	6%	
		Stooping					



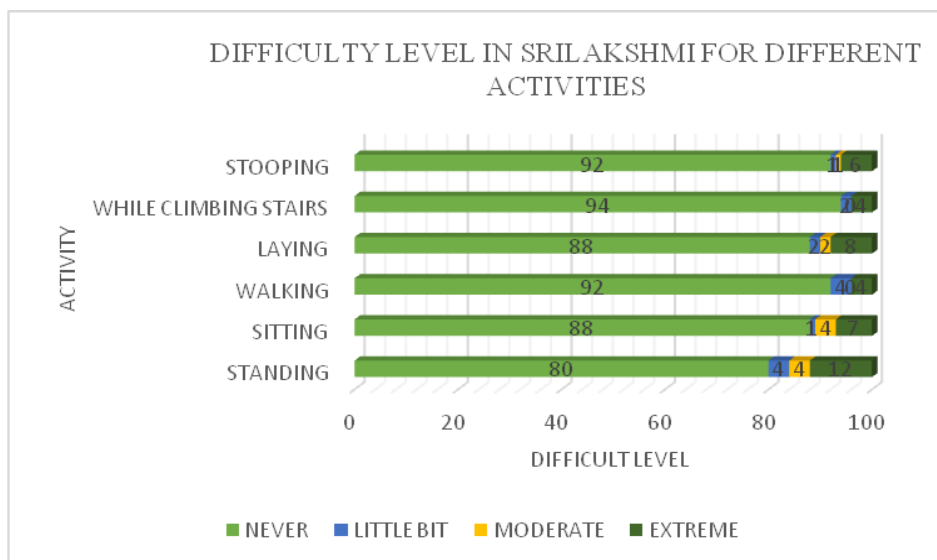
Graph 6.75: Difficulty level in magnum for different activities



Graph 6.76: Difficulty level in 4 creations for different activities



Graph 6.77: Difficulty level in maf for different activities

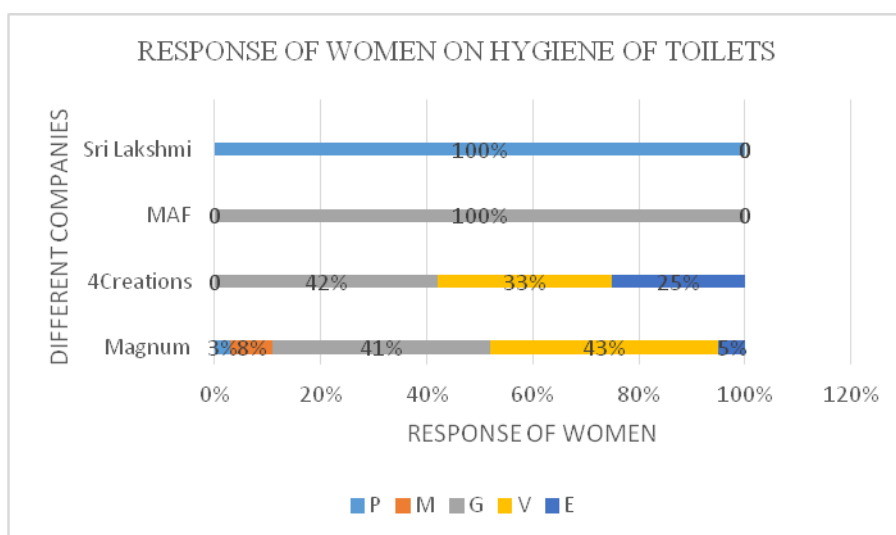


Graph 6.78: Difficulty level in sri lakshmi for different activities

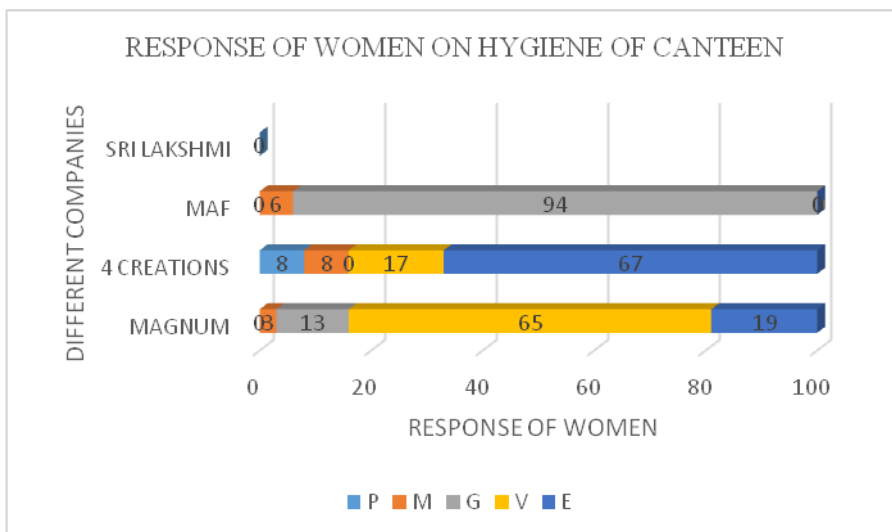
F. General Amenities							
Identified factor affecting women health& productivity	Garment company	Response of women in %					Remarks
Hygiene of toilets used *P-Poor *M-Moderate *G-Good *V-Very good *E-Excellent	Magnum	P	M	G	V	E	
		6%	2%	50%	42%	5%	
	4Creations	P	M	G	V	E	
		5%	20%	33%	34%	8%	
	MAF	P	M	G	V	E	
		-	4%	96%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
Hygiene of canteen	Magnum	P	M	G	V	E	
		3%	-	17%	58%	22%	
	4Creations	P	M	G	V	E	
		1%	5%	37%	38%	19%	
	MAF	P	M	G	V	E	
		-	12%	88%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		No canteen at premises					
Availability of drinking water	Magnum	P	M	G	V	E	
		-	-	-	25%	75%	
	4Creations	P	M	G	V	E	
		-	-	1%	9%	90%	
	MAF	P	M	G	V	E	
		-	-	-	96%	4%	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	-	100%	
Availability of sufficient rest periods	Magnum	P	M	G	V	E	
		97%	-	-	-	3%	
	4Creations	P	M	G	V	E	
		4%	6%	22%	35%	33%	
	MAF	P	M	G	V	E	
		-	9%	12%	79%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	100%	-	-	
Availability of first aid box during injuries	Magnum	P	M	G	V	E	
		6%	11%	52%	25%	6%	
	4Creations	P	M	G	V	E	
		1%	1%	1%	20%	77%	
	MAF	P	M	G	V	E	

	Sri Lakshmi	-	-	-	100%	-	
		P	M	G	V	E	
		-	100%	-	-	-	
Availability of doctor/nurse	Magnum	P	M	G	V	E	
		69%	17%	14%	-	-	
	4Creations	P	M	G	V	E	
		1%	-	2%	14%	83%	
	MAF	P	M	G	V	E	
		-	4%	96%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		No such facility					
How much do you rate medical room?	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	
		1%	-	1%	15%	83%	
	MAF	P	M	G	V	E	
		-	4%	96%	-	-	
	Sri Lakshmi	P	M	G	V	E	
		No medical room					
Rate working condition of lift	Magnum	P	M	G	V	E	
		88%	6%	6%	-	-	
	4Creations	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	MAF	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	Sri Lakshmi	P	M	G	V	E	
		No lift facility					
Rate working condition of fire alarms/engines	Magnum	P	M	G	V	E	
		11%	14%	64%	11%	-	
	4Creations	P	M	G	V	E	
		1%	-	1%	11%	87%	
	MAF	P	M	G	V	E	
		-	-	-	6%	94%	
	Sri Lakshmi	P	M	G	V	E	
		-	100%	-	-	-	
Rate working condition of machines in terms of performance	Magnum	P	M	G	V	E	
		8%	-	-	45%	47%	
	4Creations	P	M	G	V	E	
		-	1%	2%	14%	83%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	

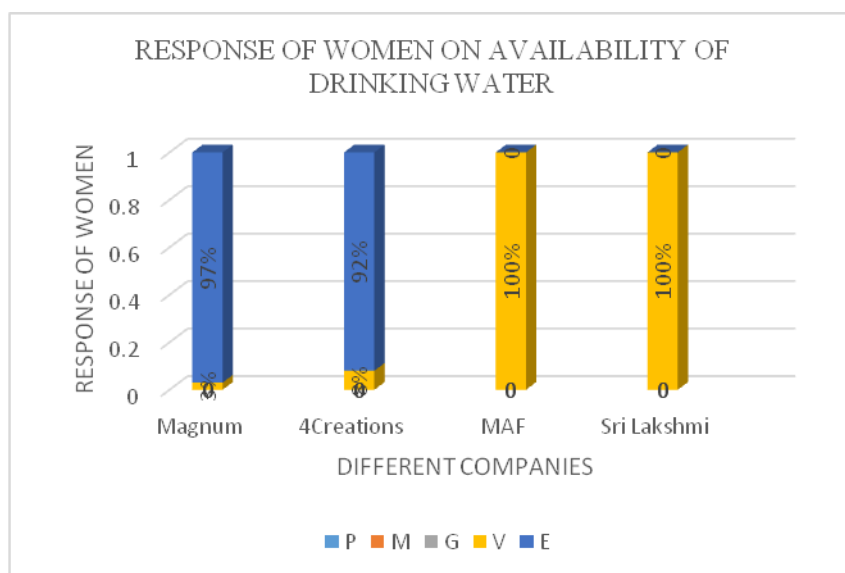
Rate quality of personal protective equipment provided to you	Sri Lakshmi	P	M	G	V	E	Not applicable for 38% women as they are either checker or helper
		-	-	-	62%	-	
	Magnum	P	M	G	V	E	
		94%	3%	6%	3%	-	
	4Creations	P	M	G	V	E	
		-	4%	15%	16%	65%	
	MAF	P	M	G	V	E	Most of them were either not using or have not been provided with personal protective equipment
		-	-	25%	-	-	
	Sri Lakshmi	P	M	G	V	E	Personal protective equipments are not provided for 89% women
		-	-	11%	-	-	



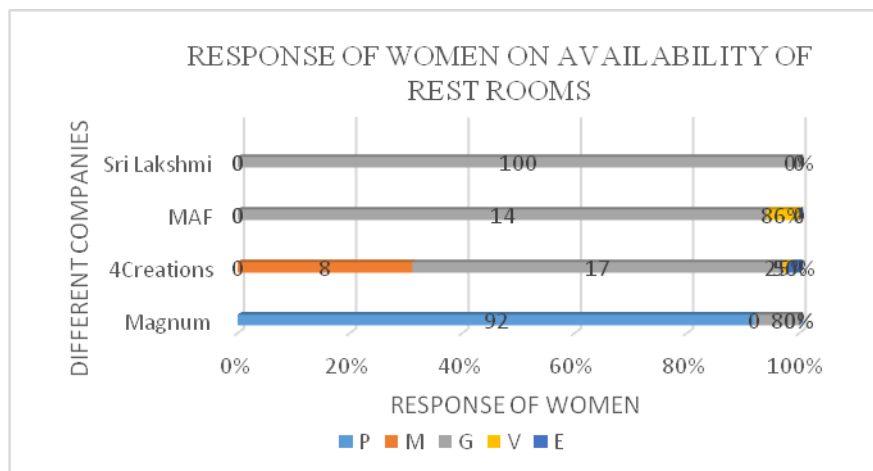
Graph 6.79 Response of women on hygiene of toilets



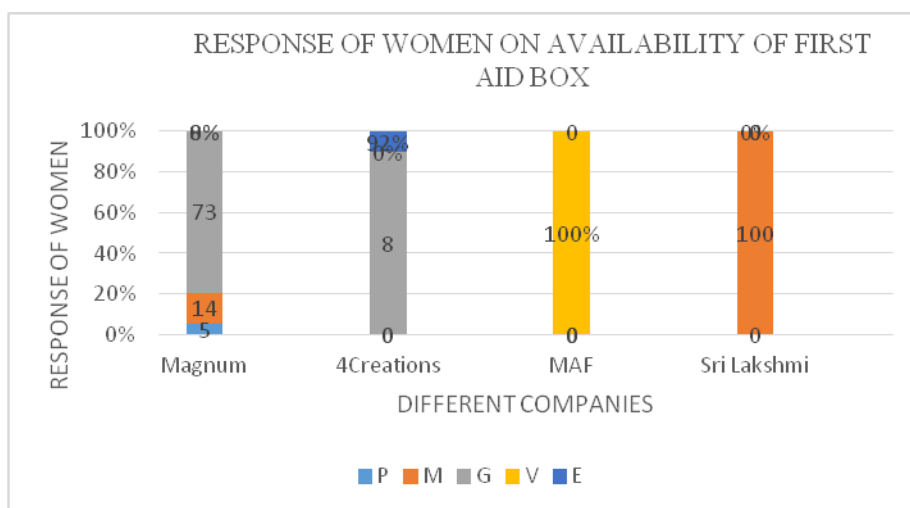
Graph 6.80: Response of women on hygiene of canteen



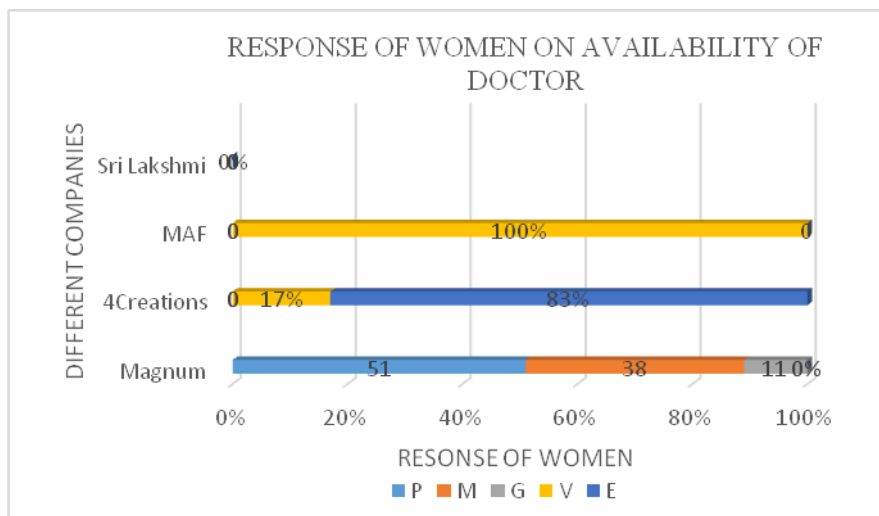
Graph 6.81: Response of women on availability of drinking water



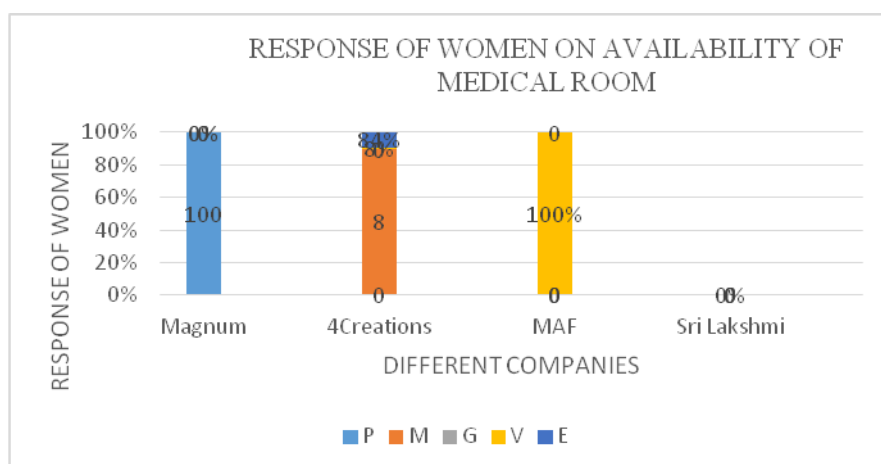
Graph 6.82: Response of women on availability of rest rooms



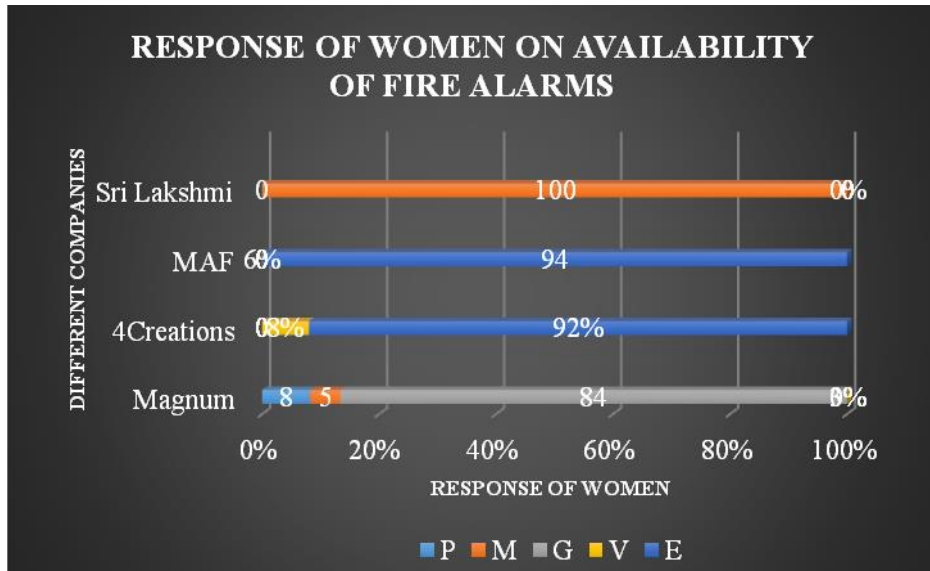
Graph 6.83: Response of women on availability of first aid box



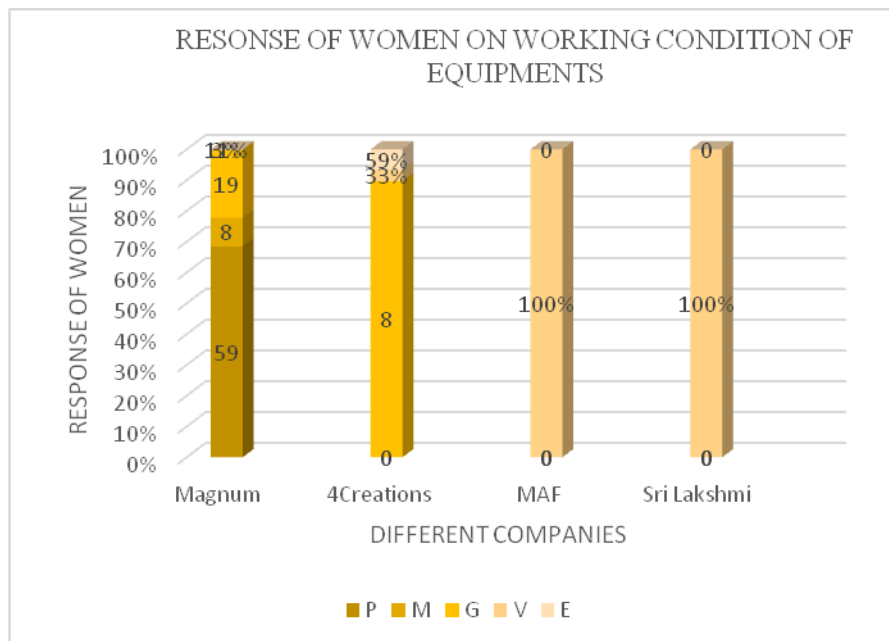
Graph 6.84: Response of women on availability of doctor



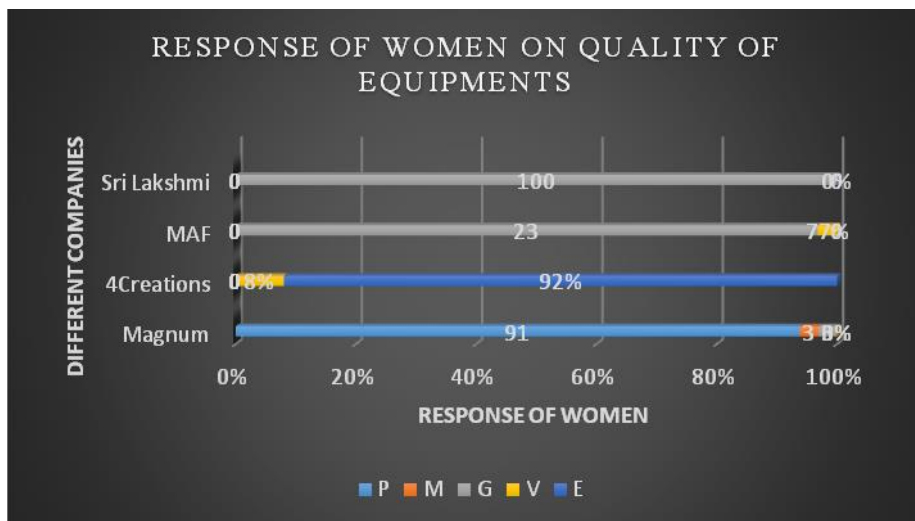
Graph 6.85: Response of women on availability of medical room



Graph 6.86: Response of women on availability of fire alarms



Graph 6.87: Response of women on working condition of equipments



Graph 6.88: Response of women on quality of equipments

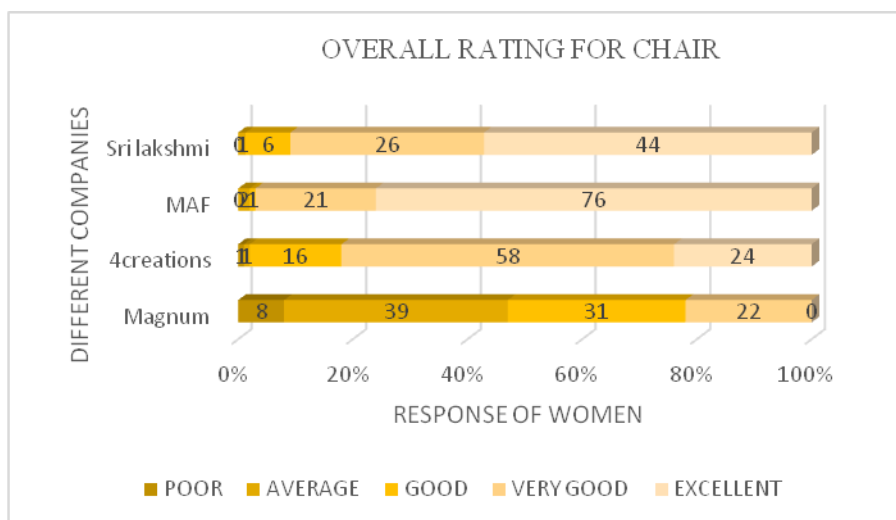
Section wise survey – Sewing section

Sewing section survey				
Identified factor affecting women health& productivity	Garment company	Response of women in %		Remarks
Seat type	Magnum	Chair		For women who are other than tailors in sewing section like checker, helper and etc, chairs are not provided
	4Creations	Chair – 76%, stool – 1%		
	MAF	Chair		
	Sri Lakshmi	Chair		
Chair provided is: *S- Stable *C- Comfortable	Magnum	S	C	For women who are other than tailors in sewing section like checker, helper and etc, chairs are not provided
		44%	56%	
	4Creations	S	C	
		2%	74%	
	MAF	S	C	
		-	100%	
	Sri Lakshmi	S	C	
-		100%		
Can adjust chair for comfort?	Magnum	Yes - 56%, NO- 44%		For women who are other than tailors in sewing section like checker, helper and etc, chairs are not provided
	4Creations	No- 100%		
	MAF	No – 100%		
	Sri Lakshmi	No – 100%		

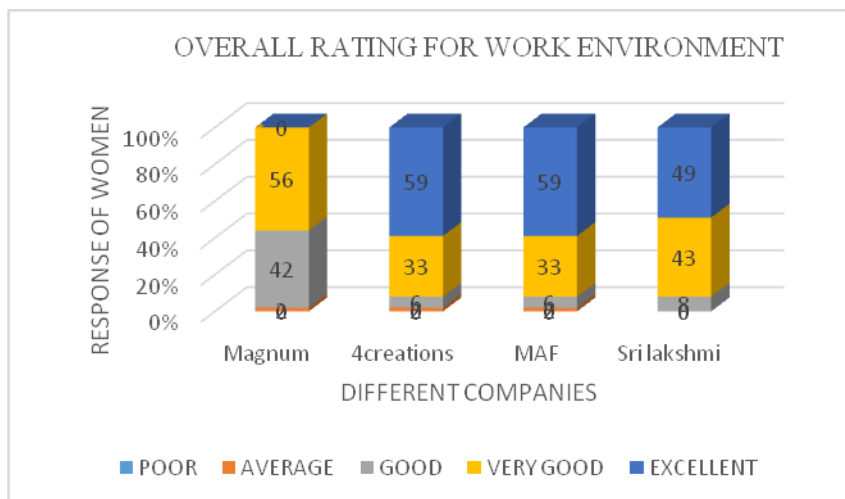
Are sewing machines in good working condition?	Magnum	Yes – 100%	For women who are other than tailors in sewing section like checker, helper and etc, chairs are not provided
	4Creations	Yes - 75%	
	MAF	Yes – 100%	
	Sri Lakshmi	Yes – 100%	
Sufficient windows or doors in activity area?	Magnum	Yes – 100%	
	4Creations	Yes – 100%	
	MAF	Yes – 100%	
	Sri Lakshmi	Yes – 100%	
Sufficient fans and ventilation in activity area?	Magnum	Yes – 100%	
	4Creations	Yes – 95%, No- 5%	
	MAF	Yes – 82%, No -18%	
	Sri Lakshmi	Yes – 100%	
Are fans in good working condition?	Magnum	Yes – 100%	
	4Creations	Yes – 95%, No- 5%	
	MAF	Yes – 100%	
	Sri Lakshmi	Yes – 100%	
Comfortable to work in sitting position for long duration?	Magnum	Yes – 8%,No – 92%	For women who are other than tailors in sewing section like checker, helper and etc, chairs are not provided
	4Creations	Yes – 73%, No –3%	
	MAF	Yes – 100%	
	Sri Lakshmi	Yes – 100%	
Does the work demand you to be in bending position for long duration?	Magnum	Yes – 47%, No-53%	
	4Creations	Yes – 2%, No – 98%	
	MAF	No – 100%	
	Sri Lakshmi	No – 100%	
Comfortable to work in congested area?	Magnum	Yes – 8%, No-92%	
	4Creations	Yes – 71%, No-11%	
	MAF	Yes – 100%	
	Sri Lakshmi	Yes– 100%	
Does your work provide safe working environment?	Magnum	Yes-100%	
	4Creations	Yes-100%	
	MAF	Yes -100%	
	Sri Lakshmi	Yes – 100%	
Does your work provide better seating arrangement?	Magnum	Yes – 44%, No-56%	For women who are other than tailors in sewing section like checker, helper and etc, chairs are not provided
	4Creations	Yes – 80%, No-2%	
	MAF	Yes -90%	
	Sri Lakshmi	Yes -100%	
Does your	Magnum	Yes – 94%, No-6%	

work provide enough leg space for movement of legs?	4Creations	Yes – 90%, No-3%					
	MAF	Yes -100%					
	Sri Lakshmi	Yes -100%					
Have you suffered from some injury during work?	Magnum	Yes – 19%, No-81%					<ul style="list-style-type: none">Finger was pricked by needle.Finger was cut by trimmer, scissor, blade and threadToe nail got cut because of sharp edges of chair
	4Creations	Yes – 25%, No-75%					
	MAF	No-100%					
	Sri Lakshmi	Yes – 30%, No-70%					
Does your work involve repetitive use of foot pedals?	Magnum	Yes – 92%, No-8%					For women who are other than tailors in sewing section like checker, helper and etc, do not work on sewing machine.
	4Creations	Yes-68%, No-32%					
	MAF	Yes -90%					
	Sri Lakshmi	Yes-62%, No-38%					
Have you been provided with personal protective equipments?	Magnum	Yes-44%, No-56%					Equipments provided: <ul style="list-style-type: none">MaskGlovesGoggles
	4Creations	Yes-54%, No-46%					
	MAF	Yes – 56%, No-44%					
	Sri Lakshmi	Yes – 11%, No-89%					
Do you use them in work?	Magnum	Yes – 8%, No- 92%					
	4Creations	Yes – 23%, No- 77%					
	MAF	Yes – 18%, No- 82%					
	Sri Lakshmi	Yes – 4%, No- 96%					
Overall ratings for chair *P-Poor *M-Moderate *G-Good *V-Very Good *E-Excellent	Magnum	P	M	G	V	E	
		8%	39%	31%	22%	-	
	4Creations	P	M	G	V	E	
		1%	1%	16%	58%	24%	
	MAF	P	M	G	V	E	
		-	2%	1%	21%	76%	
	Sri Lakshmi	P	M	G	V	E	
		-	1%	-	26%	44%	
Ratings for work environment *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	Magnum	P	M	G	V	E	
		-	2%	42%	56%	-	
	4Creations	P	M	G	V	E	
		-	2%	6%	33%	59%	
	MAF	P	M	G	V	E	
		-	2%	6%	33%	59%	
	Sri Lakshmi	P	M	G	V	E	
		-	-	8%	43%	49%	
Ratings for overall work	Magnum	P	M	G	V	E	
		-	33%	42%	22%	3%	

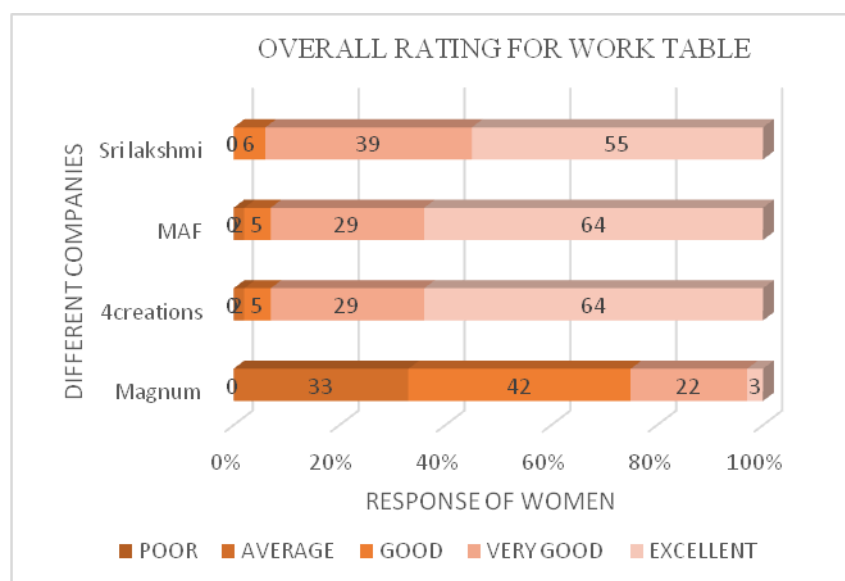
table in terms of height, space, adjustable features *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	4Creations	P	M	G	V	E	
		-	2%	5%	29%	64%	
	MAF	P	M	G	V	E	
		-	2%	5%	29%	64%	
	Sri Lakshmi	P	M	G	V	E	
		-	-	6%	39%	55%	



Graph 6.89 Overall rating for chair



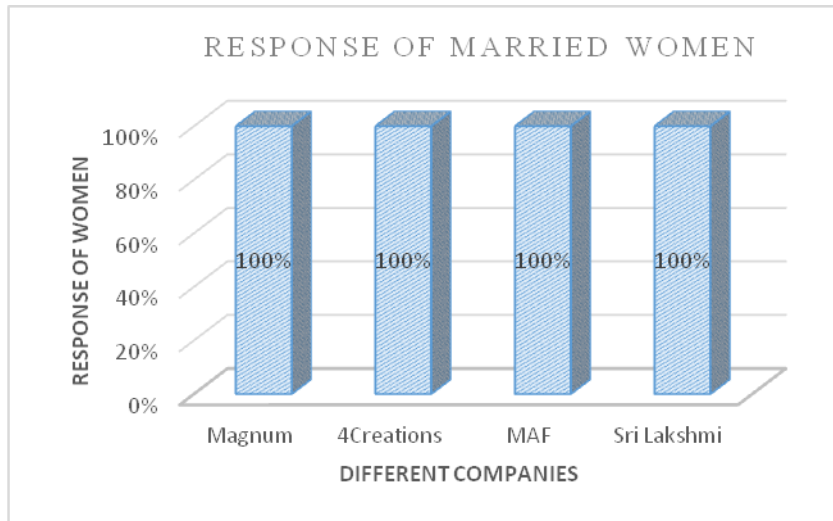
Graph 6.90: Overall rating for work environment



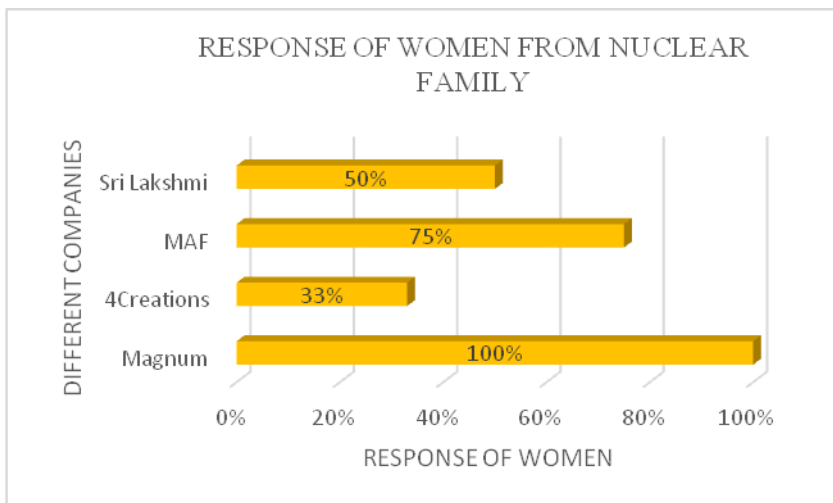
Graph 6.91: Overall rating for work table

6.3 Ironing section:

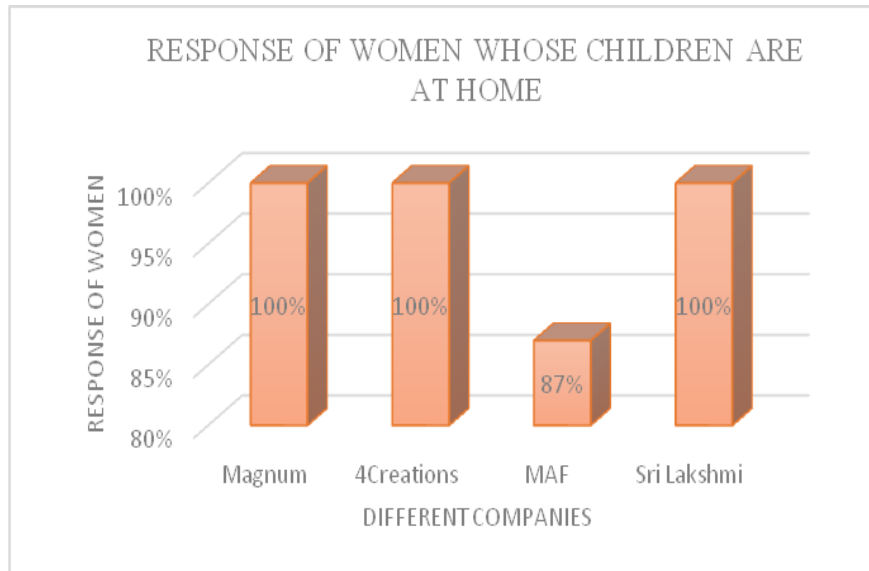
A. Social-Demographic Profile of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Marital status- MARRIED	Magnum	100%	Women need to manage both home and work
	4Creations	100%	
	MAF	100%	
	Sri Lakshmi	100%	
Family Type – NUCLEAR FAMILY	Magnum	100%	No elders/other family members to help in household chores.
	4Creations	33%	
	MAF	75%	
	Sri Lakshmi	50%	
Children at home	Magnum	100%	Children need more care and attention than any other family member.
	4Creations	100%	
	MAF	87%	
	Sri Lakshmi	100%	
Family Members Support - NO	Magnum	33%	Having no support from their family members may put women under mental and physical stress because of the need to manage both household work and their career.
	4Creations	33%	
	MAF	-	
	Sri Lakshmi	50%	
Accommodation– RENTED/PAYING GUEST	Magnum	67%	Major part of their salary goes in paying off house rent thus causing stress to earn more money.
	4Creations	100%	
	MAF	100%	
	Sri Lakshmi	100%	
Mode of Transportation to Office - WALK	Magnum	100%	They will be tired by the time they reach work place
	4Creations	33%	
	MAF	12%	
	Sri Lakshmi	-	
Addiction- TOBACCO	Magnum	-	--
	4Creations	-	
	MAF	-	
	Sri Lakshmi	-	



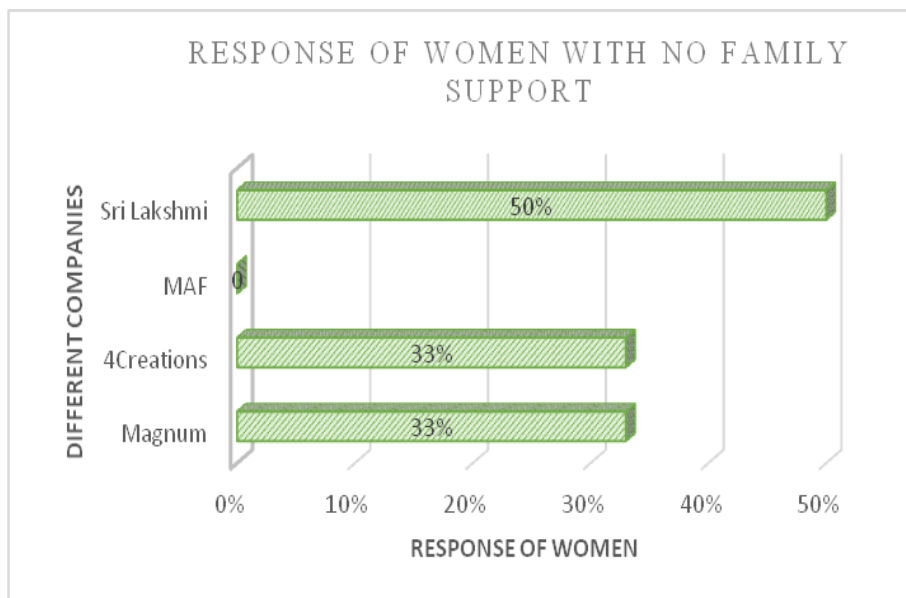
Graph 6.92: Married women response



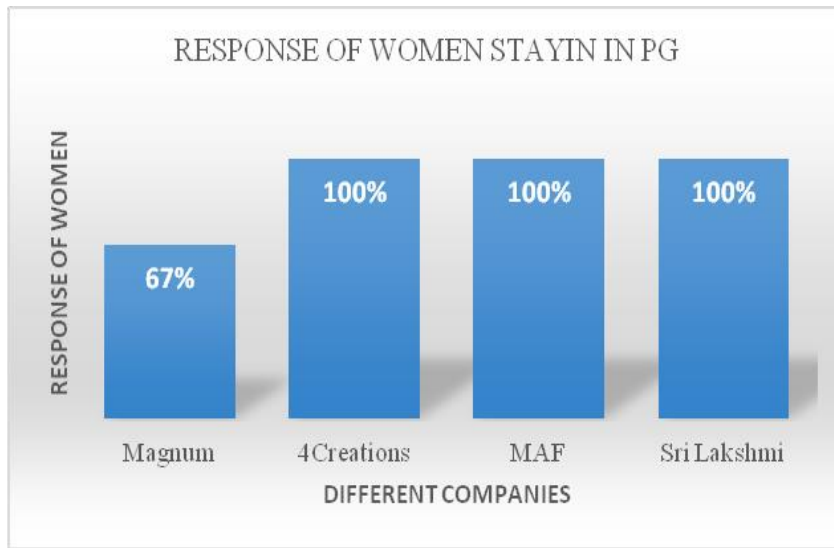
Graph 6.93: Nuclear type women response



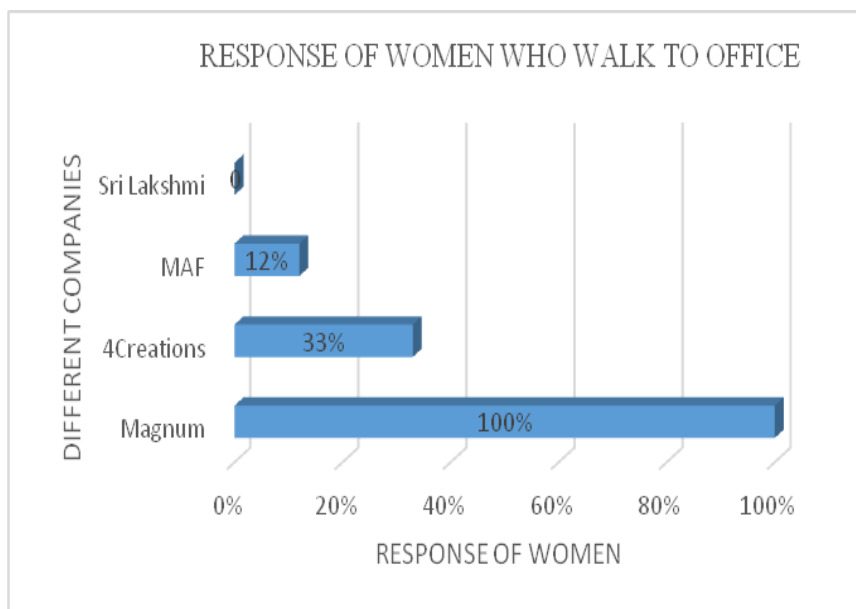
Graph 6.94: Response of women whose children are at home



Graph 6.95: Women with no family support

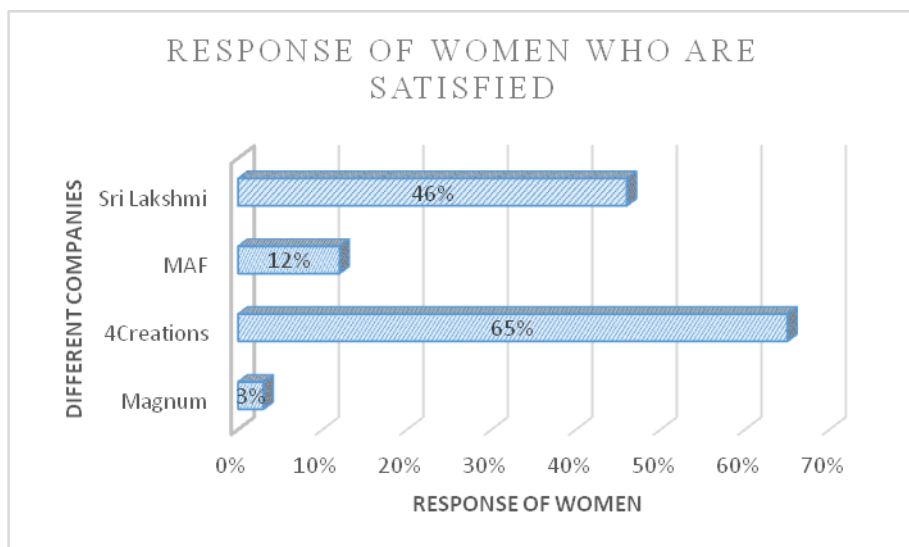


Graph 6.96: Response of women stayin as paying guests

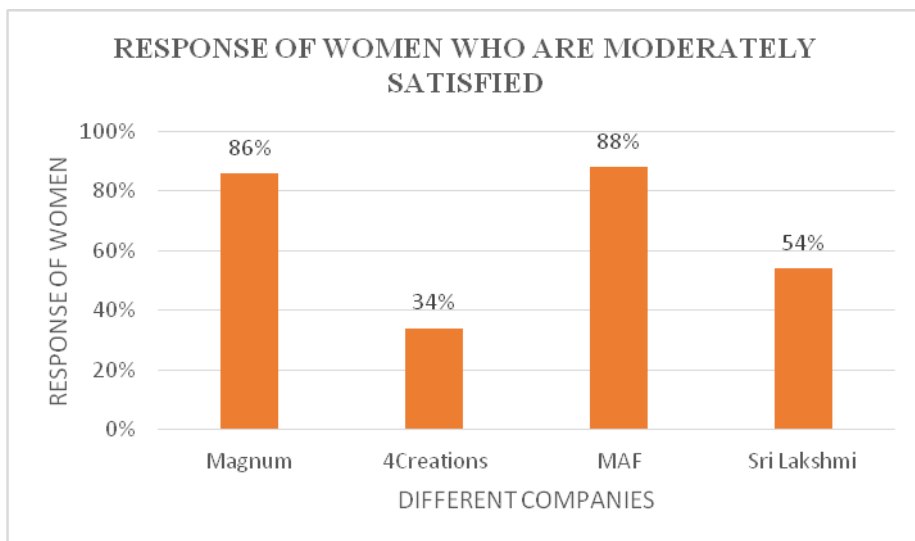


Graph 6.97: Response of women who walk to office

B. Occupational Status of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Job Satisfaction Level - SATISFIED	Magnum	-	--
	4Creations	67%	
	MAF	50%	
	Sri Lakshmi	100%	
Job Satisfaction Level – MODERATELY SATISFIED	Magnum	100%	Women said they were not satisfied with their salaries, facilities like chairs, fans, break during work.
	4Creations	33%	
	MAF	50%	
	Sri Lakshmi	-	



Graph 6.98: Response of women who are satisfied

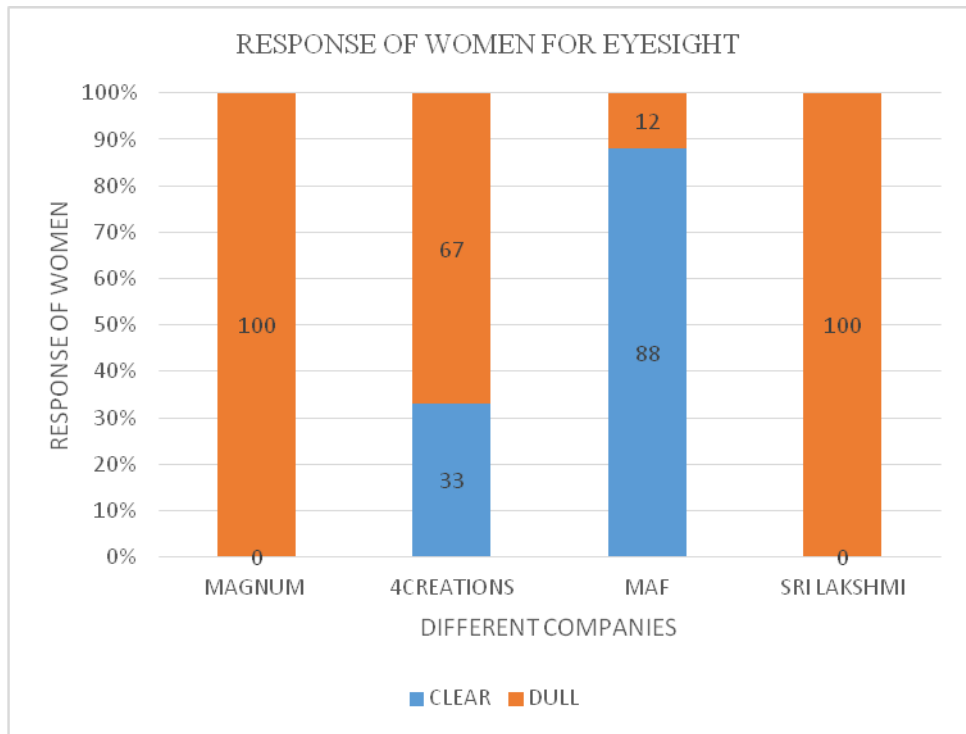


Graph 6.99: Response of women who are moderately satisfied

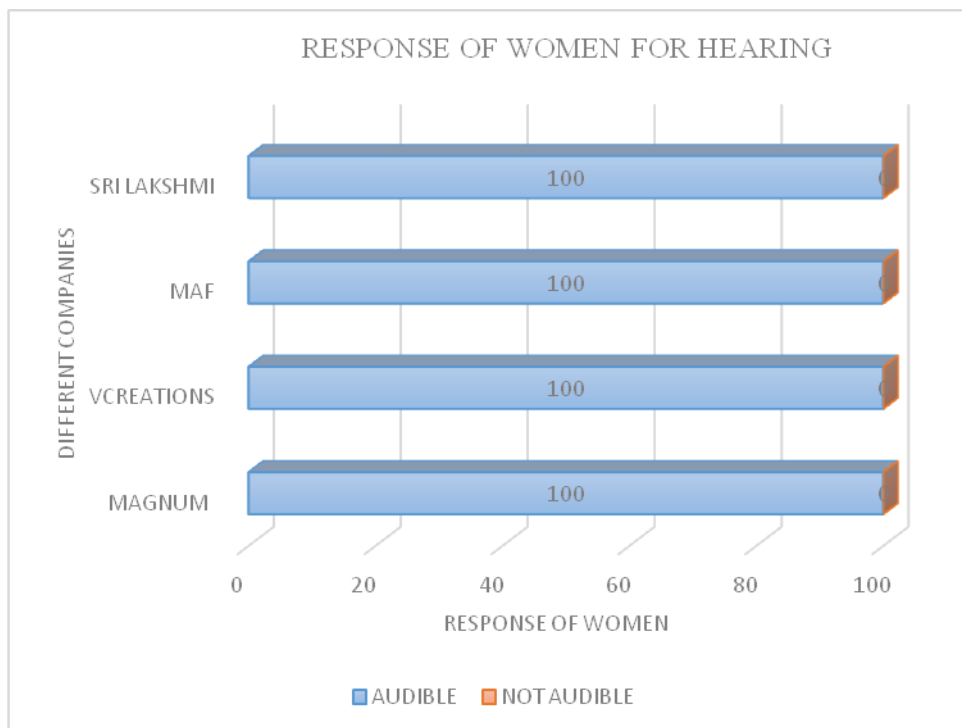
C. Women-Oriented Profile			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Eyesight *Clear-C *Dull-D	Magnum	D-100%	
	4Creations	C-33%,D-67%	
	MAF	C-88%,D-12%	
	Sri Lakshmi	D-100%	
Hearing *Audible - A *Not audible – NA	Magnum	A-100%	
	4Creations	A-100%	
	MAF	A-100%	
	Sri Lakshmi	A-100%	
Hygiene *Good-G *Moderate-M *Poor- P	Magnum	M-100%	
	4Creations	G-100%	
	MAF	G-100%	
	Sri Lakshmi	G-100%	
Oral hygiene *Good-G *Moderate-M *Poor- P	Magnum	M-34%,P-66%	Common Oral problems faced by women: Dry mouth, oral ulcers, bad breathe, gum diseases, tonsils
	4Creations	G-67%,P-33%	
	MAF	G-75%,M-25%	
	Sri Lakshmi	G-100%	
Skin hygiene *Good-G *Moderate-M *Poor- P	Magnum	M-34%,P-66%	Common Skin problems faced by women: Dry skin, exposure to dust, exposure to extreme heat, rashes/itching/allergic problem, dandruff.
	4Creations	M-100%	
	MAF	G-38%,M-62%	
	Sri Lakshmi	G-100%	

