

**A STUDY ON OCCUPATIONAL HEALTH HAZARDS AMONG WORKING WOMEN**

**Ms. L.MONISHA M.Com.,M.Phil.,(9789906378)**

**Mrs.E.MARIA JENCY M.Com.,M.Phil.,(9176780955)**

**Assistant Professors, SRM Institute of Science and Technology**  
**Ramapuram Campus**

**ABSTRACT**

Occupational safety and health (OSH) also commonly referred to as occupational health and safety (OHS) or workplace health and safety (WHS) is an area concerned with the safety, health and welfare of people engaged in work or employment. "Health" has been defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Occupational health deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. Occupational health is a multidisciplinary field of healthcare concerned with enabling an individual to undertake their occupation, in the way that causes least harm to their health. Health has been defined as it contrasts, for example, with the promotion of health and safety at work, which is concerned with preventing harm from any incidental hazards, arising in the workplace. The Study aims at identifying work hazards of working women, related to occupational, work and work environment. The study was done using Female employees and questionnaire was distributed to 120 respondents in Chennai city. Percentage analysis, Chi-Square test and weighted average method were used for analysis of data.

**KEY WORDS:**Health Hazards, Safety, Working women, Workforce, Conducive working Environment.

**INTRODUCTION**

Work provides many economic and other benefits, though it is, a wide array of workplace hazards also present risks to the health and safety of people at work. These include but are not limited to, "Physical factors, adverse ergonomic conditions, allergens, a complex network of safety risks," and a broad range of psychosocial risk factors. Personal protective equipment can help protect against many of these hazards. Physical hazards affect many people in the workplace, it includes ergonomic hazard, radiation, Heat and cold stress, vibration, etc, and

psychosocial hazards include risks to the mental and emotional well-being of workers, such as feelings of job insecurity, long work hours, and poor work-life balance.

### **SCOPE OF THE STUDY**

- The scope of the study is to understand the various aspects and concepts of occupational health hazards among working women. The study shows the relationship between occupational health hazards and the working women.

### **OBJECTIVE OF THE STUDY**

- To identify work hazards related to occupational, work and work environment.
- To identify the type of health issue suffered by working women.
- To offer suggestions for the better improvement of their health.

### **LIMITATIONS OF THE STUDY**

- The study is confined for a specific period and hence the sample size is 120.
- The data collected is primary and hence there may be personal bias.
- The sample size consists of female respondents only.
- The study covers only the limited area.

### **REVIEW OF LITERATURE**

**JinkyLeilanie Lu, “Occupational Health and Safety of Women Workers: Viewed in the Light of Labor Regulations” in ‘Journal of International Women’s Studies’ (2011).** This article is an analytic and discursive review of data and studies about women workers in the manufacturing sector in the Philippines in the light of labour regulations. The analyses focus on the following: occupational health and safety, health and safety programs, provision of facilities at work, and labour issues pertaining to women workers. Policy and advocacy work implications are recommended based on the discursive analysis.

### **RESEARCH METHODOLOGY**

**Research design:** Descriptive research

**Sample design:** Convenience sampling techniques

**Collection of data**

1. **Primary data:** Structured questionnaire.

2. **Secondary data:** Data collected through journals and magazines
3. **Sample size:** 120
4. **Sample area :** Chennai city

#### **TOOLS USED FOR ANALYSIS**

- Percentage Analysis
- Chi – square analysis
- Weighted Average

#### **ANALYSIS AND FINDING**

##### **Percentage analysis:**

It is used to find out percentage of respondents from the total number of respondents. It compares the relative terms.

$$\text{PERCENTAGE} = \frac{\text{NUMBER OF RESPONDENTS}}{\text{TOTAL NUMBER OF SAMPLES}} \times 100$$

<b>Demographic Profiles</b>	<b>Frequencies</b>	<b>Percentage</b>
<b>GENDER</b>		
Male	0	0
Female	120	100
<b>Total</b>	<b>120</b>	<b>100</b>
<b>AGE</b>		
20-30	75	62
30-40	38	32
Above 40	7	6
<b>Total</b>	<b>120</b>	<b>100</b>
<b>EDUCATION</b>		
UG	51	42
PG	69	58
<b>Total</b>	<b>120</b>	<b>100</b>
<b>EXPERIENCE</b>		

