



# “Workplace Risk And Safety Practices Among Women Employees Working In Food Processing Industries”

(Mohanapriya.S<sup>1</sup>, Lokesh.K<sup>2</sup>, Karthigeyan.S<sup>3</sup>, Suruthi.R<sup>4</sup>, Srivithya.J<sup>5</sup>)

1. Guest Faculty, B.Voc. Food Processing, The Gandhigram Rural Institute-Deemed to Be University, Gandhigram.

2,3,4,5. Student, B.Voc. Food Processing, The Gandhigram Rural Institute-Deemed to Be University, Gandhigram.

## Abstract:

Working women pickup, a considerable measure of new skill and abilities associated with driving an organization as well as with personal improvement. In this study, we assess the **"Workplace Risk and Safety Practices Among Women Employees Working in Food Processing Industries"**. The field study was conducted to focus on their personal information, anthropometric measurement, job-related information, health status, workplace risk their facilities and safety practices to be followed in food industry. The data was collected by face-to-face interview method using a standard questionnaire with a simple random sampling method. The Selected samples were collected from the districts of Dindigul, Madurai and Tiruvannamalai. Among the selected women employees most of them in the age range of 20-30 from this 88% of samples were married. In this study, it is noted that 23% people are in normal BMI, 18% samples are overweight. 92% of employees are having weekly off and regular day shift time. Among them 98% of women workers haven't felt any gender discrimination, 8% people are having skin related problems and 44% are facing workplace hazard. The 50% of female workers are working with heavy machines never faced any chemical exposure, equipment's/machinery accidents and physical hazards. Among the samples are 100% of selected samples showed that industries provide safety gears for the women workers. Among the samples 92% of employees stated that in their industry they prioritize the women's workplace safety. 82% of selected samples told that they didn't provide any transport facilities for women workers is the only disadvantage for them to reach on time to the industry. The selected samples showed that 100% of the women workers are trained in basic first aid to handle immediate injuries, burn and so on. The samples showed that 80% of industries have medical facilities, 100% of the employees consider that the industries provide safety audit orientation program, continuous power supply, proper toilet facility, sanitizing facility and drainage facility.

**Keywords:** Workplace, Women, Safety, Risk, Hazard.

## Introduction

In recent decades, the food processing industry has experienced significant growth, driven by the global demand for packaged and processed food products. However, alongside this growth, concerns surrounding the safety and well-being of employees, particularly women, have come to the forefront. A significant part of the workforce in food processing plants consists of women, who often take on a variety of roles ranging from production and packaging to quality control and maintenance. Despite the fact there have been advancements in achieving gender equality in the workforce, the specific risks that women encounter in these industries are still insufficiently addressed in numerous instances.

Workplace safety practices are crucial in protecting all employees from physical, mental, and health hazards. For women, however, additional challenges may arise due to the nature of the tasks, environmental factors, and potential exposure to harmful substances. Factors such as ergonomics, machinery safety, harassment, reproductive health concerns, and long working hours can contribute to the risks women face in the food processing industry. Understanding these risks and implementing effective safety protocols is not only a matter of compliance but also an essential part of ensuring the overall productivity and well-being of women employees. Women workers who balance both their jobs and personal lives often face the challenge of managing multiple responsibilities, including career demands, household duties, and caregiving. This lifestyle balance can lead to stress and fatigue, highlighting the importance of supportive workplace policies and a healthy work-life equilibrium for their overall well-being. (Milupi *et.al.*, 2020)<sup>1</sup>.

This study aims to explore the workplace risks that women face in food processing industries and assess the effectiveness of existing safety practices in mitigating these hazards. By identifying gaps in safety protocols and suggesting improvements, it is possible to create a safer and more inclusive work environment for all employees, fostering both gender equality and a culture of well-being

## Review of Literature

One of the greatest challenges facing society in this century, is the aging population with a growing elderly population along with industrialization, and an increase in the number of working women. Employment rates are generally lower among women and older workers. In 2015, the employment rate for men aged 20 to 64 stood at 75.9%, as compared with 64.3% for women. A longer-term comparison shows that while the employment rate for men in 2015 was the same as 10 years earlier (75.9% in 2005), there was a marked increase in the proportion of women in employment by 4.3 percentage points from 60.0% in 2005.

