

**A STUDY ON EMPLOYEE HEALTH AND SAFETY
MEASURES IN BERGER PAINT INDIA LIMITED
PONDICHERRY**

Mr. A. Radhakrishnan*

Ms. H.Sasikala**

ABSTRACT

“A study on employee health and safety measures in Berger paints India limited, puducherry” was used to study the existing employee health and safety measures and various factors involved in it. Both primary and secondary sources were used to collect data. The primary data is collected from 50 employees of BERGER PAINTS INDIA LIMITED, PUDUCHERRY, through as well constructed questionnaire. The secondary data was collected from various journals, magazines, articles, various sites and company records. From the analysis it was inferred that the organization gave preference to internal sources rather than external sources. Some of the employees felt that the company would still fasten the process. From the study it was found that the employees are satisfied with their present employee health and safety measures.

INTRODUCTION

Due to rapid industrialization, industrial workers are exposed to several types of hazards and accidents. Every year lakes of workers are injured due to mechanical, chemical, electrical and radiation hazards and it leads to partial or total disablement. So in recent years, greater attention is given to health and safety due to pressure from government, trade unions, labor laws and awareness of employers.

The efficiency of workers depends to a great extends on the environment in which the work. Work environment consists of all the factors, which act and react on the body and mind of an

* **M.Com., B.Ed., M.phil., PGDCM.,(Assistant professor)**

** **M.Phil, (Research scholar)**

employee. The primary aim is to create an environment, which ensures the greatest ease of work and removes all causes of worries.

Successful occupational health and safety practice requires the collaboration and participation of both employers and workers in health and safety programmes, and involves the consideration of issues relating to occupational medicine, industrial hygiene, toxicology, education, engineering safety, ergonomics, psychology, etc.

Health of the workers:

Health is a state of complete physical, mental and social wellbeing and not merely the absence of diseases. It's a positive and dynamic concept which means something more than the absence of illness.

Occupational accidents/disease:

Work-related accidents or diseases are very costly and can have many serious direct and indirect effects on the lives of workers and their families. For workers some of the **direct costs** of an injury or illness are:

- a) The pain and suffering of the injury or illness;
- b) The loss of income;
- c) The possible loss of a job;
- d) Health-care costs.

It has been estimated that the **indirect costs** of an accident or illness can be four to ten times greater than the direct costs, or even more. An occupational illness or accident can have so many indirect costs to workers that it is often difficult to measure them. One of the most obvious indirect costs is the human suffering caused to workers' families, which cannot be compensated with money.

REVIEW OF LITERATURE

Johansson B; Rask K; Stenberg M (2010)¹, This study was to carry out a broad survey and analysis of relevant research articles about piece rate wages and their effects on health and safety. A total of 75 research articles were examined extensively and 31 of these were found relevant and had sufficient quality to serve the purpose of this study. The findings of these relevant articles are summarized and analyzed in the survey. More recent research shows a clear interest for health, musculoskeletal injuries, physical workload, pains and occupational injuries. The fact that 27 of the 31 studied articles found negative effects of piece rates on different aspects of health and safety does not prove causality, but together they give very strong support that in most situations piece rates have negative effects on health and safety.

Tompa, Emile PhD; Dolinschi, Roman MA; de Oliveira (2009)², We reviewed the occupational health and safety intervention literature to synthesize evidence on financial merits of such interventions. A literature search included journal databases, existing systematic reviews, and studies identified by content experts. We found strong evidence that ergonomic and other musculoskeletal injury prevention intervention in manufacturing and warehousing are worth undertaking in terms of their financial merits. The economic evaluation of interventions in this literature warrants further expansion. The review also provided insights into how the methodological quality of economic evaluations in this literature could be improved.

Conor CO Reynolds; M Anne Harris; Peter A Cripton; Meghan Winters (2009)³, Bicycling has the potential to improve fitness. Understanding ways of making bicycling safer is important to improving population health. We reviewed studies of the impact of transportation infrastructure on bicyclist safety. Results to date suggest that sidewalks and multi-use trails pose the highest risk, major roads are more hazardous than minor roads, and the presence of bicycle facilities (e.g. on-road bike routes, on-road marked bike lanes, and off-road bike paths) was associated with the lowest risk. Street lighting, paved surfaces, and low-angled grades are additional factors that appear to improve cyclist safety.

Lucia Artazcoz; Imma Cortes; Vincenta Escriba-aguir; Lorena Cascant (2009)⁴, The objectives of this study was to identify family and job characteristics associated with long work hours. The sample was composed of all salaried workers aged 16–64 years (3950 men and 3153

women) interviewed in the 2006 Catalonian Health Survey. Factors associated with long working hours differed by gender. In men, working 51–60 h a week was consistently associated with poor mental health status, self-reported hypertension, job dissatisfaction, smoking, shortage of sleep. Among women it was only related to smoking and to shortage of sleep.