Below 5 year	72	60
5-10 years	33	28
Above 10 years	15	12
<b>Total</b>	<b>120</b>	<b>100</b>
<b>MONTHLY INCOME</b>		
10,000-20,000	72	60
20,000-30,000	38	32
Above 30,000	10	8
<b>Total</b>	<b>120</b>	<b>100</b>
<b>MARITAL STATUS</b>		
Single	42	35
Married	78	65
<b>Total</b>	<b>120</b>	<b>100</b>

Source: Questionnaire

### ***FINDINGS***

By applying percentage analysis the following inferences were found:

- 63% of the Working women belong to the age group of 20-30
- 100% of respondents are female.
- 56% of the respondents are post graduates.
- 60% of the respondents have the experience of below 5 years.
- 50% of the respondents fall under the salary group of 10,000 to 20,000.
- 65% of the respondents are married.

### **CHI –SQUARE ANALYSIS**

#### **RELATIONSHIP BETWEEN WORKING HOURS AND PHYSIOLOGICAL & PSYCHOLOGICAL PROBLEMS**

**H<sub>0</sub>**: There is no relationship between working hours and physiological & psychological problems.

**H<sub>1</sub>**: There is relationship between working hours and physiological & psychological problems.

**Table No: 4.1**

**Table Showing Chi – Square Result of Relationship Between Working Hours And  
Physiological & Psychological Problems**

	<b>Relationship</b>	<b>Chi – square</b>	<b>DOF</b>	<b>Asymp .sig</b>	<b>Accept/Reject</b>
(a)	Working hours and health issue	30.79	12	0.002	Reject
(b)	Working hours and absenteeism	5.545	12	0.937	Accept
(c)	Working hours and denied a job	15.527	9	0.077	Accept
(d)	Working hours and ability to work	2.828	3	0.419	Accept
(e)	Working hours and illness	7.333	12	0.835	Accept
(f)	Working hours and tea (or) coffee addiction	19.27	15	0.202	Accept
(g)	Working hours and chest problem & cough	40.152	12	0	Reject
(h)	Working hours and hearing & vision problem	15.28	12	0.226	Accept
(I)	Working hours and muscles problem	39.495	12	0	Reject
(j)	Working hours and skin problem	43.729	12	0	Reject

**Inference:**

From the above table it is found that there is no relationship between working hours and physiological & psychological problems, hence null hypothesis (H<sub>0</sub>) is accepted. But in case of working hours and health issue, working hours and muscles problem, working hours and skin problem there is a relationship between working hours and physiological & psychological problems so the null hypothesis (H<sub>0</sub>) is rejected in this case.

**RELATIONSHIP BETWEEN JOB DESCRIPTION AND PHYSIOLOGICAL &  
PSYCHOLOGICAL PROBLEMS**

**H<sub>0</sub>:** There is no relationship between job description and physiological & psychological problems.

**H<sub>1</sub>:** There is relationship between job description and physiological & psychological problems.

**Table No: 4.2**

**Table Showing Chi – Square Result of Relationship Between Job Description And  
Physiological & Psychological Problems**

<b>S,NO</b>	<b>Relationship</b>	<b>Chi – square</b>	<b>DOF</b>	<b>Asymp .sig</b>	<b>Accept / Reject</b>
(a)	Job description and health issue	25.477	20	0.184	Accept
(b)	Job description and absenteeism	17.011	20	0.652	Accept
(c)	Job description and denied a job	10.071	15	0.815	Accept
(d)	Job description and ability to work	2.171	5	0.825	Accept
(e)	Job description and illness	28.241	25	0.297	Accept
(f)	Job description and tea (or) coffee addiction	37.091	20	0.011	Reject
(g)	Job description and chest problem & cough	31.372	20	0.05	Reject
(h)	Job description and hearing & vision problem	27.86	20	0.113	Accept
(I)	Job description and muscles problem	14.271	20	0.817	Accept
(j)	Job description and skin problem	27.924	20	0.111	Accept