Menstrual history: (i) Nature of cycle *Regular-R *Irregular-IR *Stopped-S) (ii) Intensity of pain *Mild-M *Moderate-MOD *Severe-Sv	Magnum	Cycle: R-67%, IR-33% Pain: M-67%, MOD-33%		
	4Creations	Cycle: R-100% Pain: M-100%		
	MAF	Cycle: R-63%, IR-25%,s-12% Pain: M-63%, Sv-25%		
	Sri Lakshmi	Cycle: R-50%, IR-50% Pain: M-50%		
Frequency of Illness Experienced- Before Employment *Often-O *Not Often-NO *Rarely-R *Not reported -NR	Magnum	NR-33%,R-67%		
	4Creations	O-33%,NR-67%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Illness Experienced- After Employment *Often-O *Not Often-NO *Rarely-R *Not reported -NR	Magnum	O-67%,NR-33%		
	4Creations	O-33%,NR-67%		
	MAF	N.O-12%, NR-88%		
	Sri Lakshmi	NR-100%		
Frequency of Absence in a month	Magnum	Absence (in days)	%	
		1	34%	
		1-2	33%	
		1-3	33%	
	4Creations	Absence (in days)	%	
		1-2	58%	
		2-3	8%	
	MAF	Absence (in days)	%	
		Not Ab	50%	
		1	12%	
		2-3	38%	
	Sri Lakshmi	Absence (in days)	%	

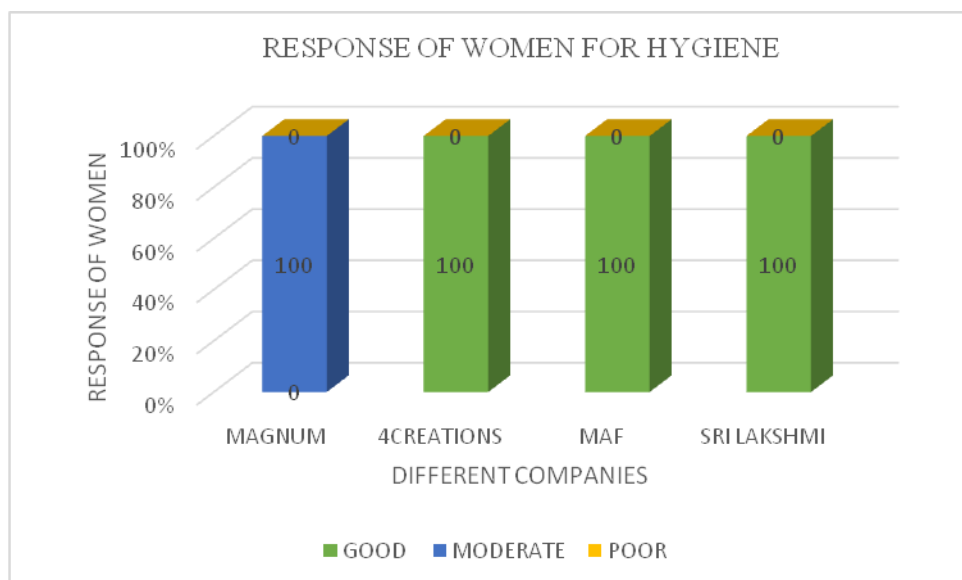
		1-2	50%	
		3-4	50%	
Causes of absenteeism *Family commitment-FC; *Illness-IL	Magnum	FC-100%,IL-67%		
	4Creations	FC-100%, IL-100%		
	MAF	FC-38%, IL-38%		
	Sri Lakshmi	FC-100%, IL-100%		
Victim of common illness	Magnum	Common illness: Cough and cold, Headache, Fever, Jaundice		Other common illnesses : Stomach pain, Low BP, Anemia
	4Creations			
	MAF			
	Sri Lakshmi			
Victim of specific illness	Magnum	Hypertension-33%, Swelling of legs- 67%, Ischemic heart disease – 33%		
	4Creations	Swelling of legs- 33%		
	MAF	Difficulty in breathing – 33%, Swelling of legs - 34%, diabetes mellitus – 33%		
	Sri Lakshmi	No illness		
Undergone treatment for common illness	Magnum	Yes – 100%		
	4Creations	Yes – 67%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 50%, No – 50%		
Category of medical services	Magnum	First aid – 100%		
	4Creations	First aid- 100% Primary care – 100%		
	MAF	First aid- 100%		
	Sri Lakshmi	First aid- 100%		
Psychiatric problems suffered	Magnum	Depression-34% Anxiety-33% Palpitations-33%		
	4Creations	Insomnia-33% Depression-33% Anxiety-67% Palpitations-33%		
	MAF	Insomnia-38% Depression-63% Anxiety-75% Palpitations-50%		
	Sri Lakshmi	Insomnia-50% Depression-50% Anxiety-50% Palpitations-50%		



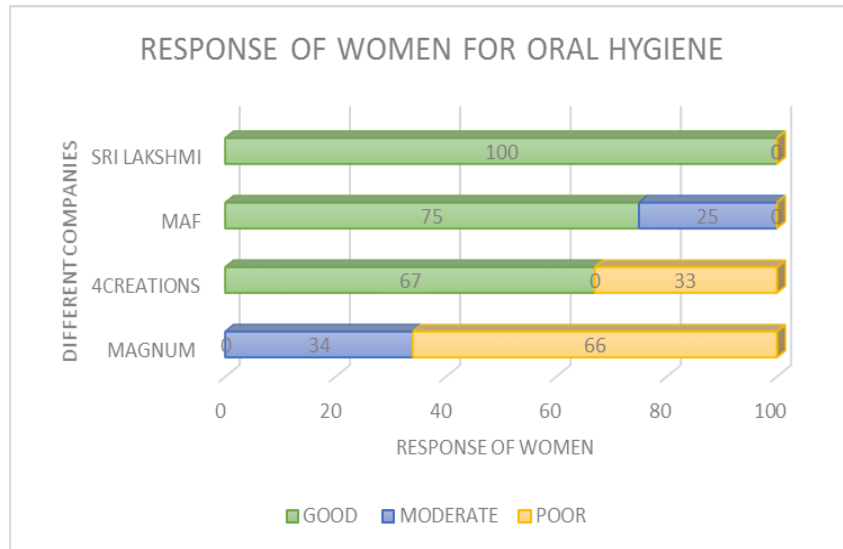
Graph 6.100: Response of women for eyesight



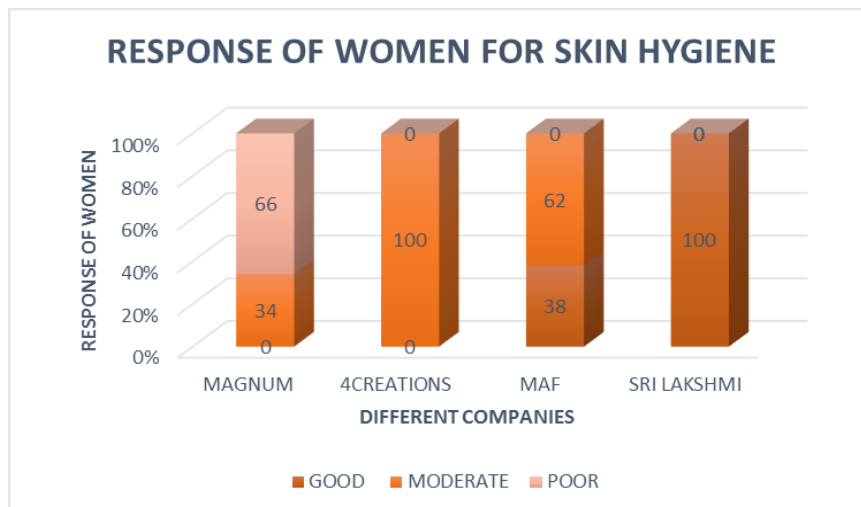
Graph 6.101: Response of women for hearing



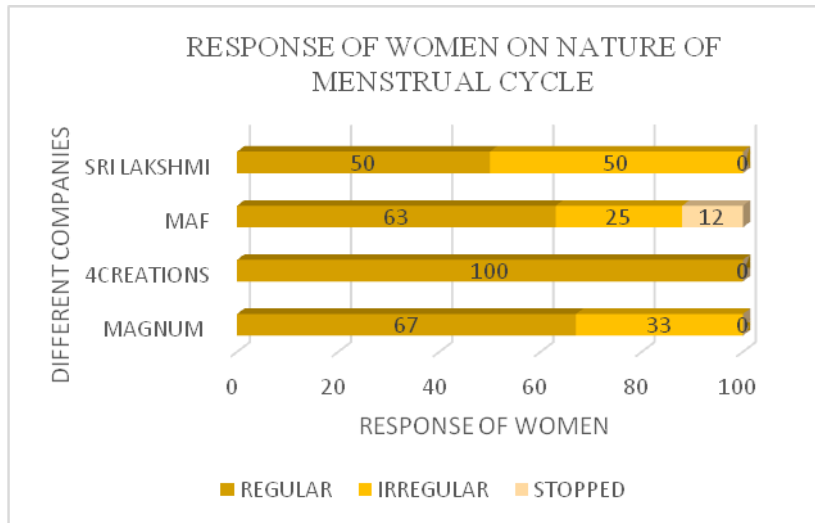
Graph 6.102: Response of women for hygiene



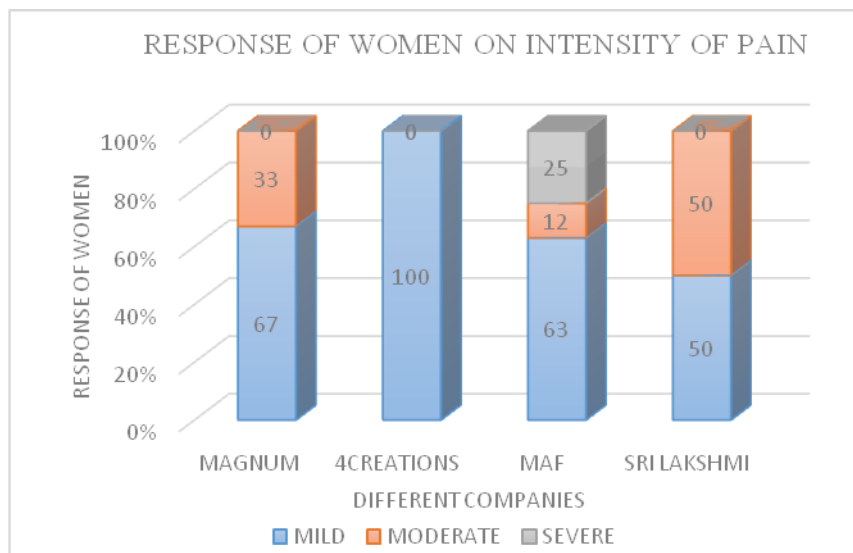
Graph 6.103: Response of women for Oral Hygiene



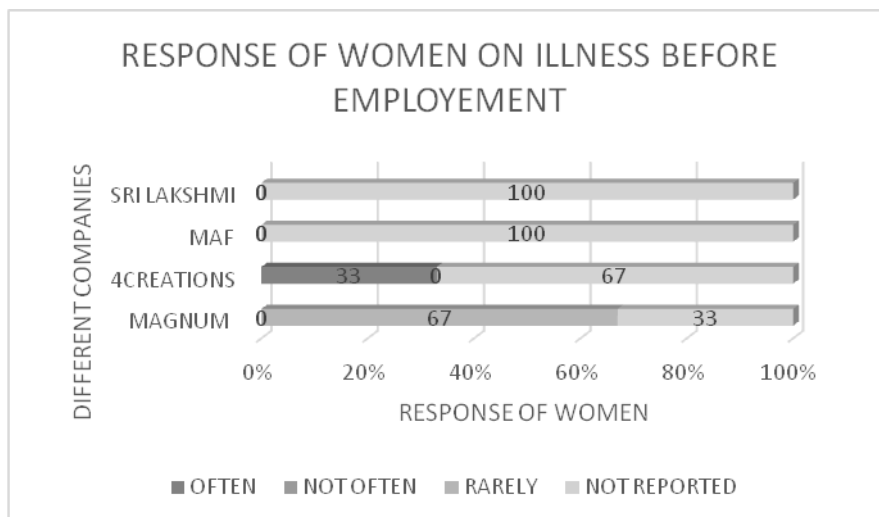
Graph 6.104: Response of women for Skin Hygiene



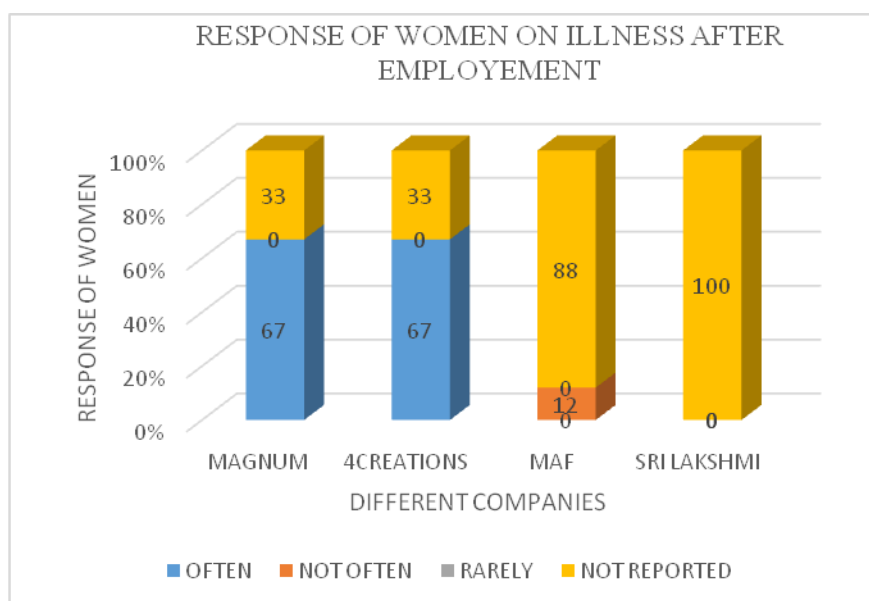
Graph 6.105: Response of women on Nature of Menstrual Cycle



Graph 6.106: Response of women on Intesity of Pain



Graph 6.107: Response of women on Illness Before Employment



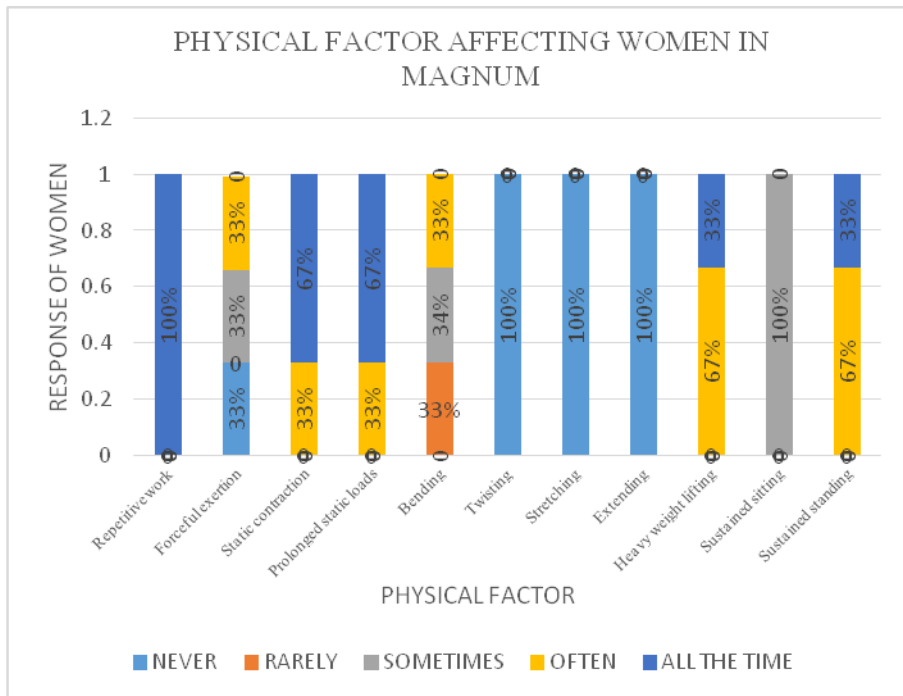
Graph 6.108: Response of women on Illness After Employment

D. Physical factors at work								
Identified factor affecting women health & productivity	Garment company	Response of women in %						Remarks
Work involves following constraints *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	33%	-	33%	33%	-	
		Static contraction	-	-	-	33%	67%	
		Prolonged static loads	-	-	-	33%	67%	
		Bending	-	33%	34%	33%	-	
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	-	
		Extending	100%	-	-	-	-	
		Heavy weight lifting	-	-	-	67%	33%	
		Sustained sitting	-	-	100%	-	-	
		Sustained standing	-	-	-	67%	33%	
	4Creations	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	-	-	-	-	100%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	100%	-	-	-	-	
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	-	
		Extending	100%	-	-	-	-	
		Heavy weight lifting	100%	-	-	-	-	
		Sustained sitting	100%	-	-	-	-	
		Sustained standing	-	-	-	-	100%	
	MAF	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	37%	-	-	-	63%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	100%	-	-	-	-	
		Twisting	100%	-	-	-	-	
		Stretching	63%	-	-	13%	24%	
		Extending	63%	-	-	13%	24%	
		Heavy weight	100%	-	-	-	-	

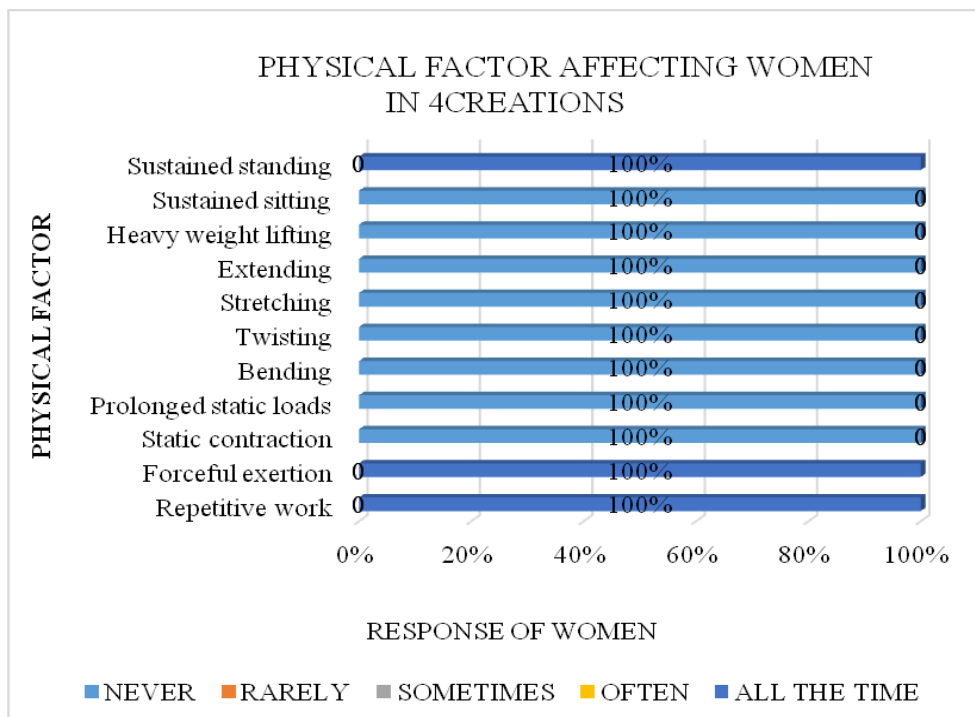
		lifting					
		Sustained sitting	100%	-	-	-	-
		Sustained standing	-	-	-	-	100%
	Sri Lakshmi	Physical factor	N	R	S	O	A
		Repetitive work	-	-	-	-	100%
		Forceful exertion	100%	-	-	-	-
		Static contraction	100%	-	-	-	-
		Prolonged static loads	100%	-	-	-	-
		Bending	100%	-	-	-	-
		Twisting	100%	-	-	-	-
		Stretching	100%	-	-	-	-
		Extending	100%	-	-	-	-
		Heavy weight lifting	100%	-	-	-	-
		Sustained sitting	100%	-	-	-	-
		Sustained standing	-	-	-	-	100%
Comfortable to work in standing/sitting position for long working hours	Magnum	No – 100%					
	4Creations	Yes – 100%					
	MAF	Yes – 25%, No – 75%					
	Sri Lakshmi	Yes – 100%					
Victim of following symptoms *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Symptoms	N	R	S	O	A
		Aching	-	-	-	67%	33%
		Cramping	33%	-	-	67%	-
		Carelessness	67%	33%	-	-	-
		Dizziness	33%	-	67%	-	-
		Numbness	-	-	-	100%	-
		Stiffness	-	-	-	100%	-
		Tiredness	-	-	-	33%	67%
		Tangling	100%	-	-	-	-
	4Creations	Symptoms	N	R	S	O	A
		Aching	-	-	67%	-	33%
		Cramping	33%	-	67%	-	-
		Carelessness	100%	-	-	-	-
		Dizziness	67%	-	33%	-	-
		Numbness	33%	34%	33%	-	-
		Stiffness	100%	-	-	-	-
		Tiredness	-	-	33%	-	67%
		Tangling	100%	-	-	-	-
	MAF	Symptoms	N	R	S	O	A
		Aching	-	-	-	-	100%
		Cramping	-	-	25%	50%	25%
		Carelessness	100%	-	-	-	-

		Dizziness	75%	-	-	25%	-
		Numbness	13%	-	25%	25%	37%
		Stiffness	13%	-	37%	37%	13%
		Tiredness	25%	13%	37%	-	25%
		Tangling	100%	-	-	-	-
	Sri Lakshmi	Symptoms	N	R	S	O	A
		Aching	-	-	50%	50%	-
		Cramping	50%	-	50%	-	-
		Carelessness	100%	-	-	-	-
		Dizziness	50%	-	-	50%	-
		Numbness	50%	-	50%	-	-
		Stiffness	50%	-	50%	-	-
		Tiredness	-	-	50%	50%	-
		Tangling	100%	-	-	-	-
Victim of following injuries	Magnum	Injury	Yes		No		
		Laceration	-		100%		
		Puncture	-		100%		
		Avulsion	-		100%		
		Hematoma	-		100%		
		Abrasions	-		100%		
		Contusions	100%		-		
		Fracture	-		100%		
		Sprain	33%		67%		
		Burn	100%		-		
		Amputation	-		100%		
	4Creations	Injury	Yes		No		
		Laceration	-		100%		
		Puncture	-		100%		
		Avulsion	-		100%		
		Hematoma	-		100%		
		Abrasions	-		100%		
		Contusions	-		100%		
		Fracture	33%		67%		
		Sprain	-		100%		
		Burn	67%		33%		
		Amputation	-		100%		
	MAF	Injury	Yes		No		
		Laceration	-		100%		
		Puncture	-		100%		
		Avulsion	-		100%		
		Hematoma	-		100%		
		Abrasions	-		100%		
		Contusions	-		100%		
		Fracture	-		100%		
		Sprain	-		100%		

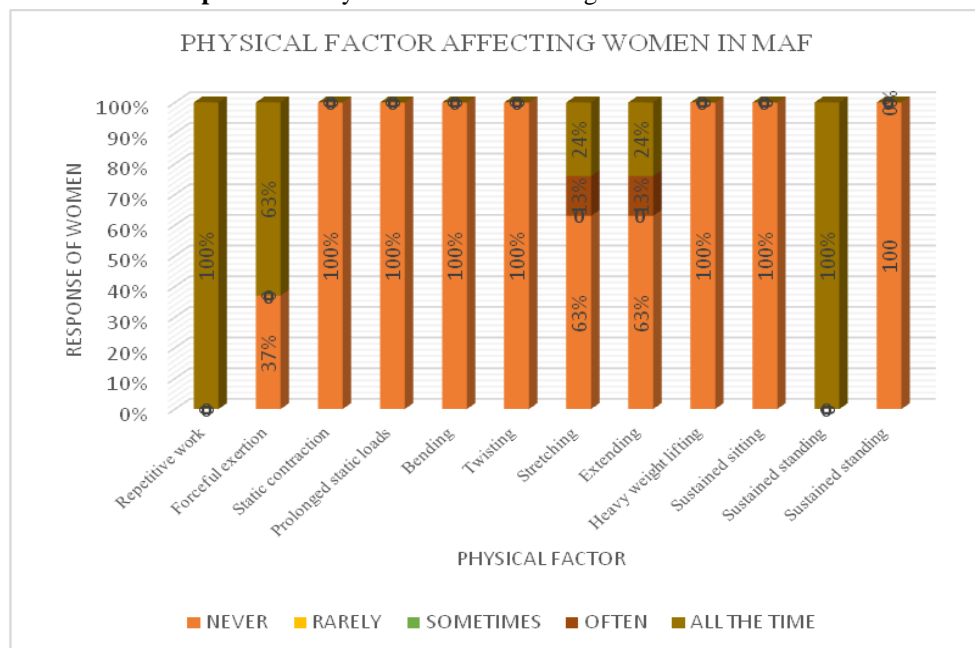
	Sri Lakshmi	Burn	25%	75%
		Amputation	-	100%
		Injury	Yes	No
		Laceration	-	100%
		Puncture	-	100%
		Avulsion	-	100%
		Hematoma	-	100%
		Abrasions	-	100%
		Contusions	-	100%
		Fracture	-	100%
		Sprain	-	100%
		Burn	-	100%
		Amputation	-	100%



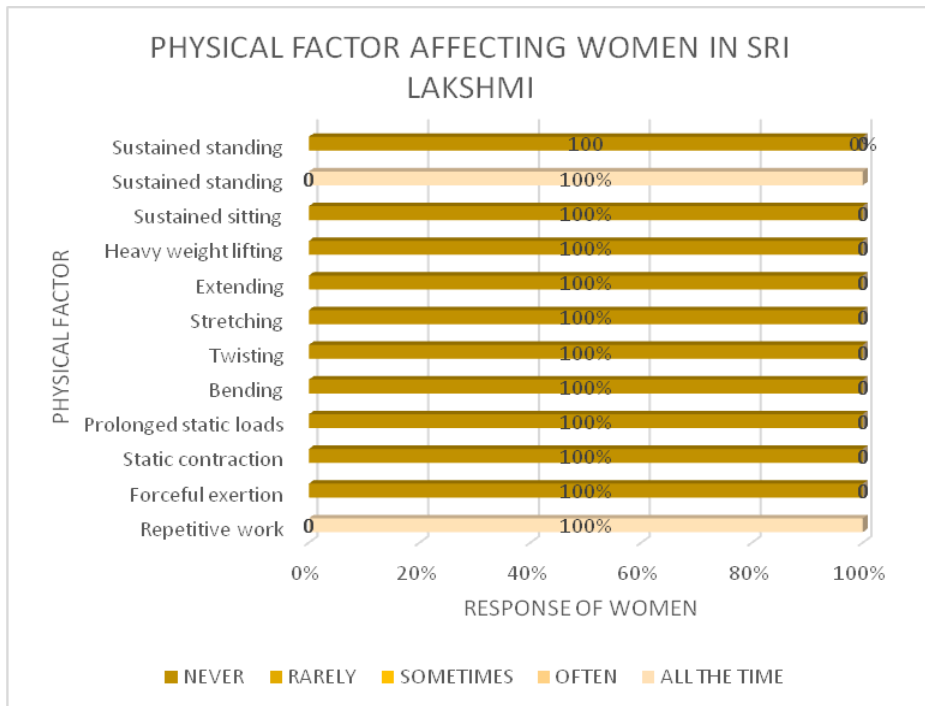
Graph 6.109: Physical Factors Affecting Women in Magnum



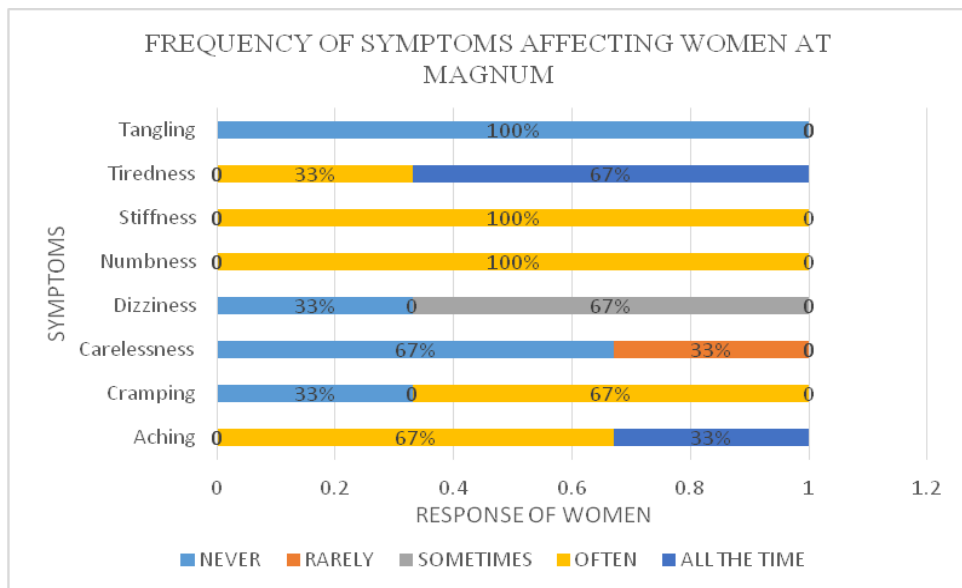
Graph 6.110: Physical Factors Affecting Women in 4 creations



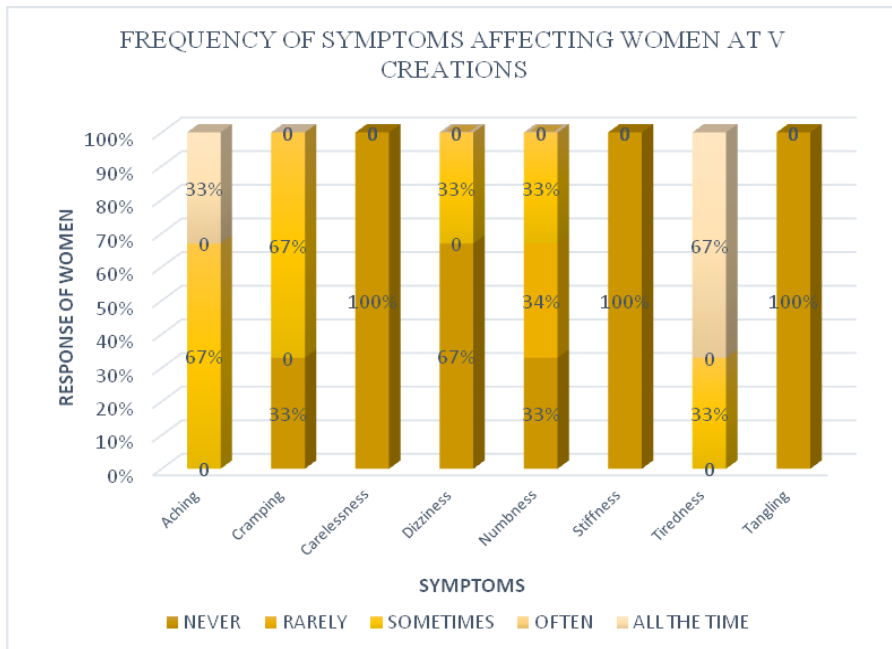
Graph 6.111: Physical Factors Affecting Women in Maf



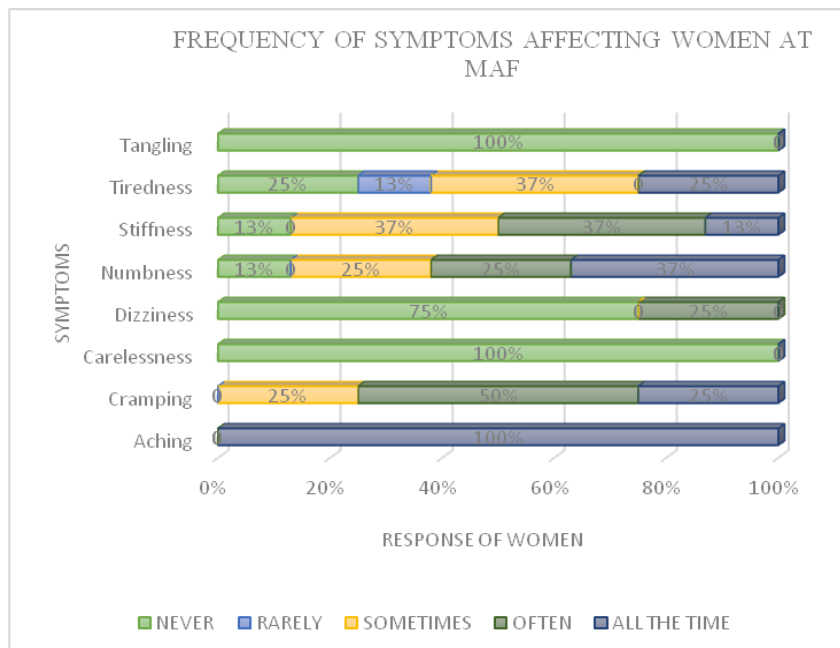
Graph 6.112: Physical Factors Affecting Women in Sri lakshmi



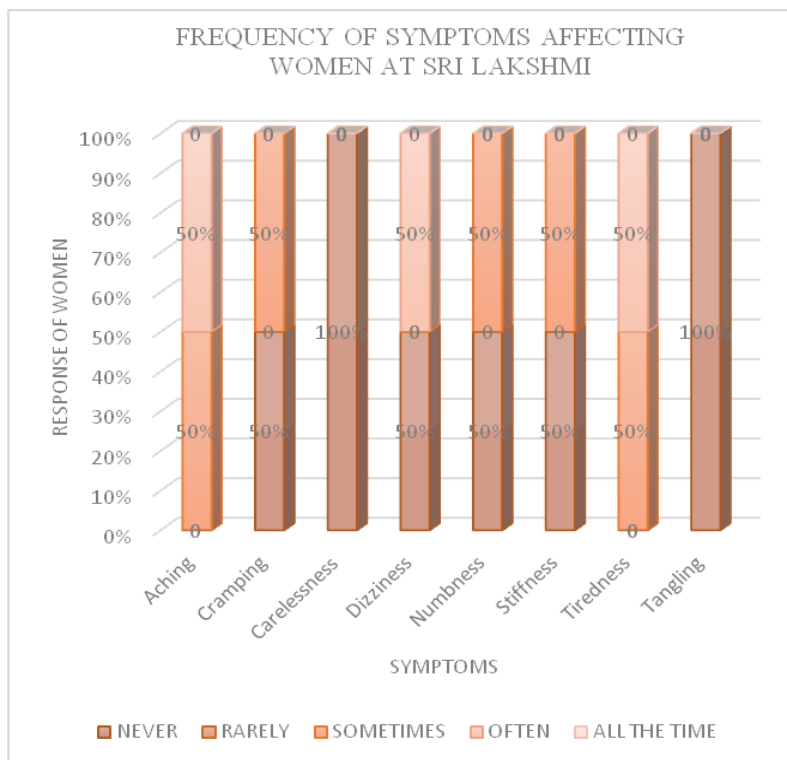
Graph 6.113: Frequency of symptoms Affecting Women at Magnum



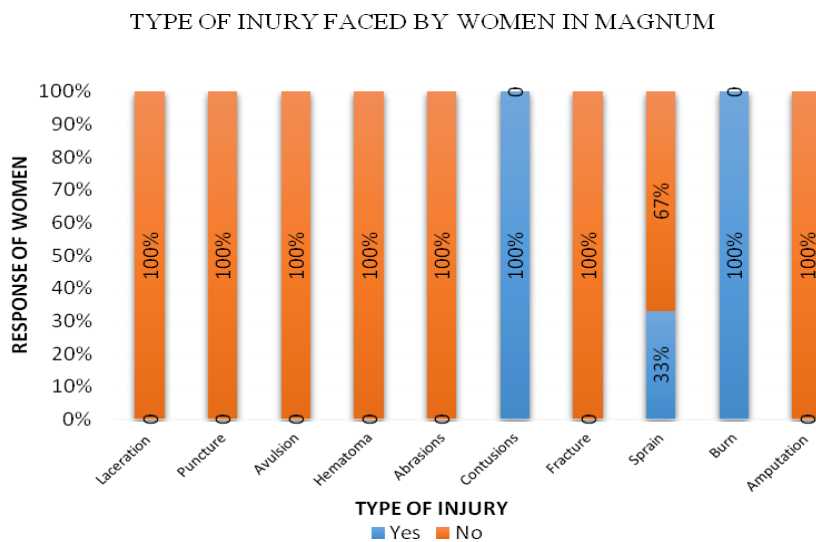
Graph 6.114: Frequency of symptoms Affecting Women at 4 creations



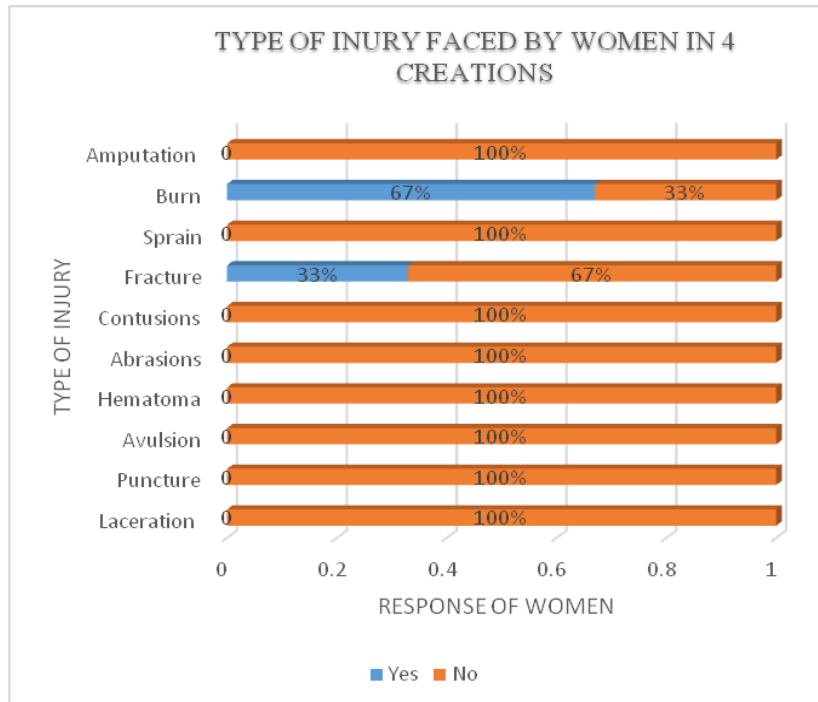
Graph 6.115: Frequency of symptoms Affecting Women at Maf



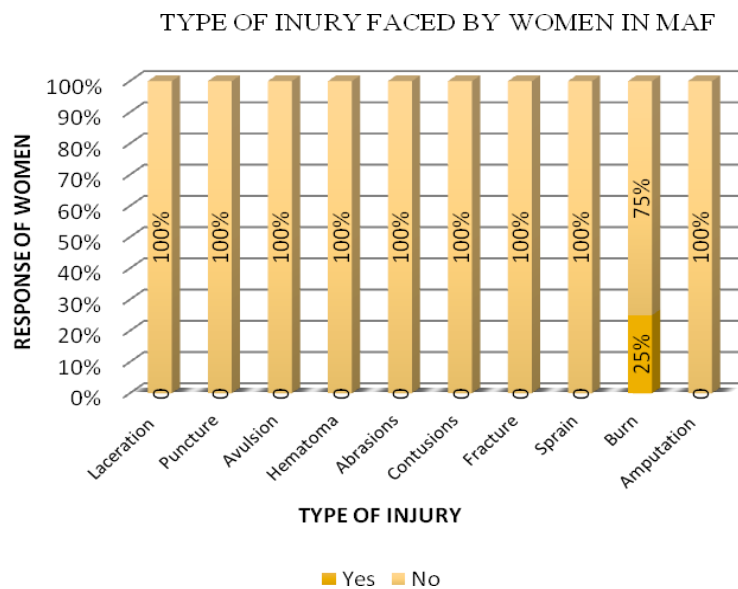
Graph 6.116: Frequency of symptoms Affecting Women at Sri lakshmi



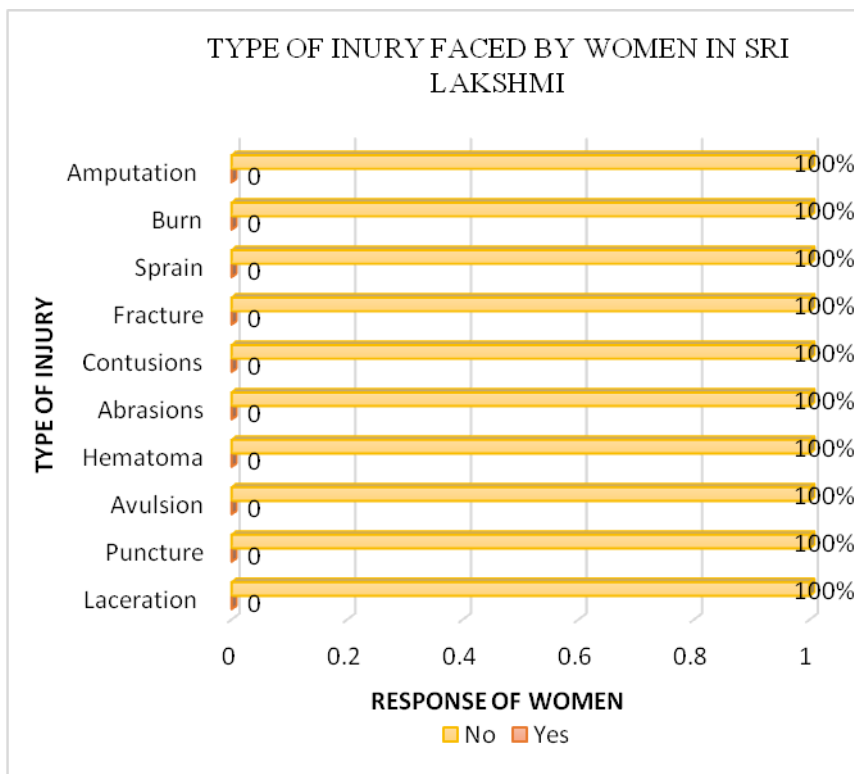
Graph 6.117: Type of injury faced by Women in Magnum



Graph 6.118: Type of injury faced by Women in 4 creations



















Graph 6.119: Type of injury faced by Women in Maf

















Graph 6.120: Type of injury faced by Women in Sri lakshmi

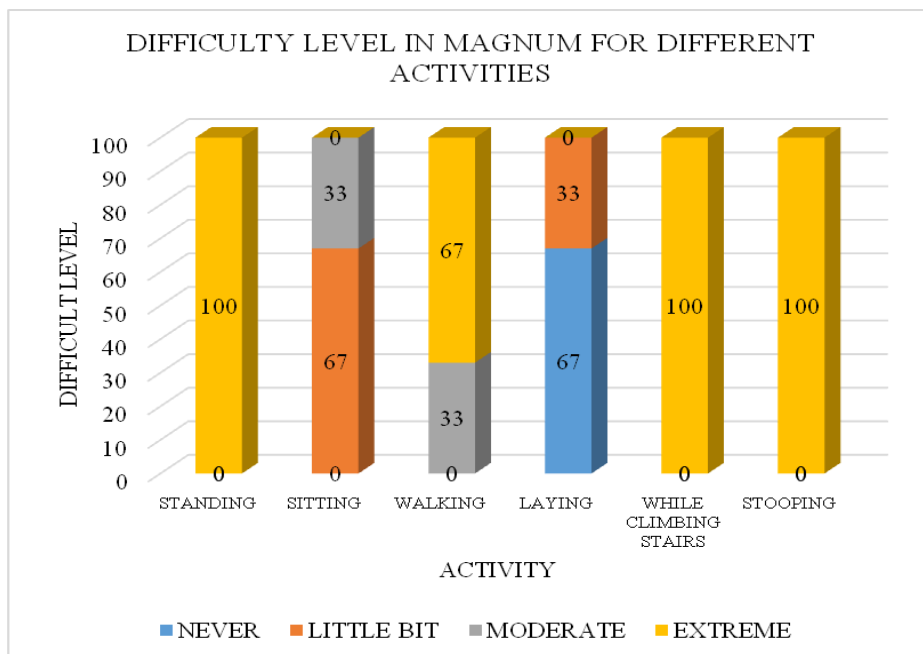
E. Pain features			
Identified factor affecting women health & productivity	Garment company	Response of women in %	Remarks
Suffer from pain at present	Magnum	Yes – 100%	
	4Creations	Yes – 67%, No- 33%	
	MAF	Yes – 88%, No- 12%	
	Sri Lakshmi	Yes – 100%	
Pain experienced in a particular location (No pain, Low pain, Mild pain, High pain, Severe pain)	Magnum		
	4Creations		

Cause of pain	MAF		
	Sri Lakshmi		
Cause of pain	Magnum	Cause	%
		Bad posture for long time	100%
		Long working periods	100%
		Incorrect way of lifting a load	100%
		Usage of faulty equipment	67%
	4Creations	Cause	%
		Bad posture for long time	67%
		Long working periods	33%
	MAF	Cause	%
		Bad posture for long time	87%
		Long working periods	87%
		Incorrect way of lifting a load	13%
	Sri	Cause	%

