

## Effectiveness of Planned Health Teaching on Prevention of Occupational Hazards among Workers

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### Abstract

The workplace is the setting in which many people spend the largest proportion of their time. Many people, particularly in developing countries, the boundary between their home and workplace environments is blurred, since they often undertake agricultural or cottage industry activities within the home. Study was conducted to assess the effectiveness of planned health teaching on knowledge regarding the prevention of occupational hazards among the workers of selected industrial areas of Indore city. Objectives of the study were to assess the effectiveness of planned teaching on knowledge regarding the prevention of industrial hazards among the industrial workers in RICCO Industrial area in Jaipur. & to associate the demographic variables and pre test knowledge regarding prevention of industrial hazards among the industrial workers in selected industries of Indore city. Research approach was evaluatory approach was found to be the most appropriate & research design was pre test post design. Sample Size was 60 & Sample type was Convenience Sampling, Descriptive and inferential statistics were used for analysis. The mean post-test score(18.25) of knowledge of workers were higher than mean pretest knowledge(13.58) score The 't' value computed for knowledge score was (t=9.32) showed significant difference, 't' value suggesting that planned health teaching was effective in increasing the knowledge of worker's . There is no significant association between knowledge on prevention of occupational hazards and age in years, number of children type of family and total experience except significant association between knowledge on prevention of occupational hazards with the educational status and monthly income of the workers.

**Keyword:** Industrial hazards; Occupational hazards; Occupational disorder.

### Introduction

"No occupation is without an occupational hazards and disorder and there is no occupational disorder that can be prevented".

The workplace is the setting in which many people spend the largest proportion of their time. Many people,

particularly in developing countries, the boundary between their home and workplace environments is blurred, since they often undertake agricultural or cottage industry activities within the home.

#### *Background of study*

The great variety of occupational health hazards makes quantification of their associated health risks and impacts at the global level very difficult. In India large number of injuries and diseases caused by workplace hazards are not reported. Making such adjustment, ILO and WHO estimate that there may be as many as 250 million

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occupational injuries each year, resulting in 330000 fatalities.

Due to the changes in occupational distribution with development, many countries have experienced a shift from the hazards that characterize work in agriculture, mining and other primary industries, to those of manufacturing industries or service industries.

#### *Need of the study*

1. In India, occupational health, which include child labor, poor industrial legislation, vast informal sector, less attention to industrial hygiene and poor surveillance.
2. The major occupational diseases morbidity of concern in India include silicosis, musculoskeletal injuries, coal workers' pneumoconiosis, chronic obstructive lung diseases, asbestosis, byssinosis, pesticide poisoning and noise-induced hearing loss.
3. Lack of education, unawareness of hazards, poor sanitation, nutrition and climatic proneness to epidemics aggravate worker's health hazards in the work environment.
4. In India, occupational health is not integrated with primary healthcare, and it is the mandate of the Ministry of Labor, not the Ministry of Health.
5. Industrial revolution as well as globalization is increasing the burden of occupational hazards and changing occupational morbidity drastically.

#### *Research statement*

A study to assess the effectiveness of planned health teaching on knowledge regarding the prevention of occupational hazards among the workers in RICCO Industrial area in Jaipur.

#### *Objectives of the study*

- ▶ To assess the pre test knowledge regarding prevention of industrial hazards among the industrial workers in RICCO Industrial area in Jaipur.
- ▶ To assess the effectiveness of planned teaching on knowledge regarding the prevention of industrial hazards among the industrial workers in RICCO Industrial area in Jaipur.
- ▶ To associate the demographic variables and pre test knowledge regarding prevention of

industrial hazards among the industrial workers in RICCO Industrial area in Jaipur.

#### *Hypothesis*

- ▶ *RH-1.* There is a significant difference between the pre test and post test knowledge after implementation of planned teaching regarding the prevention of industrial hazards among the industrial workers.
- ▶ *RH-2.* There is significant association between demographic variables and pre test knowledge of workers regarding the prevention of industrial hazards among the industrial workers.

#### *Delimitation of the study*

1. The study is limited to industrial workers.
2. The study is limited to male industrial workers.
3. The study is limited to age group between the 18-60 ages.
4. The study is limited to those who have experience more than 6 months.