**Inference:**

From the above table it is found that there is no relationship between job description and physiological & psychological problems, hence null hypothesis (H<sub>0</sub>) is accepted. But in case of Job description and tea (or) coffee addiction, Job description and chest problem & cough, there is

a relationship between job description and physiological & psychological problems so the null hypothesis (H<sub>0</sub>) is rejected in this case

**RELATIONSHIP BETWEEN WORK HOURS AND REASONS FOR HEALTH HAZARDS**

**H<sub>0</sub>:** There is no relationship between work hours and reasons for health hazards  
**H<sub>1</sub>:** There is relationship between work hours and reasons for health hazards

**Table No: 4.3**

**Table Showing Chi – Square Result of Relationship Between Work Hours And Reasons For Health Hazards**

<b>S.NO</b>	<b>Relationship</b>	<b>Chi -square</b>	<b>DOF</b>	<b>Asymp.sig</b>	<b>Accept /Reject</b>
(a)	work hours and job function	15.751	12	0.203	Accept
(b)	work hours and hazardous waste	21.7	12	0.041	Reject
(c)	work hours and aggression	16.38	12	0.174	Accept

**Inference:**

From the above table it is found that there is no relationship between work hours and reasons for health hazards. Hence null hypothesis is accepted. But in case of work hours and hazardous waste, the null hypothesis (H<sub>0</sub>) is rejected. This shows that there is association between work hours and hazardous waste affecting health of workers.

**RELATIONSHIP BETWEEN JOB DESCRIPTION AND REASONS FOR HEALTH HAZARDS**

**H<sub>0</sub>:** There is no relationship between job description and reasons for health hazards.  
**H<sub>1</sub>:** There is relationship between job description and reasons for health hazards

**Table No: 4.4**

**Table Showing Chi – Square Result of Relationship Between Job Description And Reasons For Health Hazards**

<b>S.NO</b>	<b>Relationship</b>	<b>Chi -square</b>	<b>DOF</b>	<b>Asymp.sig</b>	<b>Accept /Reject</b>
(a)	Job description and job function	19.59	20	0.484	Accept
(b)	Job description and hazardous waste	26.426	20	0.152	Accept
(c)	Job description and aggression	22.337	20	0.323	Accept

**Inference:**

From the above table it is found that there is no relationship between job description and reasons for health hazards. Hence the null hypothesis (H<sub>0</sub>) is accepted.

**WEIGHTED AVERAGE RANK TEST**

The weighted average formula is used to calculate the average value of a particular set of numbers with different levels of relevance. The relevance of each number is called its weight. The weights should be represented as a percentage of the total relevancy. Therefore, all weights should be equal to 100% or 1.

The most common formula used to determine an average is the arithmetic mean formula. This formula adds all of the numbers and divides by the amount of numbers. An example would be the average of 1, 2, and 3 would be the sum of 1+2+3 divided by 3, which would return 2. However, the weighted average formula looks at how relevant each number is. Say that 1 only happens 10% of the time while 2 and 3 each happen 45% of the time. The percentages in this example would be the weights. The weighted average would be 2.35.

**Table No 4.5**  
**Table Showing Health Issues Faced**

<b>HEALTH ISSUES</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>TOTAL</b>	<b>MEAN</b>	<b>RANK</b>
<b>Heat</b>	85(17)	68 (17)	51(17)	36(18)	31(31)	271	18.1	2
<b>Noise</b>	20(4)	72(18)	69(23)	54(27)	28(28)	243	16.2	3
<b>Vibration</b>	20(4)	36(9)	54(18)	70(35)	34(34)	214	14.3	8
<b>Lighting</b>	15(3)	68(17)	69(23)	48(24)	33(33)	233	15.5	6
<b>Radiation</b>	15(3)	40(10)	69(23)	42(21)	43(43)	209	13.9	9
<b>Ventilation problem</b>	5(1)	60(15)	66(22)	56(28)	34(34)	221	14.7	7
<b>Dust related problem</b>	40(8)	76(19)	33(11)	62(31)	31(31)	242	16.1	4
<b>Occupational problems</b>	10(2)	16(4)	84(28)	26(13)	53(53)	189	12.6	10
<b>Stress</b>	80(16)	136(34)	45(15)	32(16)	19(19)	312	20.8	1
<b>Breathing problem</b>	35(7)	64(16)	57(19)	46(23)	35(35)	237	15.8	5