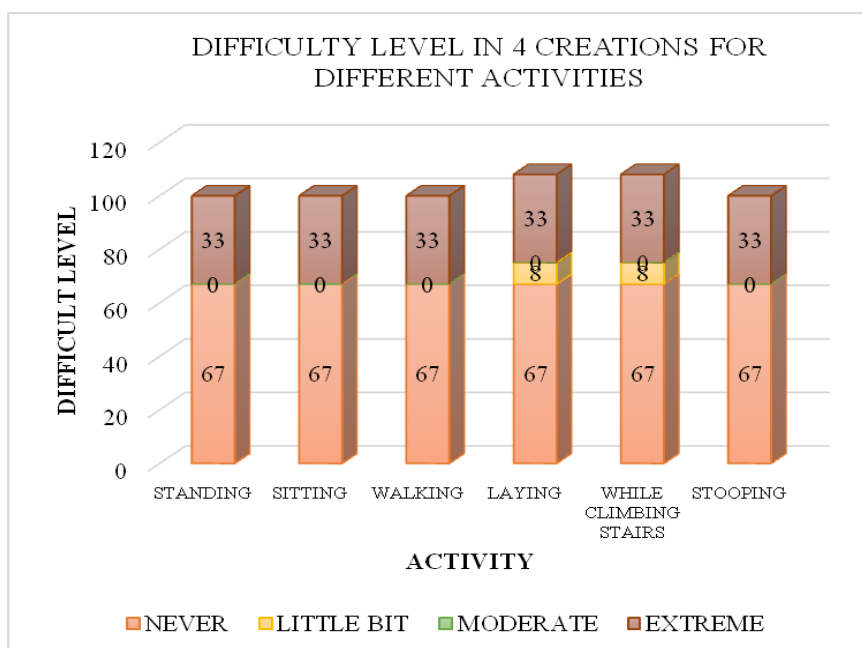
		 Walking	-	-	33%		67%																																		
		 Laying	67%	33%	-		-																																		
		 While climbing stairs	-	-	-		100%																																		
		 Stooping	-	-	-		100%																																		
4Creations		<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td> Standing</td><td>67%</td><td>-</td><td>-</td><td>33%</td></tr><tr><td> Sitting</td><td>67%</td><td>-</td><td>-</td><td>33%</td></tr><tr><td> Walking</td><td>67%</td><td>-</td><td>-</td><td>33%</td></tr><tr><td> Laying</td><td>67%</td><td>8%</td><td>-</td><td>33%</td></tr></table>							Activity	Difficulty level				Never	Little bit	Moderate	Extreme	 Standing	67%	-	-	33%	 Sitting	67%	-	-	33%	 Walking	67%	-	-	33%	 Laying	67%	8%	-	33%				
Activity	Difficulty level																																								
	Never	Little bit	Moderate	Extreme																																					
 Standing	67%	-	-	33%																																					
 Sitting	67%	-	-	33%																																					
 Walking	67%	-	-	33%																																					
 Laying	67%	8%	-	33%																																					

			While climbing stairs	67%	8%	-	33%		
			Stooping	67%	-	-	33%		
	MAF								
		<i>Activity</i>	<i>Difficulty level</i>						
			<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>			
			Standing	25%	13%	25%		37%	
			Sitting	25%	13%	25%		37%	
			Walking	37%	13%	25%		25%	
			Laying	25%	13%	25%		37%	
			While climbing stairs	37%	13%	25%		25%	
			Stooping	37%	13%	25%		25%	
	Sri								

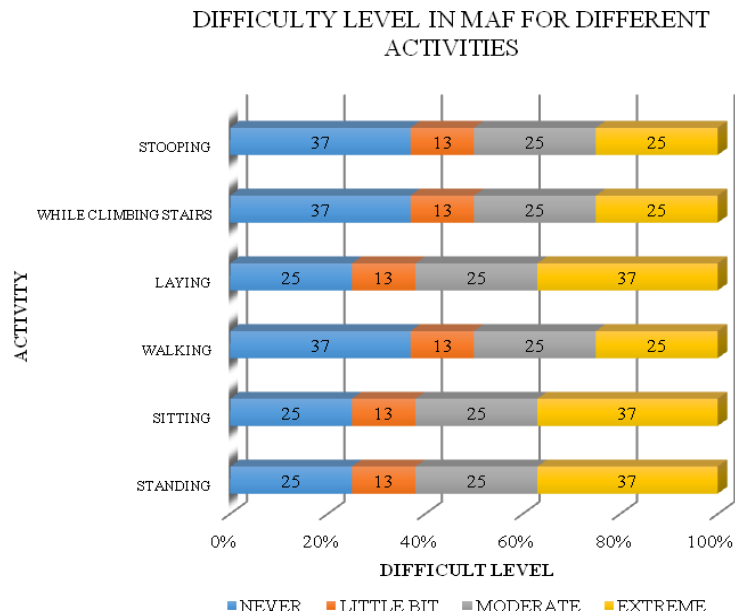
	Lakshmi						
		Activity	Difficulty level				
			Never	Little bit	Moderate		Extreme
			100%	-	-		-
		Standing					
			100%	-	-		-
		Sitting					
			100%	-	-		-
		Walking					
	100%	-	-		-		
Laying							
	100%	-	-		-		
While climbing stairs							
	100%	-	-		-		
Stooping							



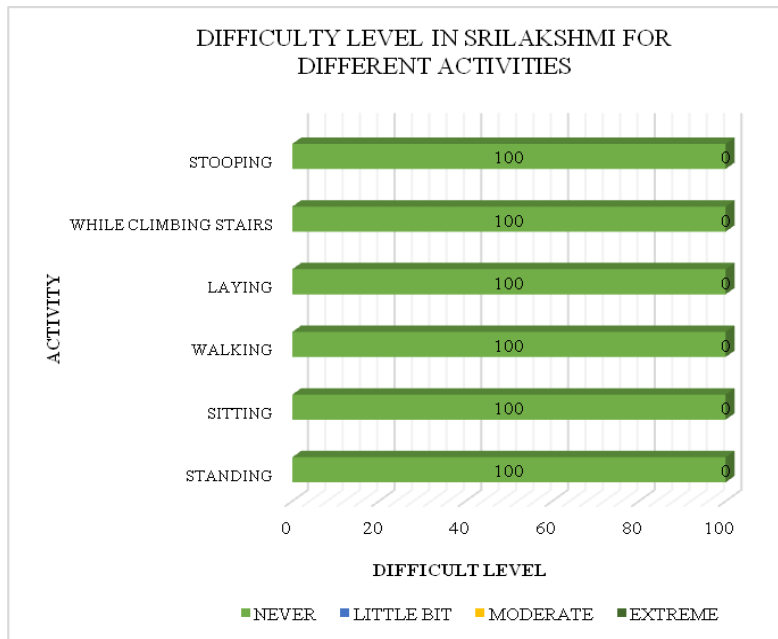
Graph 6.121: Difficulty level in magnum for different activities



Graph 6.122: Difficulty level in 4 creations for different activities



Graph 6.123: Difficulty level in maf for different activities

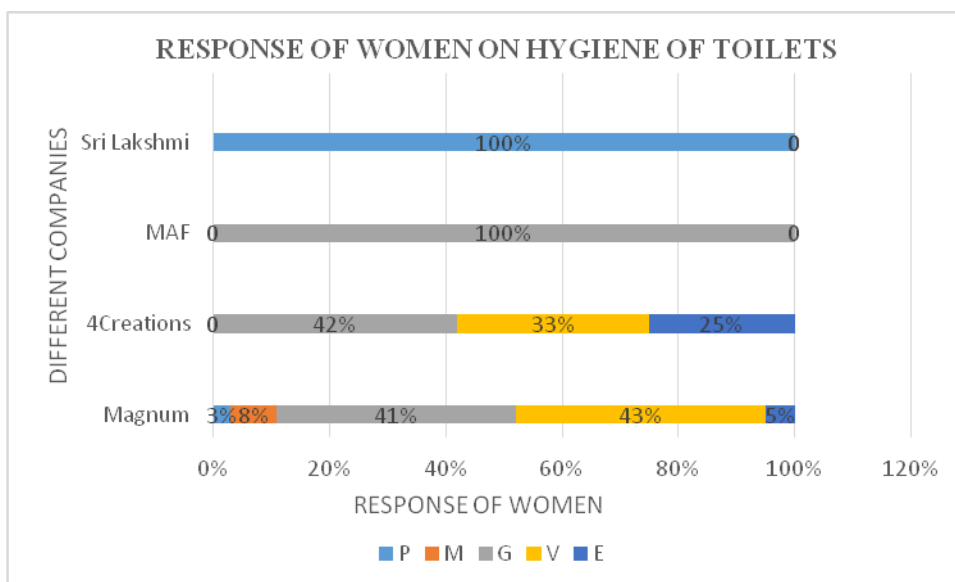


Graph 6.124:Difficulty level in sri lakshmi for different activities

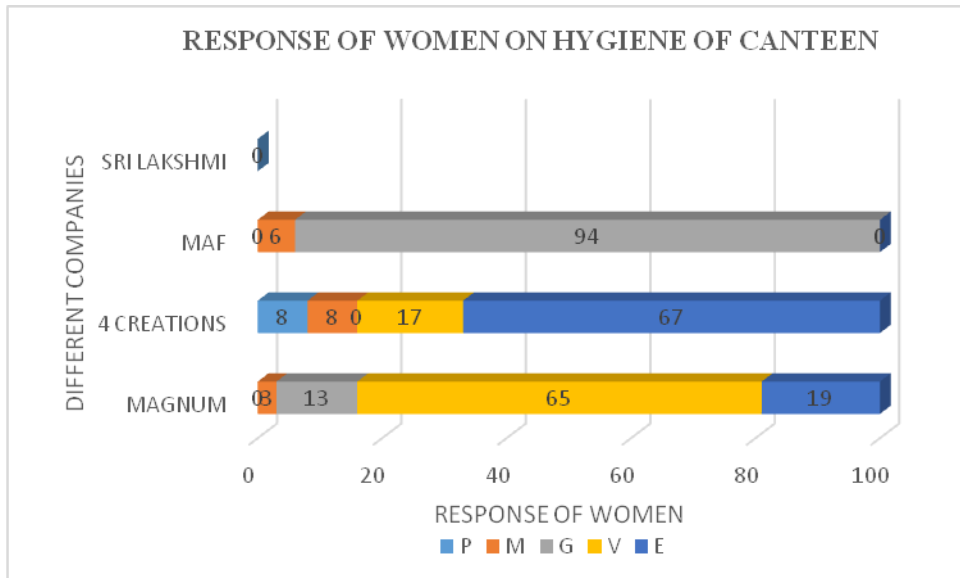
F. General Amenities							
Identified factor affecting women health& productivity	Garment company	Response of women in %					Remarks
Hygiene of toilets used *P-Poor *M-Moderate *G-Good *V-Very good *E-Excellent	Magnum	P	M	G	V	E	
		-	-	67%	33%	-	
	4Creations	P	M	G	V	E	
		-	-	67%	33%	-	
	MAF	P	M	G	V	E	
		-	13%	-	62%	25%	
	Sri Lakshmi	P	M	G	V	E	
		-	50%	-	50%	-	
Hygiene of canteen	Magnum	P	M	G	V	E	
		-	-	-	67%	33%	
	4Creations	P	M	G	V	E	
		-	-	67%	33%	-	
	MAF	P	M	G	V	E	
		-	-	13%	62%	25%	
	Sri Lakshmi	P	M	G	V	E	
		No canteen at premises					
Availability of drinking water	Magnum	P	M	G	V	E	
		-	-	-	-	100%	
	4Creations	P	M	G	V	E	
		-	-	-	33%	67%	
	MAF	P	M	G	V	E	
		-	-	-	63%	37%	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
Availability of sufficient rest periods	Magnum	P	M	G	V	E	
		100%	-	8%	-	-	
	4Creations	P	M	G	V	E	
		33%	-	67%	-	-	
	MAF	P	M	G	V	E	
		-	13%	37%	50%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	100%	-	-	
Availability of first aid box during injuries	Magnum	P	M	G	V	E	
		-	-	100%	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	63%	37%	

	Sri Lakshmi	P	M	G	V	E	
		50%	50%	-	-	-	
Availability of doctor/nurse	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	50%	50%	
	Sri Lakshmi	P	M	G	V	E	
		No such facility					
How much do you rate medical room?	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	50%	50%	
	Sri Lakshmi	P	M	G	V	E	
		No medical room					
Rate working condition of lift	Magnum	P	M	G	V	E	
		100%	-	3%	-	-	
	4Creations	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	MAF	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	Sri Lakshmi	P	M	G	V	E	
		No lift facility					
Rate working condition of fire alarms/engines	Magnum	P	M	G	V	E	
		34%	-	33%	33%	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	-	100%	
	Sri Lakshmi	P	M	G	V	E	
		-	100%	-	-	-	
Rate working condition of machines in terms of performance	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	100%	-	
	MAF	P	M	G	V	E	
		-	-	-	37%	13%	
	Sri	P	M	G	V	E	

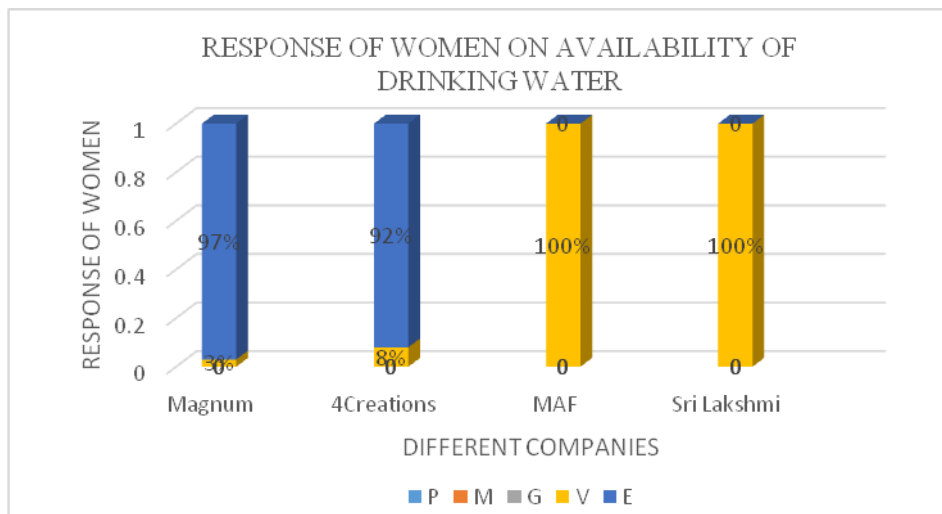
	Lakshmi	Not applicable					
Rate quality of personal protective equipment provided to you	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	Not provided for 33% women.
		-	-	67%	-	-	
	MAF	P	M	G	V	E	Most of them were either not using or have not been provided with personal protective equipment
		Not provided					
	Sri Lakshmi	P	M	G	V	E	
Not provided							



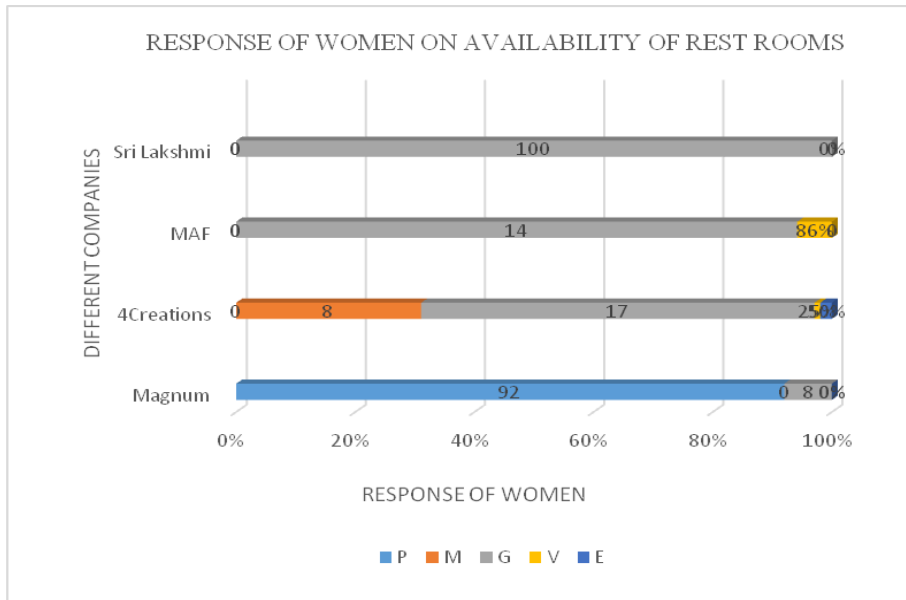
Graph 6.125: Response of women on hygiene of toilets



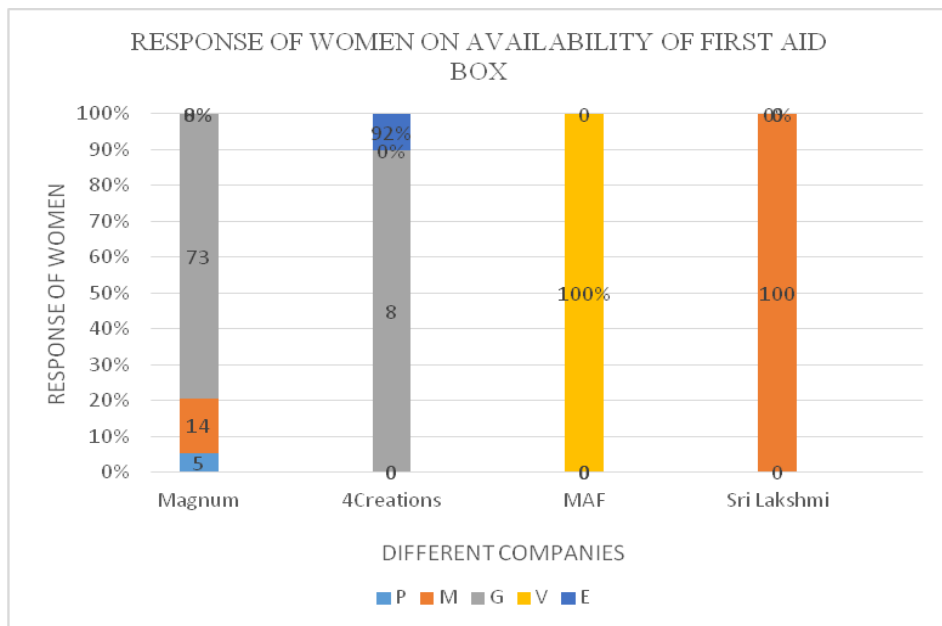
Graph 6.126: Response of women on hygiene of canteen



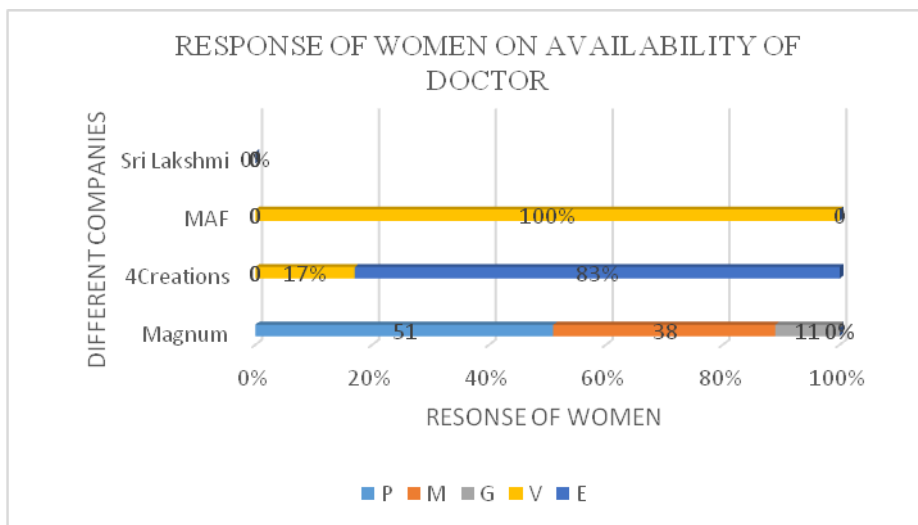
Graph 6.127: Response of women on availability of drinking water



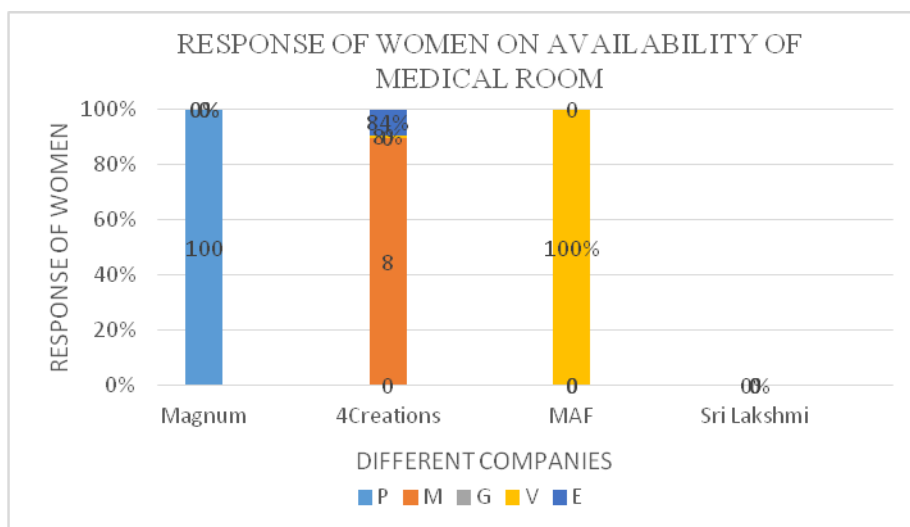
Graph 6.128: Response of women on availability of rest rooms



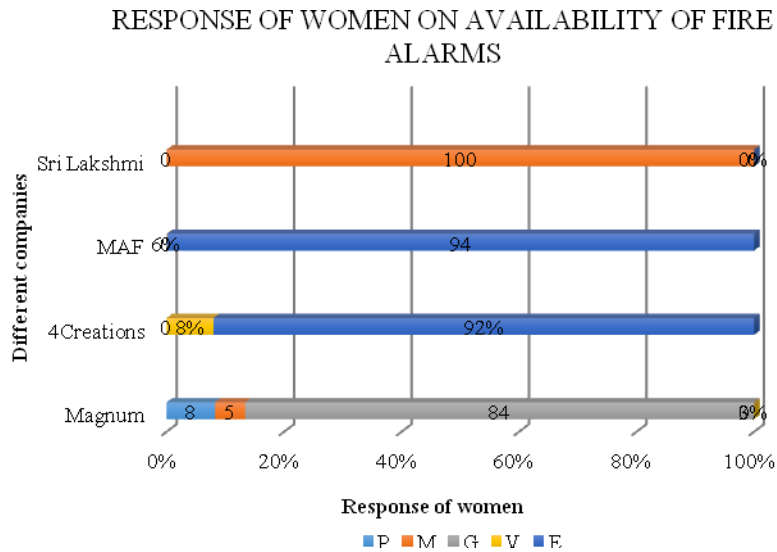
Graph 6.129: Response of women on availability of first aid box



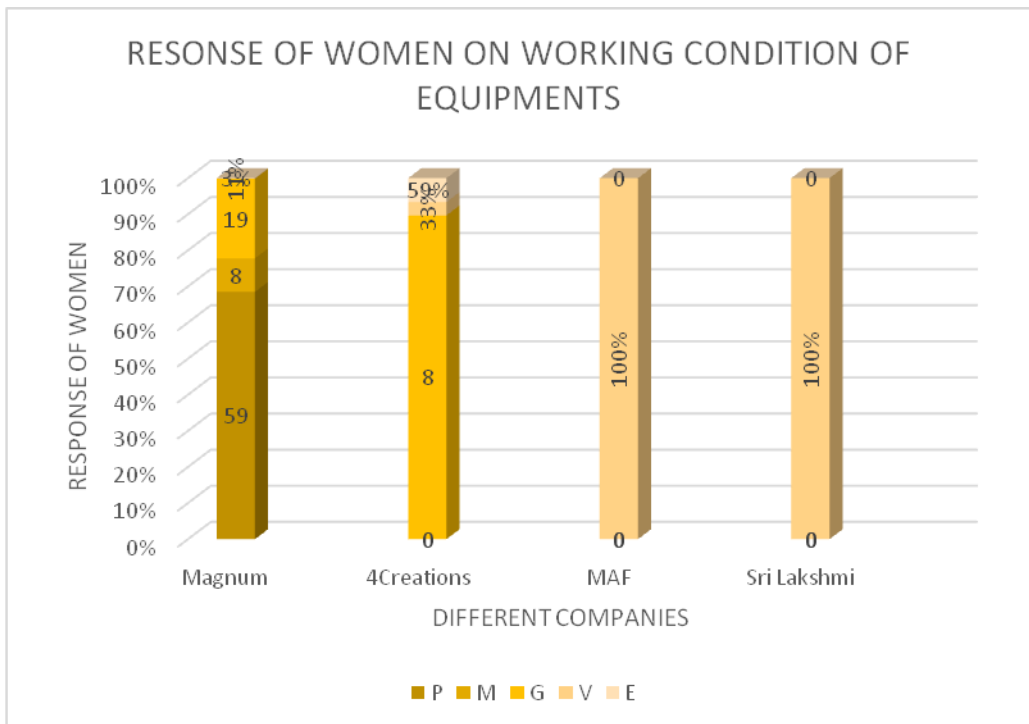
Graph 6.130: Response of women on availability of doctor



Graph 5.131: Response of women on availability of medical room

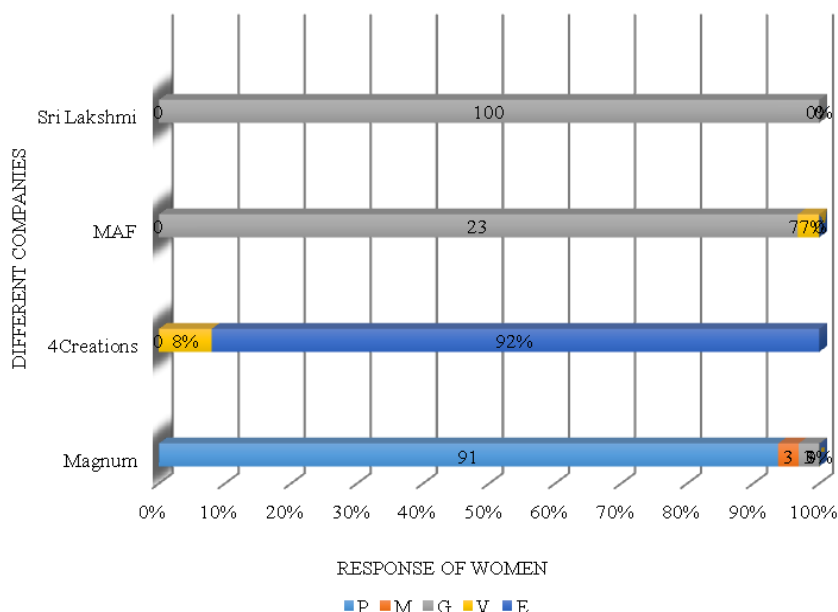


Graph 6.132: Response of women on availability of fire alarms



Graph 6.133: Response of women on working condition of equipments

RESPONSE OF WOMEN ON QUALITY OF EQUIPMENTS



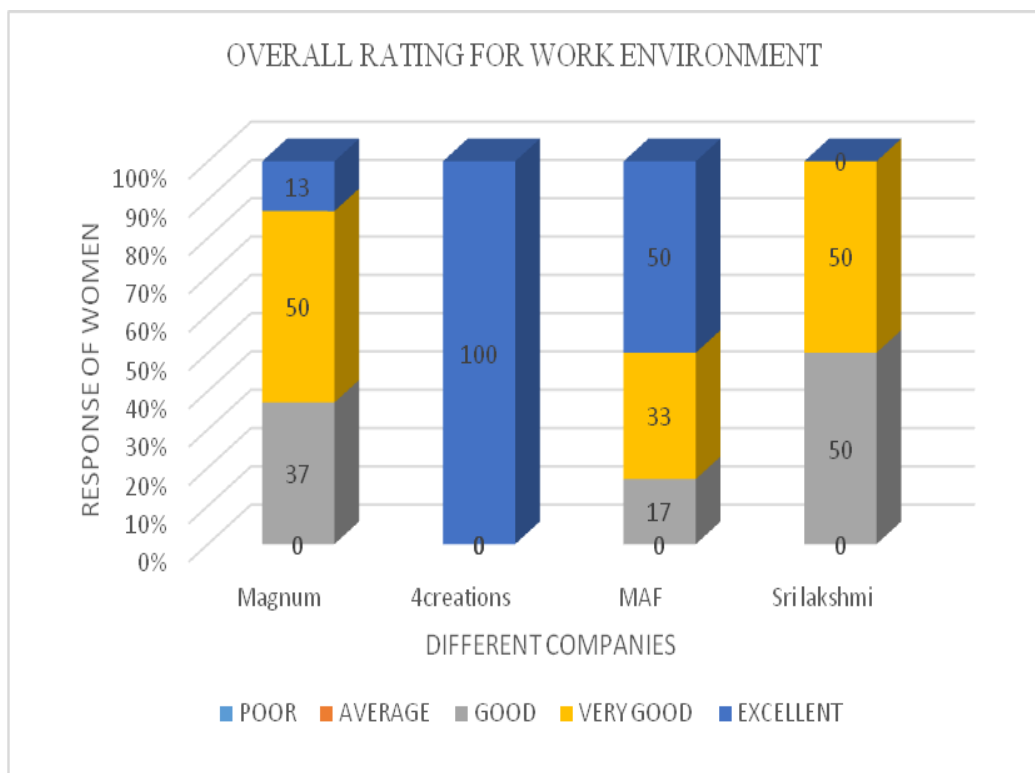
Graph 6.134: Response of women on quality of equipments

Section wise survey – Ironing section

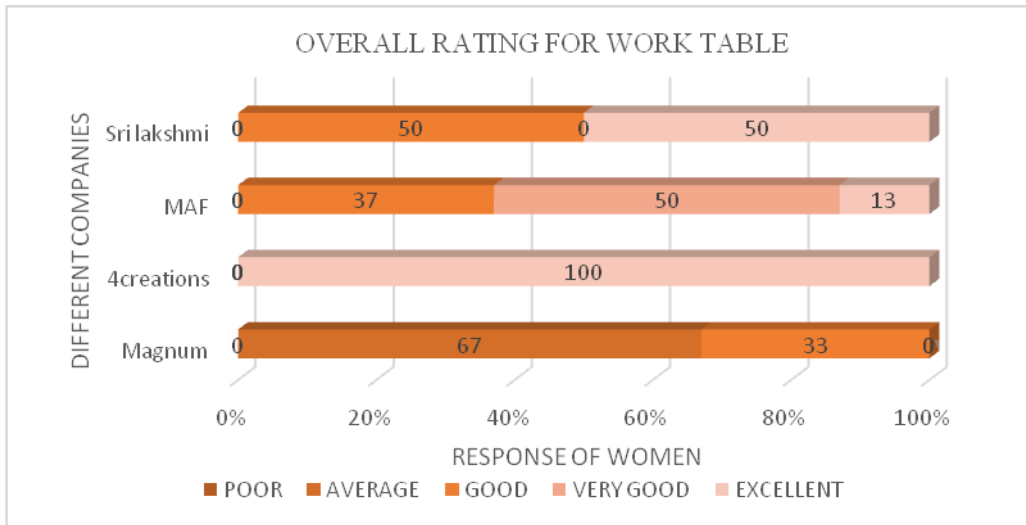
Ironing section survey				
Identified factor affecting women health& productivity	Garment company	Response of women in %		Remarks
Tables in ironing section *A-Adjustable *NA-Not Adjustable	Magnum	A	NA	
		67%	33%	
	4Creations	A	NA	
		67%	33%	
	MAF	A	NA	
		-	100%	
	Sri Lakshmi	A	NA	
		-	100%	
Comfortable to work in standing position for	Magnum	No – 100%		
	4Creations	Yes - 100%		
	MAF	Yes – 37%, No -63%		
	Sri Lakshmi	Yes – 100%		

long duration?						
Sufficient windows or doors in activity area?	Magnum	Yes – 100%				
	4Creations	Yes – 100%				
	MAF	Yes – 100%				
	Sri Lakshmi	Yes – 50%, No – 50%				
Sufficient fans and ventilation in activity area?	Magnum	Yes – 100%				
	4Creations	Yes – 100%				
	MAF	Yes – 75%, No- 25%				
	Sri Lakshmi	No – 100%				
Are fans in good working condition?	Magnum	Yes – 100%				
	4Creations	Yes – 100%				
	MAF	Yes – 100%				
	Sri Lakshmi	No – 100%				
Do you feel level of exposure to heat is high?	Magnum	Yes – 100%				
	4Creations	Yes – 67%, No – 33%				
	MAF	Yes – 87%, No – 13%				
	Sri Lakshmi	Yes – 100%				
Have you been provided with personal protective equipments?	Magnum	Yes-33%, No-67%				
	4Creations	Yes-33%, No-67%				
	MAF	No-100%				
	Sri Lakshmi	No – 100%				
Do you use them in work?	Magnum	No- 100%				
	4Creations	No- 100%				
	MAF	No-100%				
	Sri Lakshmi	No- 50%				
Do you find iron box is heavy to lift?	Magnum	Yes- 100%				
	4Creations	No- 100%				
	MAF	Yes – 75%, No- 25%				
	Sri Lakshmi	Yes – 50%, No- 50%				
Have you been provided with mats to prevent from electric shock?	Magnum	Yes- 100%				
	4Creations	Yes- 100%				
	MAF	Yes- 100%				
	Sri Lakshmi	No- 100%				
Ratings for work environment *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	Magnum	P	A	G	V	E
		-	-	37%	50%	13%
	4Creations	P	A	G	V	E
		-	-	-	-	100%
	MAF	P	A	G	V	E
		-	-	17%	33%	50%
	Sri Lakshmi	P	A	G	V	E
		-	-	50%	50%	-
Ratings for overall work	Magnum	P	A	G	V	E
		-	67%	33%	-	-

table in terms of height, space, adjustable features *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	4Creations	P	A	G	V	E	
		-	-	-	-	100%	
	MAF	P	A	G	V	E	
		-	-	37%	50%	13%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	50%	-	50%	



Graph 6.135: Overall rating for work environment

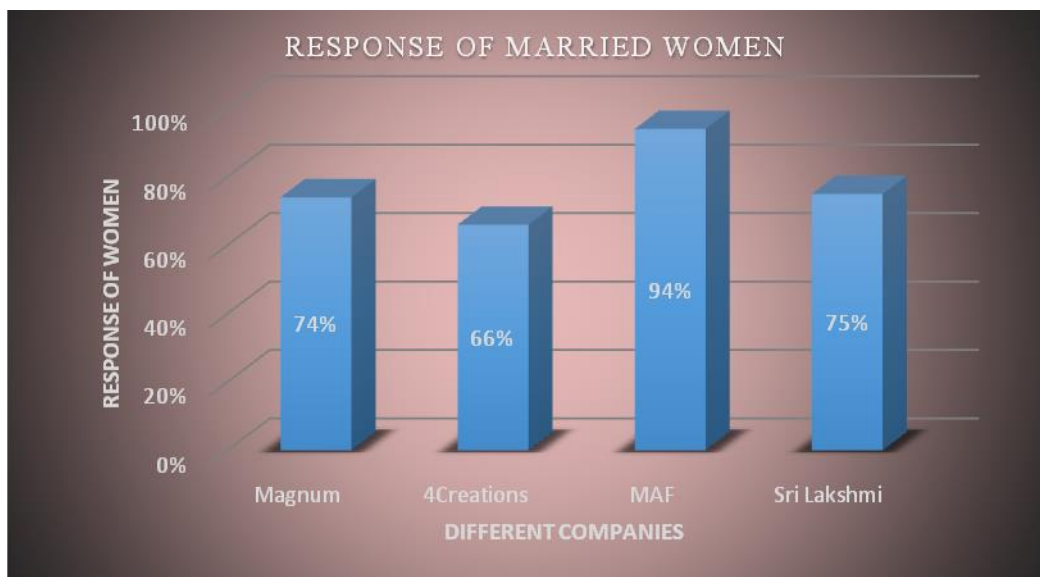


Graph 6.136: Overall rating for work table

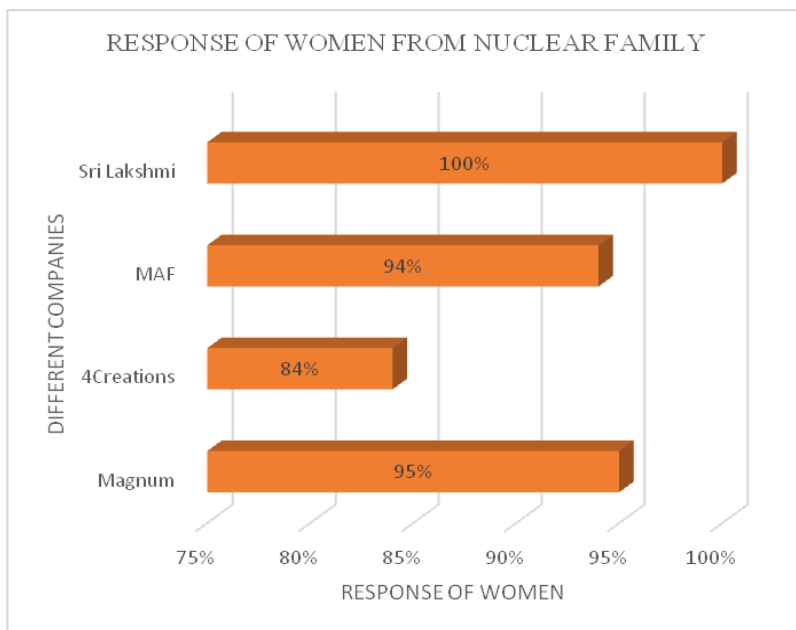
6.4 Finishing section:

A. Social-Demographic Profile of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Marital status- MARRIED	Magnum	74%	Women need to manage both home and work
	4Creations	66%	
	MAF	94%	
	Sri Lakshmi	75%	
Family Type – NUCLEAR FAMILY	Magnum	95%	No elders/other family members to help in household chores.
	4Creations	84%	
	MAF	94%	
	Sri Lakshmi	100%	
Children at home	Magnum	63%	Children need more care and attention than any other family member.
	4Creations	56%	
	MAF	87%	
	Sri Lakshmi	56%	
Family Members Support - NO	Magnum	37%	Having no support from their family members may put women under mental and physical stress because of the need to manage both household work and their career.
	4Creations	6%	
	MAF	-	
	Sri Lakshmi	-	
Accommodation–	Magnum	100%	Major part of their salary goes in

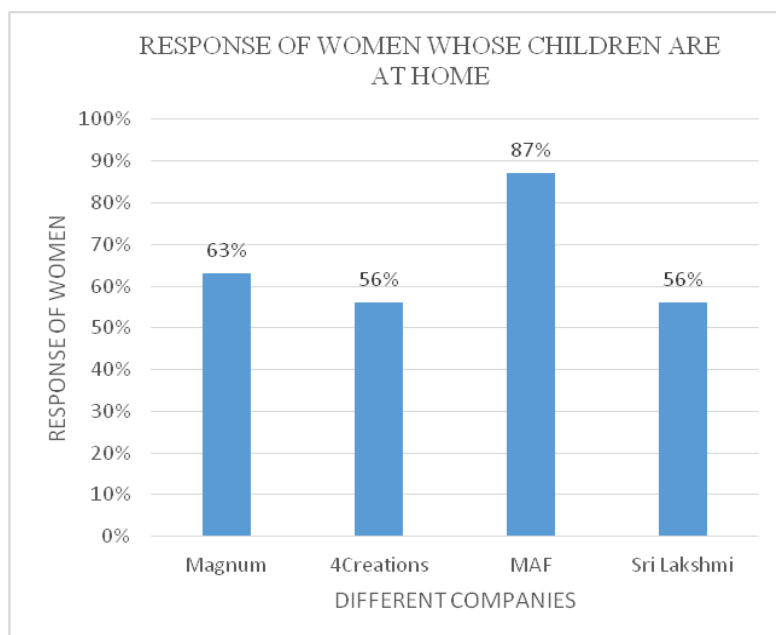
RENTED/PAYING GUEST	4Creations	97%	paying off house rent thus causing stress to earn more money.
	MAF	100%	
	Sri Lakshmi	100%	
Mode of Transportation to Office - WALK	Magnum	89%	They will be tired by the time they reach work place
	4Creations	59%	
	MAF	29%	
	Sri Lakshmi	38%	
Addiction- TOBACCO	Magnum	32%	--
	4Creations	-	
	MAF	-	
	Sri Lakshmi	-	



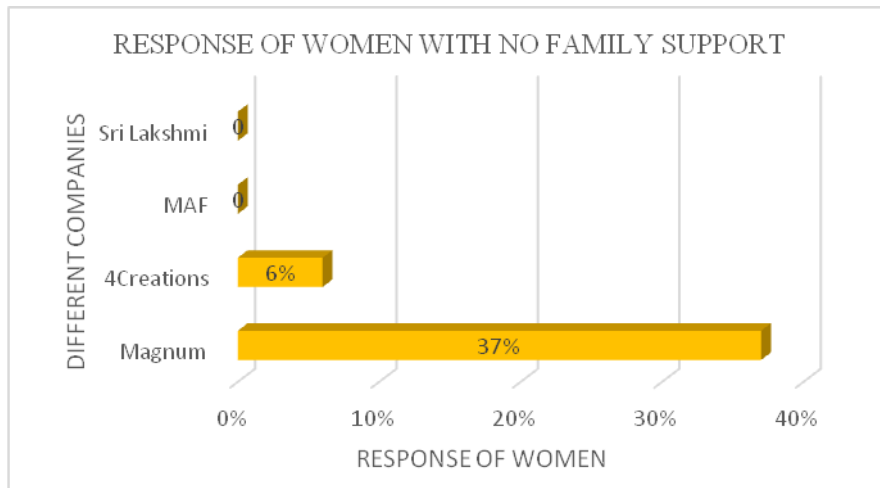
Graph 6.137: Married women response



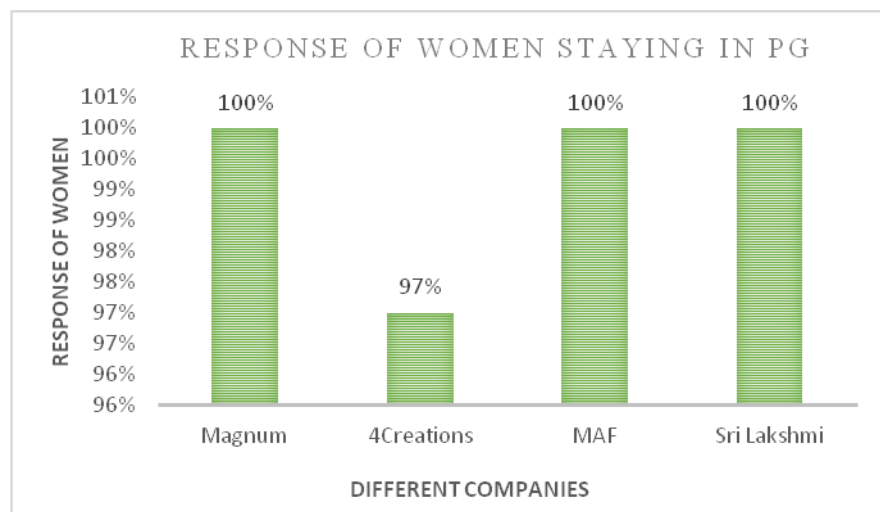
Graph 6.138: Nuclear type women response



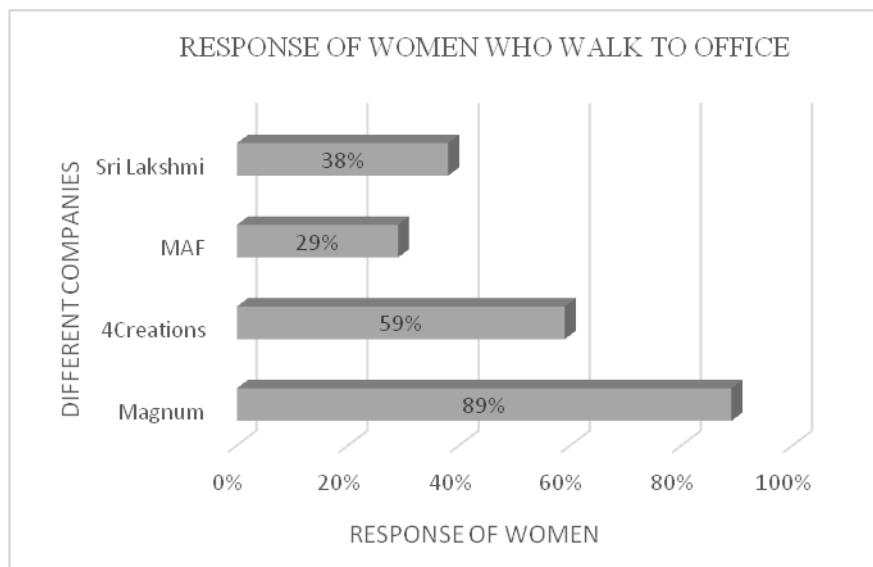
Graph 6.139: Response of women whose children are at home



Graph 6.140: Women with no family support

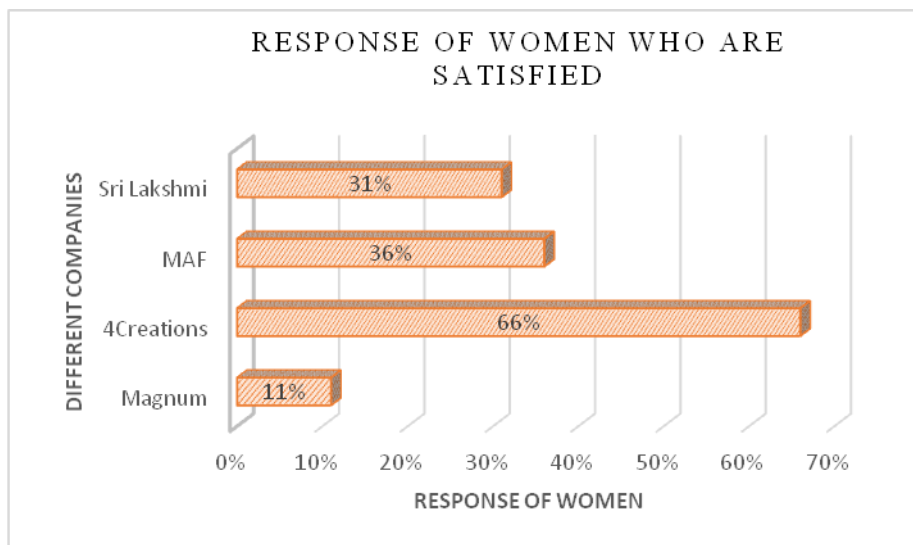


Graph 6.141: Response of women stayin as paying guests

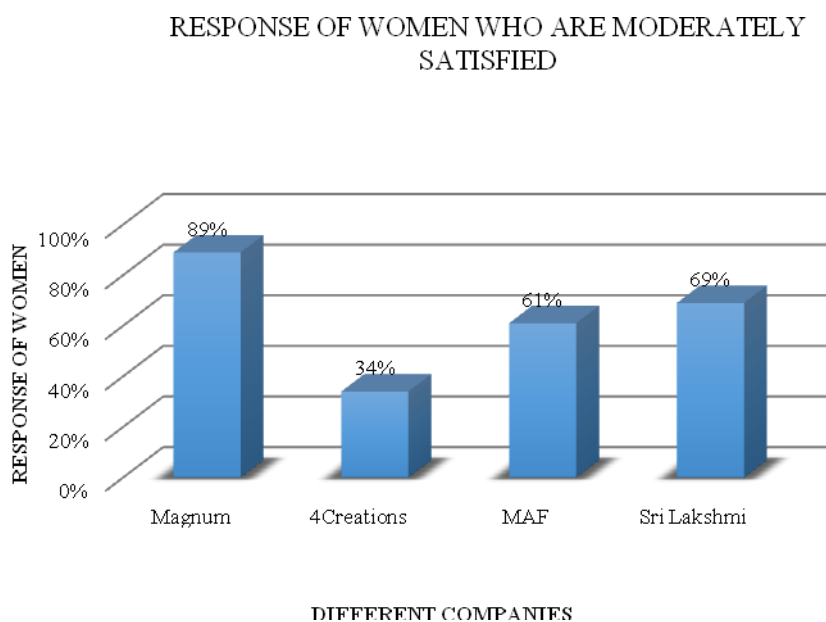


Graph 6.142: Response of women who walk to office

B. Occupational Status of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Job Satisfaction Level - SATISFIED	Magnum	11%	--
	4Creations	66%	
	MAF	36%	
	Sri Lakshmi	31%	
Job Satisfaction Level – MODERATELY SATISFIED	Magnum	89%	Women said they were not satisfied with their salaries, facilities like chairs, fans, break during work.
	4Creations	34%	
	MAF	61%	
	Sri Lakshmi	69%	