Work environments and shift patterns may prevent access to natural light - an important part of a healthy environment for all workers. Lack of natural light can affect the body's ability to absorb calcium, and can also affect mood. The situation can also be influenced by workplace culture, policies, and practices. Insufficient rest breaks or working hours that are too long can also heighten the likelihood of health issues, stress, and fatigue. Due to tiredness and night sweats, women may become temporarily more prone to work-related fatigue and stress, which are associated with a diminished immune response and heightened vulnerability to infections. Lack of exercise and/or a sedentary lifestyle is linked to increased risks of osteoporosis, cancer, diabetes, and cardiovascular disease in older women. Ready access to suitable washing and toilet facilities is important for women, particularly during menopause. Adequate workplace sanitary facilities with private washing and changing facilities are needed by those concerned (Jafari *et.al.*, 2017)<sup>2</sup>.

Women have played a vital role in the health and safety field, offering unique perspectives, skills, and strengths. Through enhancing risk evaluations, enacting successful policies, and increasing awareness of health and safety matters, they have contributed to the establishment of workplaces that are safer, healthier, and more inclusive. In addition, they have demonstrated leadership, resilience, and innovation, paving the way for a more diverse and equitable workforce. Women's contribution to health and safety in the workplace is essential for creating safe and healthy work environments. (Mubita *et.al.*, 2023)<sup>3</sup>.

This study aims to address this workplace risk and safety practices gap by conducting a comprehensive assessment of the workplace risk and safety of women employees in the food processing industry. By using a mixed-methods approach that combines quantitative and qualitative data, this study will provide a nuanced

understanding of the lifestyle challenges faced by women employees in this sector and identify potential areas for intervention.

## METHODOLOGY

### 3.1. Research Methodology

Research methodology is used to determine the risk and safety practices of women employees working in the food processing industries in Tiruvannamalai, Madurai, and Dindigul districts.

### 3.2. Selection of the sample

The study sampling frame consisted of 50 employees working in food processing industries. This consisted of the following industries pickle, masala, and dairy. The sampling frame was then exposed to a simple random sampling method. In this method, respondents are selected randomly for each unit by the unit based on our questionnaire only women employees were selected for the study.

### 3.3. Source of data

The study is based on both primary and secondary sources of information.

- Primary data

Primary data is directly collected from the respondent through various methods such as face-to-face interviews based on a set of well-structured questions and interaction with respondents.

- Secondary data

The secondary data is sources of second-hand information collected through books, journals, reports, and research articles.

### 3.4. Data collection

Data collection is an important aspect of the research design. The collection of the data for the research study was in the form of primary data. Firstly, the collection of industry details and seeking permission from the management for a survey in Dindigul, Madurai, and Tiruvannamalai. The interview schedule was used to collect the primary data based on the questionnaire. This study was conducted for two months in Tamil Nadu.

## RESULTS AND DISCUSSION

### 4.1. Personal information:

#### 4.1.1. Age:

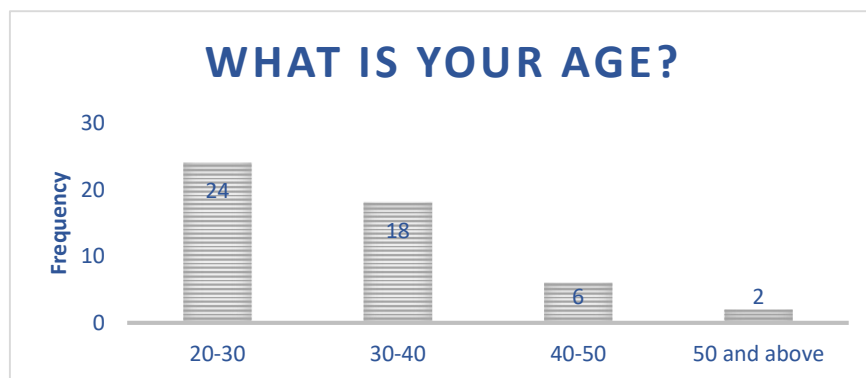


Figure-1

Figure 1 shows that most of the selected women employees are in the age range of 20-30.