**Interpretation:**

From the analysis it is found that respondents are highly suffered by Stress, Heat & Noise due to their occupation as they are ranked 1, 2, and 3. They feel average level of issues on Dust related problems, Breathing problem and Poor lighting and are ranked as 4, 5&6. Low level of issues are Poor Ventilation, Vibration, Radiation & Occupational cancers and are ranked as 7, 8,9,10.

**SPECIFIC FINDINGS**

**By applying Chi – Square analysis the following result have been obtained:**

There is no relationship between working hours and physiological & psychological problem in the following cases:

- Working hours and absenteeism.
- Working hours and denied a job.

- Working hours and ability to work.
- Working hours and illness.
- Working hours and tea (or) coffee addiction.
- Working hours and hearing & vision problem.

There is relationship between working hours and physiological & psychological problem in the following cases:

- Working hours and health issue
- Working hours and chest problem & cough
- Working hours and muscles problem
- Working hours and skin problem

There is no relationship between job description and physiological & psychological problems in the cases:

- Job description and health issue.
- Job description and absenteeism.
- Job description and denied a job.
- Job description and ability to work.
- Job description and illness.
- Job description and hearing & vision problem.
- Job description and muscles problem.
- Job description and skin problem.

There is relationship between job description and physiological & psychological problems in the cases:

- Job description and tea (or) coffee addiction.
- Job description and chest problem & cough.

There is no relationship between work hours and reasons for health hazards in the following in case:

- Work hours and job function.
- Work hours and hazardous waste.
- Work hours and aggression.

There is no relationship between Job description and various health issues in the following case:

- Job description and regular pain.( shoulder , arm , hand , leg , foot , neck)
- Job description and skin rashes.
- Job description and begin alert at work.

### **Weighted Average Method**

The applying the weighted average analysis the following results were obtained

- The work and work pattern mainly create problems among working women are stress, heat and noise as they are ranked as one, two and three.
- Mediatory level of health problems are due to dust, lighting condition and ventilation problems and are ranked as four, five and six.
- The very affecting conditions are poor ventilation, vibration, radiation at work place and are ranked as seven, eight and nine.

### **Suggestions**

In today's competitive world, there is a definite need for women being employed. Problems faced by working women are increasing day to day. Due to economic constraints, women are forced to go for an employment, but they face innumerable problems which taken as a study by the researcher. The following are the various suggestions provided to improve women safety & security.

- There is a need for protective laws that would limit employed women's working hours.
- Conveyance facility should be provided by the concerned department of working women, so they can be protected from social problems.
- The researcher has analysed another major constraint faced by women are health issues. Nature of job, work overload, working environment lead to health problems. Therefore, sufficient measures should be adopted to improve their health condition.
- Professional and family situations create fear among working women. Appropriate measures are to be taken to encourage the women to move up to the next level in the organizational hierarchy.

### **Conclusion**

The women employees are considered as the most significant resources activating all other resources in any organization which are knowledge driven. The committed women employees are able to accomplish by strengthening the abilities, maintaining their motivational level to maximize their individual potential strong commitment initiates creative skills and initiate employees to innovate new products and services. Health is more important for everyone to perform their job well. Unhealthy physique leads to unhealthy job and working atmosphere. Hence, women should give importance to their health. Organisations may also consider this issue and can provide free medical facilities, arrange for holiday tours, recreational facilities etc., If employees are physically fit, then organisation may aim for attaining targets efficiently.