NEED FOR THE STUDY:

Health and Safety measures are inevitable to any organization where workers are involved. It's an organization's responsibility to provide to its workers beyond the payment of wages for their services. The working environment in a factory adversely affects the worker's health and safety because of the excessive heat or cold, noise, odours, fumes, dust and lack of sanitation and pure air etc., which leads to accident or injury or disablement or loss of life to the workers. Providing a health and safer environment is a pre-requisite for any productive effort. This research deals with the study on the health and safety measures provided to the workers at Berger paints India limited India ltd, Pondicherry.

OBJECTIVES FOR THE STUDY:

Primary objective:

- 1) To study the awareness of the workers about health and safety in the work place.
- 2) To find the occurrence of accidents happened at the work place.
- 3) To find out the satisfaction level of the respondents towards health and safety measures.
- 4) To give suggestions to improve the health and safety in the organization.

SCOPE OF THE STUDY:

This study would give an overview of the health and safety measures existing at Berger paints India ltd, Padasozhanallur, Pondicherry. Since health and safety are two important elements essential for improving the productivity of an organization, a study on the existing health and safety measures would help the organization to perform better. This study would throw light on the perception of the workers regarding health and safety. Berger paints India ltd can identify the areas where it can be improved, so as to improve the performance of the workers. This study would also help to analyze the satisfaction level of the workers towards health and safety measures and suggest provisions to improve health and safety.

LIMITATIONS OF THE STUDY

- 1) Due to time constraints the sample size had to be confined to 50.
- 2) The respondents have replied to the queries recalling from their memory. Therefore recall bias and personal bias are possible.
- 3) Since the data was collected using a schedule, the interviewer unable to understand and record the responses correctly.

RESEARCH METHODOLOGY

Research Design

The researcher has undertaken a descriptive type of research, It describes the characteristics of population or presentation of answer for the questions like where, when and how relating to a particular field. The study will present the state of affairs as it exists. This type of study mainly helps to know the past and to predict the future.

Data Collection

Primary data

The primary data are collected from the employees of Berger paints India limited, through a direct structured questionnaire.

Secondary Data

Company profile, company registers, websites, magazines, articles were used widely as a support to primary data

Sample Size and techniques:

It refers to the number of items to be selected from the universe to constitute as a sample. In this study 50 employees of Berger Paints India ltd were selected as size of sample.

Sample design:

The sampling techniques used in this study are simple random sampling method.

STATISTICAL TOOLS USED

To analyse and interpret collected data the following statistical tools were used.

1. Percentage method
2. Chi-square
3. Correlation co-efficient

TEST – I

CHI –SQUARE ANALYSIS FOR SUFFICIENT NUMBER OF TOILETS AND HYGENIC MEASURES IN BERGER PAINTS.

OBSERVED FREQUENCY:

S.NO	PARTICULARS			TOTAL
	TOILET	HYGENIC MEASURES		
		YES	NO	
1	YES	17	8	25
2	NO	15	10	25
	TOTAL	32	18	50

EXPECTED FREQUENCY:

S.NO	PARTICULARS			TOTAL
	TOILET	HYGENIC MEASURES		
		YES	NO	
1	YES	16	9	25
2	NO	16	9	25
	TOTAL	32	18	50

Total Number of respondents = 50

H_0 = The satisfaction level of sufficient number of toilets and hygienic measures are good.

H_1 = The satisfaction level of sufficient number of toilets and hygienic measures are not good.

$$\chi^2 = \frac{(O_i - E_i)^2}{E_i}$$

SL.NO	O_i	E_i	$(O_i - E_i)$	$(O_i - E_i)^2$	$(O_i - E_i)^2 / E_i$
1	17	16	1	1	0.096
2	8	9	1	1	0.178
3	15	16	1	1	0.096
4	10	9	1	1	0.178
	50	50		χ^2	0.54

Degree of freedom = $(r - 1)(c - 1)$

= 3×1

$$= 3$$

Tabulated value of degree of freedom (3) @ 5% level of significance = 7.815

Since the calculated value is less than table value (0.54 < 7.815)

Hence Null Hypothesis H_0 is accepted.

INFERENCE:

The satisfaction level of sufficient number of toilets and hygienic measures are good.