#### 4.1.2. Marital status:

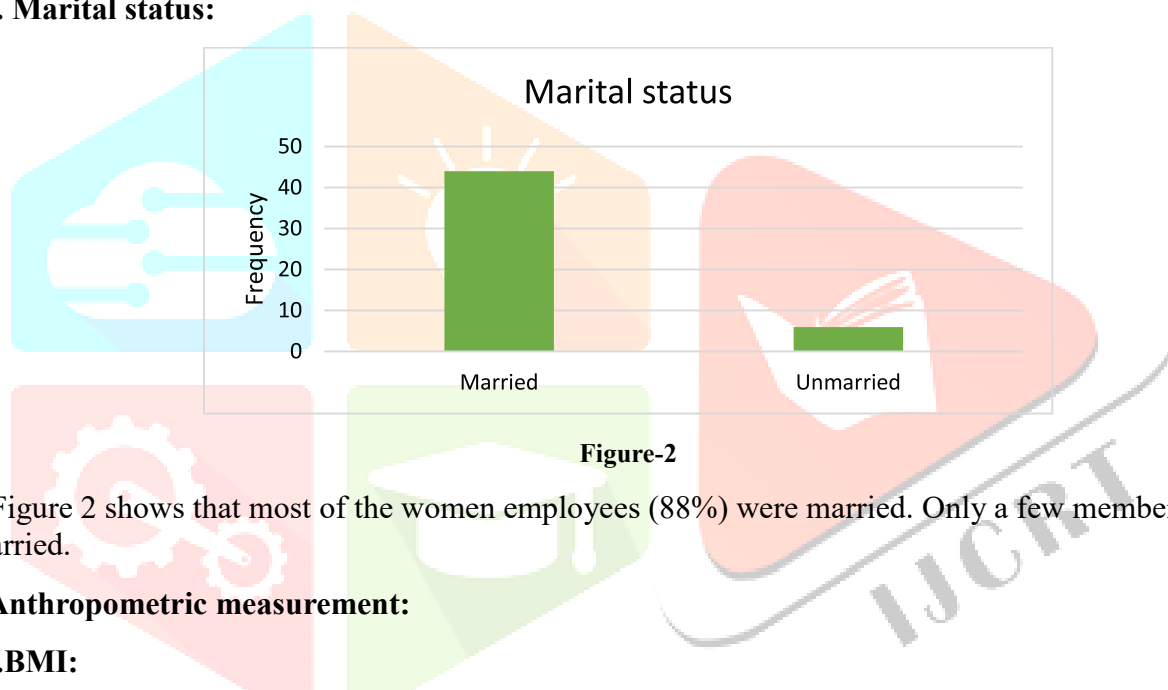


Figure-2

Figure 2 shows that most of the women employees (88%) were married. Only a few members are unmarried.

### 4.2. Anthropometric measurement:

#### 4.2.1. BMI:

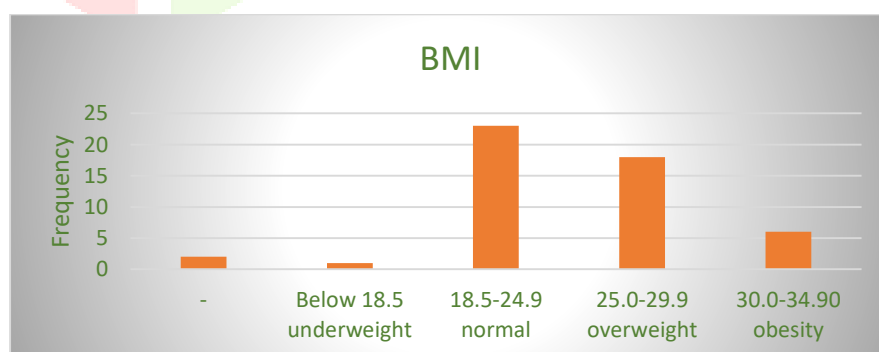


Figure-3

Body Mass Index (BMI) is a measurement of a person's weight with respect to his or her height. It is more of an indicator than a direct measurement of a person's total body fat. Figure 3 shows that selected women employees noted that 23% of people have in normal BMI 18% samples are overweight because they weren't aware of their health concerns.