Graph 6.143: Response of women who are satisfied



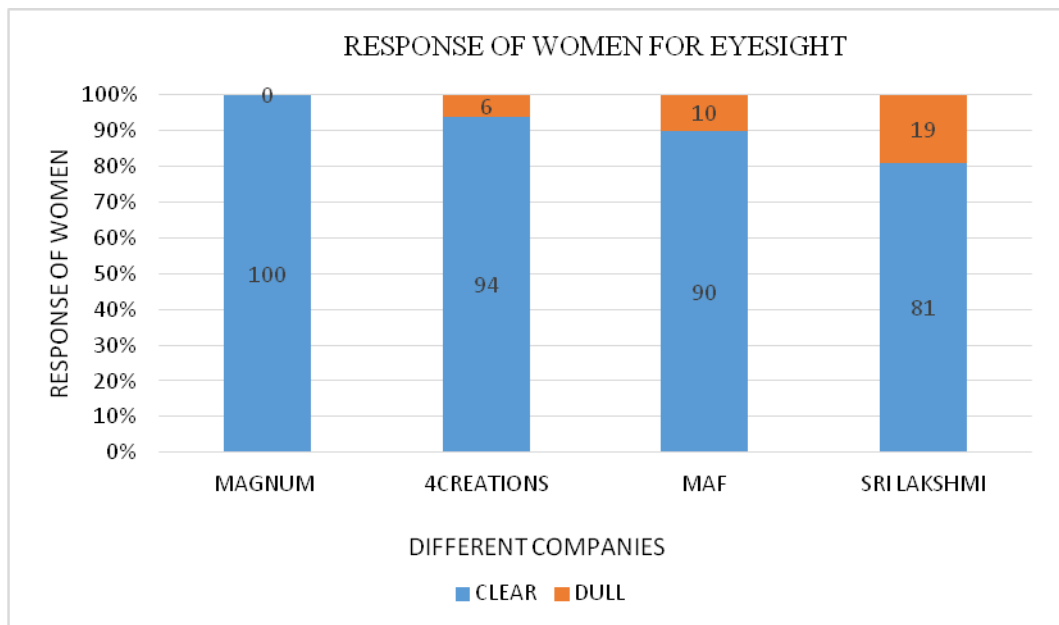
Graph 6.144: Response of women who are moderately satisfied

C. Women-Oriented Profile			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Eyesight *Clear-C *Dull-D	Magnum	C-100%	
	4Creations	C-94%, D-6%	
	MAF	C-90%,D-10%	
	Sri Lakshmi	C – 81%, D-19%	
Hearing *Audible - A *Not audible – NA	Magnum	A-100%	
	4Creations	A-100%	
	MAF	A-100%	
	Sri Lakshmi	A-100%	
Hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-21%, M-79%	
	4Creations	G-97%, M-3%	
	MAF	G-100%	
	Sri Lakshmi	G-100%	
Oral hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-5%, M-37%,P-58%	Common Oral problems faced by women: Dry mouth, oral ulcer, bad breathe, gum diseases
	4Creations	G-78%, M-19%, P-3%	
	MAF	G-97%,M-3%	
	Sri Lakshmi	G-88%, M-12%	
Skin hygiene *Good-G *Moderate-M *Poor- P	Magnum	M-79%, P-21%	Common Skin problems faced by women: Dry skin, exposure to dust, exposure to extreme heat, rashes/itching/allergic problem,dandruff.
	4Creations	G-63%, M-34%,P-3%	
	MAF	G-100%	
	Sri Lakshmi	G-88%,M-12%	
Menstrual history: (i) Nature of cycle *Regular-R *Irregular-IR *Stopped-S) (ii) Intensity of pain *Mild-M *Moderate-MOD *Severe-Sv	Magnum	Cycle: R-79%, IR-16%,S-5% Pain: M-68%, MOD-16%, Sv-11%	
	4Creations	Cycle: R-94%, IR-6% Pain: M-50%, MOD-28%,Sv-22%	
	MAF	Cycle: R-94%, IR-6% Pain: M-68%,MOD-6% Sv-26%	
	Sri Lakshmi	Cycle: R-88%, IR-6%, S-6% Pain: M-81%,MOD-13%	

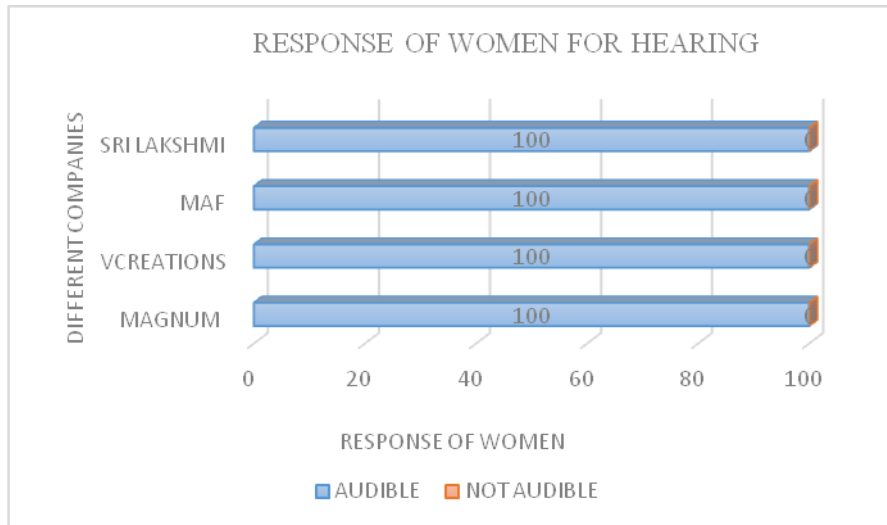
Frequency of Illness Experienced- Before Employment *Often-O *Not Often-NO *Rarely–R *Not reported –NR	Magnum	O- 16%, R-84%		
	4Creations	NR-100%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Illness Experienced- After Employment *Often-O *Not Often-NO *Rarely–R *Not reported –NR	Magnum	O- 37%, R-63%		
	4Creations	NR-100%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Absence in a month	Magnum	Absence (in days)	%	
		Not Ab	11%	
		1-2	42%	
		1-3	21%	
		2-3	21%	
		Upto 3	5%	
	4Creations	Absence (in days)	%	
		Not Ab	44%	
		1	9%	
		1-2	16%	
		1-3	3%	
		2	3%	
		2-3	9%	
		3	7%	
		3-4	9%	
	MAF	Absence (in days)	%	
		Not Ab	55%	
		1	7%	
		1-2	3%	
		2	3%	
		2-3	23%	
		3	3%	
		>4	6%	
	Sri Lakshmi	Absence (in days)	%	
		Not Ab	38%	
		1	12%	

		1-2	12%	
		2	7%	
		2-3	12%	
		3	6%	
		3-4	7%	
Causes of absenteeism *Family commitment-FC; *Illness-IL *W- Work pressure	Magnum	FC-79%,IL-53%, W-5%		
	4Creations	FC-56%,IL-53%, W-3%		
	MAF	FC-45%, IL-45%		
	Sri Lakshmi	FC-50%, IL-63%		
Victim of common illness	Magnum	Common illness: Cough and cold, Headache, Fever, typhoid		Other common illnesses : Low BP, bleeding per rectum, gastric, toothache, anemia, stomach pain, acidity, sore throat ,bleeding from nose, abnormal abdominal pain, chest pain due to gastric, appendix operation, hysterectomy, body pain
	4Creations			
	MAF			
	Sri Lakshmi			
Victim of specific illness	Magnum	Swelling of legs - 26%		
	4Creations	Difficulty in breathing(always) – 3%, Swelling of legs - 13%, Ischemic heart disease – 3%, hypertension – 6% acute attack of bronchial asthma-3%		
	MAF	Swelling of legs - 3%, hypertension – 3%		
	Sri Lakshmi	Swelling of legs - 19%		
Undergone treatment for common illness	Magnum	Yes–79%,No-21%		
	4Creations	Yes – 84%, No- 16%		
	MAF	Yes – 71%, No – 29%		
	Sri Lakshmi	Yes – 50%, No – 50%		
Category of medical services	Magnum	First aid – 100%		
	4Creations	First aid- 100% Primary care – 100%		
	MAF	First aid- 100%		
	Sri Lakshmi	First aid- 100%		
Psychiatric problems suffered	Magnum	Insomnia-11% Depression-26% Anxiety-32%		

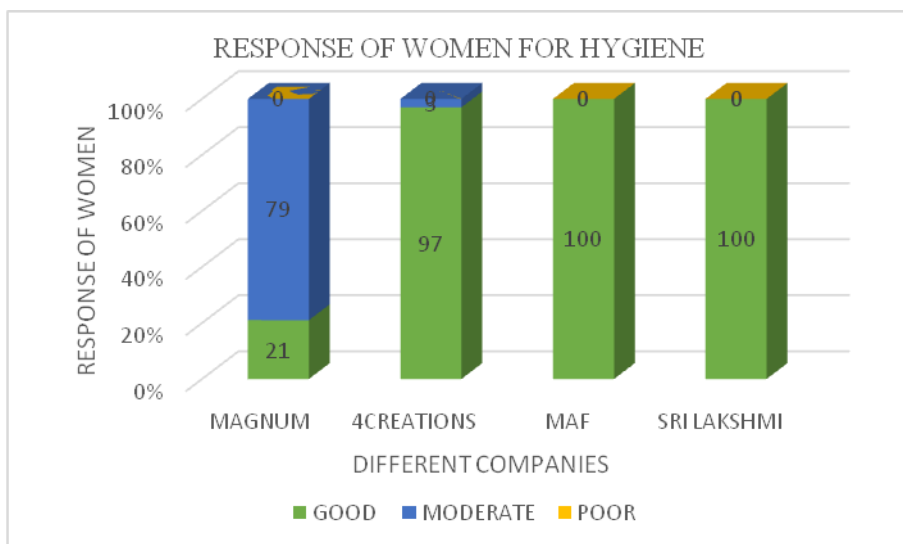
		Palpitations-21%	
	4Creations	Insomnia-13% Depression-13% Anxiety-31% Palpitations-22%	
	MAF	Insomnia-19% Depression-23% Anxiety-32% Palpitations-26%	
	Sri Lakshmi	Insomnia-31% Depression-19% Anxiety-31% Palpitations-25%	



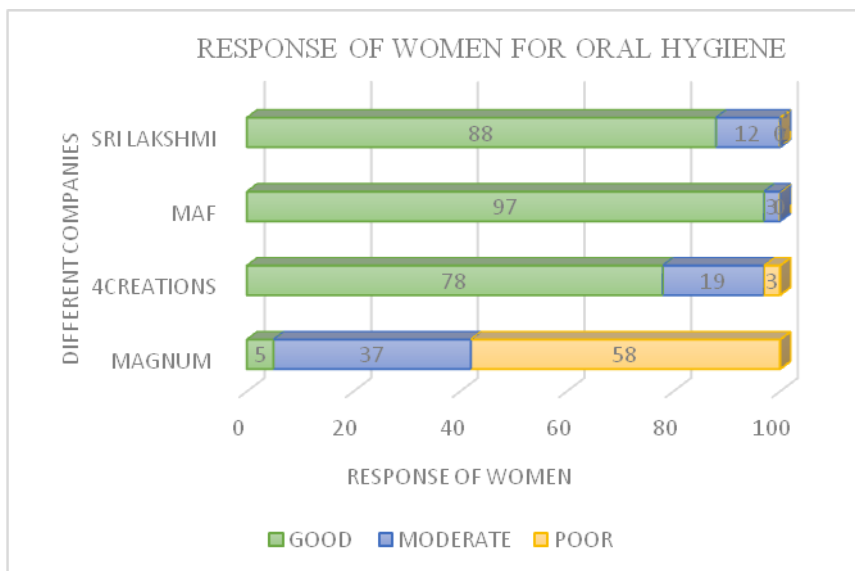
Graph 6.145: Response of women for eyesight



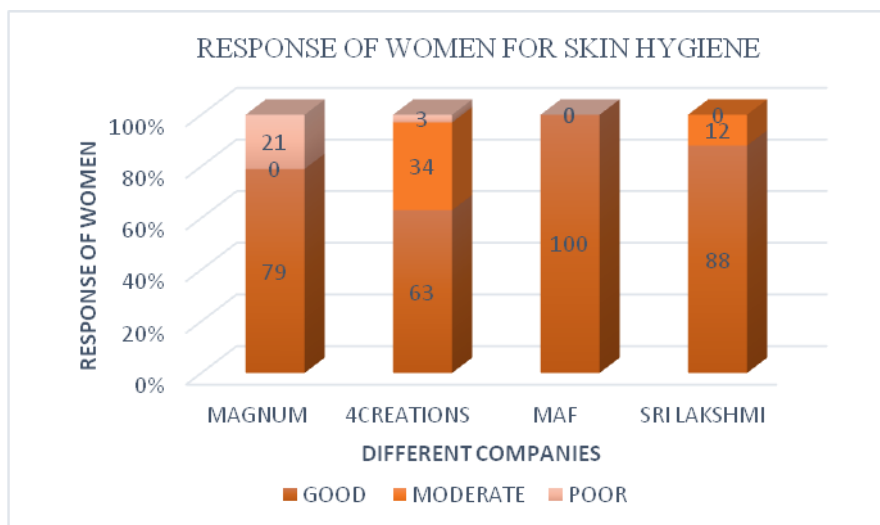
Graph 6.146: Response of women for hearing



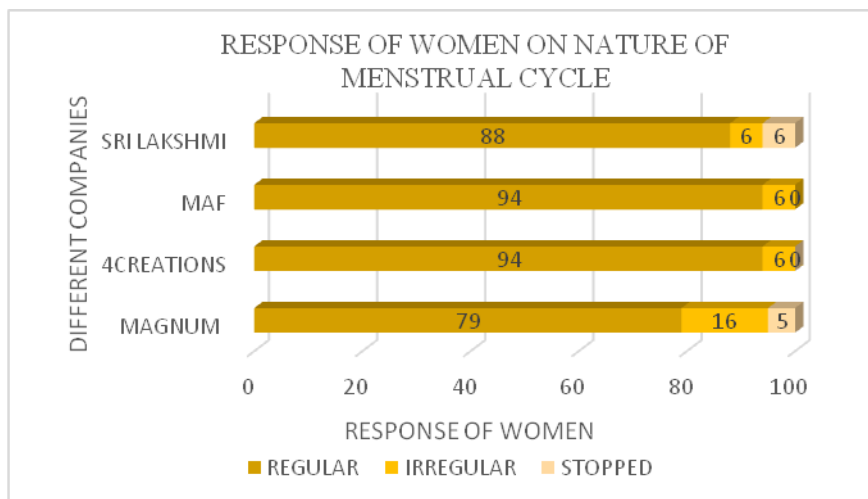
Graph 6.147: Response of women for hygiene



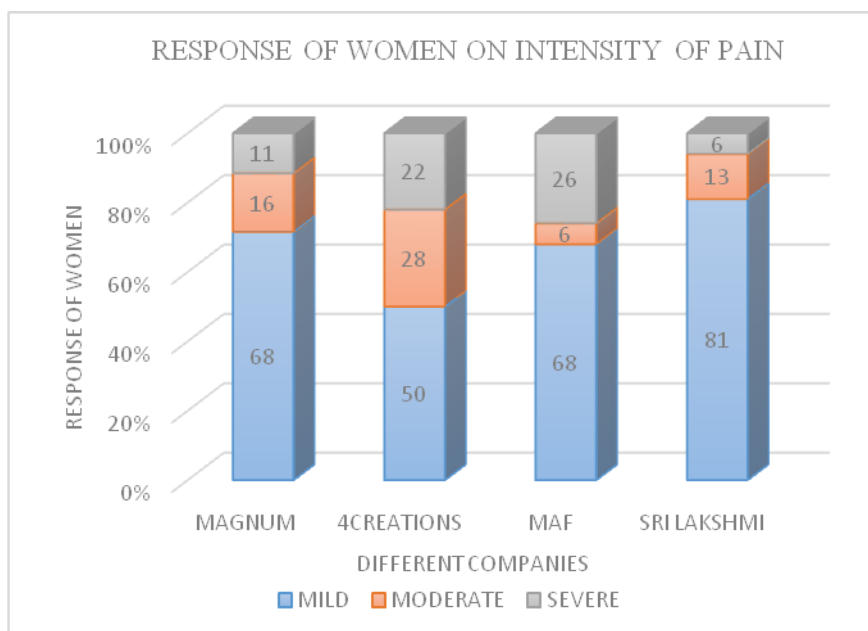
Graph 6.148: Response of women for oral hygiene



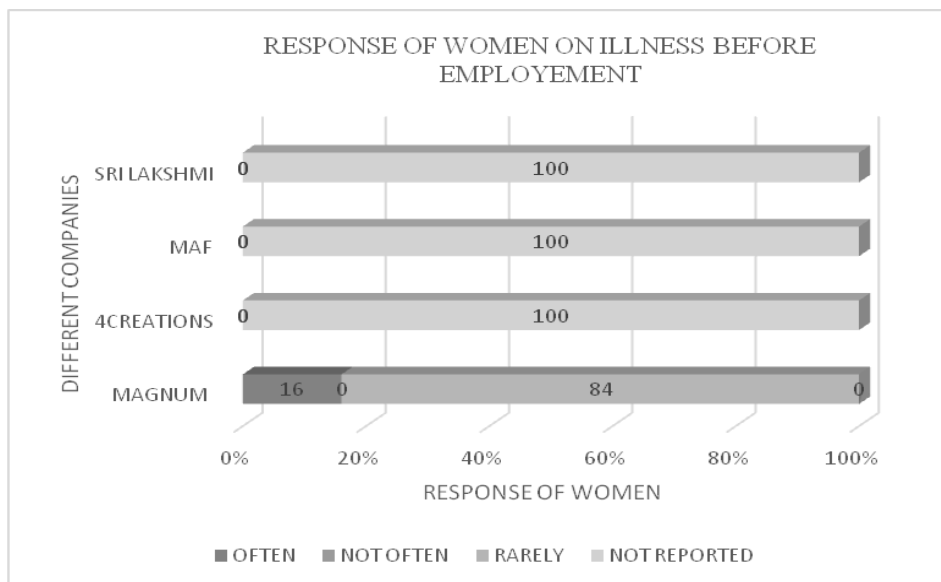
Graph 6.149: Response of women for Skin Hygiene



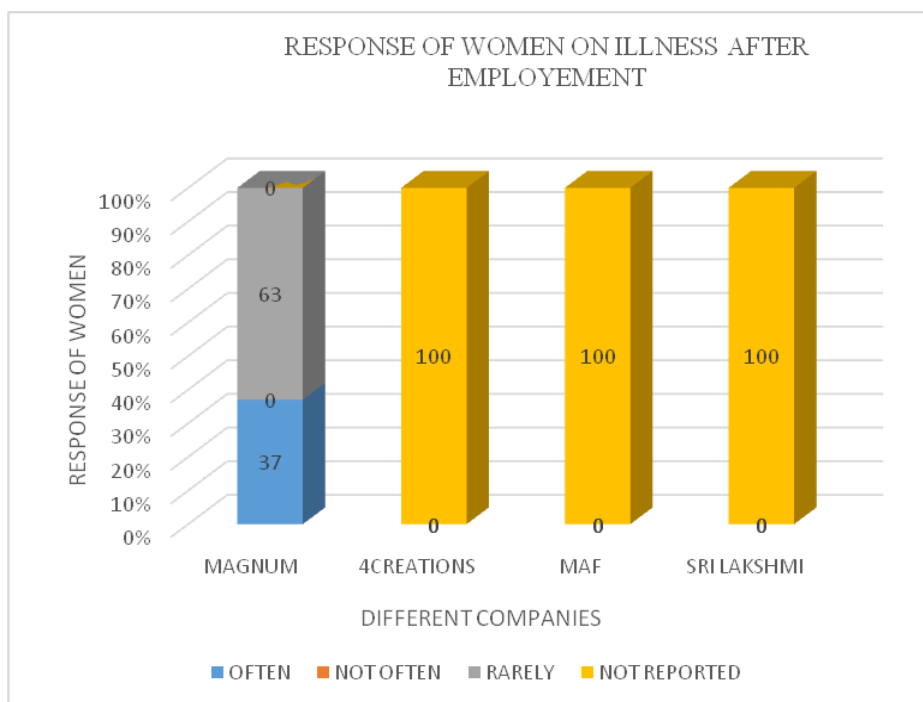
Graph 6.150: Response of women on Nature of Menstrual Cycle



Graph 6.151: Response of women on Intesity of Pain



Graph 6.152: Response of women on Illness Before Employment



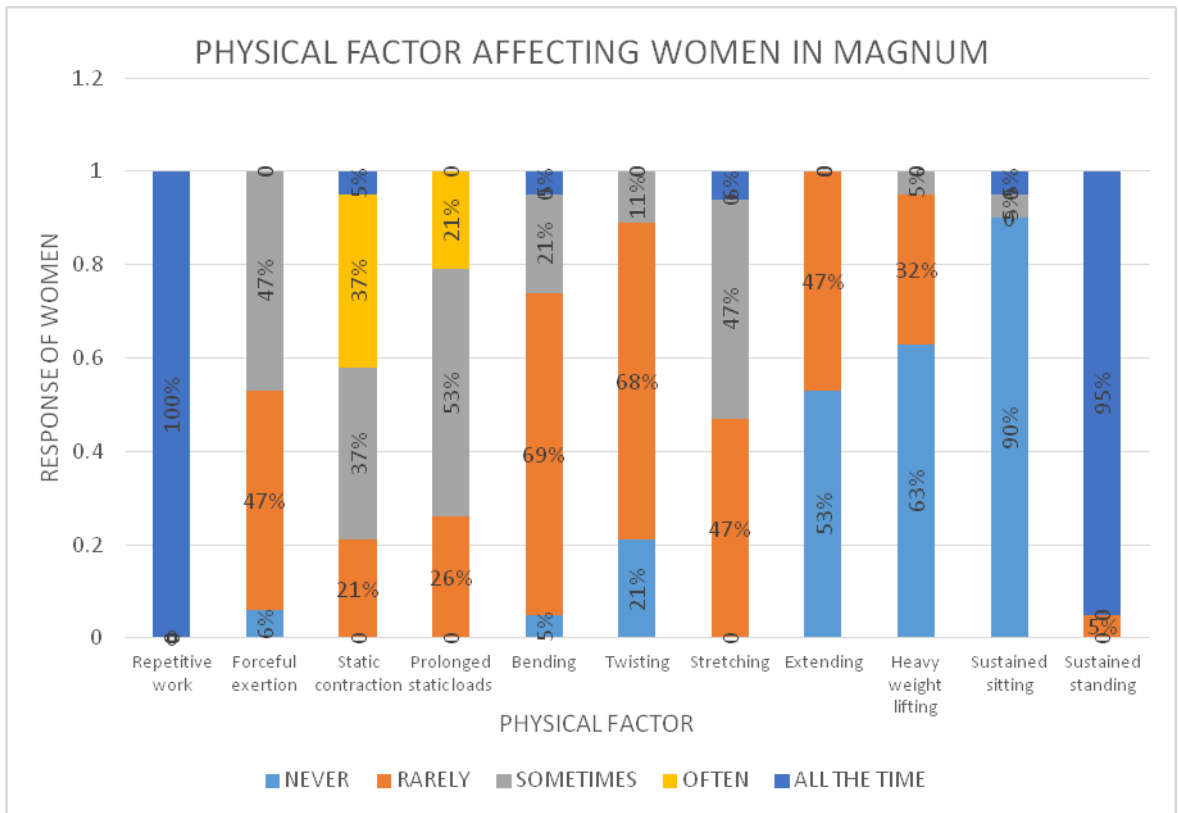
Graph 6.153: Response of women on Illness After Employment

D. Physical factors at work								
Identified factor affecting women health& productivity	Garment company	Response of women in %						Remarks
Work involves following constraints *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	6%	47%	47%	-	-	
		Static contraction	-	21%	37%	37%	5%	
		Prolonged static loads	-	26%	53%	21%	-	
		Bending	5%	69%	21%	-	5%	
		Twisting	21%	68%	11%	-	-	
		Stretching	-	47%	47%	-	6%	
		Extending	53%	47%	-	-	-	
		Heavy weight lifting	63%	32%	5%	-	-	
		Sustained sitting	90%	-	5%	-	5%	
		Sustained standing	-	5%	-	-	95%	
	4Creations	Physical factor	N	R	S	O	A	
		Repetitive work	6%	-	-	-	94%	
		Forceful exertion	84%	-	-	-	5%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	94%	-	3%	-	3%	
		Twisting	100%	-	-	-	-	
		Stretching	97%	-	-	-	3%	
		Extending	97%	-	-	-	3%	
		Heavy weight lifting	97%	-	-	-	3%	
		Sustained sitting	88%	-	3%	-	9%	
		Sustained standing	9%	-	3%	-	88%	
	MAF	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	95%	-	-	-	5%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	94%	-	3%	-	3%	
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	3%	

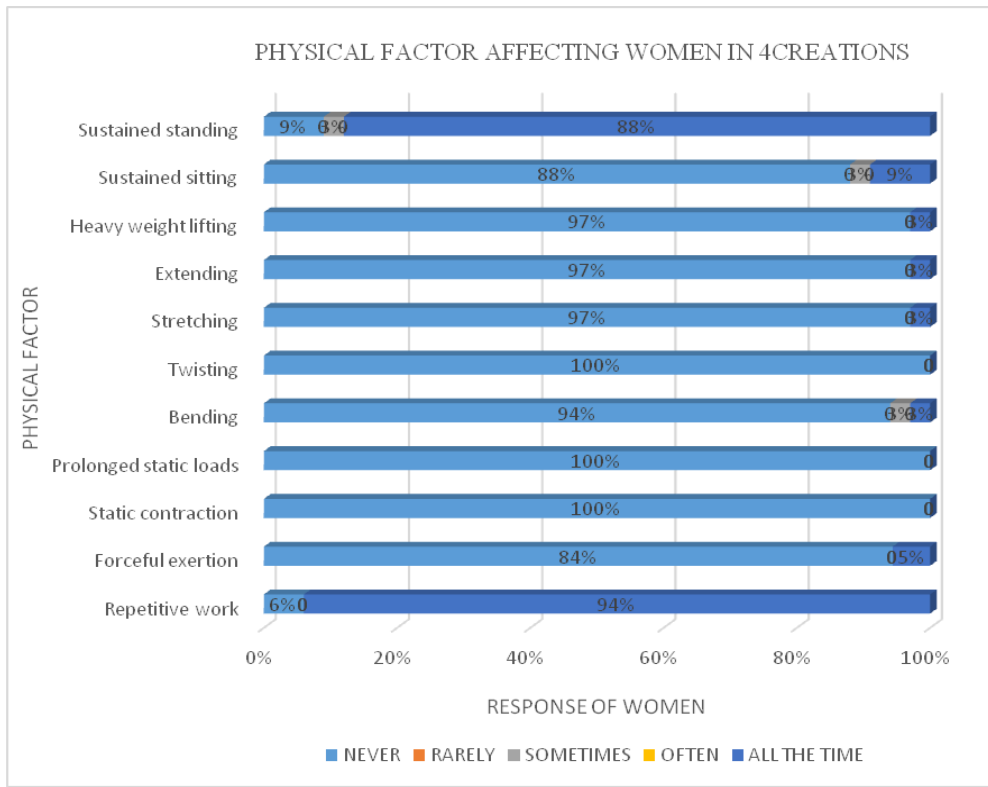
		Extending	100%	-	-	-	3%
		Heavy weight lifting	100%	-	-	-	3%
		Sustained sitting	97%	-	-	-	3%
		Sustained standing	3%	-	-	-	97%
	Sri Lakshmi	Physical factor	N	R	S	O	A
		Repetitive work	-	-	-	-	100%
		Forceful exertion	94%	-	-	-	6%
		Static contraction	100%	-	-	-	-
		Prolonged static loads	100%	-	-	-	-
		Bending	94%	-	-	-	6%
		Twisting	100%	-	-	-	-
		Stretching	94%	-	-	-	6%
		Extending	94%	-	-	-	6%
		Heavy weight lifting	94%	-	-	-	6%
		Sustained sitting	81%	-	-	-	19%
		Sustained standing	19%	-	-	-	81%
Comfortable to work in standing/sitting position for long working hours	Magnum	Yes – 16%, No – 84%					
	4Creations	Yes – 84%, No – 16%					
	MAF	Yes – 74%, No – 26%					
	Sri Lakshmi	Yes – 100%					
Victim of following symptoms *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Symptoms	N	R	S	O	A
		Aching	-	5%	26%	37%	32%
		Cramping	37%	47%	11%	5%	-
		Carelessness	74%	21%	5%	-	-
		Dizziness	73%	11%	11%	5%	-
		Numbness	16%	16%	58%	10%	-
		Stiffness	16%	42%	42%	-	-
		Tiredness	5%	21%	32%	21%	21%
		Tangling	95%	-	5%	-	-
	4Creations	Symptoms	N	R	S	O	A
		Aching	22%	16%	38%	-	25%
		Cramping	66%	-	25%	-	9%
		Carelessness	100%	-	-	-	-
		Dizziness	81%	3%	6%	3%	6%
		Numbness	81%	3%	9%	3%	3%
		Stiffness	97%	3%	-	-	-
		Tiredness	47%	-	28%	9%	16%
		Tangling	100%	-	-	-	-
	MAF	Symptoms	N	R	S	O	A
		Aching	6%	6%	3%	10%	75%

		Cramping	23%	10%	51%	13%	3%	
		Carelessness	100%	-	-	-	-	
		Dizziness	100%	-	-	-	-	
		Numbness	23%	10%	51%	13%	3%	
		Stiffness	39%	13%	35%	10%	3%	
		Tiredness	26%	6%	23%	42%	3%	
		Tangling	100%	-	-	-	-	
		Sri Lakshmi	Symptoms	N	R	S	O	
	Aching		6%	-	13%	56%	25%	
	Cramping		56%	6%	6%	3%	-	
	Carelessness		100%	-	-	-	-	
	Dizziness		88%	-	12%	-	-	
	Numbness		56%	6%	13%	25%	-	
	Stiffness		56%	6%	13%	25%	-	
	Tiredness		13%	6%	31%	44%	6%	
	Tangling	100%	-	-	-	-		
Victim of following injuries	Magnum	Injury	Yes			No		
		Laceration	-			100%		
		Puncture	11%			89%		
		Avulsion	-			100%		
		Hematoma	-			100%		
		Abrasions	21%			79%		
		Contusions	42%			58%		
		Fracture	-			100%		
		Sprain	5%			95%		
		Burn	42%			58%		
		Amputation	-			100%		
	4Creations	Injury	Yes			No		
		Laceration	-			100%		
		Puncture	-			100%		
		Avulsion	-			100%		
		Hematoma	-			100%		
		Abrasions	-			100%		
		Contusions	-			100%		
		Fracture	-			100%		
		Sprain	-			100%		
		Burn	-			100%		
		Amputation	-			100%		
	MAF	Injury	Yes			No		
		Laceration	-			100%		
		Puncture	-			100%		
		Avulsion	-			100%		
		Hematoma	-			100%		
		Abrasions	-			100%		
Contusions		-			100%			

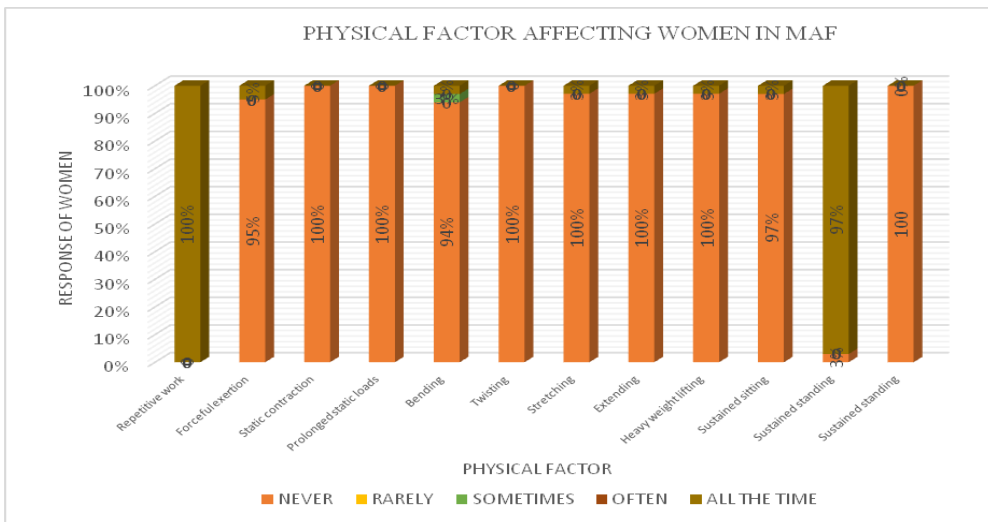
		Fracture	-	100%
		Sprain	-	100%
		Burn	-	100%
		Amputation	-	100%
	Sri Lakshmi	Injury	Yes	No
		Laceration	-	100%
		Puncture	-	100%
		Avulsion	-	100%
		Hematoma	-	100%
		Abrasions	-	100%
		Contusions	-	100%
		Fracture	-	100%
		Sprain	-	100%
		Burn	-	100%
		Amputation	-	100%



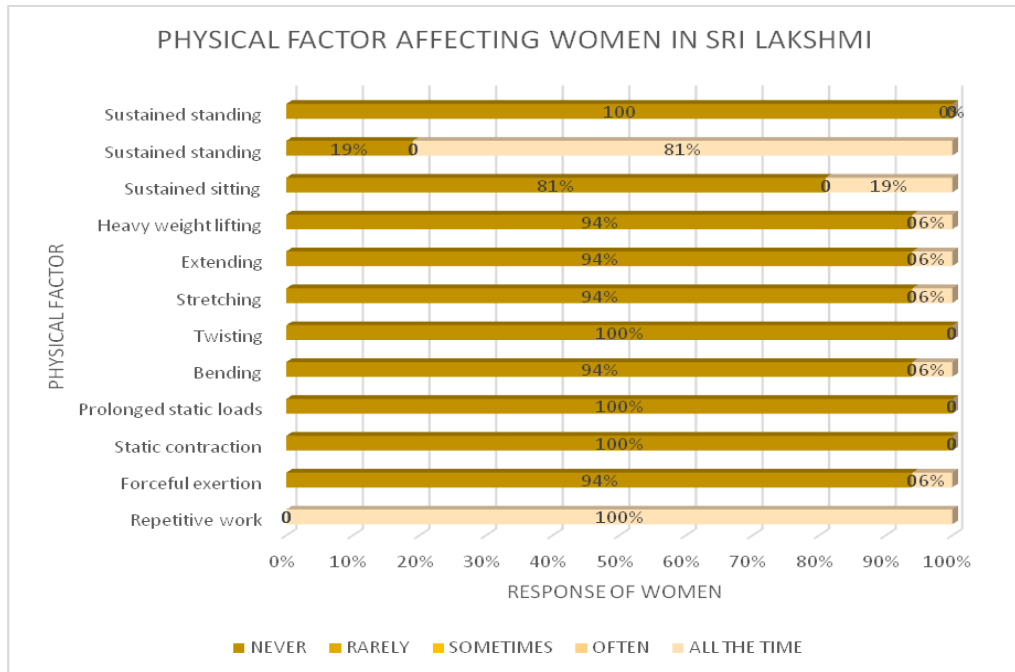
Graph 6.154: Physical Factors Affecting Women in Magnum



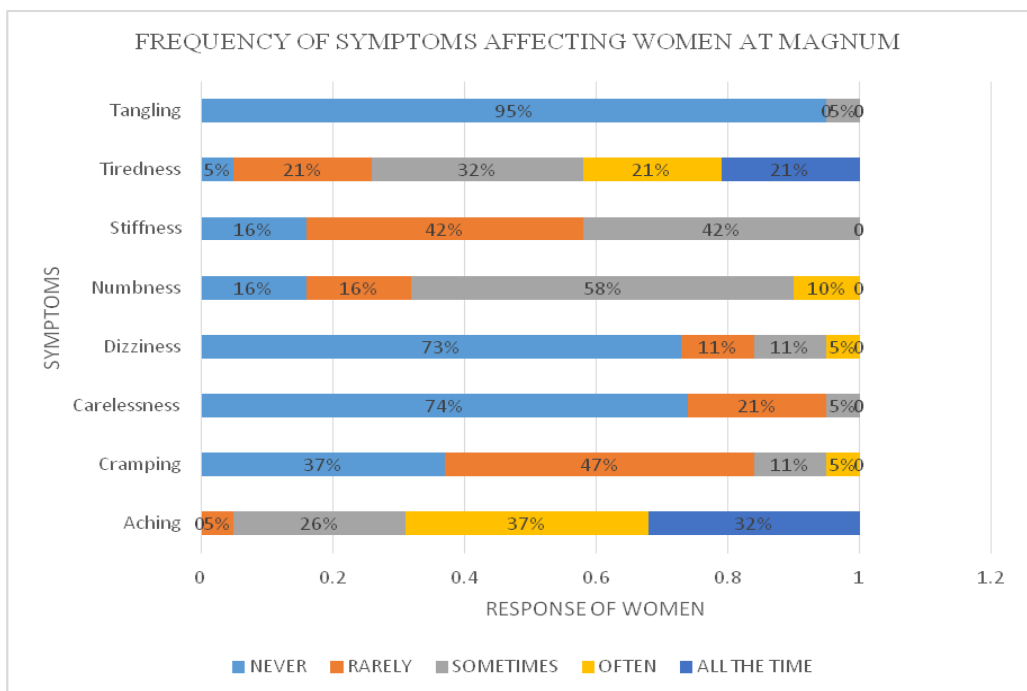
Graph 6.155: Physical Factors Affecting Women in 4 creations



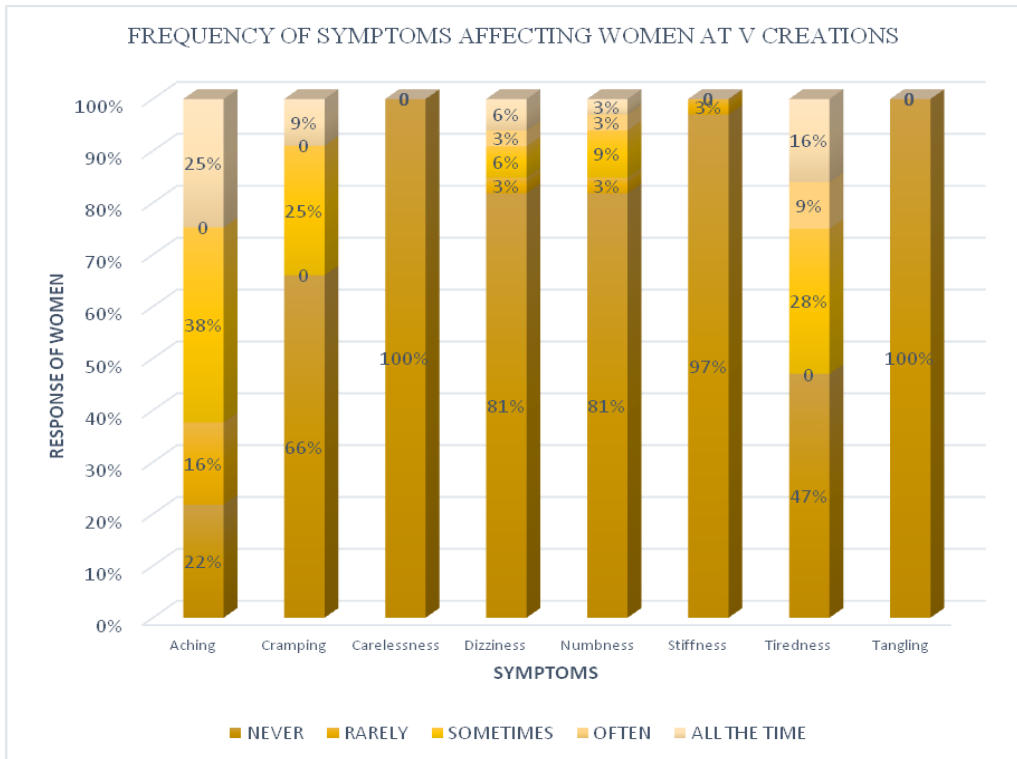
Graph 6.156: Physical Factors Affecting Women in Maf



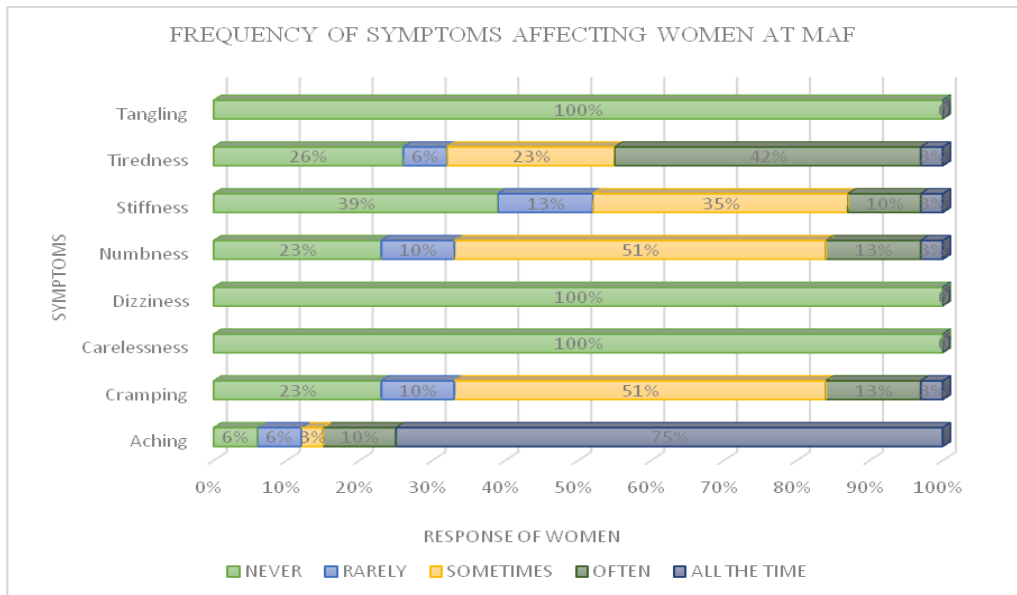
Graph 6.157: Physical Factors Affecting Women in Sri lakshmi



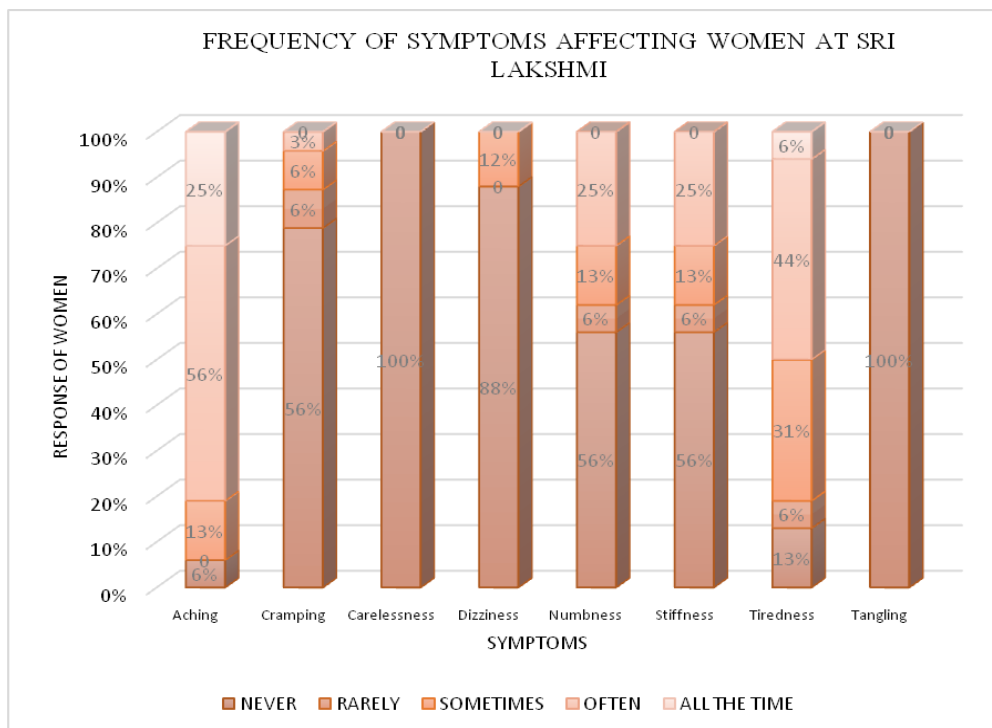
Graph 6.158: Frequency of symptoms Affecting Women at Magnum



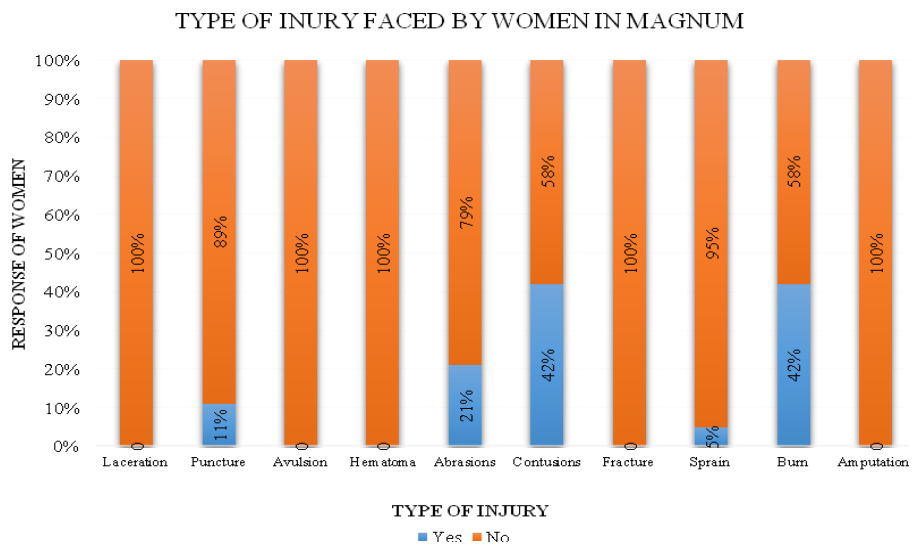
Graph 6.159: Frequency of symptoms Affecting Women at 4 creations



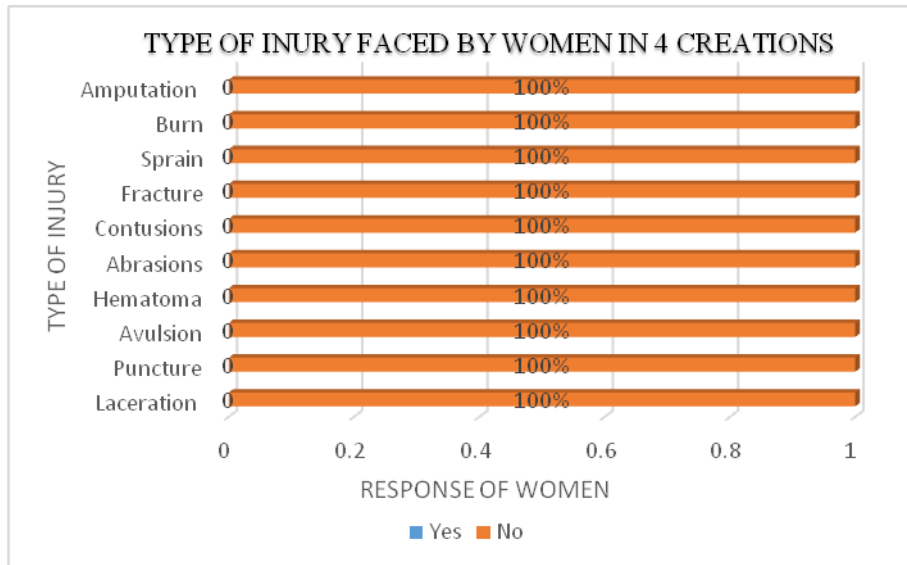
Graph 6.160: Frequency of symptoms Affecting Women at Maf



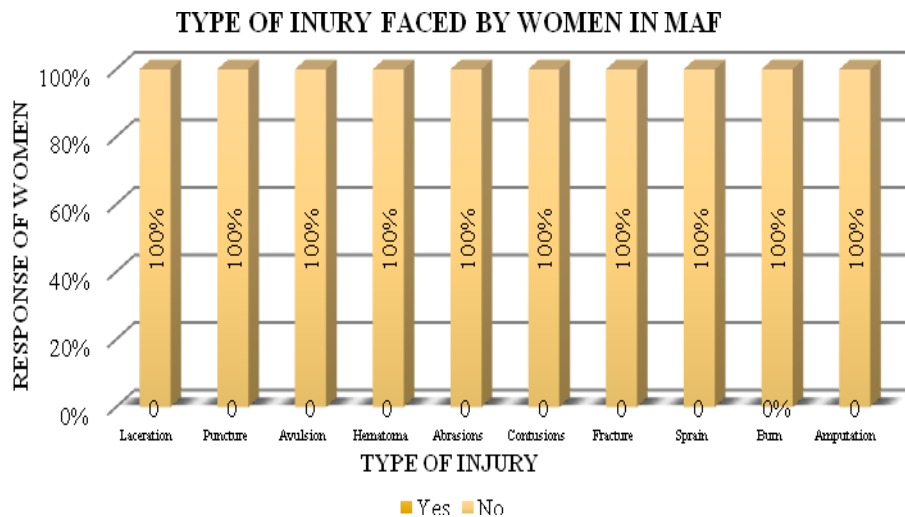
Graph 6.161: Frequency of symptoms Affecting Women at Sri lakshmi