### **Research Methodology**

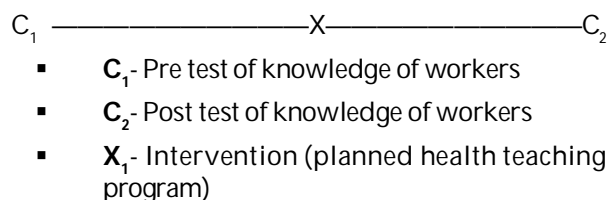
#### *Research approach*

Research approach keeping in view the nature of problem and objective of the study an evaluatory approach was found to be the most appropriate.

#### *Research design*

##### Pre Test Post Design

The design can be presented as:



#### *Sample size and sampling*

The investigator identified all 18-60 years workers who met the sample criteria.

- *Sample Size:* Sample size is 60.
- *Sample type:* Convenience Sampling,

- **Setting of the study:** Settings are the more specific places where data collection will occur. The setting for the present study is industrial area.

**Result**

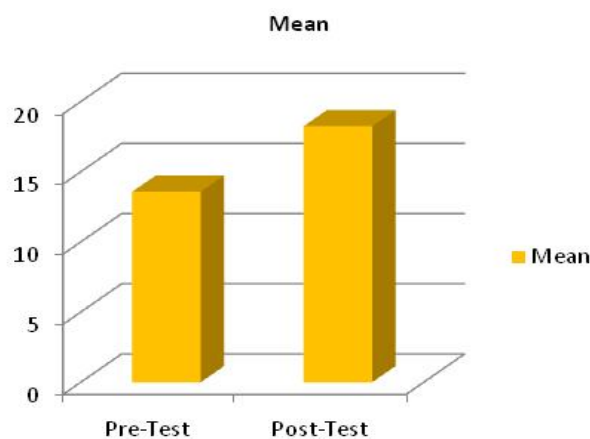
Descriptive and inferential statistics were used for analysis. It was found that mean post-test

score(18.25) of knowledge of workers were higher than mean pretest knowledge(13.58) score. The 't' value computed for knowledge score was ( $t_{(59)}=9.32$ ) showed significant difference, 't' value suggesting that planned health teaching was effective in increasing the knowledge of worker's.

There is no significant association between knowledge on prevention of occupational hazards and age in years, number of children type of family

**Table 1:** Comparison of pre test and post test knowledge score N=60

Knowledge Score	Mean	Standard Deviation	Mean Difference	d.f.	't' value
Pre - Test	13.58	4.33			
Post - Test	18.25	4.38	4.67	59	- 9.32



**Fig. 1:** Pre-test and Post-test knowledge score

and total experience except significant association between knowledge on prevention of occupational hazards with the educational status and monthly income of the workers.

There was a significant  $X^2 = 10.83$  ( $P < 0.5$ ) association between educational status and knowledge on prevention of occupational hazards.

There was a significant  $X^2 = 10.83$  ( $P < 0.5$ ) association between monthly income and knowledge on prevention of occupational hazards.

**Discussion**

This study shows that there is a significant increase in knowledge of workers after the planned health teaching program. Where the t-value is 9.32 ( $P < 0.5$ ).

*The hypothesis R H<sub>1</sub>* There is a significant increase in level of knowledge after implementation of planned teaching regarding the prevention of industrial hazards among the industrial workers has been accepted.

*The hypothesis R H<sub>2</sub>* There would be a significant relationship between selected demographic variable and pre test knowledge on prevention of occupational hazards was accepted with only two variables that is educational status and monthly income's was accepted.

**Conclusion**

After the detailed analysis, this study leads to the following conclusion:

Data presented that 36% workers has poor knowledge regarding the prevention of occupational hazards while 61.66% were found average in knowledge.

After the implementation of planned health teaching program, there is a significant increase in knowledge of workers regarding the prevention of occupational hazards. Which is calculated by t-test and the result were 9.32.

There was significant association between knowledge on prevention of occupational hazards and educational status. Low educational attainment was a significant risk factor for occupational hazards.

The study shows that there is no significant association between age, type of family, no. of children, working experience, except in educational status and income.

*Recommendations*

On the basis of the findings of the study, it is recommended that:

1. Studies may be conducted to evaluate the effectiveness of the information booklet regarding prevention of occupational hazards.
2. A similar study may be repeated on a larger sample covering all factory workers in the state.
3. A study may be undertaken on workers of different industrial areas to evaluate the effectiveness of SIM on prevention of occupational hazards.
4. A study may be conducted to find out the prevention strategies undertaken by the employer and employees in a factory.
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