### 4.3. Nature of the job:

#### 4.3.1. Weekly off

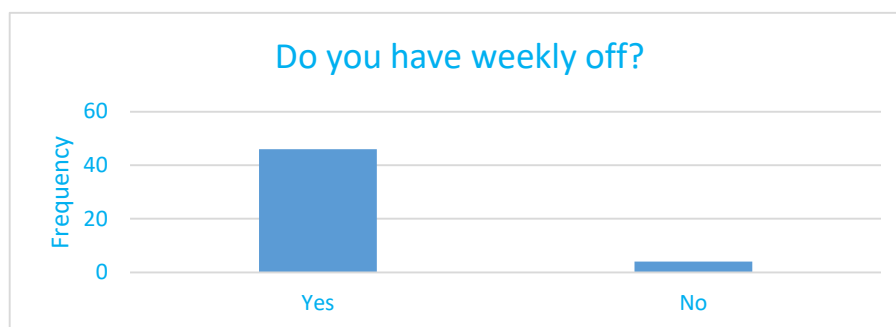


Figure-4

Figure 4 shows that 92% of employees had weekly off on a rotational basis and regular day shift time. But they didn't take leave whenever they needed, because they needed to interchange the person instead of them. The major disadvantage of the work shift they faced those improper dietary patterns due to unconventional shift time among employees.

### 4.4. Workplace risk:

#### 4.4.1. Gender discrimination

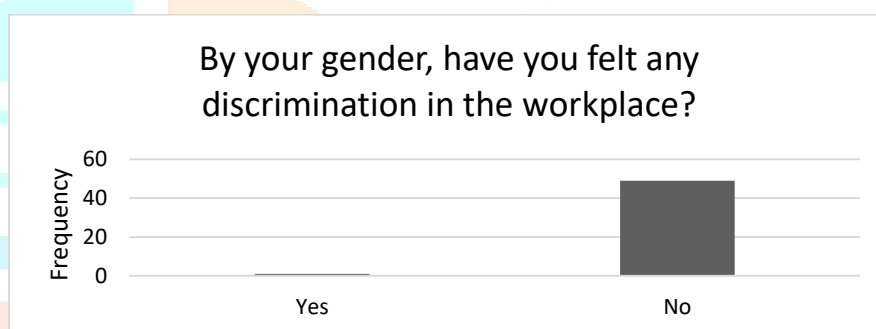


Figure-5

“All human beings are born free and equal in dignity and rights” and “Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, birth or other status.” Figure-5 shows that 98% of women workers haven't felt any gender discrimination because both the men and women workers are treated equally during work shift time.

#### 4.4.2. Workplace hazards:

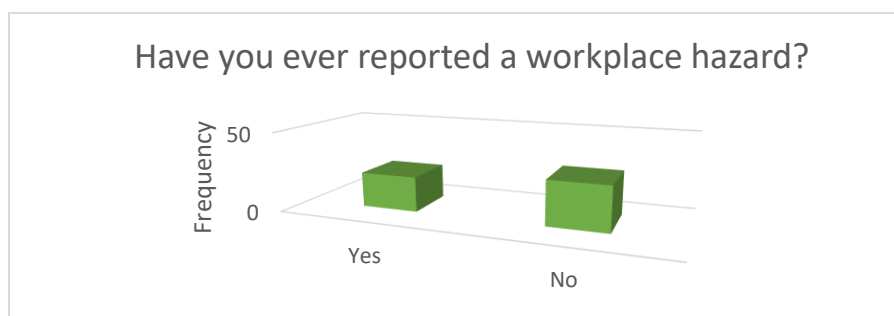
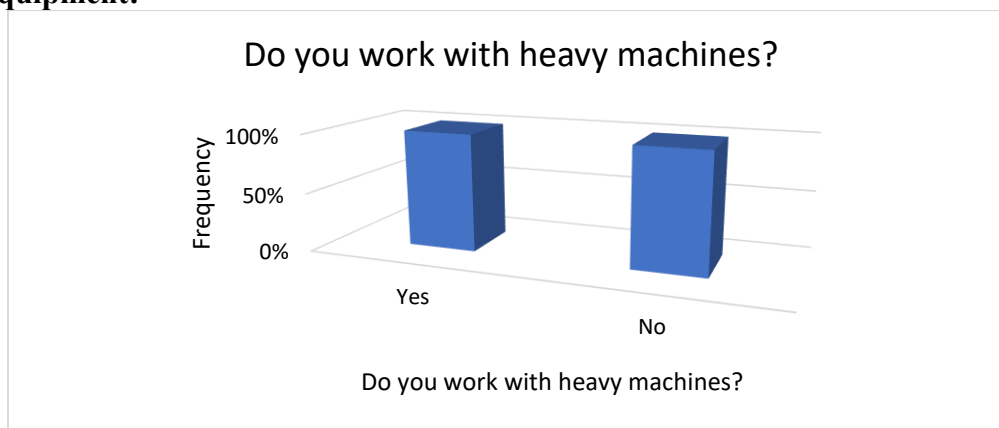