TEST – 2

CORRELATION CO-EFFICIENT

S.NO	FACTORS	HIGHLY SATISFIED	SATISFIED	DISSATISFIED	HIGHLY DISSATISFIES
1	Medical benefits provided by organisation	20	21	5	4
2	Welfare measures provided in the company	20	24	5	1

FACTORS	X	Y	X ²	Y ²	XY
HIGHLY SATISFIED	20	20	400	400	400

SATISFIED	21	24	441	576	504
DISSATISFIED	5	5	25	25	25
HIGHLY DISSATISFIED	4	1	16	1	4
TOTAL	50	50	882	1002	933

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

$$r = \frac{4(933) - (50)(50)}{\sqrt{4(882) - (50)^2} \sqrt{4(1002) - (50)^2}}$$

$$r = \frac{3732 - 2500}{\sqrt{3532 - 2500} \sqrt{4008 - 2500}}$$

$$r = \frac{1232}{\sqrt{1028} \times \sqrt{1508}}$$

$$r = \frac{1232}{32.06 \times 38.83}$$

$$r = \frac{1232}{1245}$$

RESULT: **r = 0.9943**

r = 0.9943 There exists a positive relationship between companies welfare measures and medical benefits provided to the employee and their families by the organization.

FINDINGS

- The collected data shows Majority (36%) of respondents fall in the age group of 41- 50 years.
- Majority (80%) of respondents are belonging to the male category.
- More than half of the respondents (68%) were married.

- Majority of the respondents (70%) were aware about their company's safety measure policy.
- Nearly (60%) of respondents feels that Hygienic Measures given by the company are good.
- 70% of respondents said that sufficient numbers of toilets are provided in their premises.
- The collected data shows majority (60%) of respondents are satisfied with the drinking water facility provided in the Berger paints India limited.
- 54% of respondents said that transport facilities were provided to the employees.
- Almost (60%) of respondents is satisfied with medical benefits given to employees and their families.

SUGGESTIONS

- ✓ Most of the respondents satisfied (except some) with the facilities provided by the organization. Organization should maintain same in the future years to come.
- ✓ The firms can also provide the mask and overcoat in order to avoid the health hazards.
- ✓ Proper training has to be given to the workers to avoid frequent accidents.
- ✓ Meditation practices can be given to avoid electric shocks, finger injuries etc. due to lack of concentration.
- ✓ Safety committee has to be formed to monitor the health and safety issues.

CONCLUSION

The employees of this industry enjoy not only the satisfaction of their jobs but also various facilities given by the firms. The labours extend their maximum support for the improvement of the company. The personnel department takes care of the total human resources in the company. The management provides all the health, safety and welfares to the employees that will help to produce better performance in the work and working environment.

References

1. Arun Monappa (1994); Industrial Relation (8th Edition)
2. P. Subba Rao (2008); Essentials of Human Resource Management and Industrial Relations (3rd Edition); Himalaya Publishing House.
3. Armstrong, M. (2004); Handbook of Human Resources Management Practice (9th Edition) London: Kogan Page.
4. K Aswathappa (2014); Human Resource Management (7th Edition); Mc Graw Hill Education.
5. I. M. Bakri (2013); Evaluation of Safety & Health Performance on construction sites : Journal of Management & Noor Aina Amrillah, Wan Izatul Asma, Shaladdin Mudao Sustainability, Volume 3, No. 2, pp. 100-109.
6. Aziz Amiri (2013); Operationalisation of Safety culture to foster safety & Collins Badu Agyemang, Joseph Gerald Nyanyofioohealth in the Malaysian Manufacturing Industries: Asian Social Science, Volume 9, No. 7, pp. 283-289.
7. Gerald Dapaah Gyamfi (2014) ; Job Stress, sector of work & shift work pattern as correlates of worker health & safety : A study of Manufacturing company in Ghana : International Journal of Business
8. Fariba Kiani (2014); Preventing injuries in workers : the role of management practices in decreasing injuries reporting : International Journal of Health policyoManagement, Volume 9, No. 7, pp. 59-69. & Management, pp. 171-177.
9. Joseph M Putti (1980); The management of securing and maintaining the workforce, S Chando69 & Co Ltd. Ram Nagar, New Delhi.
10. Dr. C.B. Gupta "Human Resource Management" Sultan Chand & Sons Educational publisher, New Delhi
11. L.M.Prasad "Organizational Behaviour" Sultan Chand & Sons Educational publisher, New dehil
12. K.Aswathappa "Organizational Behaviour" Himalaya Publishing House Mumbai
13. C.R.Kothari "Research Methodology" Vishwaprakashan, New Delhi

WEBSITES

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gate as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Management, IT and Engineering
<http://www.ijmra.us>

www.bergerpaints.com

www.employeesafety.com

www.projectguide.com

www.ijmar.com