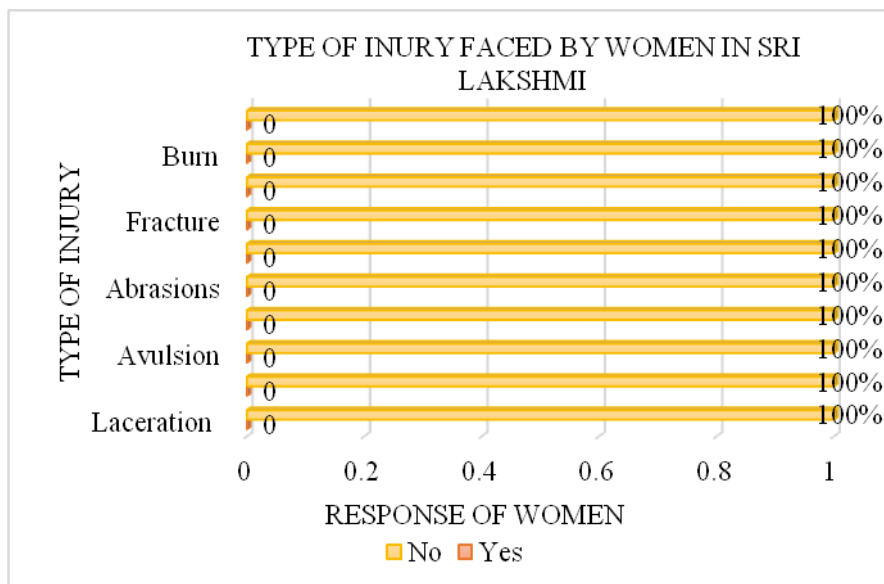
Graph 6.162: Type of injury faced by Women in Magnum



Graph 6.163: Type of injury faced by Women in 4 creations

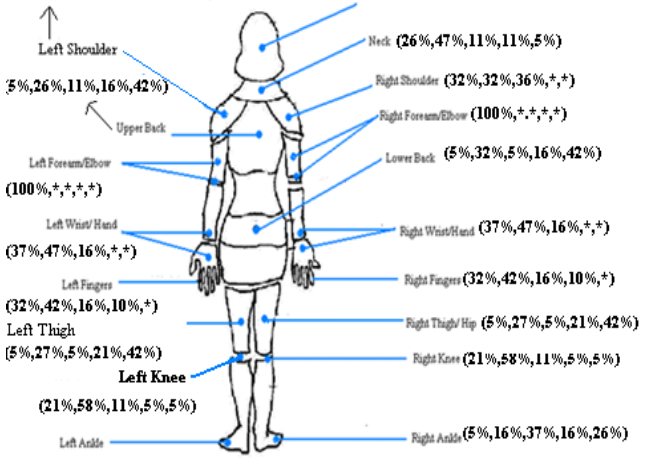
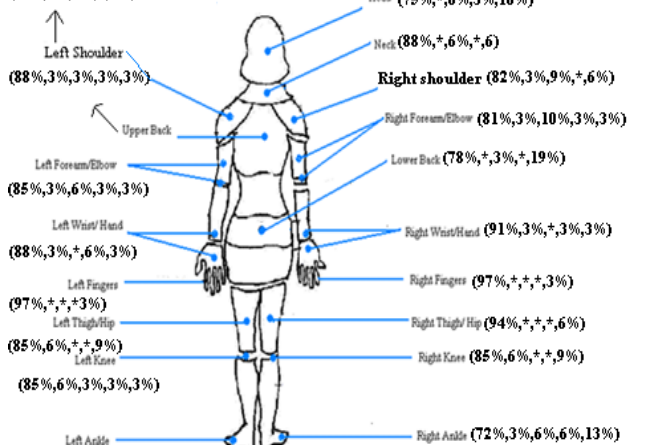


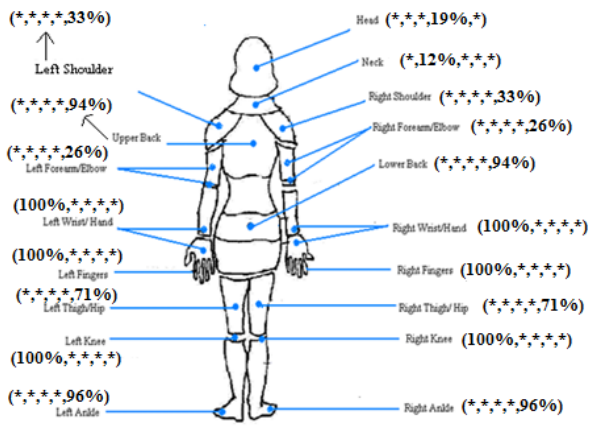
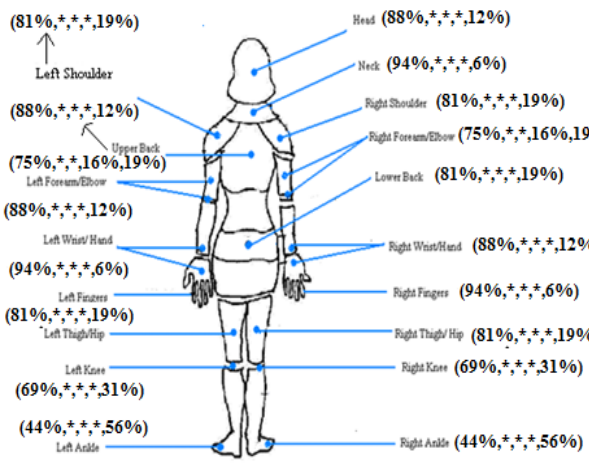
Graph 6.164: Type of injury faced by Women in Maf




















Graph 6.165: Type of injury faced by Women in Sri lakshmi



















E. Pain features			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Suffer from pain at present	Magnum	Yes – 100%	
	4Creations	Yes – 66%, No-34%	
	MAF	Yes – 71%, No- 29%	
	Sri Lakshmi	Yes – 69%, No- 31%	








<p>Pain experienced in a particular location (No pain, Low pain, Mild pain, High pain, Severe pain)</p>	<p>Magnum</p>	 <p>Diagram illustrating pain levels for the Magnum condition. The figure shows a human silhouette with various body parts labeled and their corresponding pain percentages and levels (No pain, Low pain, Mild pain, High pain, Severe pain).</p> <ul style="list-style-type: none"> Head (11%, 26%, 37%, 21%, 5%) Neck (26%, 47%, 11%, 11%, 5%) Right Shoulder (32%, 32%, 36%, +, +) Right Forearm/Elbow (100%, +, +, +, +) Lower Back (5%, 32%, 5%, 16%, 42%) Right Wrist/Hand (37%, 47%, 16%, +, +) Right Fingers (32%, 42%, 16%, 10%, +) Right Thigh/Hip (5%, 27%, 5%, 21%, 42%) Right Knee (21%, 58%, 11%, 5%, 5%) Right Ankle (5%, 16%, 37%, 16%, 26%) Left Shoulder (32%, 32%, 36%, +, +) Upper Back (5%, 26%, 11%, 16%, 42%) Left Forearm/Elbow (100%, +, +, +, +) Left Wrist/Hand (37%, 47%, 16%, +, +) Left Fingers (32%, 42%, 16%, 10%, +) Left Thigh (5%, 27%, 5%, 21%, 42%) Left Knee (21%, 58%, 11%, 5%, 5%) Left Ankle (5%, 16%, 37%, 16%, 26%) 	
	<p>4Creation S</p>	 <p>Diagram illustrating pain levels for the 4Creation S condition. The figure shows a human silhouette with various body parts labeled and their corresponding pain percentages and levels (No pain, Low pain, Mild pain, High pain, Severe pain).</p> <ul style="list-style-type: none"> Head (75%, +, 6%, 3%, 16%) Neck (88%, +, 6%, +, 6) Right shoulder (82%, 3%, 9%, +, 6%) Right Forearm/Elbow (81%, 3%, 10%, 3%, 3%) Lower Back (78%, +, 3%, +, 19%) Right Wrist/Hand (91%, 3%, +, 3%, 3%) Right Fingers (97%, +, +, +, 3%) Right Thigh/Hip (94%, +, +, +, 6%) Right Knee (85%, 6%, +, +, 9%) Right Ankle (72%, 3%, 6%, 6%, 13%) Left Shoulder (88%, 3%, 3%, 3%, 3%) Upper Back (81%, 3%, 6%, +, 9%) Left Forearm/Elbow (85%, 3%, 6%, 3%, 3%) Left Wrist/Hand (88%, 3%, +, 6%, 3%) Left Fingers (97%, +, +, +, 3%) Left Thigh/Hip (85%, 6%, +, +, 9%) Left Knee (85%, 6%, 3%, 3%, 3%) Left Ankle (69%, +, 9%, 9%, 13%) 	

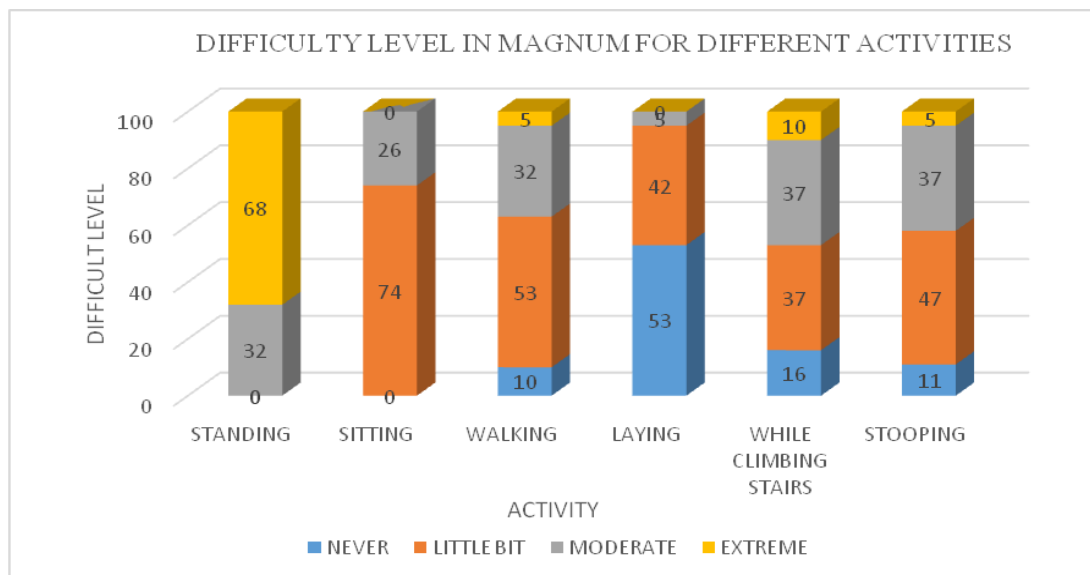
	MAF	 <p>Diagram showing pain percentages for MAF:</p> <ul style="list-style-type: none">Head (*,*,*,19%,*)Neck (*,12%,*,*,*)Right Shoulder (*,*,*,33%)Right Forearm/Elbow (*,*,*,26%)Lower Back (*,*,*,94%)Right Wrist/Hand (100%,*,*,*)Right Fingers (100%,*,*,*)Right Thigh/Hip (*,*,*,71%)Right Knee (100%,*,*,*)Right Ankle (*,*,*,96%)Left Shoulder (*,*,*,33%)Upper Back (*,*,*,26%)Left Forearm/Elbow (*,*,*,26%)Left Wrist/Hand (100%,*,*,*)Left Fingers (100%,*,*,*)Left Thigh/Hip (*,*,*,71%)Left Knee (100%,*,*,*)Left Ankle (*,*,*,96%)																			
	Sri Lakshmi	 <p>Diagram showing pain percentages for Sri Lakshmi:</p> <ul style="list-style-type: none">Head (88%,*,*,12%)Neck (94%,*,*,6%)Right Shoulder (81%,*,*,19%)Right Forearm/Elbow (75%,*,*,16%,19%)Lower Back (81%,*,*,19%)Right Wrist/Hand (88%,*,*,12%)Right Fingers (94%,*,*,6%)Right Thigh/Hip (81%,*,*,19%)Right Knee (69%,*,*,31%)Right Ankle (44%,*,*,56%)Left Shoulder (81%,*,*,19%)Upper Back (75%,*,*,16%,19%)Left Forearm/Elbow (75%,*,*,16%,19%)Left Wrist/Hand (88%,*,*,12%)Left Fingers (94%,*,*,6%)Left Thigh/Hip (81%,*,*,19%)Left Knee (69%,*,*,31%)Left Ankle (44%,*,*,56%)																			
Cause of pain	Magnum	<table><tr><th>Cause</th><th>%</th></tr><tr><td>Bad posture for long time</td><td>84%</td></tr><tr><td>Long working periods</td><td>89%</td></tr></table>	Cause	%	Bad posture for long time	84%	Long working periods	89%													
	Cause	%																			
	Bad posture for long time	84%																			
	Long working periods	89%																			
	4Creation s	<table><tr><th>Cause</th><th>%</th></tr><tr><td>Bad posture for long time</td><td>53%</td></tr><tr><td>Long working periods</td><td>34%</td></tr><tr><td>Usage of faulty equipment</td><td>3%</td></tr><tr><td>Incorrect way of lifting load</td><td>3%</td></tr><tr><td>Personal problem</td><td>3%</td></tr><tr><td>Work pressure at home</td><td>3%</td></tr><tr><td>Work pressure at company</td><td>6%</td></tr><tr><td>Accident</td><td>3%</td></tr></table>	Cause	%	Bad posture for long time	53%	Long working periods	34%	Usage of faulty equipment	3%	Incorrect way of lifting load	3%	Personal problem	3%	Work pressure at home	3%	Work pressure at company	6%	Accident	3%	
		Cause	%																		
		Bad posture for long time	53%																		
		Long working periods	34%																		
		Usage of faulty equipment	3%																		
		Incorrect way of lifting load	3%																		
		Personal problem	3%																		
		Work pressure at home	3%																		
		Work pressure at company	6%																		
Accident	3%																				
MAF	<table><tr><th>Cause</th><th>%</th></tr><tr><td>Bad posture for long time</td><td>76%</td></tr></table>	Cause	%	Bad posture for long time	76%																
Cause	%																				
Bad posture for long time	76%																				

		Long working periods	76%																	
	Sri Lakshmi	Cause	%																	
		Bad posture for long time	69%																	
		Long working periods	69%																	
Occurrence of pain	Magnum	Suddenly - 84%, Gradually-16%																		
	4Creation s	Suddenly - 3%, Gradually - 63%																		
	MAF	Gradually - 100%																		
	Sri Lakshmi	Gradually - 69%																		
Interval of pain	Magnum	Intermittent - 95%, Constant – 5%																		
	4Creation s	Intermittent - 57%, Constant – 9%																		
	MAF	Intermittent - 100%																		
	Sri Lakshmi	Intermittent - 63%, Constant – 6%																		
Physical activities at work are main reason for pain?	Magnum	Yes -95%, No- 5%																		
	4Creation s	Yes -47%, No- 53%																		
	MAF	Yes -100%																		
	Sri Lakshmi	Yes -100%																		
Inadequate rest intervals at work are the main contributors to pain?	Magnum	Yes -100%																		
	4Creation s	Yes -19%, No- 81%																		
	MAF	Yes – 42%, No- 58%																		
	Sri Lakshmi	Yes -100%																		
Have you been absent from work due to extreme pain?	Magnum	Yes -53%, No-47%																		
	4Creation s	Yes -56%, No- 44%																		
	MAF	Yes -51%, No- 49%																		
	Sri Lakshmi	Yes -88%, No – 12%																		
Facing difficulty in carrying out following activity?	Magnum	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td> Standing</td><td>-</td><td>-</td><td>32%</td><td>68%</td></tr></table>				Activity	Difficulty level				Never	Little bit	Moderate	Extreme	 Standing	-	-	32%	68%	
Activity	Difficulty level																			
	Never	Little bit	Moderate	Extreme																
 Standing	-	-	32%	68%																

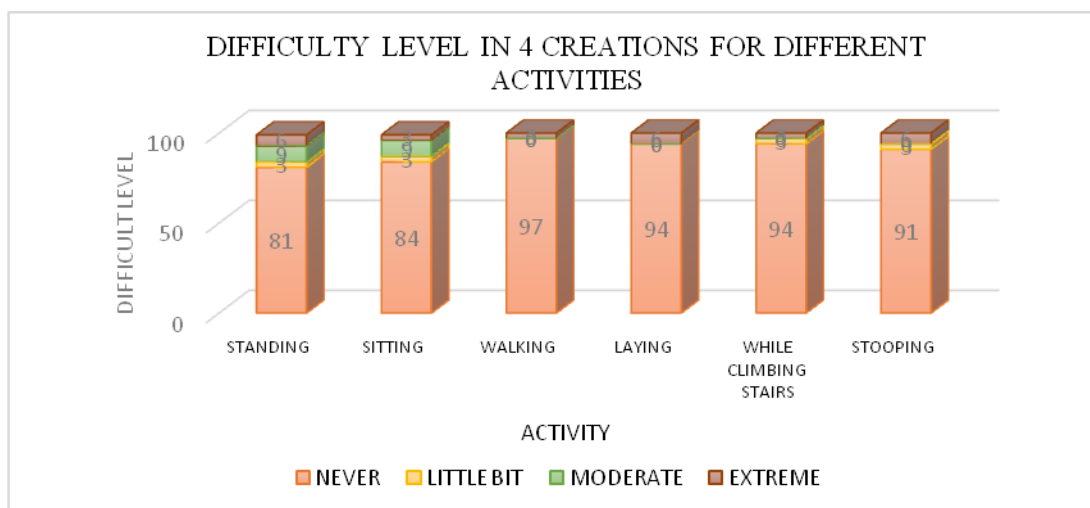
		 Sitting	-	74%	26%	-																													
		 Walking	10%	53%	32%	5%																													
		 Laying	53%	42%	5%	-																													
		 While climbing stairs	16%	37%	37%	10%																													
		 Stooping	11%	47%	37%	5%																													
4Creation s		<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td> Standing</td><td>81%</td><td>3%</td><td>9%</td><td>6%</td></tr><tr><td> Sitting</td><td>84%</td><td>3%</td><td>9%</td><td>3%</td></tr><tr><td> Walking</td><td>97%</td><td>-</td><td>-</td><td>3%</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>					Activity	Difficulty level				Never	Little bit	Moderate	Extreme	 Standing	81%	3%	9%	6%	 Sitting	84%	3%	9%	3%	 Walking	97%	-	-	3%					
		Activity	Difficulty level																																
			Never	Little bit	Moderate	Extreme																													
		 Standing	81%	3%	9%	6%																													
		 Sitting	84%	3%	9%	3%																													
		 Walking	97%	-	-	3%																													

		<div></div> <div>Laying</div> <div>94%</div> <div>-</div> <div>-</div> <div>6%</div>																																			
		<div></div> <div>While climbing stairs</div> <div>94%</div> <div>3%</div> <div>-</div> <div>3%</div>																																			
		<div></div> <div>Stooping</div> <div>91%</div> <div>3%</div> <div>-</div> <div>6%</div>																																			
	MAF	<table><tr><th rowspan="2">Activity</th><th colspan="4">Difficulty level</th></tr><tr><th>Never</th><th>Little bit</th><th>Moderate</th><th>Extreme</th></tr><tr><td><div></div><div>Standing</div></td><td>81%</td><td>3%</td><td>9%</td><td>6%</td></tr><tr><td><div></div><div>Sitting</div></td><td>84%</td><td>3%</td><td>9%</td><td>3%</td></tr><tr><td><div></div><div>Walking</div></td><td>97%</td><td>-</td><td>-</td><td>3%</td></tr><tr><td><div></div><div>Laying</div></td><td>94%</td><td>-</td><td>-</td><td>6%</td></tr><tr><td><div></div></td><td>94%</td><td>3%</td><td>-</td><td>3%</td></tr></table>	Activity	Difficulty level				Never	Little bit	Moderate	Extreme	<div></div> <div>Standing</div>	81%	3%	9%	6%	<div></div> <div>Sitting</div>	84%	3%	9%	3%	<div></div> <div>Walking</div>	97%	-	-	3%	<div></div> <div>Laying</div>	94%	-	-	6%	<div></div>	94%	3%	-	3%	
Activity	Difficulty level																																				
	Never	Little bit	Moderate	Extreme																																	
<div></div> <div>Standing</div>	81%	3%	9%	6%																																	
<div></div> <div>Sitting</div>	84%	3%	9%	3%																																	
<div></div> <div>Walking</div>	97%	-	-	3%																																	
<div></div> <div>Laying</div>	94%	-	-	6%																																	
<div></div>	94%	3%	-	3%																																	

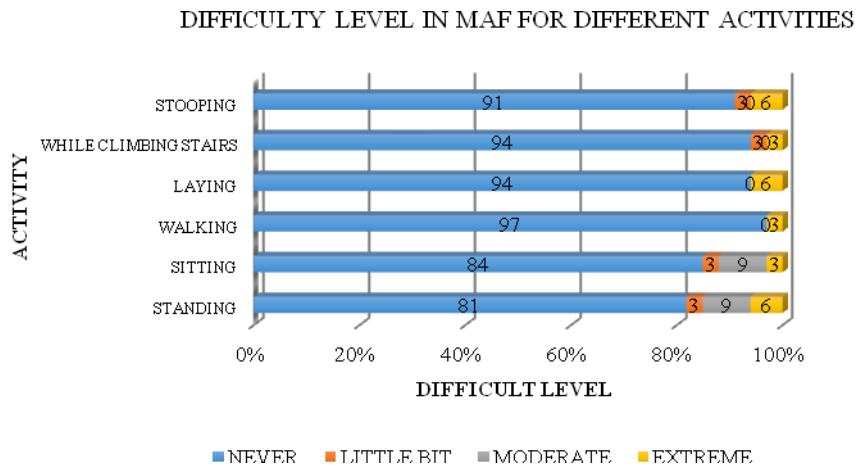
		While climbing stairs					
			91%	3%	-	6%	
		Stooping					
Sri Lakshmi							
	Activity	Difficulty level					
		Never	Little bit	Moderate	Extreme		
		94%	6%	-	-		
	Standing						
		94%	6%	-	-		
	Sitting						
		94%	6%	-	-		
	Walking						
		88%	6%	-	6%		
	Laying						
		94%	6%	-	-		
	While climbing stairs						
		94%	6%	-	-		
	Stooping						



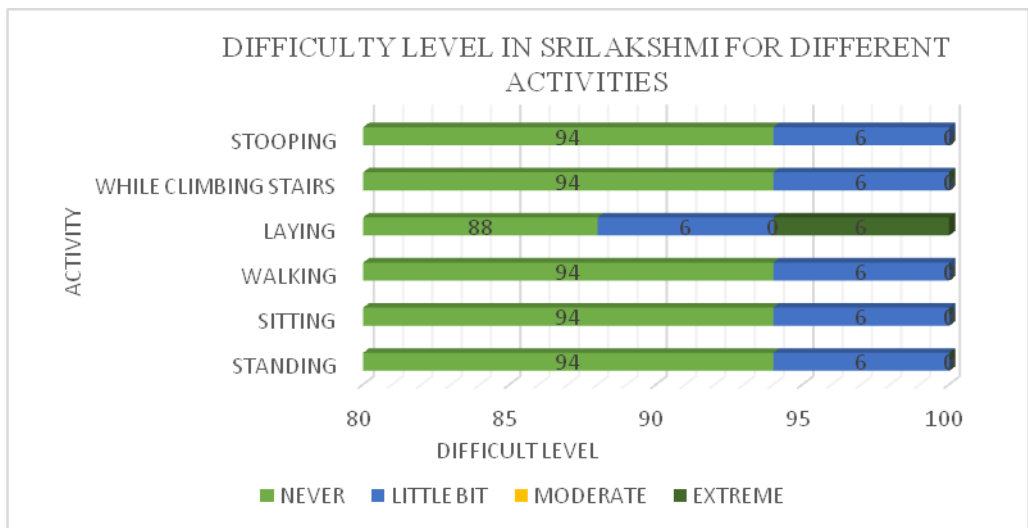
Graph 6.166: Difficulty level in magnum for different activities



Graph 6.167: Difficulty level in 4 creations for different activities



Graph 6.168: Difficulty level in maf for different activities

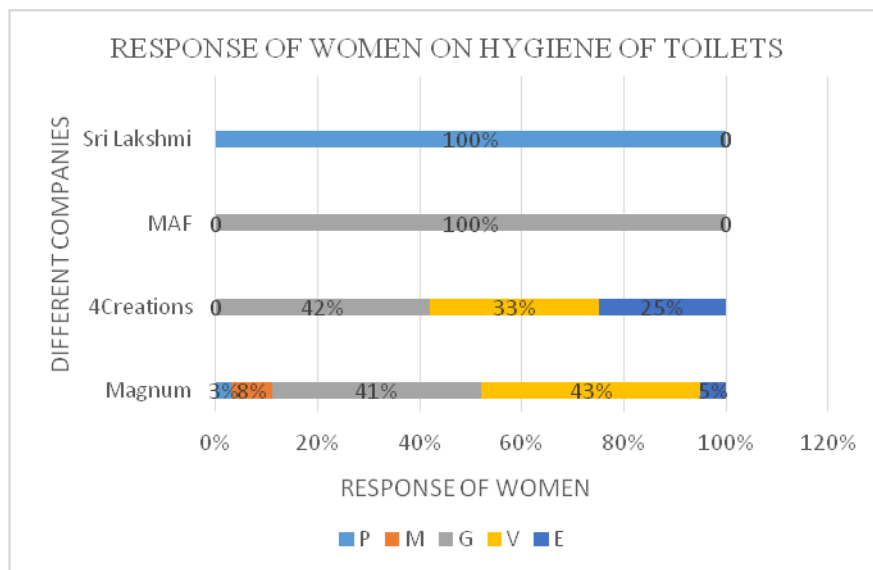


Graph 6.169: Difficulty level in sri lakshmi for different activities

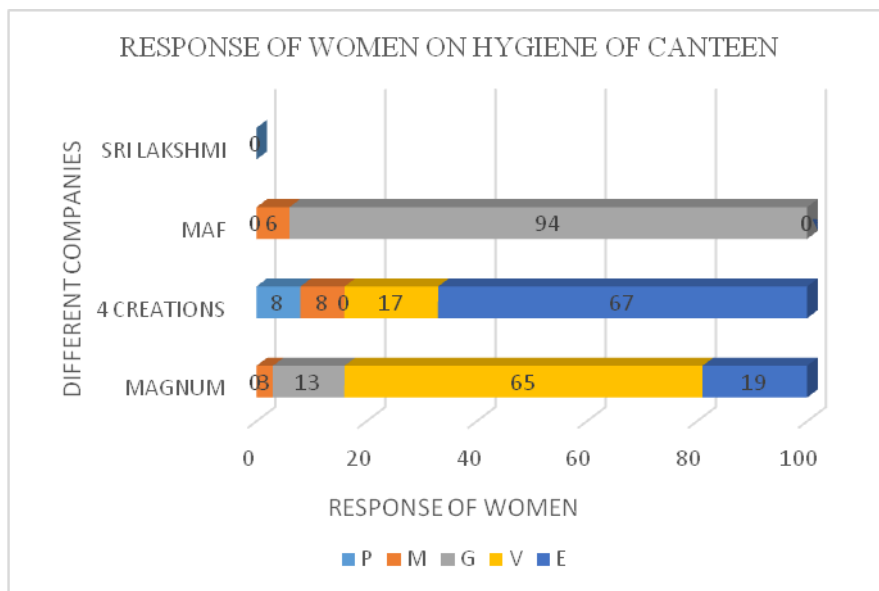
F. General Amenities							
Identified factor affecting women health& productivity	Garment company	Response of women in %					Remarks
Hygiene of toilets used *P-Poor *M-Moderate *G-Good *V-Very good *E-Excellent	Magnum	P	M	G	V	E	
		-	-	10%	74%	16%	
	4Creations	P	M	G	V	E	
		3%	6%	32%	53%	6%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	6%	-	94%	-	
Hygiene of canteen	Magnum	P	M	G	V	E	
		-	5%	11%	74%	10%	
	4Creations	P	M	G	V	E	
		-	-	34%	56%	10%	
	MAF	P	M	G	V	E	
		-	8%	26%	66%	-	
	Sri Lakshmi	P	M	G	V	E	
		No canteen at premises					
Availability of drinking water	Magnum	P	M	G	V	E	
		-	-	26%	42%	32%	
	4Creations	P	M	G	V	E	
		-	-	-	3%	97%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
Availability of sufficient rest periods	Magnum	P	M	G	V	E	
		32%	37%	10%	21%	-	
	4Creations	P	M	G	V	E	
		6%	44%	47%	3%	-	
	MAF	P	M	G	V	E	
		-	-	36%	64%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	100%	-	-	
Availability of first aid box during injuries	Magnum	P	M	G	V	E	
		10%	-	53%	32%	5%	
	4Creations	P	M	G	V	E	
		-	-	-	3%	97%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	

	Sri Lakshmi	P	M	G	V	E	
		12%	88%	-	-	-	
Availability of doctor/nurse	Magnum	P	M	G	V	E	
		21%	32%	32%	10%	5%	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	100%	-	
	Sri Lakshmi	P	M	G	V	E	
		No such facility					
How much do you rate medical room?	Magnum	P	M	G	V	E	
		53%	10%	32%	5%	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	6%	94%	-	
	Sri Lakshmi	P	M	G	V	E	
		No medical room					
Rate working condition of lift	Magnum	P	M	G	V	E	
		69%	5%	16%	5%	5%	
	4Creations	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	MAF	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	Sri Lakshmi	P	M	G	V	E	
		No lift facility					
Rate working condition of fire alarms/engines	Magnum	P	M	G	V	E	
		5%	-	53%	42%	5%	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	10%	90%	
	Sri Lakshmi	P	M	G	V	E	
		-	100%	-	-	-	
Rate working condition of machines in terms of performance	Magnum	P	M	G	V	E	
		5%	-	5%	79%	11%	
	4Creations	P	M	G	V	E	
		-	-	-	-	19%	Not applicable for 81% women as they are other than tailors like, final checker, helper

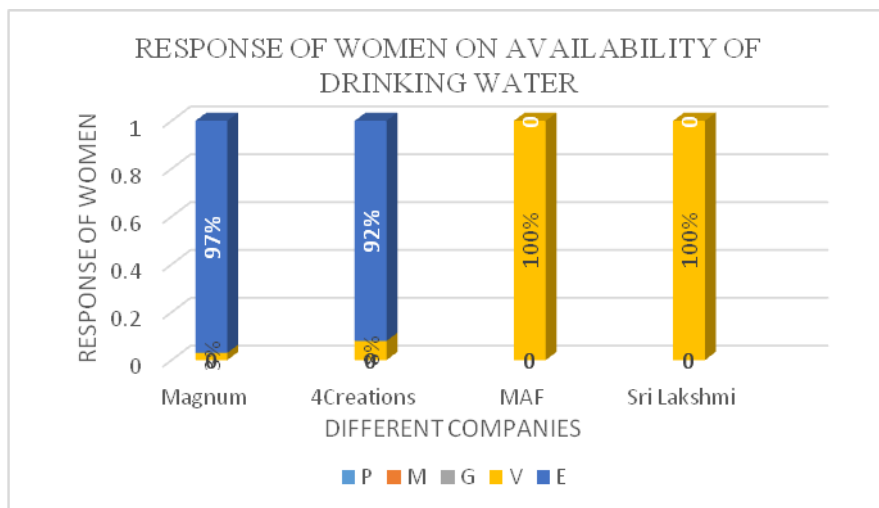
							etc...
	MAF	P	M	G	V	E	Not applicable for 40% women.
		-	-	-	60%	-	
	Sri Lakshmi	P	M	G	V	E	Not applicable for 75% women
		-	-	19%	6%	-	
Rate quality of personal protective equipment provided to you	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	Not provided for 16% women.
		-	3%	3%	47%	31%	
	MAF	P	M	G	V	E	Most of them were either not using or have not been provided with personal protective equipment
		Not provided					
	Sri Lakshmi	P	M	G	V	E	Not provided for 94% women
		-	-	6%	-	-	



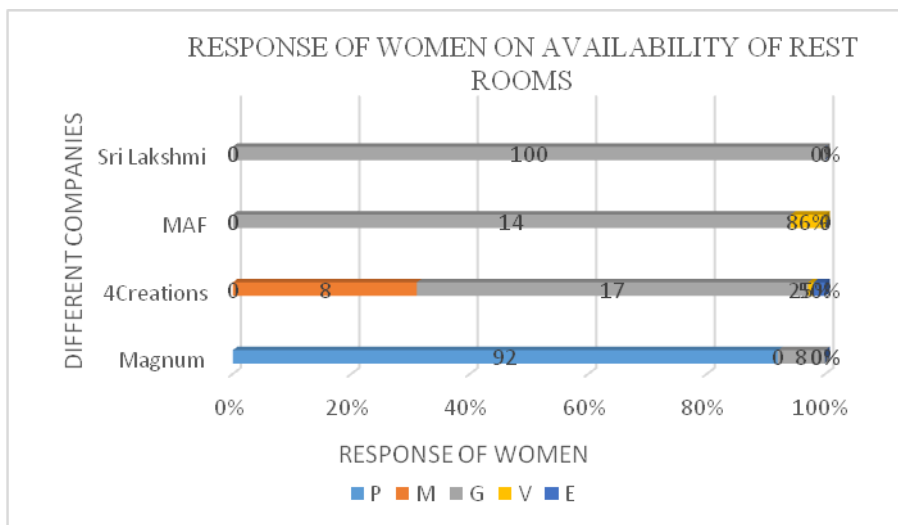
Graph 6.170: Response of women on hygiene of toilets



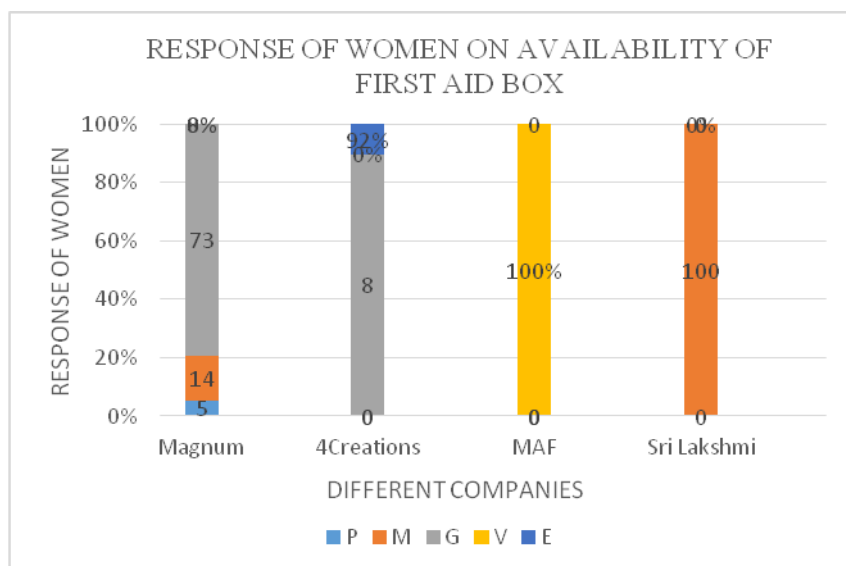
Graph 6.171: Response of women on hygiene of canteen



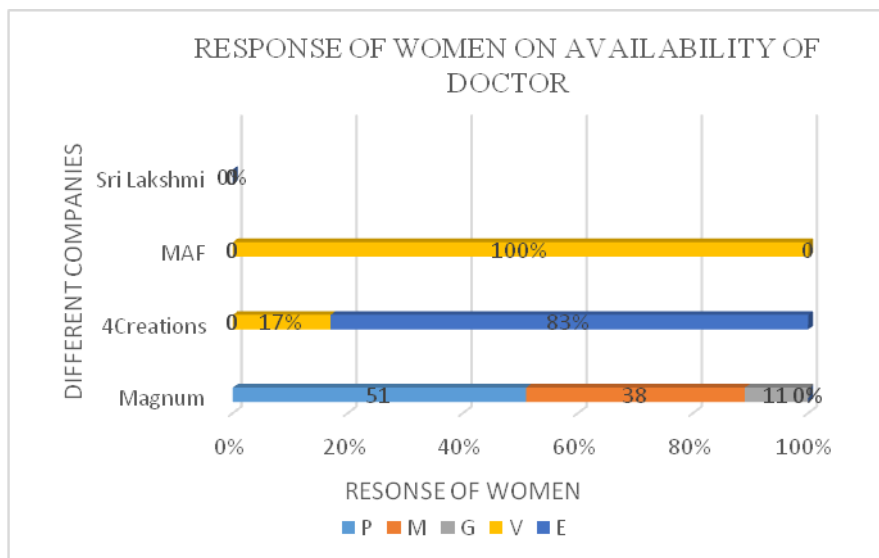
Graph 6.172: Response of women on availability of drinking water



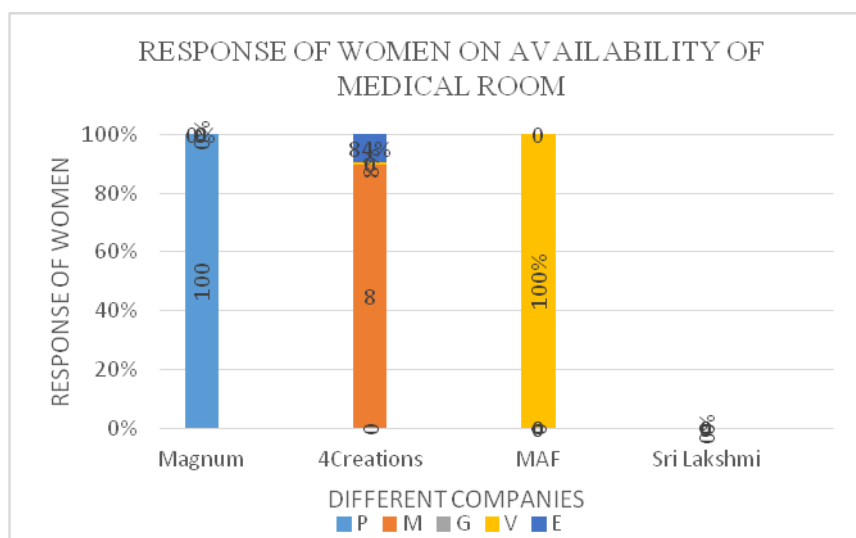
Graph 6.173: Response of women on availability of rest rooms



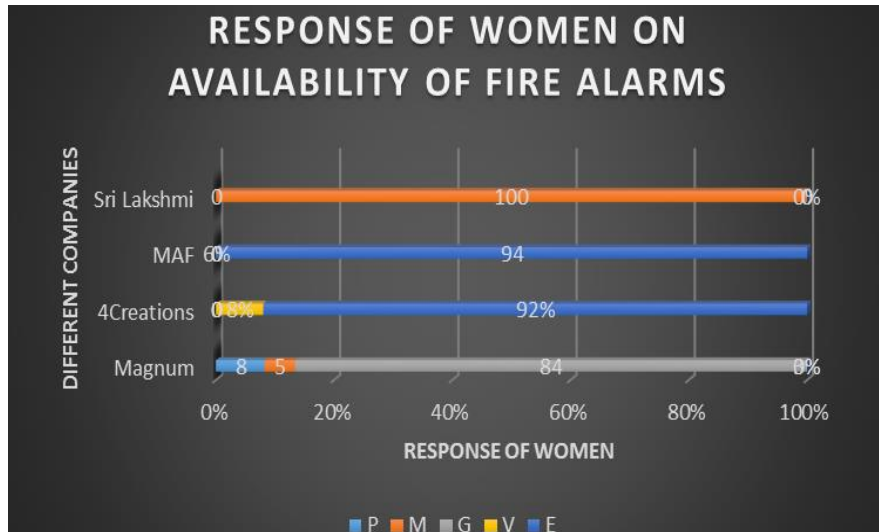
Graph 6.174: Response of women on availability of first aid box



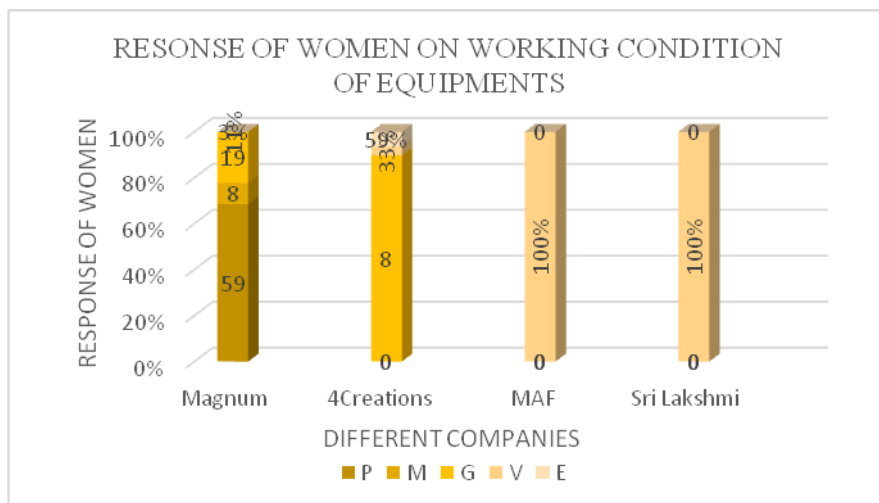
Graph 6.175: Response of women on availability of doctor



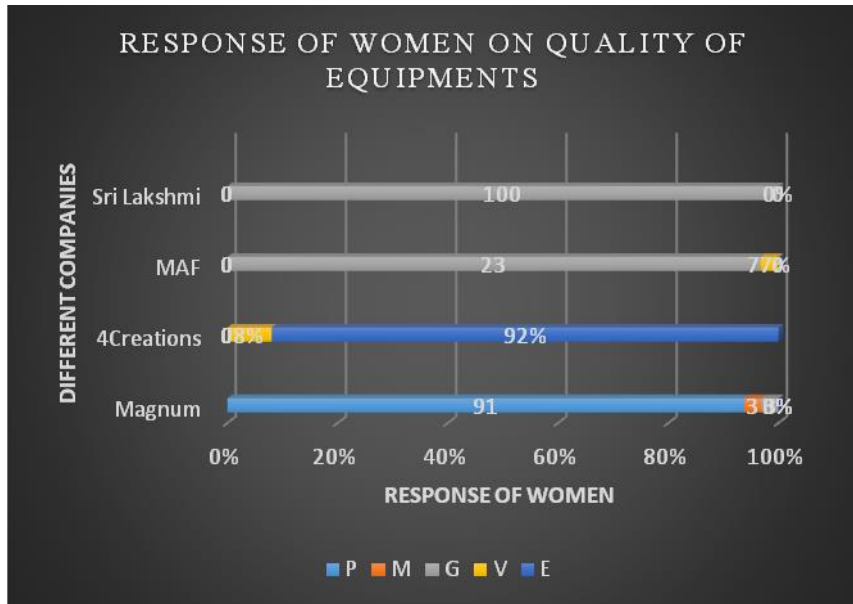
Graph 6.176: Response of women on availability of medical room



Graph 6.177: Response of women on availability of fire alarms



Graph 6.178: Response of women on working condition of equipments



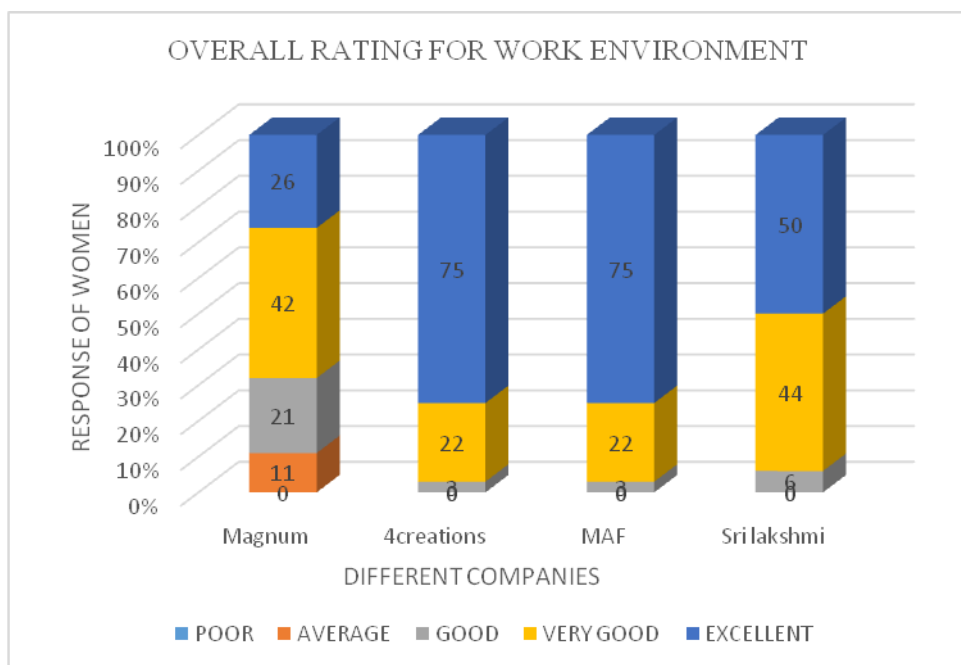
Graph 6.179: Response of women on quality of equipments

Section wise survey – Finishing section

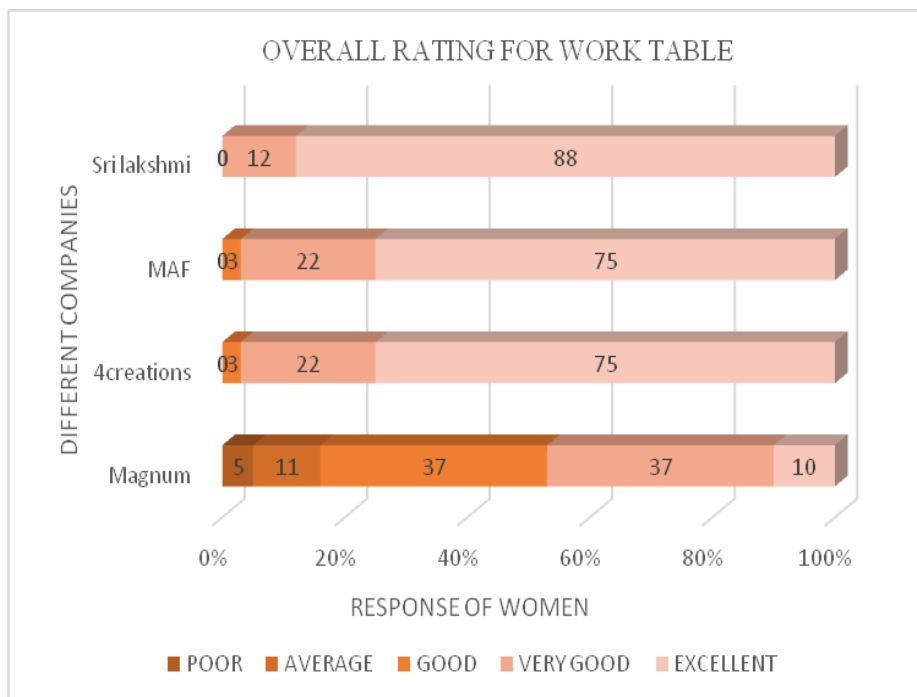
Finishing section survey				
Identified factor affecting women health& productivity	Garment company	Response of women in %		Remarks
Tables in finishing section *A-Adjustable *NA-Not Adjustable	Magnum	A	NA	
		-	100%	
	4Creations	A	NA	
		13%	87%	
	MAF	A	NA	
		-	100%	
	Sri Lakshmi	A	NA	
-		100%		
Comfortable to work with actual height of table?	Magnum	Yes – 84%, No-16%		
	4Creations	Yes – 100%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 100%		
Comfortable to work in standing	Magnum	Yes – 5%, No-95%		
	4Creations	Yes – 87%		
	MAF	Yes – 94%, No -6%		

position for long duration?	Sri Lakshmi	Yes – 75%, No -25%					
Does your work demand extreme bending?	Magnum	Yes – 63%, No-37%					
	4Creations	No – 100%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Sufficient windows or doors in activity area?	Magnum	Yes – 95%, No-5%					
	4Creations	Yes – 100%					
	MAF	Yes – 100%					
	Sri Lakshmi	Yes – 100%					
Sufficient fans and ventilation in activity area?	Magnum	Yes – 100%					
	4Creations	Yes – 100%					
	MAF	Yes – 88%, No- 12%					
	Sri Lakshmi	Yes – 100%					
Are fans in good working condition?	Magnum	Yes – 58%, No-42%					
	4Creations	Yes – 100%					
	MAF	Yes – 100%					
	Sri Lakshmi	Yes – 100%					
Do you have seating arrangement in your workstation?	Magnum	Yes – 5%, No-95%					
	4Creations	Yes – 16%, No- 84%					
	MAF	No – 100%					
	Sri Lakshmi	Yes- 25%, No – 75%					
Do you feel instruments used are heavy to lift?	Magnum	No – 100%					
	4Creations	No – 100%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Have you been provided with personal protective equipments?	Magnum	No – 100%					Equipments provided: • Mask • Ear plug
	4Creations	Yes – 84%, No – 16%					
	MAF	No-100%					
	Sri Lakshmi	Yes – 6%, No – 94%					
Do you use them in work?	Magnum	Not provided					Few women do not use them because of suffocation
	4Creations	Yes – 63%, No-37%					
	MAF	Not provided					
	Sri Lakshmi	No – 100%					
Ratings for work environment *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	Magnum	P	A	G	V	E	
		-	11%	21%	42%	26%	
	4Creations	P	A	G	V	E	
		-	-	3%	22%	75%	
	MAF	P	A	G	V	E	
		-	-	3%	22%	75%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	6%	44%	50%	
Ratings for	Magnum	P	A	G	V	E	

overall work table in terms of height, space, adjustable features *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent		5%	11%	37%	37%	10%	
	4Creations	P	A	G	V	E	
		-	-	3%	22%	75%	
	MAF	P	A	G	V	E	
		-	-	3%	22%	75%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	-	12%	88%	