Figure-6

The figure shows that 44% of women employees are facing workplace physical hazards like (noise, heat, falls, radiation, vibration, and slips).

#### 4.4.3. Heavy equipment:

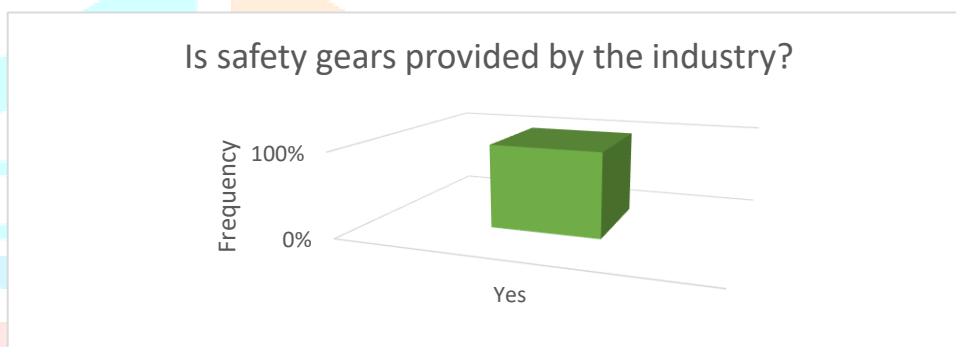


**Figure-7**

This figure-7 shows that of selected women employees, 50% of female workers are working with heavy machines like VAT, dairy bagging, blenders, centrifugal shifters, etc and 50% have never faced any chemical exposure, equipment/machinery accidents, and physical hazards.

#### 4.5. Safety practice:

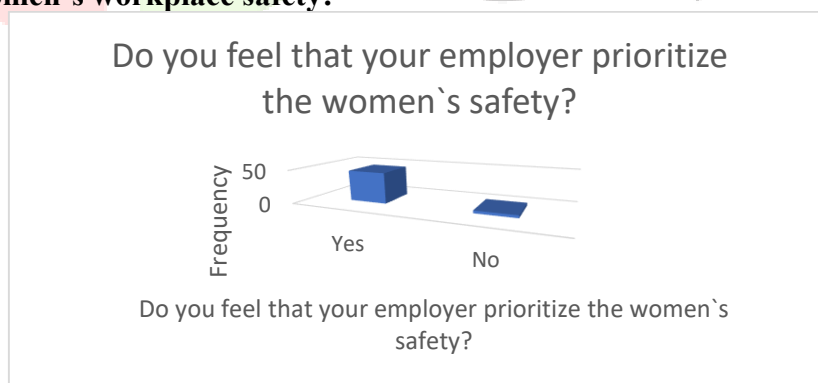
##### 4.5.1. Safety gears:



**Figure-8**

This figure-8 shows that 100% of industries provide safety gear for women workers like hair nets, gloves, aprons, boots, face masks and goggles. Work clothes should be appropriate for employees to protect the food from contamination. Ideally, they should be light-coloured with no external pockets.

##### 4.5.2. Prioritizing women's workplace safety:



**Figure-9**

This figure shows that 92% of employees stated that in their industry, they prioritize women's workplace safety like inclusive workplace culture, reporting problems and rectifying by the employer, providing training about the work.

#### 4.6. Workplace facility:

##### 4.6.1. Transport facility:

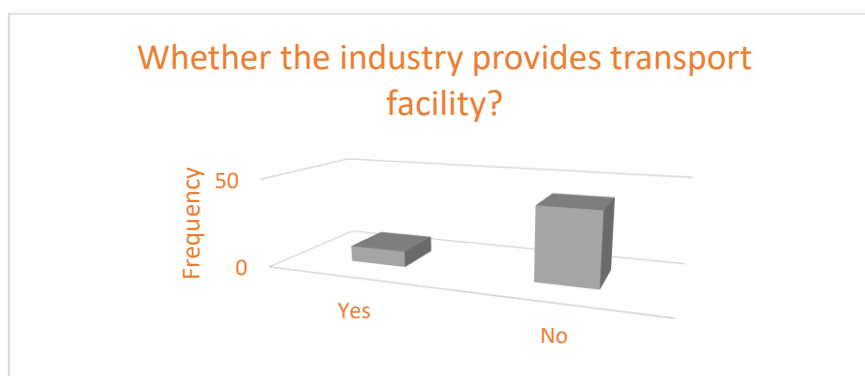


Figure-10

This figure-10 shows that 82% of selected samples said that they didn't provide any transport facilities for women workers, which is the only disadvantage for them to reach the industry on time.

#### 4.7. Medical Facility

##### 4.7.1. Trained in basic first aid

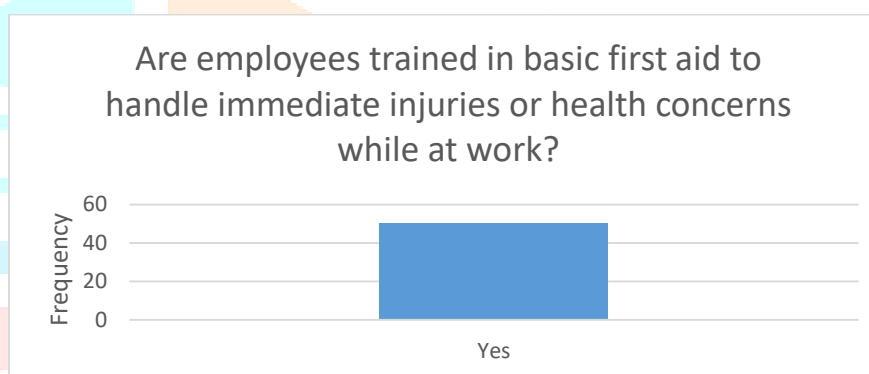


Figure-11

The figure-11 shows that 100% of the women workers are trained in basic first aid to handle immediate injuries, burns, and so on. The basic first aid kit is placed at the workplace for treating the affected person.

##### 4.7.2. Medical facilities for the women employees:

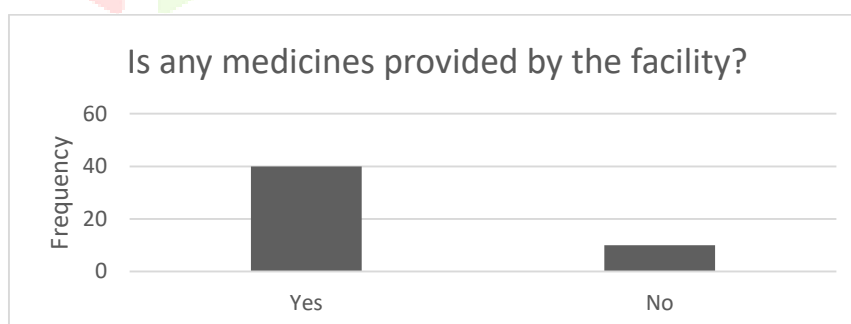


Figure-12

This figure-12 shows that 80% of the women workers said that the medical facilities provided by the industry like first aid, general medical care including master health check-ups, and medical insurance facilities are also available for them.