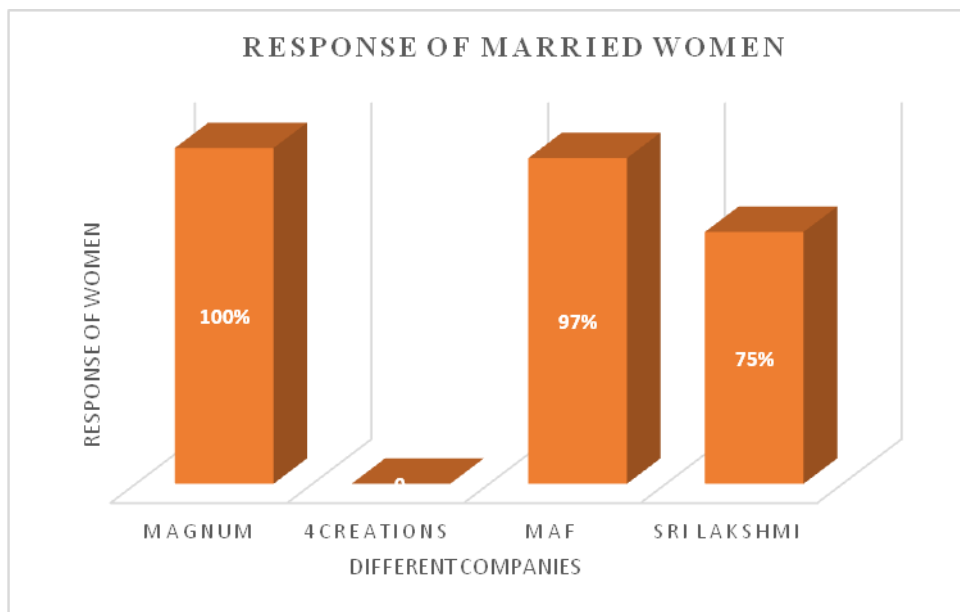
Graph 6.180: Overall rating for work environment



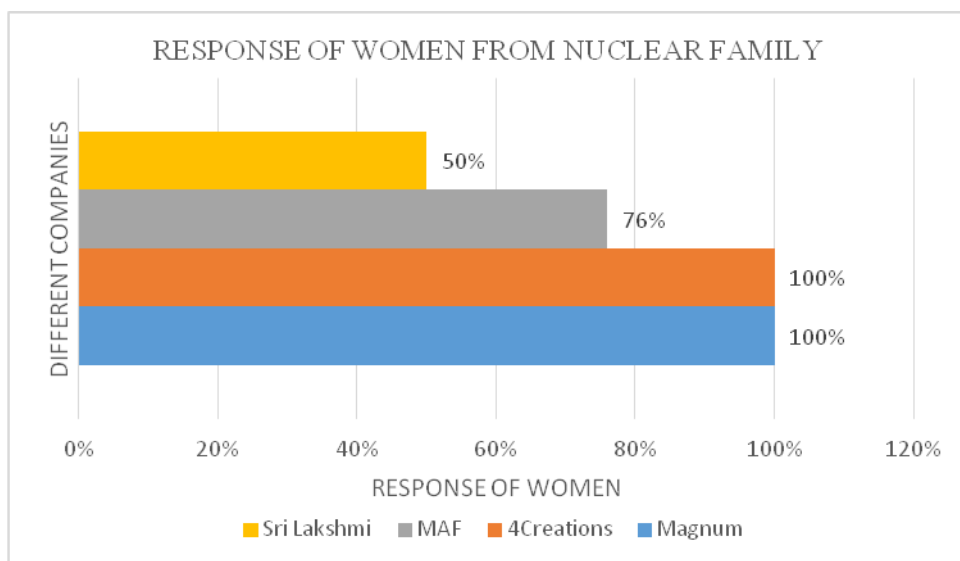
Graph 6.181: Overall rating for work table

6.5Packaging section:

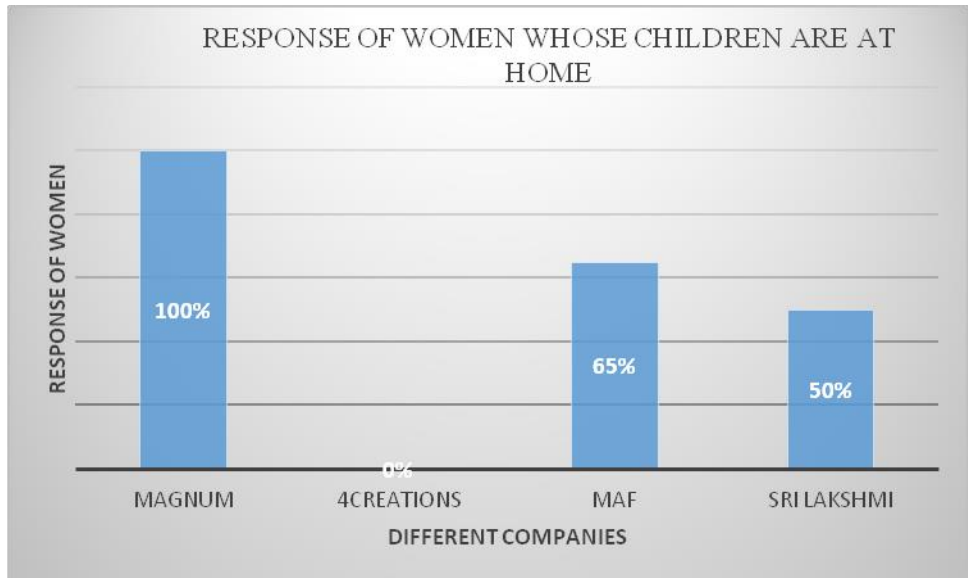
A. Social-Demographic Profile of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Marital status- MARRIED	Magnum	100%	Women need to manage both home and work
	4Creations	-	
	MAF	97%	
	Sri Lakshmi	75%	
Family Type – NUCLEAR FAMILY	Magnum	100%	No elders/other family members to help in household chores.
	4Creations	100%	
	MAF	76%	
	Sri Lakshmi	50%	
Children at home	Magnum	100%	Children need more care and attention than any other family member.
	4Creations	-	
	MAF	65%	
	Sri Lakshmi	50%	
Family Members Support - NO	Magnum	100%	Having no support from their family members may put women under mental and physical stress because of the need to manage both household work and their career.
	4Creations	100%	
	MAF	12%	
	Sri Lakshmi	-	
Accommodation– RENTED/PAYING GUEST	Magnum	100%	Major part of their salary goes in paying off house rent thus causing stress to earn more money.
	4Creations	100%	
	MAF	94%	
	Sri Lakshmi	100%	
Mode of Transportation to Office - WALK	Magnum	100%	They will be tired by the time they reach work place
	4Creations	-	
	MAF	18%	
	Sri Lakshmi	100%	
Addiction- TOBACCO	Magnum	-	--
	4Creations	-	
	MAF	-	
	Sri Lakshmi	-	



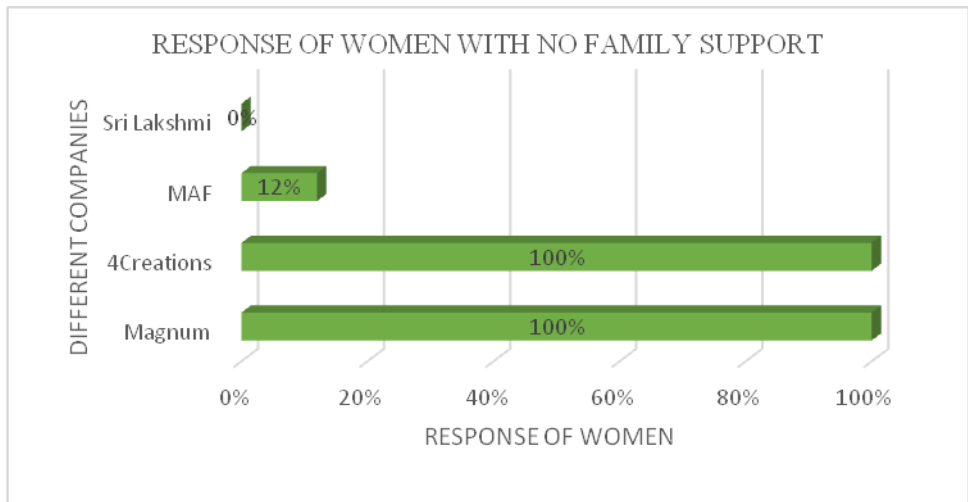
Graph 6.182: Married women response



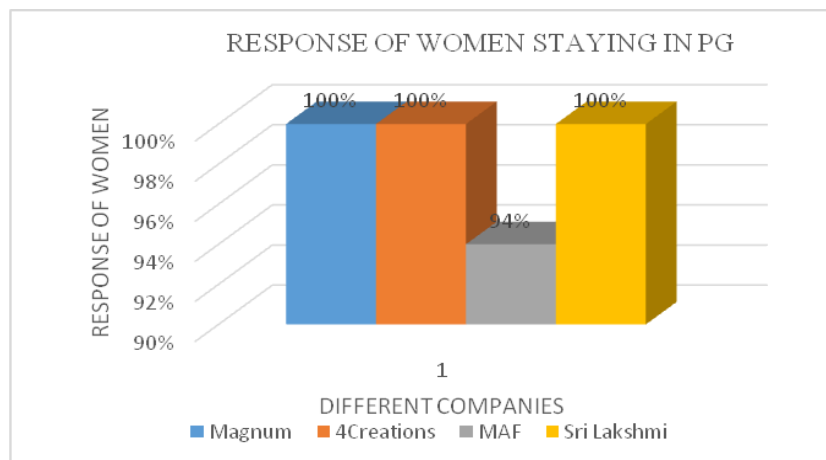
Graph 6.183: Nuclear type women response



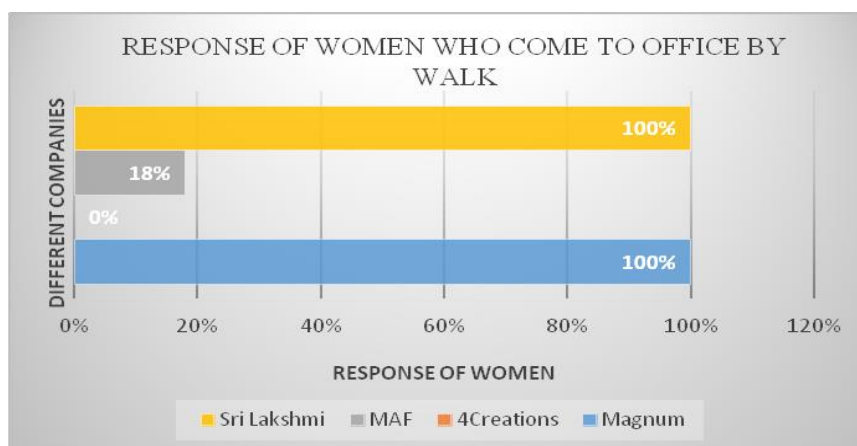
Graph 6.184: Response of women whose children are at home



Graph 6.185: Women with no family support

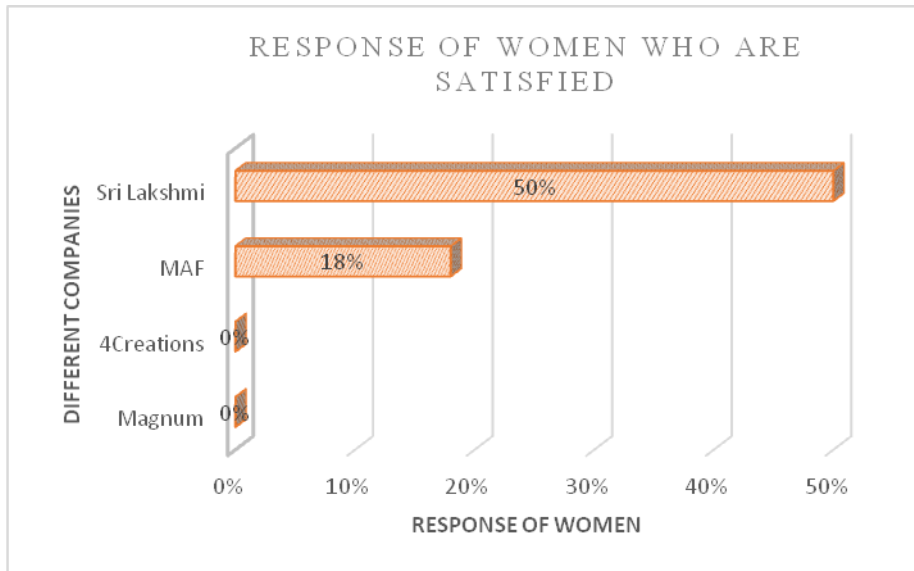


Graph 6.186: Response of women stayin as paying guests

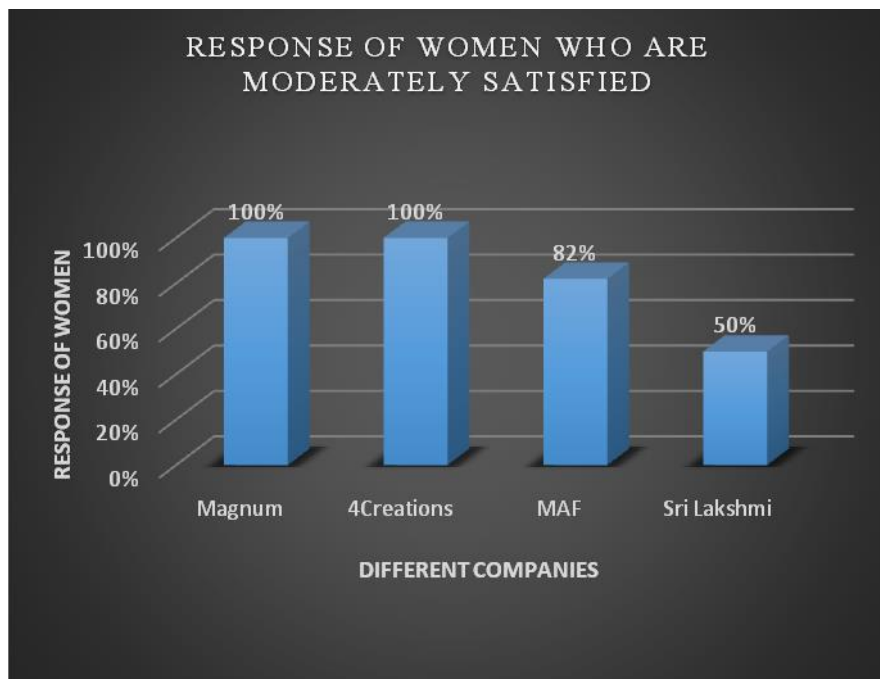


Graph 6.187: Response of women who walk to office

B. Occupational Status of Women Workers			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Job Satisfaction Level - SATISFIED	Magnum	-	--
	4Creations	-	
	MAF	18%	
	Sri Lakshmi	50%	
Job Satisfaction Level – MODERATELY SATISFIED	Magnum	100%	Women said they were not satisfied with their salaries, facilities like chairs, fans, break during work.
	4Creations	100%	
	MAF	82%	
	Sri Lakshmi	50%	



Graph 6.188: Response of women who are satisfied

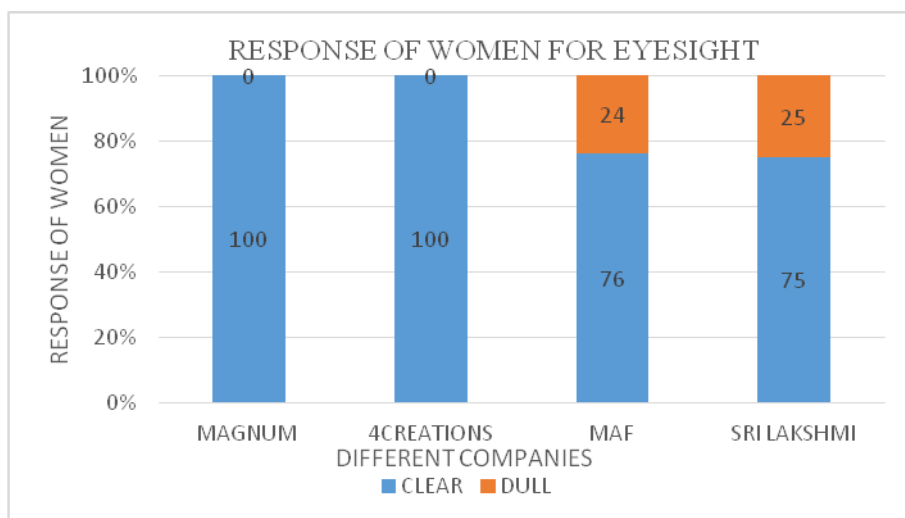


Graph 6.189: Response of women who are moderately satisfied

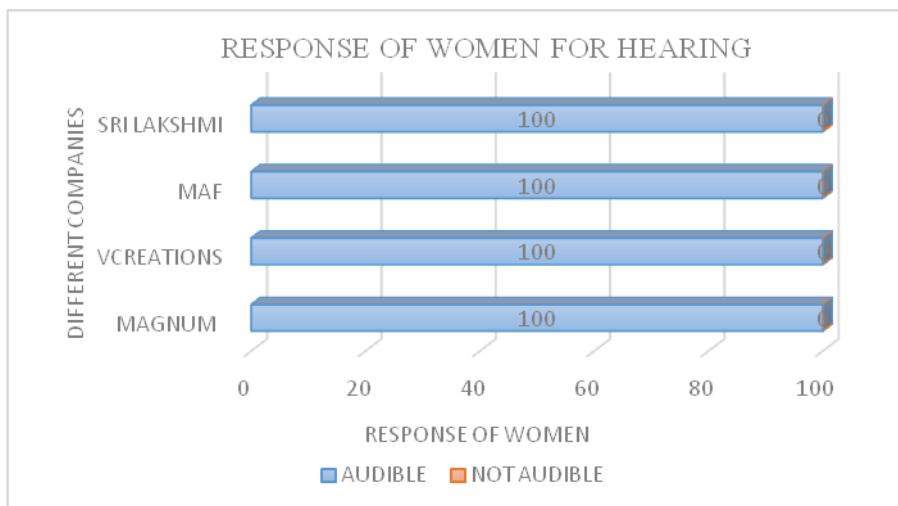
C. Women-Oriented Profile			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Eyesight *Clear-C *Dull-D	Magnum	C-100%	
	4Creations	C-100%	
	MAF	C-76%,D-24%	
	Sri Lakshmi	C – 75%, D-25%	
Hearing *Audible - A *Not audible – NA	Magnum	A-100%	
	4Creations	A-100%	
	MAF	A-100%	
	Sri Lakshmi	A-100%	
Hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-100%	
	4Creations	G-100%	
	MAF	G-100%	
	Sri Lakshmi	G-100%	
Oral hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-100%	Common Oral problems faced by women: Dry mouth, bad breathe, gum diseases,tonsils
	4Creations	M-100%	
	MAF	G-88%,M-12%	
	Sri Lakshmi	G-100%	
Skin hygiene *Good-G *Moderate-M *Poor- P	Magnum	G-100%	Common Skin problems faced by women: Dry skin, exposure to dust, exposure to extreme heat, rashes/itching/allergic problem,dandruff.
	4Creations	M-100%	
	MAF	G-94%,M-6%	
	Sri Lakshmi	G-75%,M-25%	
Menstrual history: (i) Nature of cycle *Regular-R *Irregular-IR *Stopped-S) (ii) Intensity of pain *Mild-M *Moderate-MOD *Severe-Sv	Magnum	Cycle: R-100%, Pain: M-100%,	
	4Creations	Cycle: R-100% Pain: Sv-100%	
	MAF	Cycle: R-70%, IR-12%,S-18% Pain: M-41%, Sv-41%	
	Sri Lakshmi	Cycle: R-50%, IR-25%, S-25% Pain: M-50%, Sv-25%	
Frequency of Illness Experienced- Before Employment	Magnum	R-100%	
	4Creations	NR-100%	
	MAF	NR-100%	
	Sri Lakshmi	NR-100%	

*Often-O *Not Often-NO *Rarely–R *Not reported –NR				
Frequency of Illness Experienced- After Employment *Often-O *Not Often-NO *Rarely–R *Not reported –NR	Magnum	O-100%		
	4Creations	NR-100%		
	MAF	NR-100%		
	Sri Lakshmi	NR-100%		
Frequency of Absence in a month	Magnum	Absence (in days)	%	
		1-3	100%	
	4Creations	Absence (in days)	%	
		Not Ab	100%	
	MAF	Absence (in days)	%	
		Not Ab	53%	
		1-2	29%	
		2	6%	
		>4	12%	
	Sri Lakshmi	Absence (in days)	%	
		Not Ab	75%	
		5	25%	
	Causes of absenteeism *Family commitment-FC; *Illness-IL	Magnum	FC-100%,IL-100%	
4Creations		Not Absent		
MAF		FC-47%, IL-47%		
Sri Lakshmi		FC-25%, IL-25%		
Victim of common illness	Magnum	Common illness: Cough and cold, Headache, Fever,	Other common illnesses : Stomach pain due to heat, Low BP, bleeding per rectum, eye pain , asthma, gastric	
	4Creations			
	MAF			
	Sri Lakshmi			
Victim of specific illness	Magnum	No illness		
	4Creations	No illness		
	MAF	Difficulty in breathing – 6%, Swelling of legs - 18%, diabetes mellitus – 6%, hypertension – 6%		
	Sri Lakshmi	Swelling of legs -		

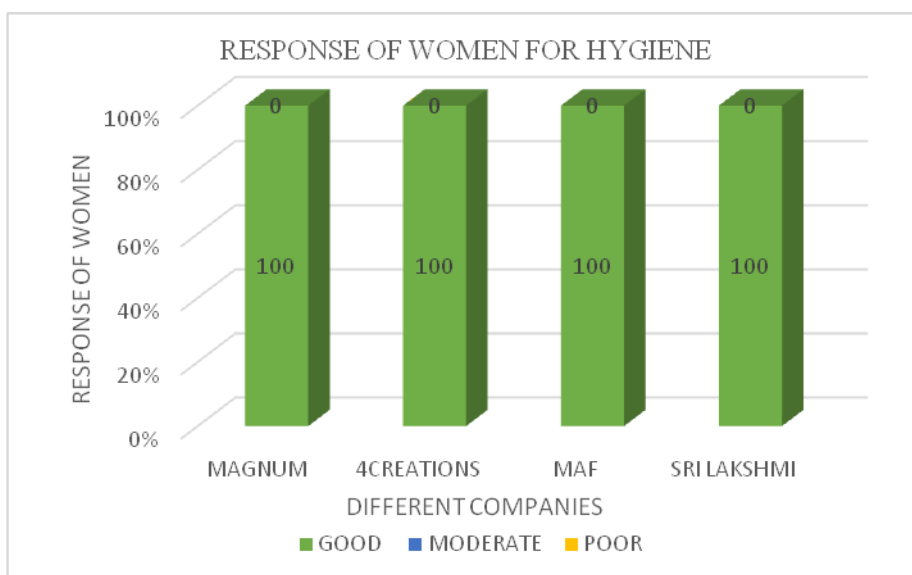
		50%	
Undergone treatment for common illness	Magnum	Yes – 100%	
	4Creations	Yes – 100%	
	MAF	Yes – 88%, No – 12%	
	Sri Lakshmi	Yes – 50%, No – 50%	
Category of medical services	Magnum	First aid – 100%	
	4Creations	First aid- 100% Primary care – 100%	
	MAF	First aid- 100%	
	Sri Lakshmi	First aid- 100%	
Psychiatric problems suffered	Magnum	No Problem	
	4Creations	Anxiety-100% Palpitations-100%	
	MAF	Insomnia-18% Depression-24% Anxiety-29% Palpitations-18%	
	Sri Lakshmi	Insomnia-25% Depression-25% Anxiety-25% Palpitations-25%	



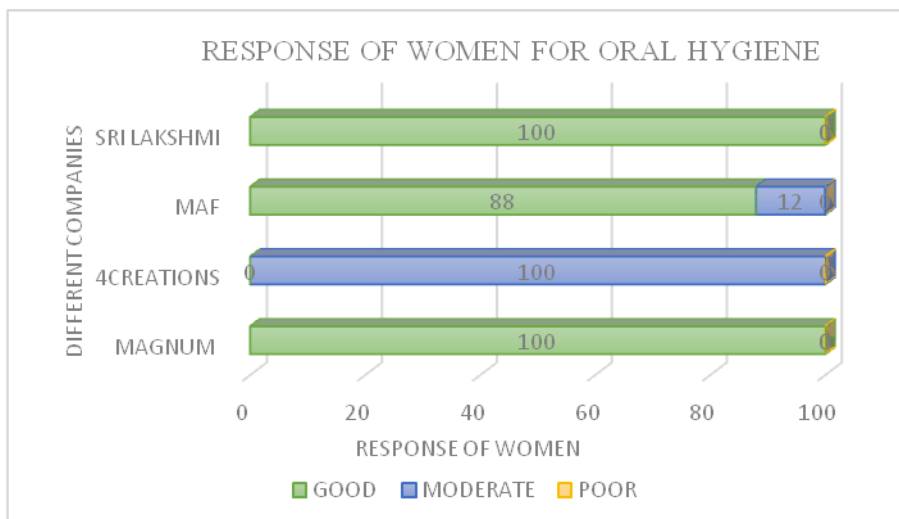
Graph 6.190: Response of women for eyesight



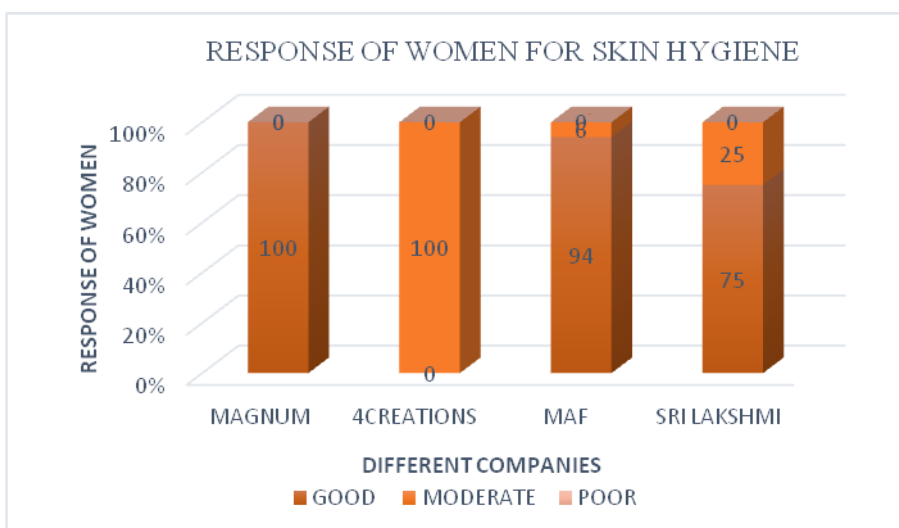
Graph 6.191: Response of women for hearing



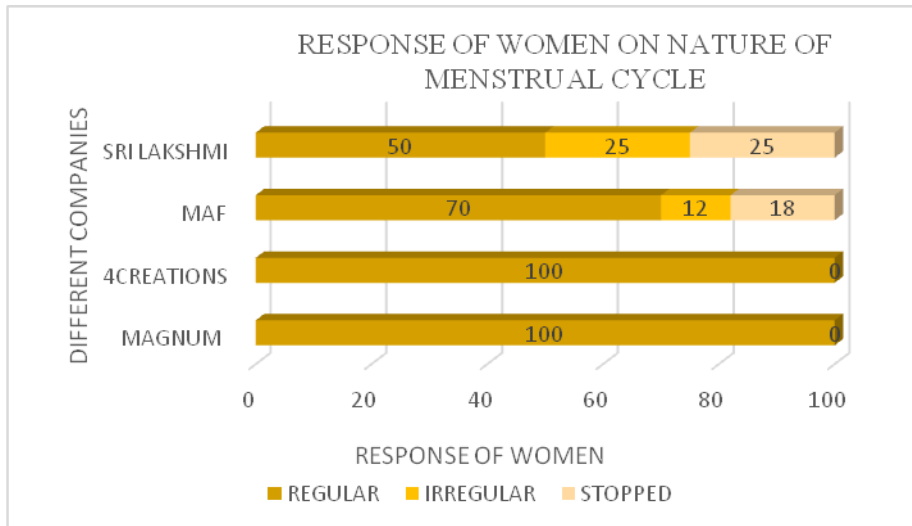
Graph 6.192: Response of women for hygiene



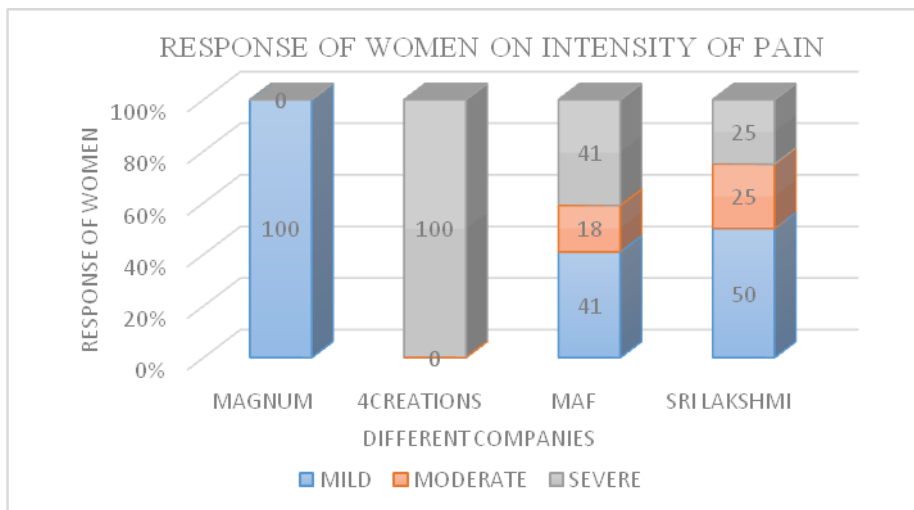
Graph 6.193: Response of women for Oral Hygiene



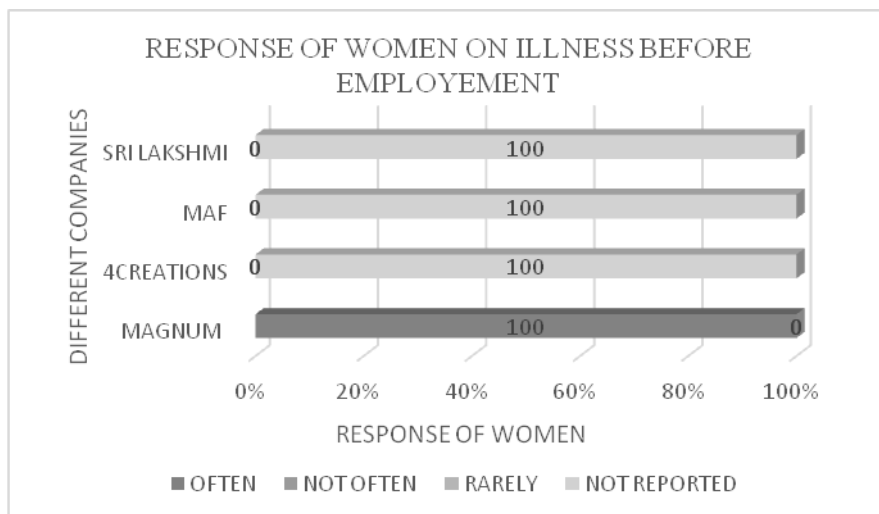
Graph 6.194: Response of women for Skin Hygiene



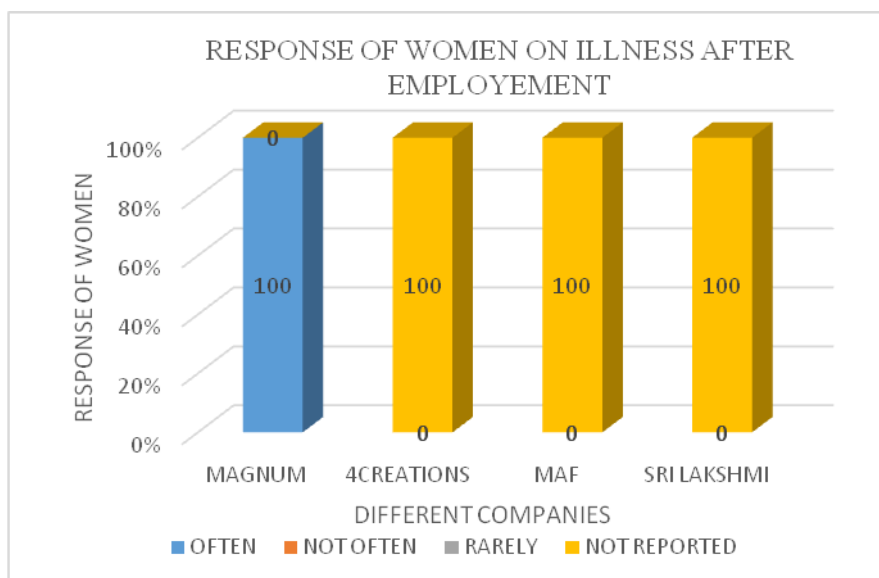
Graph 6.195: Response of women on Nature of Menstrual Cycle



Graph 6.196: Response of women on Intesity of Pain



Graph 6.197: Response of women on Illness Before Employment



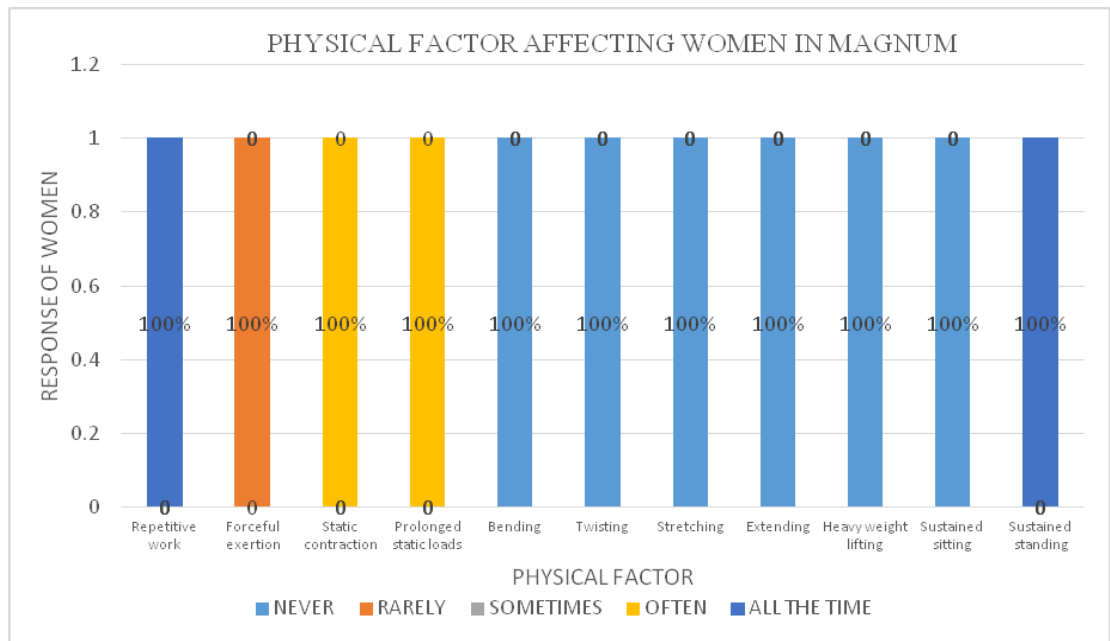
Graph 6.198: Response of women on Illness After Employment

D. Physical factors at work								
Identified factor affecting women health & productivity	Garment company	Response of women in %						Remarks
Work involves following constraints *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	-	100%	-	-	-	
		Static contraction	-	-	-	100%	-	
		Prolonged static loads	-	-	-	100%	-	
		Bending	100%	-	-	-	-	
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	-	
		Extending	100%	-	-	-	-	
		Heavy weight lifting	100%	-	-	-	-	
		Sustained sitting	100%	-	-	-	-	
		Sustained standing	-	-	-	-	100%	
	4Creations	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	-	-	-	-	100%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	-	-	-	-	100%	
		Twisting	-	-	-	-	100%	
		Stretching	-	-	-	-	100%	
		Extending	-	-	-	-	100%	
		Heavy weight lifting	-	-	100%	-	-	
		Sustained sitting	100%	-	-	-	-	
		Sustained standing	-	-	-	-	100%	
	MAF	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	-	-	-	-	100%	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	100%	-	-	-	-	

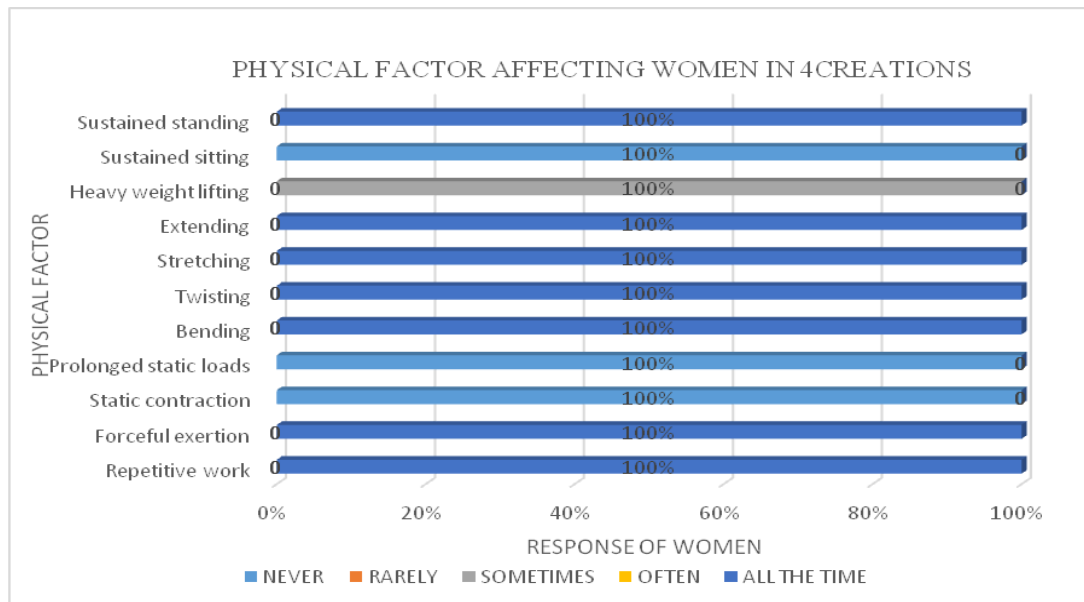
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	-	
		Extending	100%	-	-	-	-	
		Heavy weight lifting	100%	-	-	-	-	
		Sustained sitting	100%	-	-	-	-	
		Sustained standing	-	-	-	-	100%	
	Sri Lakshmi	Physical factor	N	R	S	O	A	
		Repetitive work	-	-	-	-	100%	
		Forceful exertion	100%	-	-	-	-	
		Static contraction	100%	-	-	-	-	
		Prolonged static loads	100%	-	-	-	-	
		Bending	100%	-	-	-	-	
		Twisting	100%	-	-	-	-	
		Stretching	100%	-	-	-	-	
		Extending	100%	-	-	-	-	
		Heavy weight lifting	100%	-	-	-	-	
		Sustained sitting	100%	-	-	-	-	
		Sustained standing	-	-	-	-	100%	
Comfortable to work in standing/sitting position for long working hours	Magnum	No – 100%						
	4Creations	No – 100%						
	MAF	Yes – 88%, No – 12%						
	Sri Lakshmi	Yes – 75%, No – 25%						
Victim of following symptoms *N –Never *R-Rarely *S-Sometimes *O-Often *A-All the time	Magnum	Symptoms	N	R	S	O	A	
		Aching	-	-	100%	-	-	
		Cramping	-	100%	-	-	-	
		Carelessness	100%	-	-	-	-	
		Dizziness	100%	-	-	-	-	
		Numbness	-	100%	-	-	-	
		Stiffness	-	-	100%	-	-	
		Tiredness	-	-	-	-	100%	
		Tangling	100%	-	-	-	-	
	4Creations	Symptoms	N	R	S	O	A	
		Aching	-	-	-	-	100%	
		Cramping	-	-	-	-	100%	
		Carelessness	100%	-	-	-	-	
		Dizziness	-	-	-	-	100%	
		Numbness	100%	-	-	-	-	
		Stiffness	-	-	-	-	100%	

		Tiredness	-	-	-	-	100%	
		Tangling	100%	-	-	-	-	
	MAF	Symptoms	N	R	S	O	A	
		Aching	-	12%	47%	29%	12%	
		Cramping	12%	12%	65%	12%	-	
		Carelessness	94%	6%	-	-	-	
		Dizziness	100%	-	-	-	-	
		Numbness	29%	-	65%	6%	-	
		Stiffness	18%	6%	65%	12%	-	
		Tiredness	12%	-	41%	41%	6%	
		Tangling	94%	-	6%	-	-	
		Sri Lakshmi	Symptoms	N	R	S	O	
	Aching		-	-	25%	50%	25%	
	Cramping		50%	-	50%	-	-	
	Carelessness		100%	-	-	-	-	
	Dizziness		100%	-	-	-	-	
	Numbness		50%	-	50%	-	-	
	Stiffness		50%	25%	25%	-	-	
	Tiredness		50%	-	50%	-	-	
	Tangling	100%	-	-	-	-		
Victim of following injuries	Magnum	Injury	Yes			No		
		Laceration	-			100%		
		Puncture	-			100%		
		Avulsion	-			100%		
		Hematoma	-			100%		
		Abrasions	-			100%		
		Contusions	-			100%		
		Fracture	-			100%		
		Sprain	-			100%		
		Burn	-			100%		
		Amputation	-			100%		
	4Creations	Injury	Yes			No		
		Laceration	-			100%		
		Puncture	-			100%		
		Avulsion	-			100%		
		Hematoma	-			100%		
		Abrasions	-			100%		
		Contusions	-			100%		
		Fracture	-			100%		
		Sprain	-			100%		
		Burn	-			100%		
		Amputation	-			100%		
	MAF	Injury	Yes			No		
		Laceration	-			100%		
		Puncture	-			100%		

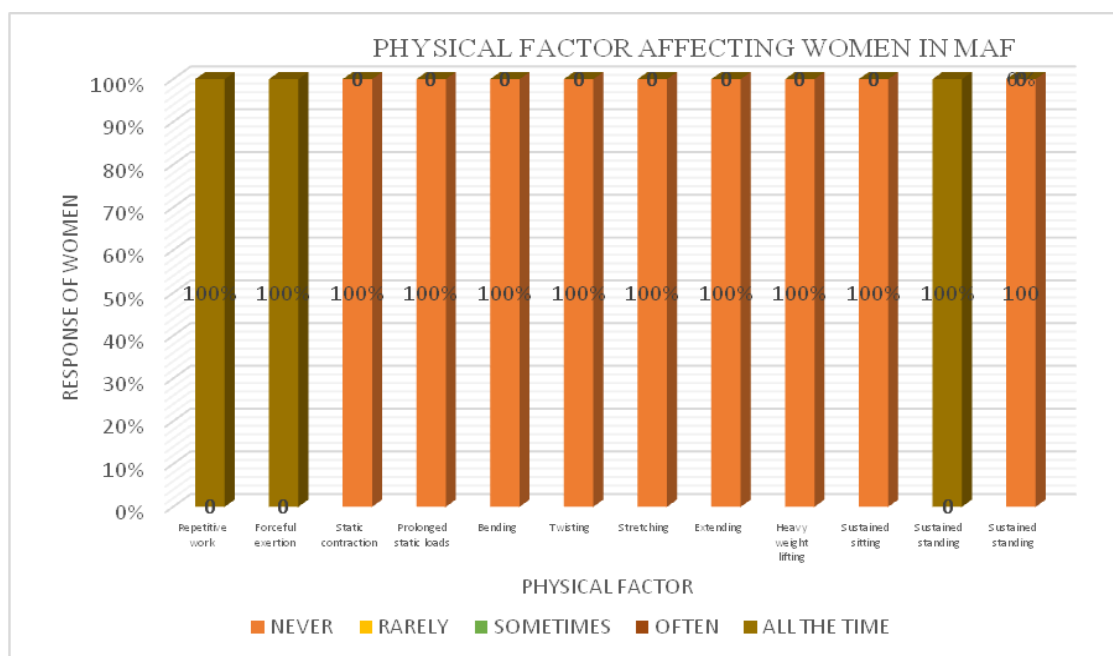
		Avulsion	-	100%	
		Hematoma	-	100%	
		Abrasions	-	100%	
		Contusions	-	100%	
		Fracture	-	100%	
		Sprain	-	100%	
		Burn	-	100%	
		Amputation	-	100%	
	Sri Lakshmi	Injury	Yes	No	
		Laceration	-	100%	
		Puncture	-	100%	
		Avulsion	-	100%	
		Hematoma	-	100%	
		Abrasions	-	100%	
		Contusions	-	100%	
		Fracture	-	100%	
		Sprain	-	100%	
		Burn	-	100%	
		Amputation	-	100%	



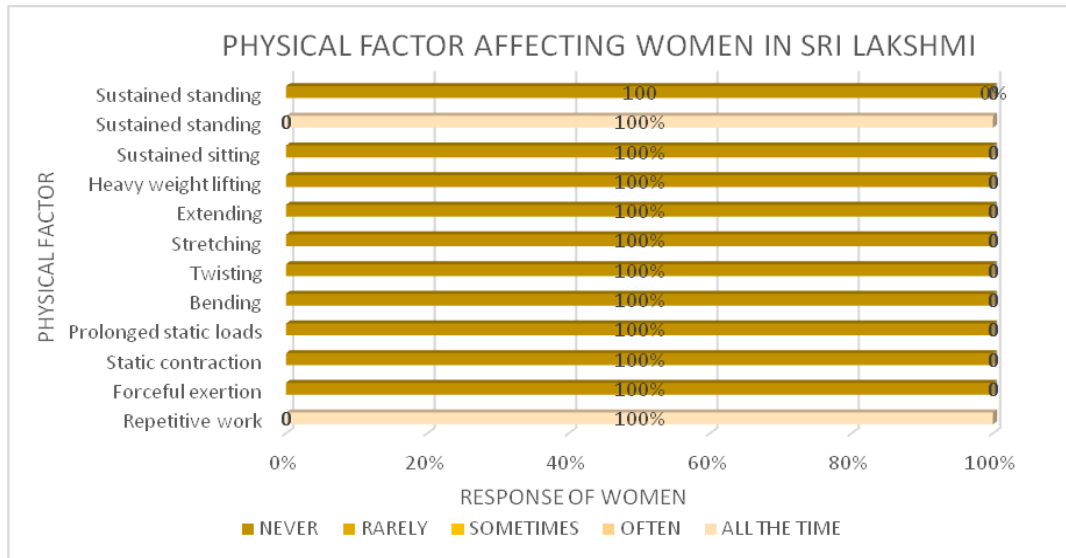
Graph 6.199: Physical Factors Affecting Women in Magnum