#### 4.8. Workplace facility:

##### 4.8.1. Continuous Power Supply, Proper Toilet Facility, Sanitizing Facility, And Drainage Facility:

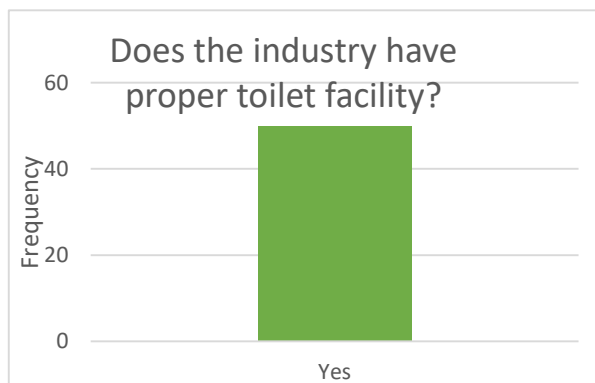


Figure-13

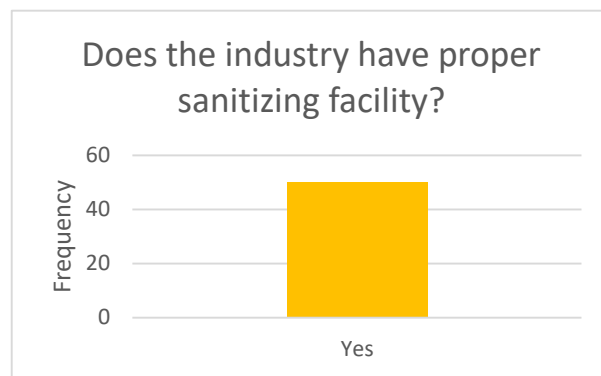


Figure-14

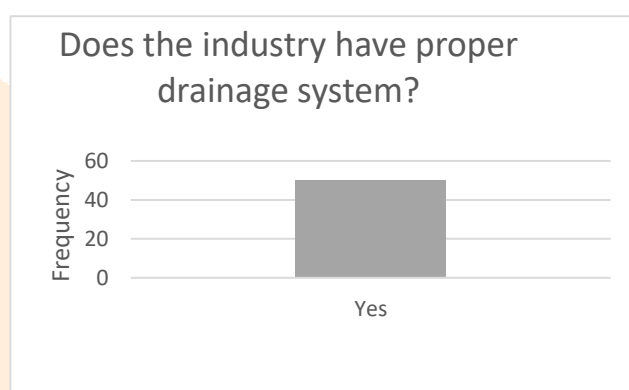


Figure-15

These figures-13,14,15 shows that 100% of the employees consider that the industries provide a safety audit orientation program, continuous power supply, proper toilet facility, sanitizing facility, and drainage facility.

#### 4.9. Health status

##### 4.9.1. Skin problems

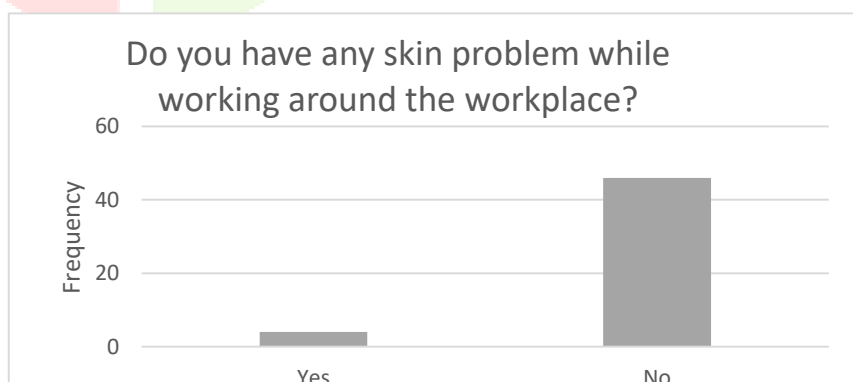
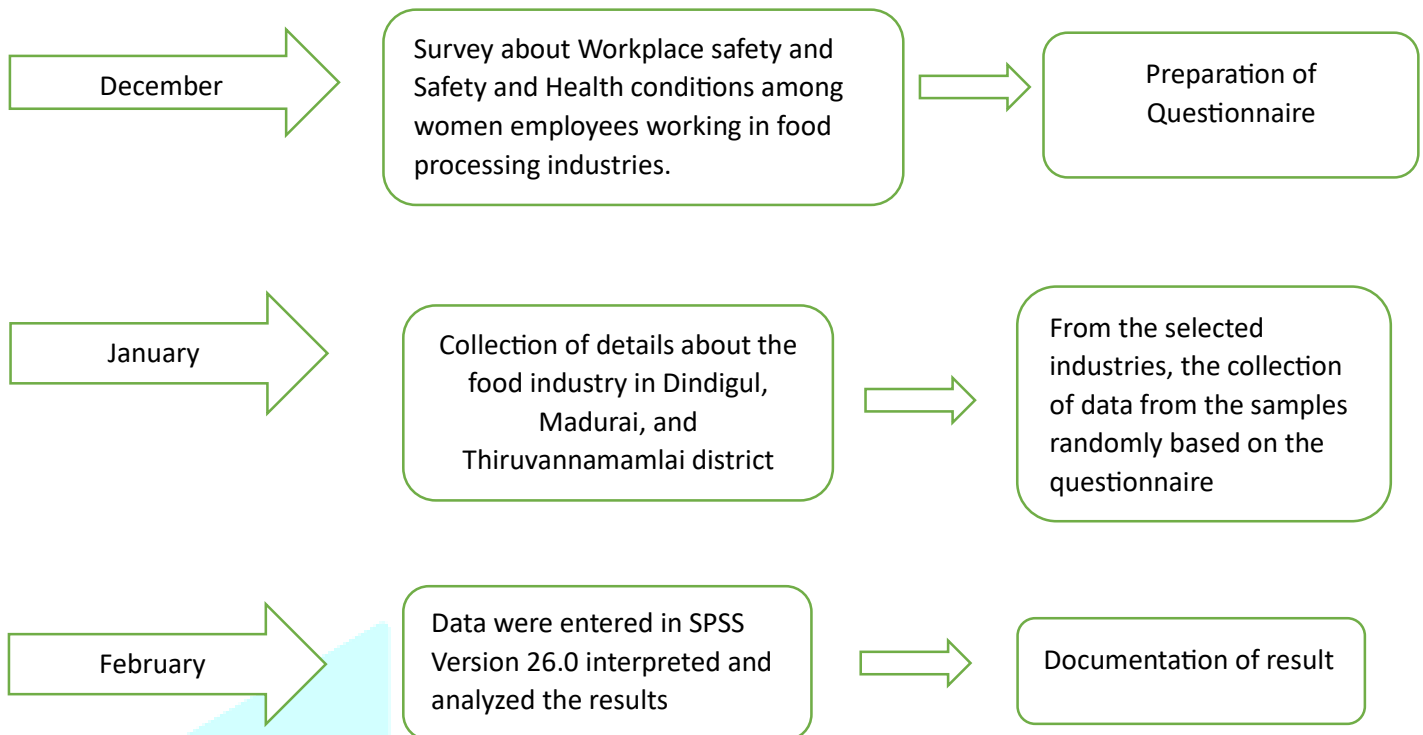


Figure-16

Figure -16 shows that 8% of people had skin-related problems like irritation, itching, allergic and dermatitis due to prolonged exposure to water, chemicals or detergents.



**Study Period:****Conclusion:**

Working women pick up a considerable measure of new skills and abilities associated with driving an organization as well as with personal improvement. The study shows that the women workers had the safety gear for working. The orientation program also conducted for them about workplace safety and hygiene is given by the industry to promote their health and well-being. They never felt any gender discrimination. The issues they faced were rectified by the higher authorities. Facilities like transport, toilets, personal lockers, health insurance, and medical facilities are also available for them. Only the disadvantage was that there was no transport facility for them to reach the industry. Most of them are difficult to reach on time to the industry. **"Think like a queen. A queen is not afraid to fail. Failure is another stepping stone to greatness." - Oprah Winfrey**

**Reference**

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