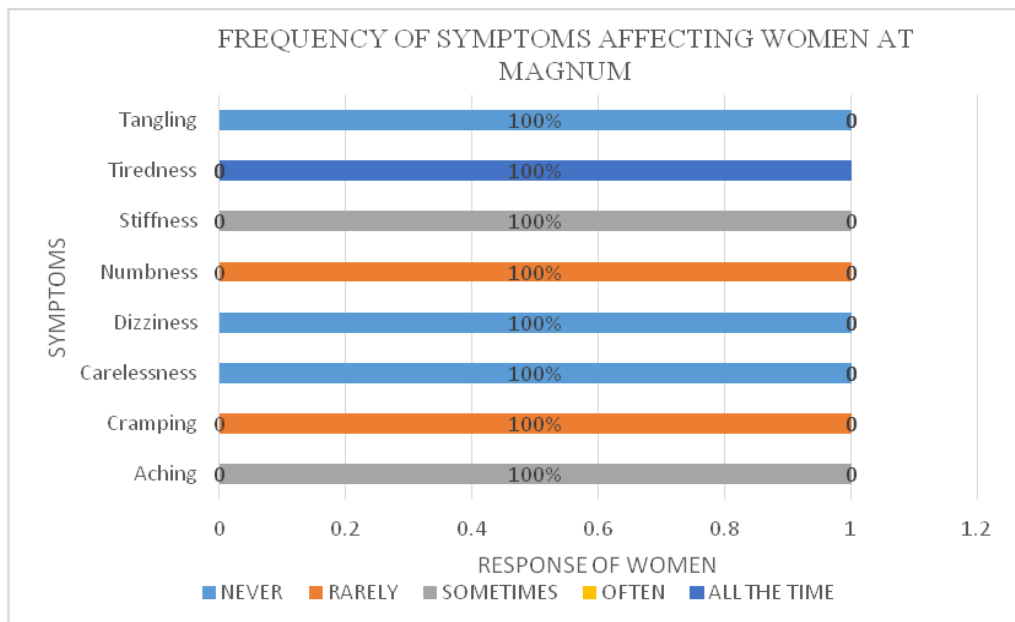
Graph 6.200: Physical Factors Affecting Women in 4 creations



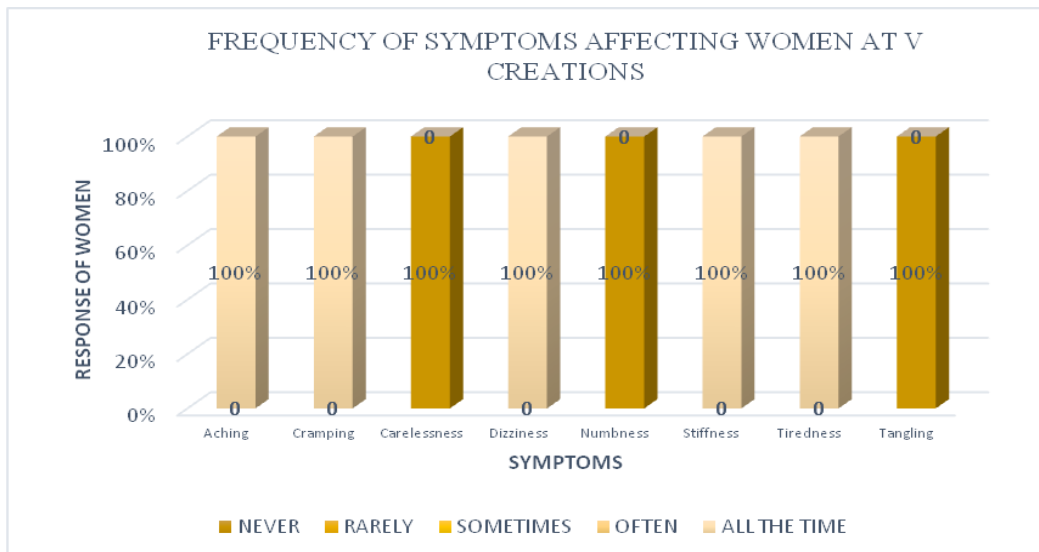
Graph 6.201: Physical Factors Affecting Women in Maf



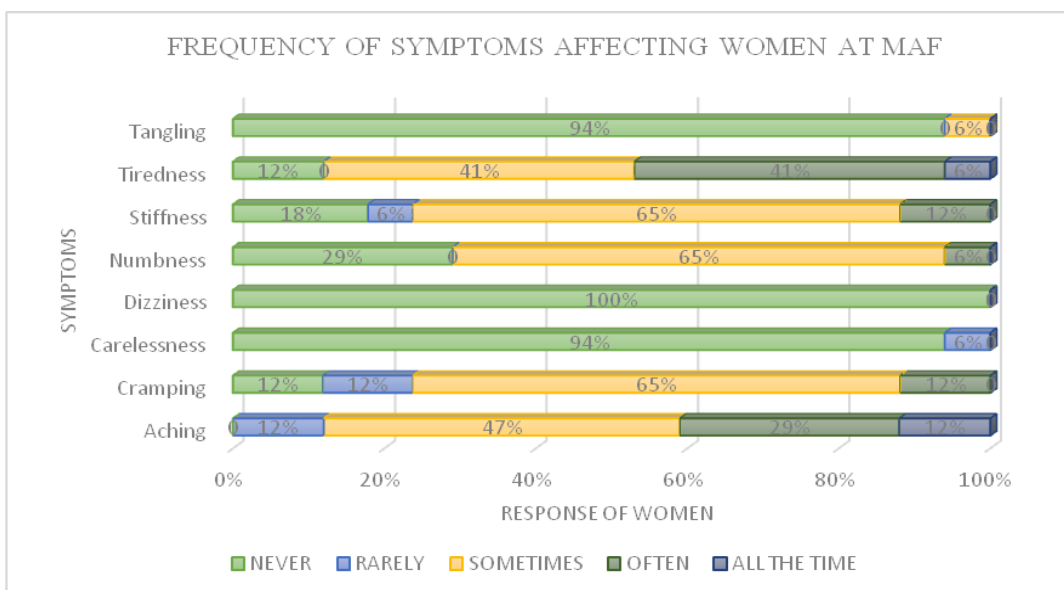
Graph 6.202: Physical Factors Affecting Women in Sri lakshmi



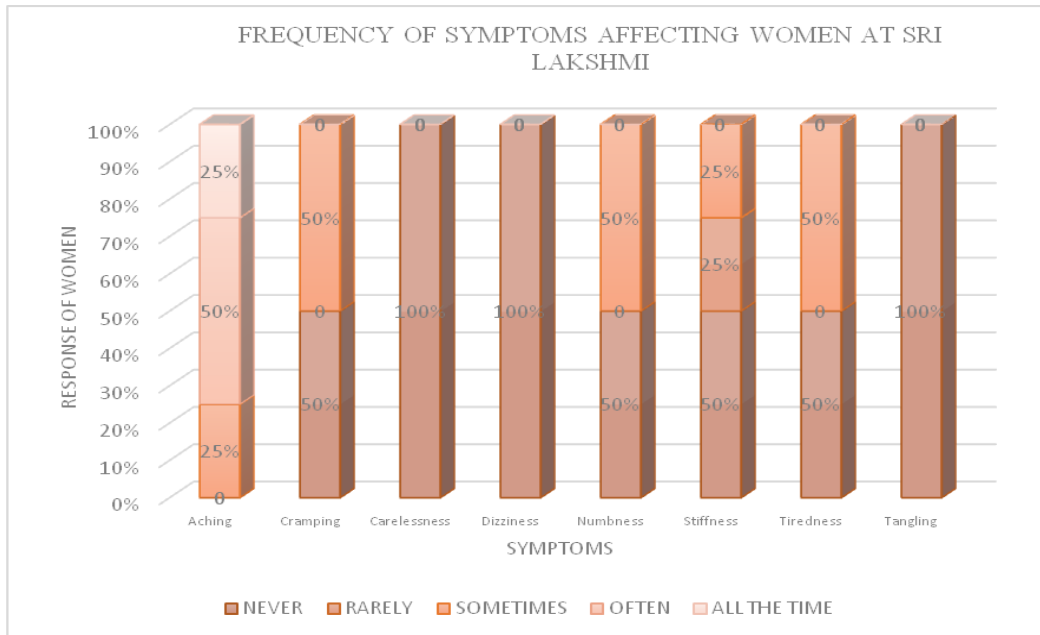
Graph 6.203: Frequency of symptoms Affecting Women at Magnum



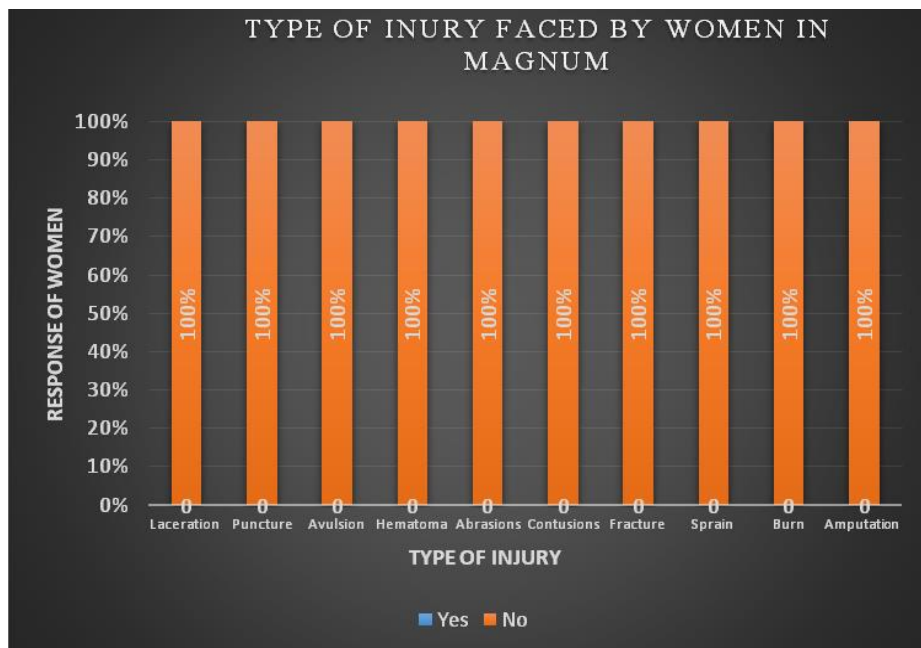
Graph 6.204: Frequency of symptoms Affecting Women at 4 creations



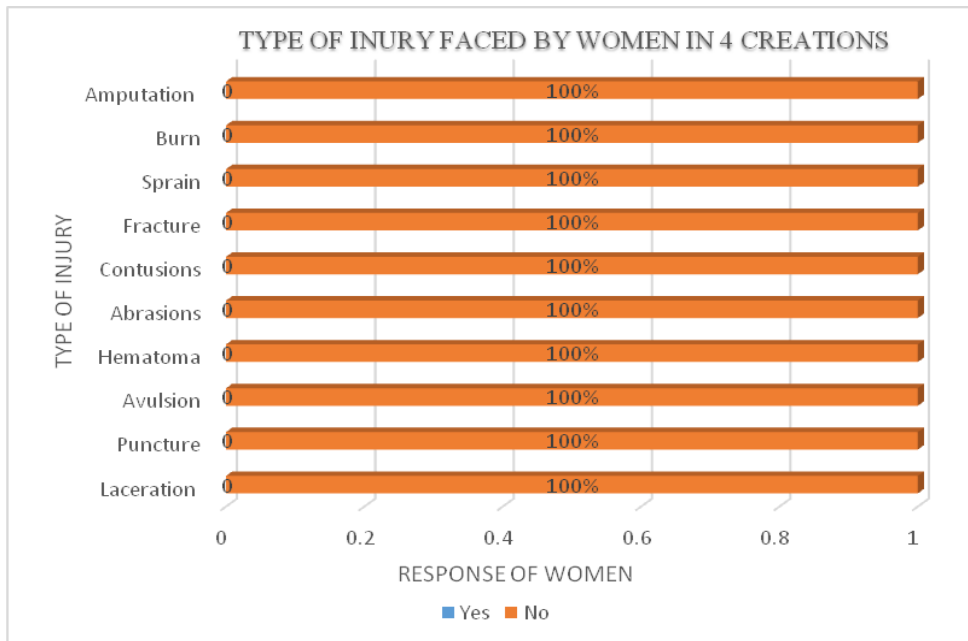
Graph 6.205: Frequency of symptoms Affecting Women at Maf



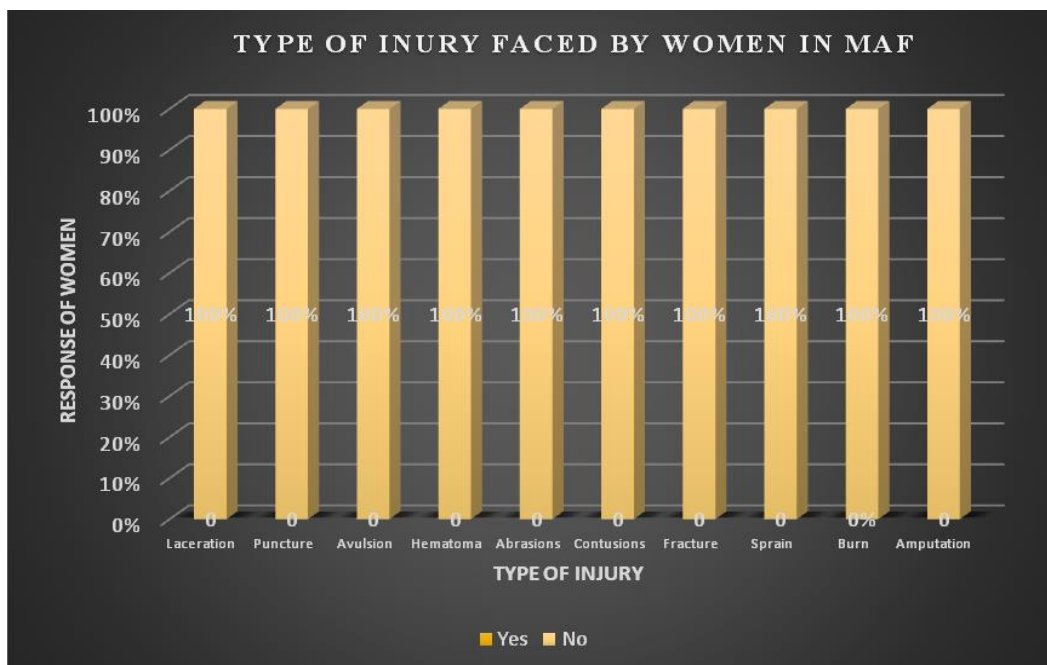
Graph 6.206: Frequency of symptoms Affecting Women at Sri lakshmi



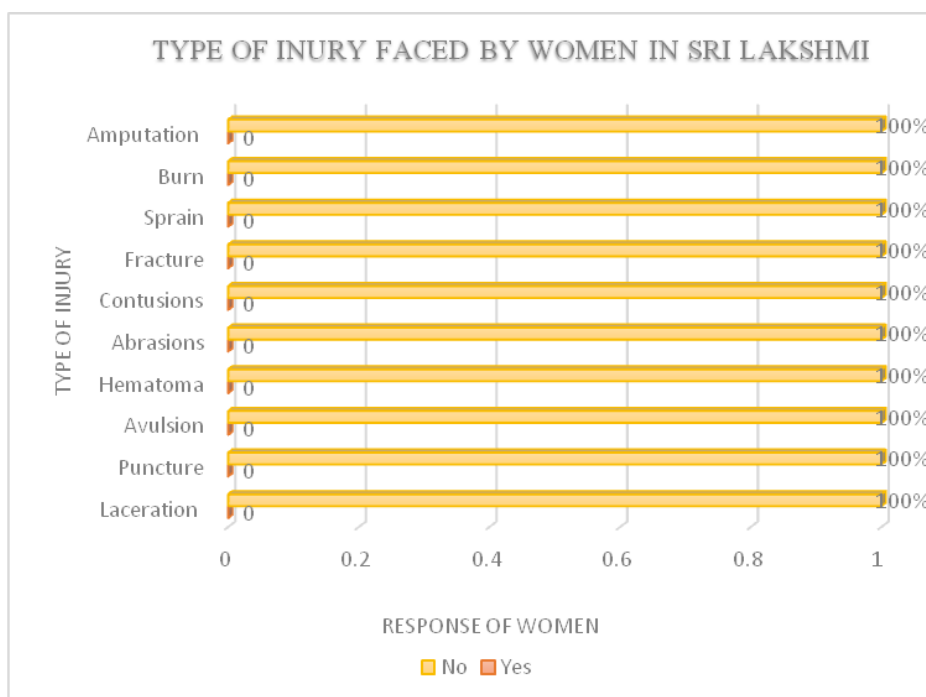
Graph 6.207: Type of injury faced by Women in Magnum



Graph 6.208: Type of injury faced by Women in 4 creations

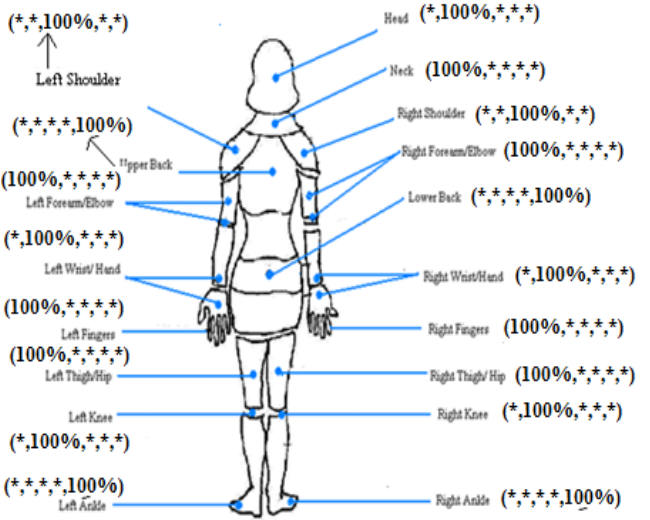
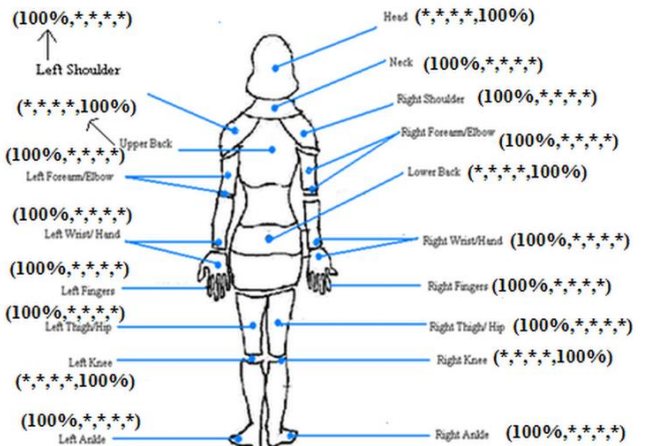


Graph 6.209: Type of injury faced by Women in Maf



















Graph 6.210:Type of injury faced by Women in Sri lakshmi







E. Pain features			
Identified factor affecting women health& productivity	Garment company	Response of women in %	Remarks
Suffer from pain at present	Magnum	Yes – 100%	
	4Creation s	Yes – 100%	
	MAF	Yes – 76%, No- 24%	
	Sri Lakshmi	Yes – 75%, No- 25%	

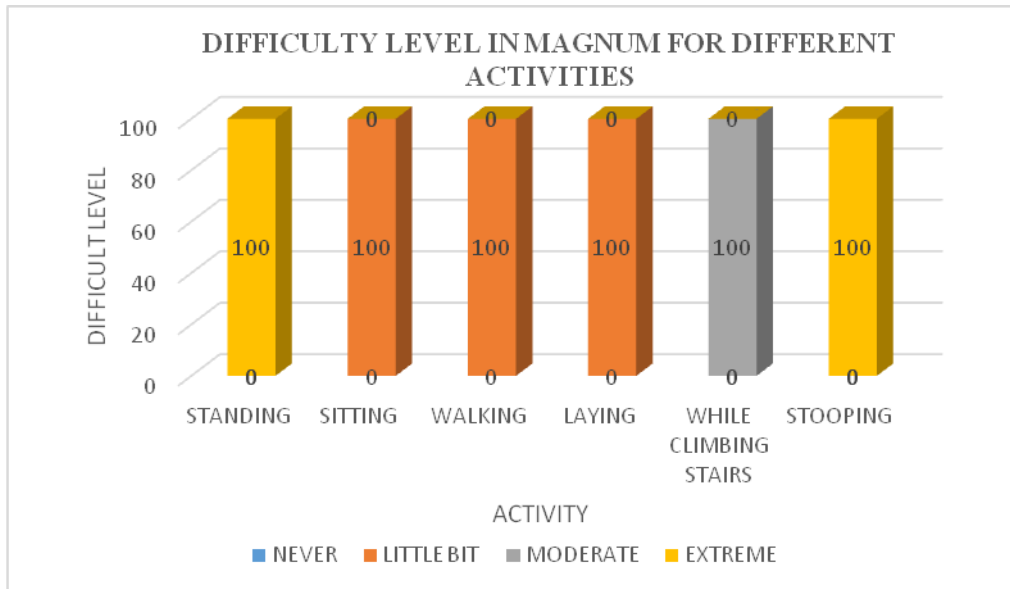
<p>Pain experienced in a particular location (No pain, Low pain, Mild pain, High pain, Severe pain)</p>	<p>Magnum</p>		
	<p>4Creation s</p>		

	MAF			
	Sri Lakshmi			
Cause of pain	Magnum	Cause	%	
		Bad posture for long time	100%	
		Long working periods	100%	
	4Creation s	Cause	%	
		Bad posture for long time	100%	
		Long working periods	100%	
	MAF	Cause	%	
		Bad posture for long time	76%	
		Long working periods	76%	
	Sri Lakshmi	Cause	%	
Bad posture for long time		75%		
Long working periods		75%		
Occurrence of pain	Magnum	Suddenly - 100%		
	4Creation	Gradually - 100%		

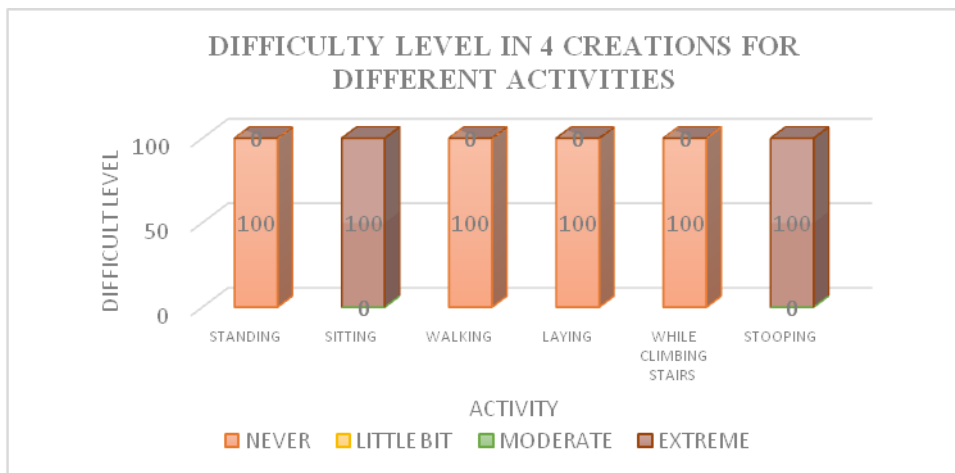
				-	100%		-		-
		Walking							
				-	100%		-		-
		Laying							
				-	-	100%			-
		While climbing stairs							
				-	-		-		100%
		Stooping							
	4Creation s								
		Activity	Difficulty level						
			<i>Never</i>	<i>Little bit</i>	<i>Moderate</i>	<i>Extreme</i>			
				100%	-	-	-		
		Standing							
				-	-	-	100%		
		Sitting							
				100%	-	-	-		
		Walking							
				100%	-	-	-		
		Laying							

			100%	-	-	-
		While climbing stairs				
	MAF		-	-	-	100%
		Stooping				
		Activity	Difficulty level			
			Never	Little bit	Moderate	Extreme
			65%	12%	6%	17%
		Standing				
			65%	17%	-	17%
		Sitting				
			65%	17%	-	17%
		Walking				
	Sri Lakshmi		65%	17%	-	17%
		Laying				
			71%	17%	-	12%
		While climbing stairs				
			71%	17%	-	12%
		Stooping				

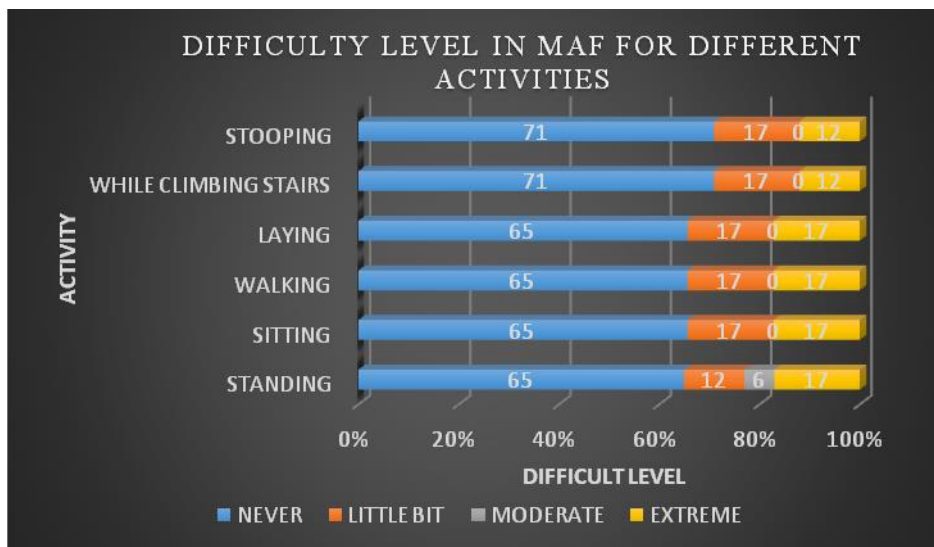
		Activity	Difficulty level			
			Never	Little bit	Moderate	Extreme
		 Standing	100%	-	-	-
		 Sitting	100%	-	-	-
		 Walking	100%	-	-	-
		 Laying	100%	-	-	-
		 While climbing stairs	100%	-	-	-
		 Stooping	100%	-	-	-



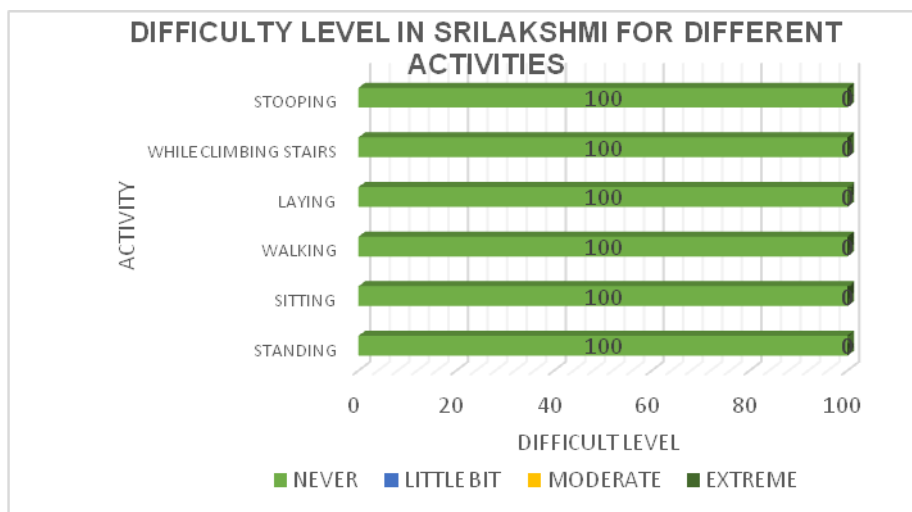
Graph 6.211: Difficulty level in magnum for different activities



Graph 6.212: Difficulty level in 4 creations for different activities



Graph 6.213: Difficulty level in maf for different activities

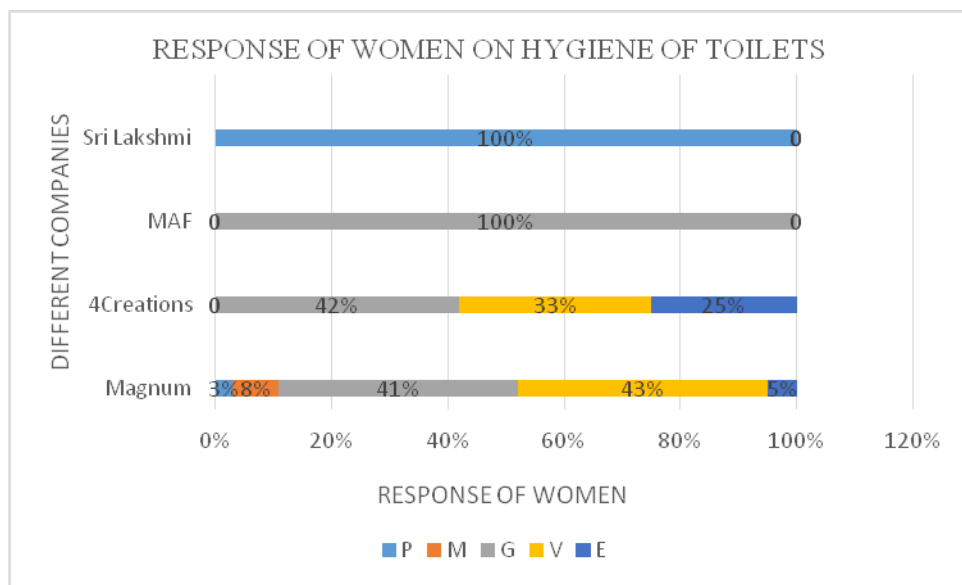


Graph 6.214: Difficulty level in sri lakshmi for different activities

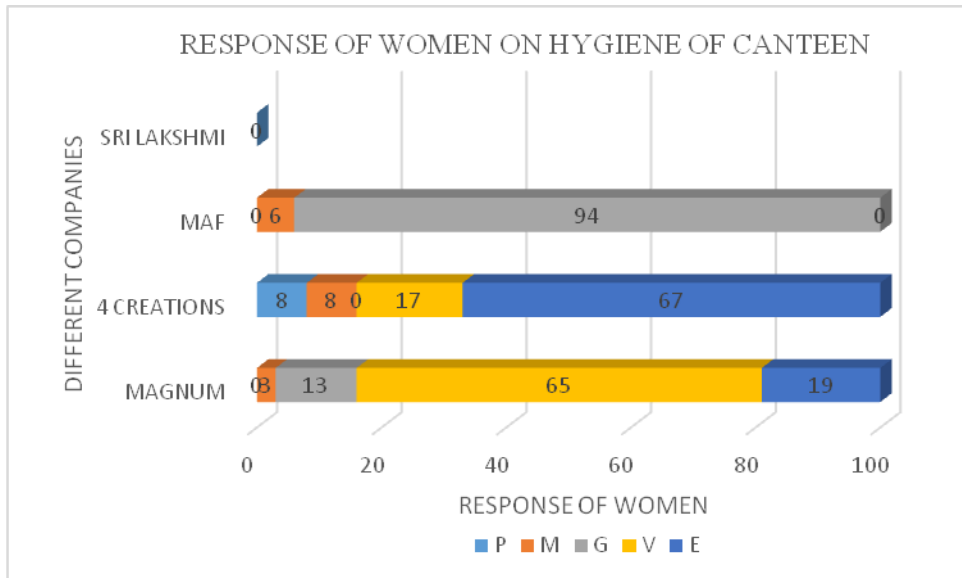
F. General Amenities							
Identified factor affecting women health& productivity	Garment company	Response of women in %					Remarks
Hygiene of toilets used *P-Poor *M-Moderate *G-Good *V-Very good *E-Excellent	Magnum	P	M	G	V	E	
		-	-	-	100%	-	
	4Creations	P	M	G	V	E	
		100%	-	-	-	-	
	MAF	P	M	G	V	E	
		-	-	-	100%	25%	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
Hygiene of canteen	Magnum	P	M	G	V	E	
		-	-	-	100%	-	
	4Creations	P	M	G	V	E	
		-	-	-	100%	-	
	MAF	P	M	G	V	E	
		-	6%	24%	71%	-	
	Sri Lakshmi	P	M	G	V	E	
		No canteen at premises					
Availability of drinking water	Magnum	P	M	G	V	E	
		-	-	100%	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	12%	88%	
	Sri Lakshmi	P	M	G	V	E	
		-	-	-	100%	-	
Availability of sufficient rest periods	Magnum	P	M	G	V	E	
		-	100%	-	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	100%	-	
	MAF	P	M	G	V	E	
		-	-	35%	65%	-	
	Sri Lakshmi	P	M	G	V	E	
		-	-	100%	-	-	
Availability of first aid box during injuries	Magnum	P	M	G	V	E	
		-	-	100%	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	47%	53%	

	Sri Lakshmi	P	M	G	V	E	
		25%	75%	-	-	-	
Availability of doctor/nurse	Magnum	P	M	G	V	E	
		-	-	100%	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	94%	6%	
	Sri Lakshmi	P	M	G	V	E	
No such facility							
How much do you rate medical room?	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	94%	6%	
	Sri Lakshmi	P	M	G	V	E	
		No medical room					
Rate working condition of lift	Magnum	P	M	G	V	E	
		100%	-	3%	-	-	
	4Creations	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	MAF	P	M	G	V	E	
		No upper floor in the company, hence not needed					
	Sri Lakshmi	P	M	G	V	E	
		No lift facility					
Rate working condition of fire alarms/engines	Magnum	P	M	G	V	E	
		-	-	100%	-	-	
	4Creations	P	M	G	V	E	
		-	-	-	-	100%	
	MAF	P	M	G	V	E	
		-	-	-	12%	88%	
	Sri Lakshmi	P	M	G	V	E	
		-	100%	-	-	-	
Rate working condition of machines in terms of performance	Magnum	P	M	G	V	E	
		Not applicable					
	4Creations	P	M	G	V	E	
		Not applicable					
	MAF	P	M	G	V	E	
		Not applicable					
	Sri Lakshmi	P	M	G	V	E	

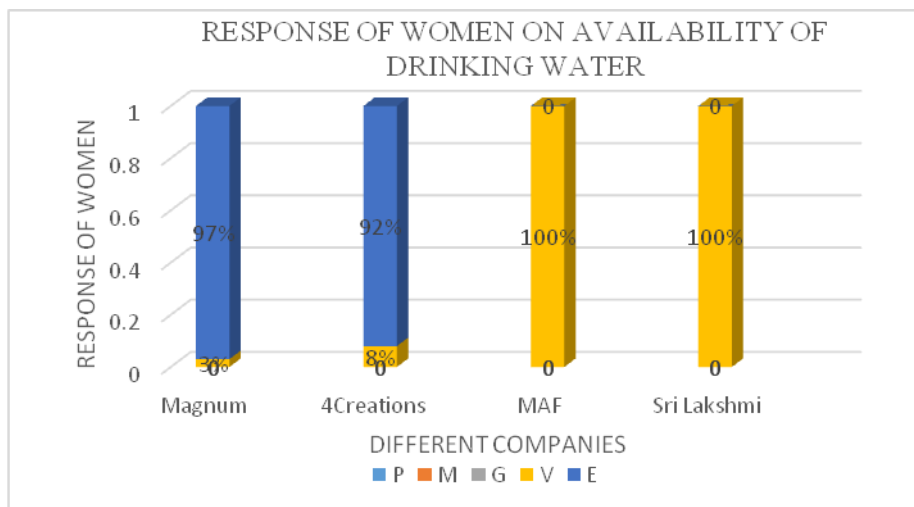
		Not applicable					
Rate quality of personal protective equipment provided to you	Magnum	P	M	G	V	E	
		100%	-	-	-	-	
	4Creations	P	M	G	V	E	Not provided for 33% women.
		Not provided					
	MAF	P	M	G	V	E	Most of them were either not using or have not been provided with personal protective equipment
		Not provided					
Sri Lakshmi		P	M	G	V	E	
		Not provided					



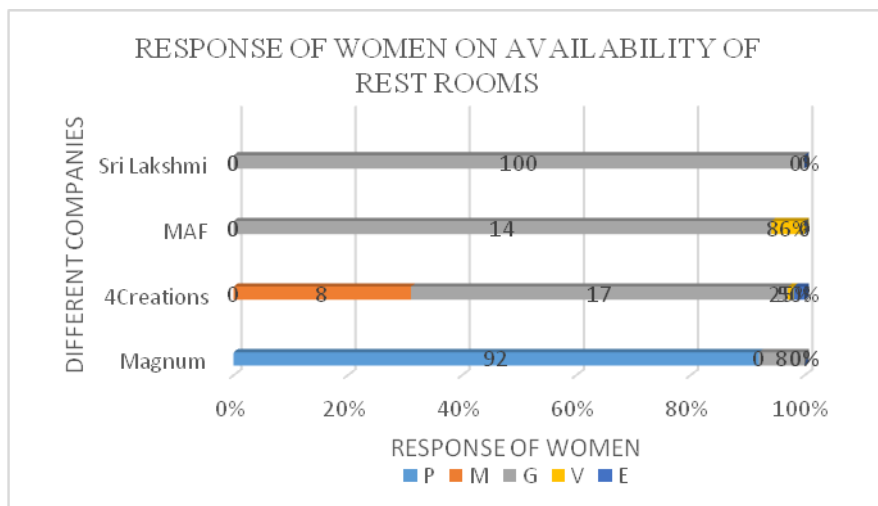
Graph 6.215: Response of women on hygiene of toilets



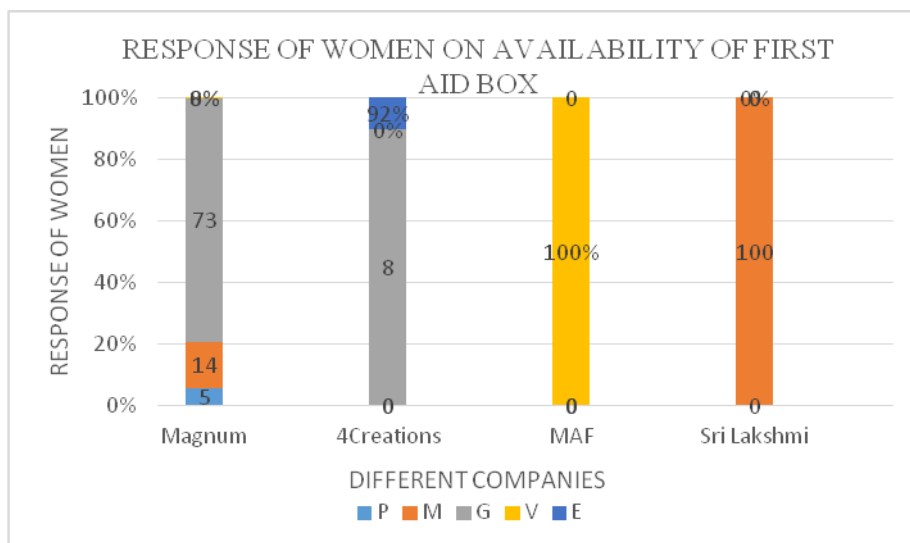
Graph 6.216: Response of women on hygiene of canteen



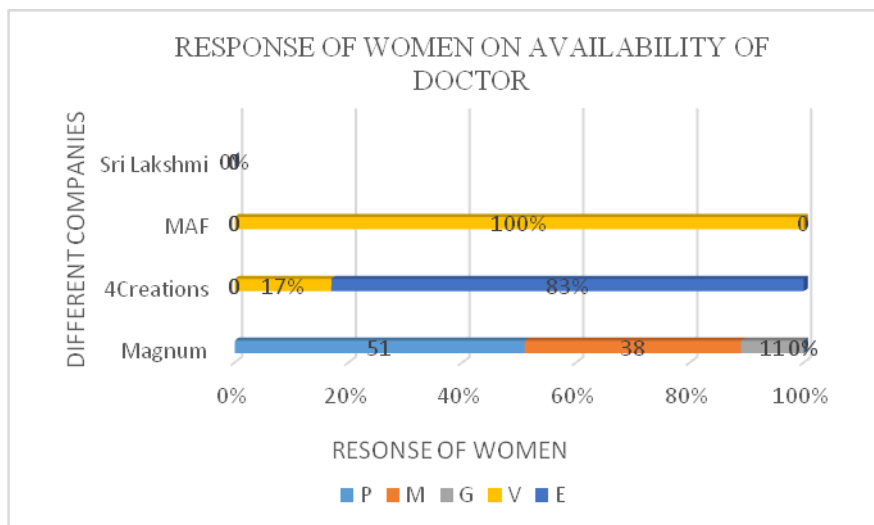
Graph 6.217: Response of women on availability of drinking water



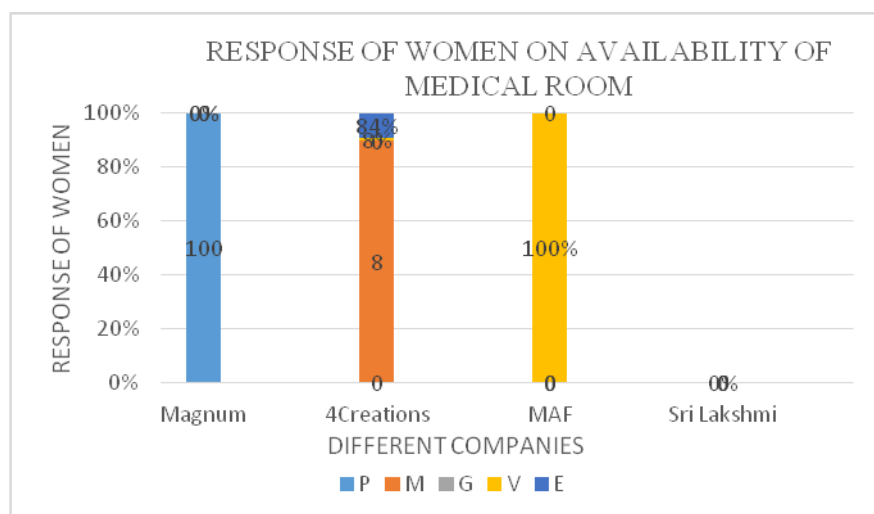
Graph 6.218: Response of women on availability of rest rooms



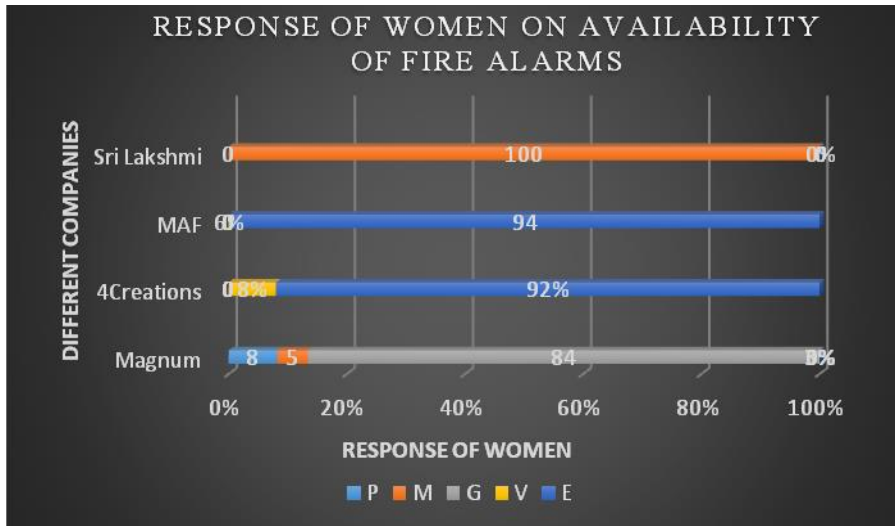
Graph 6.219: Response of women on availability of first aid box



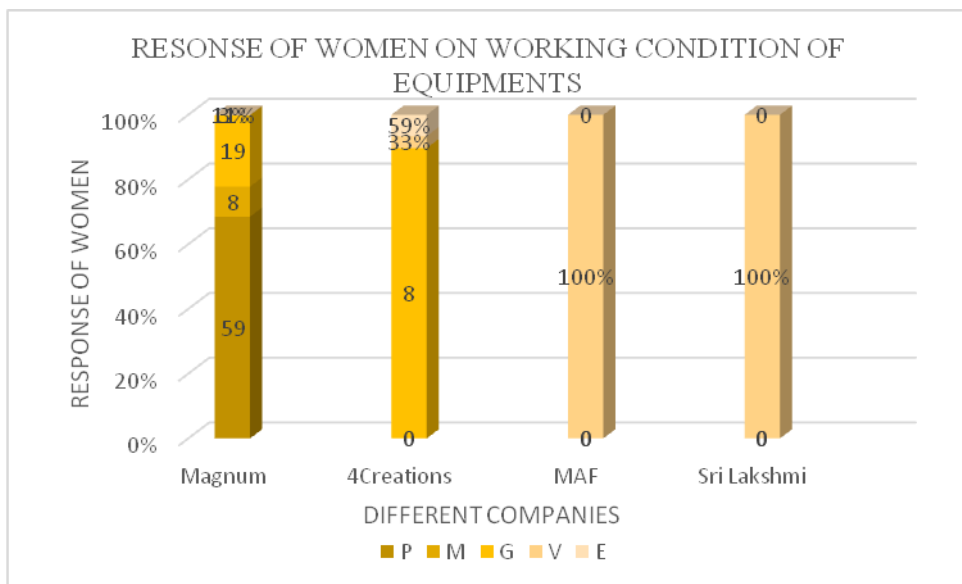
Graph 6.220: Response of women on availability of doctor



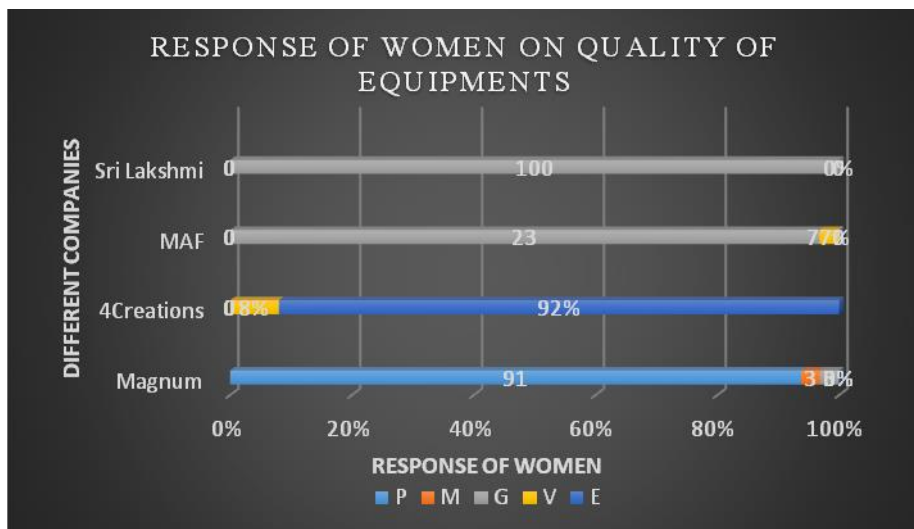
Graph 6.221: Response of women on availability of medical room



Graph 6.222: Response of women on availability of fire alarm



Graph 6.223: Response of women on working condition of equipments



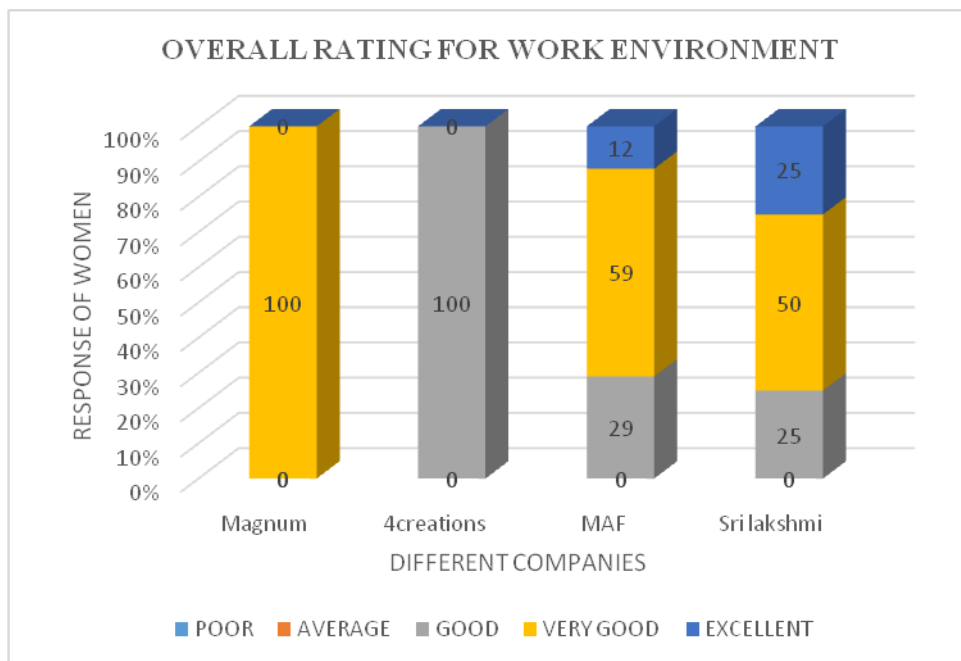
Graph 6.224: Response of women on quality of equipments

Section wise survey – Packaging section

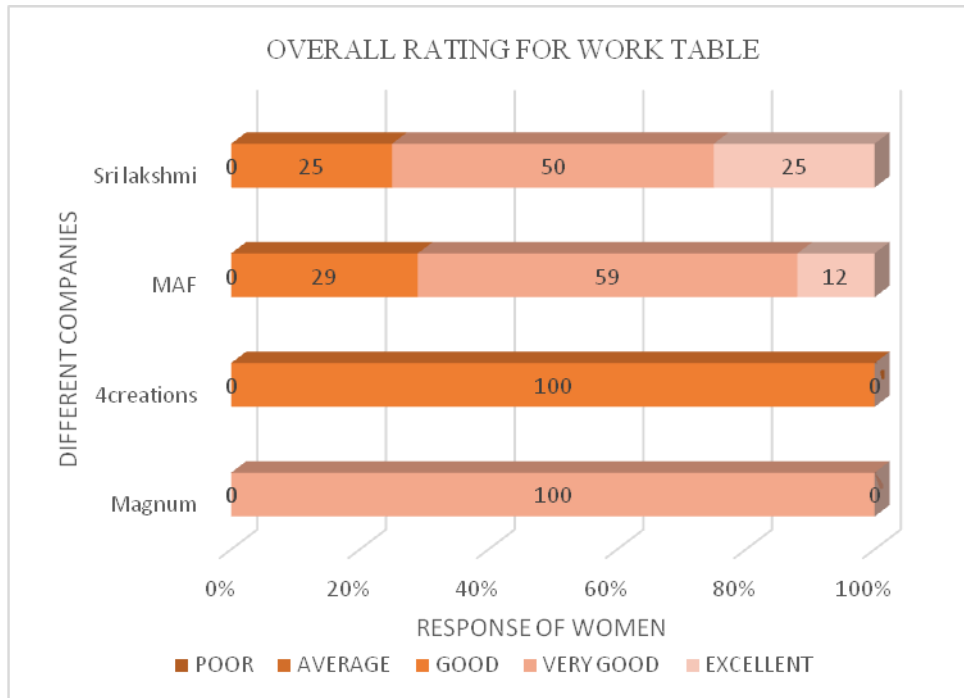
Packaging section survey				
Identified factor affecting women health& productivity	Garment company	Response of women in %		Remarks
Tables in packaging section *A-Adjustable *NA-Not Adjustable	Magnum	A	NA	
		-	100%	
	4Creations	A	NA	
		-	100%	
	MAF	A	NA	
		-	100%	
	Sri Lakshmi	A	NA	
-		100%		
Comfortable to work with actual height of table?	Magnum	Yes – 100%		
	4Creations	Yes – 100%		
	MAF	Yes – 100%		
	Sri Lakshmi	Yes – 100%		
Comfortable to work in standing position for long duration?	Magnum	No – 100%		
	4Creations	No – 100%		
	MAF	Yes – 94%, No -6%		
	Sri Lakshmi	Yes – 75%, No -25%		

Does your work demand extreme bending?	Magnum	No – 100%					
	4Creations	No – 100%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Sufficient windows or doors in activity area?	Magnum	Yes – 100%					
	4Creations	Yes – 100%					
	MAF	Yes – 100%					
	Sri Lakshmi	Yes – 100%					
Sufficient fans and ventilation in activity area?	Magnum	Yes – 100%					
	4Creations	Yes – 100%					
	MAF	Yes – 71%, No- 29%					
	Sri Lakshmi	Yes – 100%					
Are fans in good working condition?	Magnum	Yes – 100%					
	4Creations	Yes – 100%					
	MAF	Yes – 100%					
	Sri Lakshmi	Yes – 100%					
Do you have seating arrangement in your workstation?	Magnum	No – 100%					
	4Creations	No – 100%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Do you feel instruments used are heavy to lift?	Magnum	No – 100%					
	4Creations	No – 100%					
	MAF	No – 100%					
	Sri Lakshmi	No – 100%					
Have you been provided with personal protective equipments?	Magnum	No – 100%					Equipments provided: • Mask
	4Creations	No – 100%					
	MAF	No-100%					
	Sri Lakshmi	Yes – 25%, No – 75%					
Do you use them in work?	Magnum	Not provided					
	4Creations	Not provided					
	MAF	Not provided					
	Sri Lakshmi	Yes – 25%, No – 75%					
Ratings for work environment *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent	Magnum	P	A	G	V	E	
		-	-	100%	-	-	
	4Creations	P	A	G	V	E	
		-	-	-	-	100%	
	MAF	P	A	G	V	E	
		-	-	29%	59%	12%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	25%	50%	25%	
Ratings for overall work table in terms	Magnum	P	A	G	V	E	
		-	-	-	100%	-	
	4Creations	P	A	G	V	E	

of height, space, adjustable features *P-Poor *A-Average *G-Good *V-Very Good *E-Excellent		-	-	100%	-	-	
	MAF	P	A	G	V	E	
		-	-	29%	59%	12%	
	Sri Lakshmi	P	A	G	V	E	
		-	-	25%	50%	25%	



Graph 6.225: Overall rating for work environment



Graph 6.226: Overall rating for work table

Thus, appropriate analysis was carried out on the data obtained through questionnaire survey from different sections of the four manufacturing units selected for the study. The prominent factors affecting the employees' health have been identified. The factors generally are dependent on the type of work being carried out in different sections of the manufacturing units. Almost all the employees are observed to suffer from pain at different time periods in multiple locations of the human body. Generally, the causes for these pain areas may be attributed to bad work postures and long working hours with inadequate rest intervals in the manufacturing units selected for the study.

Chapter 7

Observations & Challenges in the conduction of field study- A review

This chapter documents an overview of various observations gained through field survey. While administering the questionnaire, the project members were able to gather first hand information from the workers about certain issues which cannot be recorded through questionnaire survey. Also discusses the challenges encountered in conduction of the field study.

Observations:

1. Low wages.
2. Immigrants from neighboring as well as far away states seeking employment.
3. Not taking leaves at all for months together.
4. Taking long leaves- min one month to several years- to go to their native or health not good or family problems - again joining back.
5. Very less time to relax during lunch hour. In 30 min lunch time, they are supposed to have lunch, some go to crèche and feed their babies, refresh themselves and start production on time.
6. Poor maintenance of hygiene in toilets by women from north and north eastern states- a common concern among other women.
7. Verbal abuse by supervisors if desired production (per hour) has not been made (both on men and women)
8. Some of the Supervisors (male) had approached while interaction with a woman was still going on and enquired about the survey. They also asked if they can know the inputs given by women about them during the survey. The details were not shared to them by declining politely saying it cannot be shared with individuals before arriving at a final report and will only report to the management at the end.
9. During interaction sessions it was found out that-
 - i. A woman was a victim of domestic abuse where her husband abused her physically, as result of which she has lost vision in one eye and cannot hear with one ear. Her eyes looked squint and she reported headache which persists whole day and all the time. She looked depressed, sensitive and emotional while interacting to the survey.

- ii. There was one girl aged 20 who lived with her father in a slum. She said she felt insecure to stay at home especially during night even with her father's presence. It was due to some men who live outside their house who had posed some problems to her and her father in the past, which she did not like to reveal, and team did not force her.
 - iii. A woman, who is the sole earner of her family of three, had left her daughter of one and half years in a hostel, because they gave free education for poor and needy. And there she was earning to fulfill family needs. Her husband does not take responsibility of earning.
 - iv. Few women were widows and yet dressed like a normal married lady. Their families depended on them and there they were working hard to fulfill their family needs.
 - v. There were few girls who said their age was eighteen or nineteen, but looking at their features it was hard to believe them.
 - vi. There were families who worked together in the same company, a family of mother and her two daughters, a family of mother and son, a brother and his sister and so on.
 - vii. Most of the women were depressed, not happy with their work, not satisfied with their salaries. While some were hesitating to tell this, some others were brave enough to share their grievances during interaction sessions.
10. Though there is a provision of medical room and a staff nurse being present all the time to attend patients, the room seemed to be very small with only one cot, one table and chair for doctor, one small cupboard with medicines and one wash basin. The medical room is a part of crèche, where partition has been done to separate medical room from crèche.
 11. The crèche has to be equipped with more cots, beds, mats, cradles and toys as more number of babies and kids stay there.
 12. The main drawback of medical room/crèche is that the ceiling of the building is made by sheets and not RCC. Because of this the staff and kids experience lot of heat and it may not be good to their health especially children's health.
 13. In canteen there is no separate space for washing utensils. People wash their hands in the same place where unclean utensils are kept for cleaning.
 14. Fans are not sufficient. The sewing section is operated in four different lines. A fan is placed at both the ends of the big line and there are very few fans placed in between. Most of the women neglected their personal safety by not wearing masks, gloves and other safety equipment's provided to them. The reasons they quote are varying,
 - ✓ Do not like to use it
 - ✓ Feel suffocated
 - ✓ They think it is not required for them
 - ✓ Mask quality is not good

✓ They do not even ask for it-negligence

15. Some of them had severe health issues for which they did not seek doctors help because of monetary problems.
16. Most of the girls below the age of 20 had no complaints regarding their health and their job.
17. There were many women above the age of 40 working as helpers since the beginning of their career, for almost 20 to 30 years.

Challenges:

Administering the survey was definitely not a cake walk. Several issues posed challenge to the project members in administering the survey. The issues have been summarized as follows:

1. **Language problem:** Many women working there are from other states like Orissa, Manipur, Assam and Bihar. The most challenging task was to **talk** to them. Most of the women from Orissa do not speak any other language except their mother tongue, which is Odia. They could not even speak Hindi. So the communication was usually through actions and asking other women who could understand a bit of Hindi to translate for those women.
2. **Time factor:** Since instructions were given to interact with each woman going to their place of work station, without affecting the production process, the noise and dust produced during production was affecting the time factor needed to interact with them. Hence it took more than a month to cover 50% of total women workers.
3. **Interruption by men workers:** Often men working over there used to inquire about the survey and were questioning as to why this survey is being carried out for only women and not for men too. They suggested that this kind of survey needs to be done for them too as they too faced various problems.
4. **Expectations from women employees:** Women had an impression that they were being surveyed in order to improve their financial condition or for any other help. Thus at the beginning of interaction with each woman it became mandatory to mention the main purpose of survey which was only for research purpose and nothing else.

5. Others:

- Some women were not ready to accept that they were addicted to tobacco or had bad breathe though it could be smelled.
- It was felt that 2% of women surveyed did not correctly answer the questions for reasons unknown.

By the end of the field study it was understood by the project members that the employees despite of their family issues, their personal turmoil, financial problems, health issues, mental stress they undergo, they put on brave face to be strong enough in all kinds of situation instead of complaining about their life. The above observations in addition to the survey data enabled the project members to gain a comprehensive insight about the practices and other issues in the garment manufacturing units.

Chapter 8

Recommendations and Interventions

Based on the environmental audit, observations and findings from the questionnaire survey, a comprehensive set of interventions and improvements were suggested to the manufacturing firms. This chapter focusses on recommendations and interventions suggested from ergonomics and medical perspectives. These are based on the documented symptoms experienced by the employees in manufacturing units selected for the study.

Recommendations:

The identified gaps / observations were supported by findings from the survey. The observations/ findings have been consolidated section wise in the manufacturing unit. The recommendations proposed section wise are documented below in Table 8.1.

Table 8.1: Recommendations

Section of the manufacturing Unit	Identified Gaps/Observations	Supportive findings	Recommendations
Cutting Section	In Fusing Section, the workers were exposed to extreme heat conditions as indicated in Table 4.3.1. The workstations did not have sufficient fans and ventilation for movement of air. No seating arrangements were provided. The workers were seen standing for whole working shift.	The workers stated that they suffered from headache, back pain and leg pain at the end of the day. Workers also reported that they were a victim of heat burns and suffered from dizziness.	Increase in the number of fans is required to overcome the heat conditions and improve air circulation in the work space. Provision for chairs and drinking water should be made mandatory. The availability of Personal Protective Equipment and First Aid in the workplace has to be made mandatory.

Sewing Section	<p>The fluorescent tubes were placed at a greater height making the illumination level poor especially in farthest from the window position as reported in Table 4.3.2.</p> <p>The seating arrangement provided was stool. The workers were standing in bending position.</p> <p>There was no sufficient space for the movement of legs.</p>	<p>Musculo-skeletal disorders (MSD) such as back pain, shoulder pain and neck pain were reported by the workers.</p> <p>Workers also reported that they suffered from eye strain.</p> <p>However, no worker reported of suffering from needle borne infections.</p>	<p>Instead of stool, placing of a chair would be more comfortable to work.</p> <p>It is recommended to redesign the work station in such a way that the bending posture can be minimized or eliminated and leg space is improved.</p>
Ironing Section	<p>The electric iron boxes provided were technologically old and heavy to lift.</p> <p>None of the workers were provided with Aprons and Caps.</p> <p>The temperature level was comparatively high in this section as mentioned in Table 4.3.4.</p> <p>About 35% of the fans installed were not in working condition.</p>	<p>The workers reported that they suffered from irritation caused due to sweat.</p> <p>It was also reported that this resulted in lack of interest in performing their daily task.</p>	<p>Replacing of heavy iron boxes based on old technology with new light weight iron boxes based on steam technology is advisable.</p> <p>Regular preventive electrical maintenance will ensure all the installed fans in working condition.</p>
Inspection Section	<p>The fluorescent tubes were located at a height of about 4 feet above the workers height. The workers average height was about 5feet 2 inches.</p> <p>The illumination disposed extreme glare.</p>	<p>Workers reported suffering from eye strain and headache.</p>	<p>It is advisable to replace fluorescent tubes with LED tube lights which are energy efficient and of high luminescence.</p>

Packing Section	<p>The workstation was very congested. No seating arrangements were existed.</p> <p>There were no sufficient windows for movement of air.</p> <p>The fluorescent tubes were located at a height of about 4 feet above the workers height. The workers average height was about 5feet 2 inches.</p>	<p>Few of the workers reported that they suffered from varicose veins.</p> <p>Majority of the workers reported that they suffered from back pain and leg pain.</p>	<p>The seating arrangements have to be provided so that this arrangement can avoid workers standing for the entire shift of 8 hours.</p> <p>Fluorescent tubes have to be replaced with LED tube lights which are energy efficient and of high luminescence.</p>
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Symptoms experienced by employees:

Also company wise analysis was carried out to understand the percentage of employees experiencing various health related symptoms. The following tables (Tables 8.2- 8.5) provide percentage of employees experiencing different health related symptoms in the four garment manufacturing units considered for the study. Also the findings have been consolidated in Table 8.6

Table 8.2 Symptoms experienced in carrying out various activities at Magnum Enterprises, Bangalore.

SL NO	SYMPTOMS	% OF ALL OPERATIONS						Avg %
		Cutting	Sewing	Finishing	Ironing	Packing	Checking /Inspection	
1	Pain In Bones	40	51	67	42	29	29	43
2	Oral Problem	35	19	67	58	18	18	35
3	Abdominal Pain	41	17	67	12	41	6	31
4	Fever	22	42	67	21	8	12	29
5	Eye Strain	33	33	33	33	33	6	28
6	Skin Problem	51	42	67	21	17	6	34
7	Cough & Cold	83	58	67	47	83	59	66
8	Gastric & Ulcers	22	8	31	10	8	24	17
9	Bleeding/Rectum	8	8	8	10	8	12	9
10	Heart Diseases	3	3	33	5	2	5	9
11	Hypertension	41	33	33	32	36	32	35

SL NO	SYMPTOMS	% OF ALL OPERATIONS						Avg %
		Cutting	Sewing	Finishing	Ironing	Packing	Checking /Inspection	
12	Psychiatric Problem	48	48	33	36	35	25	38
13	Low BP	42	31	33	42	35	32	36
14	Back Pain	40	51	67	42	29	25	42
15	Thyroid	33	33	33	33	33	6	28

Out of 98 Women Garment Workers Surveyed, 43% had Pain in Bones, 35.3% had Oral Problem, 30% had Abdominal Pain 29% had fever, 28% had eye strain, 35% had skin problem, 66% had cough & cold, 17% had Gastric & Ulcers, 9% had bleeding & rectum, 9% had Heart Diseases, 35% had Hypertension, 38% had Psychiatric Problem 36% had low BP, 42% had back pain, and 28% had eye strain.

Bone pains, Oral problem, recurrent episodes of fever, Eye strain, Gastric and ulcerations, Skin problems Back-pain were higher in finishing section where as cough and cold, certain non-communicable diseases such as Hypertension, Heart diseases were higher in cutting sections. Psychiatric problems were observed in cutting and sewing sections. Workers in checking and inspection section suffered from Bleeding per Rectum.

Table 8.3 Symptoms experienced in carrying out various activities at 4 Creations Bangalore.

SL NO	SYMPTOMS	% OF ALL OPERATIONS						AVERAGE %
		Cutting	Sewing	Finishing	Ironing	Packing	Checking/ Inspection	
1	Pain In Bones	65	56	33	29	29	45	43
2	Oral Problem	13	4	25	23	25	18	18
3	Abdominal Pain		2	3	12	42	17	24
4	Fever	8	23	67	31	15	26	28
5	Eye Strain	30	35	32	28	29	33	31
6	Skin Problem	17	14	55	17	22	21	24
7	Cough & Cold	83	36	47	-	-	-	55
8	Gastric & Ulcers	8	16	22	33	-	-	20

SL NO	SYMPTOMS	% OF ALL OPERATIONS						AVERAGE %
		Cutting	Sewing	Finishing	Ironing	Packing	Checking/ Inspection	
9	Bleeding/Rectum	8	2	6	-	-	-	5
10	Headache	55	54	81	67	-	-	64
11	Psychiatric Problem	58	36	-	-	-	-	47
12	Low Bp	42	3	6	-	-	-	17
13	Back Pain	58	68	33	-	-	-	53
14	Thyroid	8	2	-	-	-	-	5

Total of 219 Women Garment Workers Were Surveyed Among Them, 43% had Pain in Bones, 18% had Oral Problem, 24% had Abdominal Pain 28% had fever, 31% had eye strain, 24% had skin problem, 55% had cough & cold, 20% had Gastric & Ulcers, 5% had bleeding & rectum, 64% had Headache, 47% had Psychiatric Problem 17% had low BP, 53% had back pain, and 5% had thyroid.

Pain in Bones, Cough & Cold, bleeding per rectum, Psychiatric problems, Low Blood pressure and thyroid were found to be on higher side in Cutting Section. Eyestrain and Back Pain were found to be higher in sewing section. Finishing section had fever oral problems, headache skin problem as major health concerns. Ironing section had gastritis. Packing section had oral problems and abdominal pain.

Table 8.4 Symptoms experienced in carrying out various activities at MAF Clothing Pvt Ltd, Bangalore.

SL NO	SYMPTOMS	% OF ALL OPERATIONS		AVERAGE %
		Ironing	Packing	
1	Pain In Bones	25	41	33
2	Oral Problem	25	18	22
3	Abdominal Pain	12	41	27
4	Fever	25	12	19
5	Eye Strain	12	24	18
6	Skin Problem	14	6	10
7	Cough & Cold	38	-	38
8	Gastric & Ulcers	-	24	24
9	Bleeding/Rectum	-	12	12

SL NO	SYMPTOMS	% OF ALL OPERATIONS		AVERAGE %
		Ironing	Packing	
10	Headache	75	59	67
11	Back Pain	38	29	34

Out of the 178 women surveyed in MAF clothing Services only ironing and packing sections were available for the study. Among, 33% had Pain in Bones, 22% had Oral Problem, 27% had Abdominal Pain 19% had fever, 18% had eye strain, 10% had skin problem, 38% had cough & cold, 24% had Gastric & Ulcers, 12% had bleeding & rectum, 35% had Hypertension, 34% had back pain, and 67% headache.

In ironing section workers suffered from oral problems, recurrent episodes of fever eye strain skin problem cough and cold headache back pain. In packing section workers suffered from pain in bones abdominal bones eye strain gastric and Ulcer& Bleeding per Rectum.

Table 8.5Symptoms experienced in carrying out various activities at Sri Lakshmi Designs, Bangalore.

SL NO	SYMPTOMS	% OF ALL OPERATIONS					AVERAGE %
		Cutting	Sewing	Finishing	Ironing	Packing	
1	Pain In Bones	-	15	20	75	26	36
2	Oral Problem	-	22	31	-	25	26
3	Abdominal Pain	-	-	6	-	-	6
4	Fever	50	31	19	50	25	35
5	Eye Strain	-	6	19	-	25	17
6	Skin Problem	50	-	13	-	25	29
7	Cough & Cold	50	45	31	50	-	44
8	Gastric & Ulcers	-	5	-	-	-	5
9	Headache	50	62	50	100	50	62
10	Low Bp	-	7	-	50	-	28
11	Back Pain	-	20	15	100	25	40
12	Thyroid	-	1	6	-	-	4

Total of 108 Women Garment Workers Were Surveyed Among Them 36% had Pain in Bones, 26% had Oral Problem, 6% had Abdominal Pain 35% had fever, 17% had eye strain, 29% had skin problem, 44% had cough & cold, 5% had Gastric & Ulcers, 28% had low BP, 40% had back pain, and 62% had headache.

In cutting section Fever, Skin problem, Cough and cold were observed to be of common recurrence in Sewing section Gastric ulcer was observed. In finishing section Thyroid disorders were observed. In Ironing section pain in bones fever cough and cold headache Low B.P back pain were observed. In packing section eye strain was observed.

Table 8.6 Consolidated list of symptoms experienced in carrying out various activities (clinical symptoms).

SL NO	SYMPTOMS	Name of the company				Average %
		Magnum Enterprises	4 Creations	MAF Clothing	Sri Lakshmi Designs	
1	Pain In Bones	43	43	33	36	39
2	Oral Problem	35	18	22	26	25
3	Abdominal Pain	31	24	27	6	22
4	Fever	29	28	19	35	28
5	Eye Strain	28	31	18	17	24
6	Skin Problem	34	24	10	29	24
7	Cough & Cold	66	55	38	44	51
8	Gastric & Ulcers	17	20	24	5	17
9	Bleeding/Rectum	9	5	12		9
10	Heart Diseases	9				9
11	Headache	35	64	67	62	57
12	Psychiatric Problem	38	47			43
13	Low Bp	36	17		28	27
14	Back Pain	42	53	34	40	42
15	Thyroid	28	5		4	12

Out of survey for clinical symptom 39% had Pain in Bones, 25% had Oral Problem, 22% had Abdominal Pain 28% had fever, 24% had eye strain, 24% had skin problem, 51% had cough & cold, 17% had Gastric & Ulcers, 9% had bleeding & rectum, 9% had Heart Diseases, 35% had Hypertension, 43% had Psychiatric Problem 27% had low BP, 42% had back pain, and 35% had headache.

Remedial Measures from medical perspective:

The data obtained from the semi structured questionnaire administration to 603 women employees in selected garment manufacturing units were analyzed from medical perspective. Further necessary remedial measures and actions were suggested. The details are provided in the following Table:8.7

It was observed that 39% of respondents had Pain in Bones which means disorders in joints and muscles. The main causes for bone pain and muscular pain among women workers is Vitamin D and calcium Deficiency. As they reach menopausal age the osteoporosis is common. Hence it is advised to start on calcium tablets as a routine treatment by the time they reach menopausal age. Vit.D evaluation can be a part of annual health check up and started on Vit D sachets when required.

About 25% have reported Oral Problem arising due to poor oral hygiene resulting due to improper brushing habits and chewing of Tobacco. Awareness need to be spread through social media and also through regular camps conducted at the work place. Assessing oral hygiene annually will definitely bring down oral problems. Hence it is advisable to arrange Dental camps annually.

The survey analysis shows 22% of the respondents had Abdominal Pain arising out of Menstrual problems and also due to various Gastrointestinal diseases. The different Gynecological disorders leading to severe pain abdomen such as PCOD needs to be examined at least annually by a Gynecologist and treated properly. The various Gastrointestinal problems needs to be assessed the common being worm-infestation Deforming on a regular basis brings down the abdominal pain considerably and also brings down incidence of Anemia. Thus Annual Gynaec examination and de-worming is recommended.

About 28% mentioned recurrent fever which may be due to communicable diseases such as Enteric Fever, malaria and also poor immunity levels leading to fever. Proper screening and evaluation of the disease is required and regular cleanliness awareness programmes decreases the incidence of the disease. Administration of Multivitamins improves immunity levels thus reducing infections and fever.

Twenty four percent of the respondents had eye strain which may be due to continuous usage of sewing machines. Annual vision test and refraction will identify the problem and suitable corrective measures can be taken .About the same percentage had skin problems which again

vows to improper hygiene the commonest of the skin problems identified are Fungal infections and Scabies. Proper hygiene and awareness brings about the decline in the disease.

More than half of the respondents (51%) had cough & cold owing to dust and lower immunity. The dust leads to allergy which in turn leads to chronic cough, other infectious diseases such as T.B should be ruled out as one of the important communicable disease wise predominant symptoms is cough. Annual health checkups with screening for T.B and also wearing masks at the time of work prevents both dust and transmission of diseases.

About 17% had mentioned Gastric Ulcers. Irregular food habits, tobacco and alcohol consumption is the main cause for gastric ulcers with stress the problem gets multiplied. Having food at regular intervals and de-addiction is the main remedial measures. Interaction with de-addiction centers, counseling are the most important measures which can be taken up to bring tackle this problem. Endoscopy to identify Gastric problems is recommended in case of chronic gastritis.






About 9% had bleeding & rectum Hemorrhoids and fissures in Ano are the major causes for the disease which is mainly due to gravity that means prolonged standing, break from work for a few minutes may bring down the problem hence brief gap in workers who has prolonged standing have to be let off for a brief period of 5 minutes is recommended. Proctoscopy in recommended cases will be helpful to identify the exact cause of bleeding.



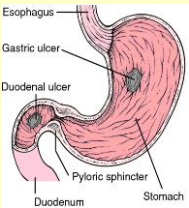
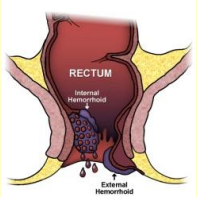
Nine percent of the respondents had Heart Diseases, 35 % had Hypertension both are due to life style changes and diet. Abstinence from addictions such as alcohol, tobacco and less stress prevents these diseases. Regular cardiac check-up such as ECG is recommended for women garment workers.

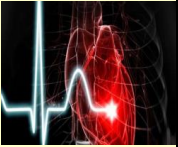


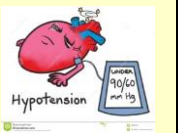

Almost 43% had Psychiatric Problem due to domestic and work place pressure. Early identification of this problem by counseling and adopting some recreational activities such as Yoga and sports may bring this problem under control to some extent. Hence it is recommended to include psychological counseling and recreational activities.

Nearly 42% had backache which is due to postural problems and par spinal spasm associated with backaches. Identification of exact ergonomic problems and having standard anthropometric data serves as a tool for identification and prevention of posture related problems.

Table 8.7: Analysis of Symptoms from medical perspective.

SL NO	Symptoms	Reasons for Clinical Symptoms	Remedial Measures	Further Action	Pictorial Representation
1	Pain In Bones	Prolonged working hours and Vitamin D Deficiency.	Screening for Vit.D and S.Calcium levels	If deficient to administer Vit.D sachets.	
2	Oral Problem	Tobacco Chewing and Improper oral Hygiene.	Annual Dental screening using Mobile units	Identified cases of pyorrhea and dental problems to be treated at Dental Colleges.	
3	Abdominal Pain	Mennorrhagia	Gynaecological screening to be done with USG Pelvis.	Treat Identified Gynaecological problems.	
4	Fever	Low Immunity Levels	Assess Vit.B12 Levels and Anaemia	Treat with Haemataenics	
5	Eye Strain	Looking at smaller objects for a longer duration	Annual screening of eyes by Ophthal camps.	Identify refractive errors and operate Cataract and other causes of blindness at a early stage	

SL NO	Symptoms	Reasons for Clinical Symptoms	Remedial Measures	Further Action	Pictorial Representation
6	Skin Problem	Inadequate hygiene	Skin Scrappings to be done	Treat Fungal infections with Antifungals and other drugs as specified.	
7	Cough & Cold	Lower Immunity Levels	Allergy detection tests to be conducted	Identified allergen to be treated with antibodies.	
8	Gastric & Ulcers	Untimely food, Prolonged working hours, stress at work place and at home.	Awareness to have timely food and counseling to be done. If Psychiatric problem identified to be referred by a Psychiatrist.	Endoscopy to be done to identify other causes of Gastric ulcers.	
9	Bleeding/Rectum	Hemorrhoids and Fissure in Ano	The cause to be identified by surgery camp.	Proctoscopy to be done.	

SL NO	Symptoms	Reasons for Clinical Symptoms	Remedial Measures	Further Action	Pictorial Representation
10	Heart Diseases	Stress and early onset of D.M.	Identification of Metabolic Syndrome.	ECG,ECHO, TMT to be done.	
11	Headache	Hypertension, Vision problems & stress	VT And Refraction to be done. Monitoring Blood Pressure on regular basis. Annual Counselling	Wearing Suitable spectacles. Treatment with anti hypertensives.	
12	Psychiatric Problem	Stress at work place and Domestic problems	COUNSELLING	Treated with Anti Anxiety drugs.	
13	LOW B.P	Anemia and IHD	Cardiac Evaluation and Complete Blood Picture to be done annually.	To go for routine CT-Angiography if ECG,TMT are positive. Treat the cause of Anaemia.	
14	Back Pain	Improper standing and gait leading to para spinal Spasm.	Anthropometric evaluation to be done	Identify IVDP by a minimal X-ray of spine.	

The survey findings have been supported by the observations made during the field study in different divisions of the manufacturing units selected for the study. Based on the analysis of the findings, suitable recommendations in terms of corrective actions have been suggested. The recommendations made have been from ergonomics and medical perspectives. The manufacturing units can consider the same and implement such that the ergonomic and medical health of the employees is improved.

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ANNEXURES

Questionnaire Formats:

A. Social-Demographic Profile of Women Workers					
1.	Company Name: _____				
2.	Name: _____				
3.	Age: _____				
4.	Occupation: _____				
5.	Marital Status:	Single <input type="checkbox"/>	Married <input type="checkbox"/>	Widow/Divorced <input type="checkbox"/>	
6.	Languages Known:	English <input type="checkbox"/>	Hindi <input type="checkbox"/>	Kannada <input type="checkbox"/>	Any other <input type="checkbox"/>
7.	Level of Education:	Literate <input type="checkbox"/>		Illiterate <input type="checkbox"/>	
8.	Family Type:	Joint Family <input type="checkbox"/>		Nuclear Family <input type="checkbox"/>	
9.	No. of children: _____				
10.	Education of children: _____				
11.	Family Members Support:			Yes <input type="checkbox"/>	No <input type="checkbox"/>
12.	Accommodation:	Own House <input type="checkbox"/>	Rented <input type="checkbox"/>	Paying Guest <input type="checkbox"/>	Relative Home <input type="checkbox"/>
13.	Vicinity of Workplace:	Nearer to the industry <input type="checkbox"/>	Within Bangalore <input type="checkbox"/>	Outskirt of Bangalore <input type="checkbox"/>	
If Yes, Please Specify the place:					
14.	Mode of Transportation to Office: _____				
15.	Addiction:	Alcohol <input type="checkbox"/>	Tobacco <input type="checkbox"/>	Smoking <input type="checkbox"/>	Other <input type="checkbox"/>

B. Occupational Status of Women Workers				
1.	Nature of Work:			
	Cutting	<input type="checkbox"/>	Checking	<input type="checkbox"/>
	Sewing	<input type="checkbox"/>	Ironing	<input type="checkbox"/>
	Stitching	<input type="checkbox"/>	Packing	<input type="checkbox"/>
	Finishing	<input type="checkbox"/>	Any other	<input type="checkbox"/>
2.	<hr/> Years of Experience:			
3.	<hr/> Per Day Working Hours:			
4.	Job Satisfaction Level:	Satisfied	Moderately Satisfied	Not Satisfied
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. Women-Oriented Profile				
1.	<hr/> Height (inch):			
2.	<hr/> Weight (Kg):			
3.	<hr/> Body Mass Index:			
4.	<hr/> Vaccination History:			
3.	Eye Sight:	Clear	Dull	
		<input type="checkbox"/>	<input type="checkbox"/>	
4.	Hearing:	Audible	Not Audible	
		<input type="checkbox"/>	<input type="checkbox"/>	
5.	Hygiene:	Good	Moderate	Poor

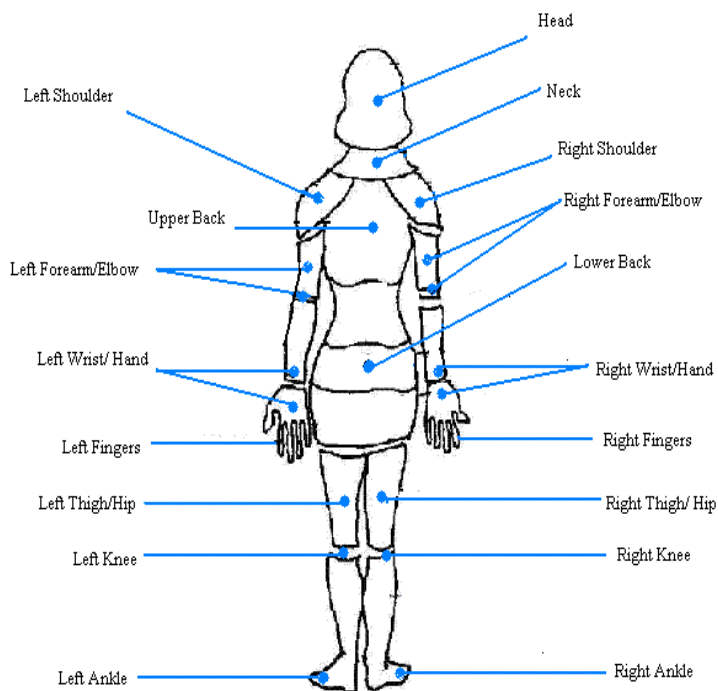
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Often	Not Often	Rarely
				Not Reported
6.	Frequency of Illness Experienced by Female Workers(Before Employment):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Frequency of Illness Experienced by Female Workers(After Employment):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Frequency of Absence in a month:			
9.	Causes of the absenteeism:			
	Family Commitment	<input type="checkbox"/>	Overtime Working Hours	<input type="checkbox"/>
	Lack of Transportation Service	<input type="checkbox"/>	Low Wage Payment	<input type="checkbox"/>
	Low Job Security	<input type="checkbox"/>	Poor Superior Subordinate Relationship	<input type="checkbox"/>
	Work Pressure	<input type="checkbox"/>	Illness	<input type="checkbox"/>
10.	Have you been a victim of following common illness in past six months:			
	Cough and Cold	<input type="checkbox"/>	Gastric Ulcer	<input type="checkbox"/>
	Fever	<input type="checkbox"/>	Piles	<input type="checkbox"/>
	Headache	<input type="checkbox"/>	TB	<input type="checkbox"/>
	Jaundice	<input type="checkbox"/>	Typhoid	<input type="checkbox"/>
	Malaria	<input type="checkbox"/>	Any other	<input type="checkbox"/>
11.	Have you been a victim of following specific illness:			
	a) Musculoskeletal Disorder			<input type="checkbox"/>
	Head	<input type="checkbox"/>	Arm and Elbow	<input type="checkbox"/>
	Neck	<input type="checkbox"/>	Forearm and wrist	<input type="checkbox"/>
	Trunk	<input type="checkbox"/>	Hand	<input type="checkbox"/>
	Upper Limb	<input type="checkbox"/>	Finger (s)	<input type="checkbox"/>
	Lower Limb	<input type="checkbox"/>	More than one body part listed above	<input type="checkbox"/>

	Shoulder	<input type="checkbox"/>	
	b) Respiratory Illness		<input type="checkbox"/>
	Chronic Bronchitis		<input type="checkbox"/>
	Chronic Bronchitis with Emphysema		<input type="checkbox"/>
	Bronchial Asthma		<input type="checkbox"/>
	c) Hyperactivity and Heat Burns		<input type="checkbox"/>
	d) Burning Mictrution		<input type="checkbox"/>
	e) Vibration Induced Syndrome		<input type="checkbox"/>
	f) Chronic Venous Insufficiency		<input type="checkbox"/>
	g) Carotid Atherosclerosis		<input type="checkbox"/>
	h) Cardio-Vascular Disease		<input type="checkbox"/>
12.	Have you undergone treatment for common illness:		
	Proper treatment was taken		<input type="checkbox"/>
	No treatment was taken		<input type="checkbox"/>
	Awaited to cure by itself		<input type="checkbox"/>
	Reported to the in-charge medical supervisor		<input type="checkbox"/>
13.	Category of medical services:		
	First Aid		<input type="checkbox"/>
	Primary Medical Services		<input type="checkbox"/>
	Intensive Medical Services		<input type="checkbox"/>

A. Physical Factors at Work						
1.	Does your work involve following constraints?					
		Never	Rarely	Sometimes	Often	All the time
	Repetitive Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Forceful Exertion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Static Contraction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Prolonged Static Loads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Bending	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Twisting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Stretching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Extending	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Heavy weight Lifting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sustained Sitting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustained Standing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Do you feel comfortable to work in standing/ sitting position for long working hours				Yes <input type="checkbox"/>	No <input type="checkbox"/>
2a	If yes, then have u been a victim of following symptoms:					
		Never	Rarely	Sometimes	Often	All the time
	Aching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cramping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Carelessness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Dizziness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Insomnia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Numbness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Stiffness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Swelling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tiredness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tangling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.	Have u been a victim of following injuries?	Yes	No
	Laceration	<input type="checkbox"/>	<input type="checkbox"/>
	Puncture	<input type="checkbox"/>	<input type="checkbox"/>
	Avulsion	<input type="checkbox"/>	<input type="checkbox"/>
	Hematoma	<input type="checkbox"/>	<input type="checkbox"/>
	Abrasions	<input type="checkbox"/>	<input type="checkbox"/>
	Contusions	<input type="checkbox"/>	<input type="checkbox"/>
	Fracture	<input type="checkbox"/>	<input type="checkbox"/>
	Sprain	<input type="checkbox"/>	<input type="checkbox"/>
	Burn	<input type="checkbox"/>	<input type="checkbox"/>

A. Pain Features			
1.	Do you suffer from any pain at present? (Mark on Body diagram): (1-No Pain 2- Low 3- Mild 4- High 5- Severe Pain)	Yes	No
		<input type="checkbox"/>	<input type="checkbox"/>



	Rating	1	2	3	4	5
a.	Head	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Neck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Right Shoulder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Left Shoulder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Upper Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Lower Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Right Forearm/Elbow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	Left Forearm/Elbow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Right Wrist/ Hand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j.	Left Wrist/ Hand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k.	Right Fingers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l.	Left Fingers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m.	Right Thigh/ Hip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n.	Left Thigh/Hip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o.	Right Knee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p.	Left Knee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q.	Right Ankle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r.	Left Ankle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	What do you think is the cause of your pain?					
	Bad posture for long-time				<input type="checkbox"/>	
	Incorrect way of Lifting a load				<input type="checkbox"/>	
	Injury				<input type="checkbox"/>	
	Usage of faulty equipment				<input type="checkbox"/>	
	Long working periods				<input type="checkbox"/>	
	Any other				<input type="checkbox"/>	
3.	Have you experienced the pain	Suddenly		Gradually		
		<input type="checkbox"/>		<input type="checkbox"/>		
4.	Does your pain remain	Constant		Intermittent		
		<input type="checkbox"/>		<input type="checkbox"/>		
5.		Yes		No		
	Do you believe physical activities at work are main reason for pain?	<input type="checkbox"/>		<input type="checkbox"/>		
6.	Do you believe inadequate rest intervals at work are the main contributors to pain?	<input type="checkbox"/>		<input type="checkbox"/>		

7.	Have you been absent from work due to extreme pain?	<input type="checkbox"/>	<input type="checkbox"/>
8.	Do you find difficulty in carrying out the following activity?		
		Never	Little Bit
		Moderate	Extreme
	Standing	<input type="checkbox"/>	<input type="checkbox"/>
	Sitting	<input type="checkbox"/>	<input type="checkbox"/>
	Walking	<input type="checkbox"/>	<input type="checkbox"/>
	Laying	<input type="checkbox"/>	<input type="checkbox"/>
	While Climbing Stairs	<input type="checkbox"/>	<input type="checkbox"/>
	Stooping	<input type="checkbox"/>	<input type="checkbox"/>

Section wise Questionnaire

A. Cutting Section				
1.	Are the tables in the cutting section?		Adjustable	Not Adjustable
			<input type="checkbox"/>	<input type="checkbox"/>
			Yes	No
2.	Do you find comfortable to work with actual height of the table?		<input type="checkbox"/>	<input type="checkbox"/>
3.	Do you feel comfortable to work in standing position for long duration?		<input type="checkbox"/>	<input type="checkbox"/>
4.	Does your work demand extreme bending?		<input type="checkbox"/>	<input type="checkbox"/>
5.	Do you have seating arrangement in your workstation		<input type="checkbox"/>	<input type="checkbox"/>
6.	Do you suffer from extreme heat cramps in the fusing Section?		<input type="checkbox"/>	<input type="checkbox"/>
7.	Have you ever suffered from some injury during work?		<input type="checkbox"/>	<input type="checkbox"/>

	If Yes, Please Specify			
8.	Have you been provided with Personal Protective Equipments?		<input type="checkbox"/>	<input type="checkbox"/>
	Equipments :	Mask	Metal gloves	Cap
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Do you use them in work?		<input type="checkbox"/>	<input type="checkbox"/>

	Do you find comfortable to work with the PPE?	<input type="checkbox"/>	<input type="checkbox"/>			
9.	Rating	1	2	3	4	5
	How much do you rate you work environment?					
	How much do you rate the overall work table in terms of (Height, Space, Adjustable Features)					

*(The scale indicates 1- Poor, 2- Average 3- Good 4- Very Good 5- Excellent)

	B. Sewing Section						
1.	Seat Type in Sewing Section						
2.	Do you feel the chair provided is					Stable	Comfortable
						<input type="checkbox"/>	<input type="checkbox"/>
3.	Can you adjust the chair for your comfort?					Yes	No
						<input type="checkbox"/>	<input type="checkbox"/>
4.	Are the sewing machines in good working condition					<input type="checkbox"/>	<input type="checkbox"/>
5.	Do you feel comfortable to work in sitting position for long duration?					<input type="checkbox"/>	<input type="checkbox"/>
6.	Does the work demand you to be in bending position for long duration?					<input type="checkbox"/>	<input type="checkbox"/>
7.	Do you feel comfortable to work in congested area?					<input type="checkbox"/>	<input type="checkbox"/>
8.	Does your work provide?						
	Safe working environment					<input type="checkbox"/>	<input type="checkbox"/>
	Better seating arrangement					<input type="checkbox"/>	<input type="checkbox"/>
	Enough Leg space for the movement of your legs					<input type="checkbox"/>	<input type="checkbox"/>
9.	Have you ever suffered from some injury during work?					<input type="checkbox"/>	<input type="checkbox"/>

	If Yes, Please Specify						
10.	Does your work involve?						
	Repetitive use of foot pedals					<input type="checkbox"/>	<input type="checkbox"/>
11.	Have you been provided with Personal Protective Equipments?					<input type="checkbox"/>	<input type="checkbox"/>
	Equipments	Apron	Cap	Gloves	Mask	Goggles	Ear Plugs
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Do you use them in your work?					<input type="checkbox"/>	<input type="checkbox"/>

	If No, Please Specify						
13.	Rating	1	2	3	4	5	
	How much do you rate your chair overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	How much do you rate you work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	How much do you rate the overall work table in terms of (Height, Space, Adjustable Features)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. Ironing Section						
1.	Are the tables in Ironing Section?	Adjustable			Not Adjustable	
		<input type="checkbox"/>			<input type="checkbox"/>	
2.	Do you feel comfortable to work in standing position for long duration?				Yes	No
					<input type="checkbox"/>	<input type="checkbox"/>
3.	Do you feel the level of exposure to heat is high?				<input type="checkbox"/>	<input type="checkbox"/>
4.	Have you been provided with Personal Protective Equipments?				<input type="checkbox"/>	<input type="checkbox"/>
	Do you use them in your work?				<input type="checkbox"/>	<input type="checkbox"/>

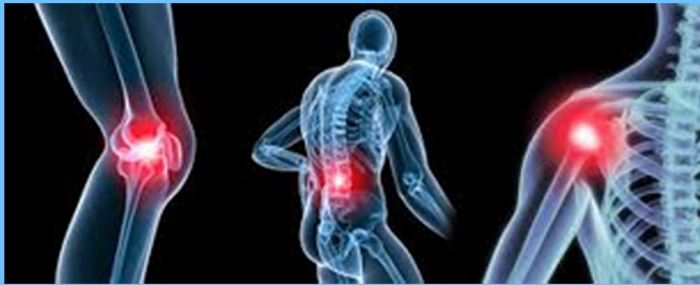
	If No, Please Specify					
5.	Do you feel the iron box is heavy to lift?				<input type="checkbox"/>	<input type="checkbox"/>
6.	Have you been provided with mats to prevent from electric shock?				<input type="checkbox"/>	<input type="checkbox"/>
7.	Rating	1	2	3	4	5
	How much do you rate you work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	How much do you rate the overall work table in terms of (Height, Space, Adjustable Features)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D. Finishing Section						
1.	Are the tables in Finishing Section?	Adjustable			Not Adjustable	
		<input type="checkbox"/>			<input type="checkbox"/>	
					Yes	No
2.	Do you find comfortable to work with actual height of the table?				<input type="checkbox"/>	<input type="checkbox"/>
3.	Do you feel comfortable to work in standing position for long duration?				<input type="checkbox"/>	<input type="checkbox"/>
4.	Does your work demand extreme bending?				<input type="checkbox"/>	<input type="checkbox"/>
5.	Do you have seating arrangement in your workstation				<input type="checkbox"/>	<input type="checkbox"/>
6.	Do you feel the instruments used by you are heavy to lift?				<input type="checkbox"/>	<input type="checkbox"/>
7.	Have you been provided with Personal Protective Equipments?				<input type="checkbox"/>	<input type="checkbox"/>
	Equipments:	Apron	Gloves	Mask	Cap	

		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Do you use them in your work?				<input type="checkbox"/>	<input type="checkbox"/>
	If No, Please Specify					
8.	Rating	1	2	3	4	5
	How much do you rate you work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	How much do you rate the overall work table in terms of (Height, Space, Adjustable Features)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E. Packing Section						
1.	Are the tables in Packing Section?			Adjustable	Not Adjustable	
				<input type="checkbox"/>	<input type="checkbox"/>	
					Yes	No
2.	Do you find comfortable to work with actual height of the table?				<input type="checkbox"/>	<input type="checkbox"/>
3.	Do you feel comfortable to work in standing position for long duration?				<input type="checkbox"/>	<input type="checkbox"/>
4.	Does your work demand extreme bending?				<input type="checkbox"/>	<input type="checkbox"/>
5.	Do you have seating arrangement in your workstation				<input type="checkbox"/>	<input type="checkbox"/>
6.	Do you feel the instruments used by you are heavy to lift?				<input type="checkbox"/>	<input type="checkbox"/>
7.	Have you been provided with Personal Protective Equipments?				<input type="checkbox"/>	<input type="checkbox"/>
	Equipments:	Apron	Gloves	Mask	Cap	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Do you use them in your work?				<input type="checkbox"/>	<input type="checkbox"/>
	If No, Please Specify					
8.	Rating	1	2	3	4	5
	How much do you rate you work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	How much do you rate the overall work table in terms of (Height, Space, Adjustable Features)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Musculoskeletal Disorders



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