



International Journal of Research in Academic World

Received: 06/September/2023

IJRAW: 2023; 2(10):113-115

Accepted: 02/October/2023

Assess the Effectiveness of Planned Teaching Programs on Knowledge Regarding the Prevention of Hazards among the Worker of Selected Printing Industries of Jabalpur M.P.

*¹Achun Rongmei¹Assistant Professor, Indra Gandhi National Tribal University, Amarkantak, Madhya Pradesh, India.

Abstract

Study to assess the effectiveness of planned teaching programme on knowledge regarding the prevention of industrial hazards among the worker of selected industries of Jabalpur.

Objectives: To develop a planned health teaching on prevention of industrial hazards in selected industries. To assess the pre test & post test knowledge regarding prevention of industrial hazards among the workers of selected industries in Jabalpur. To associate the demographic variables and pre test knowledge regarding prevention of industrial hazards among the industrial workers in selected industries of Jabalpur. To assess the effectiveness of planned teaching on knowledge regarding the Prevention of industrial hazards among the industrial workers in selected industries in Jabalpur.

Methods:-An evaluative approach with one group pre-test, post-test design was used for the study. The samples consist of 50 industrial workers. They were chosen by Non probability convenient sampling technique. The study was conducted at selected industries of Jabalpur. The data was collected prior and after the planned health teaching programme by a structured knowledge questionnaire.

Results: The data was analyzed by descriptive and inferential statistics. The knowledge gained through planned health teaching programme was good as it was evident with a highly significant difference ($t(49)=9.28, P<0.05$) between the mean post-test ($X_2=20.6$) and pre-test ($X_1=15$).

Conclusion: The planned health teaching programme delivered through audio-visual material was found to be an effective strategy for providing information and for improving the knowledge of industrial workers. It was well appreciated and accepted by the industrial workers. The more researches on the different methods on disciplining will find better outcome.

Keywords: Industrial workers, knowledge, planned health teaching programme

Introduction

Industrial hazards consist of four principle hazards. This is because industries employ many different processes involving a wide range of different raw materials, intermediates, waste products and final products. The hazards encountered are fire, explosion, toxic release and environmental damage. All industries have different type of tools, equipment and machinery. There is always a risk of hazard while operating machines. They may be physical, biological, chemical, mechanical, etc. It is crucial for all operators to be aware of the risk of hazards associated with the industry they work in. While handling tools and machines, the Operators should follow safety instructions. Specialized training must be given to the Operators to prevent injuries from these hazards. Operators should take precautions to guard against work related hazards and accidents. The work environment exposes many workers to health hazards that contribute to injuries, respiratory diseases, cancer, musculoskeletal disorders, reproductive disorders, cardiovascular diseases, mental and neurological illnesses, eye damage and hearing loss, as well

as to communicable diseases. Approximately 75% of these working people are in developing countries. The officially registered working population constitutes 60-70% of the world's adult male and 30-60% of the world's adult female population. Each year, another 40 million people join the labor force, most of them in developing countries. Workplace environmental hazards are therefore a threat to a large proportion of the world population

Need for Study

India is one of the largest and the most important developing countries of the world. In this country, public health emphasizes more on communicable diseases, malnutrition and reproductive healthcare. Majority of the population is working in industrial sector.

Industrial revolution as well as globalization is increasing the burden of industrial Hazards and changing occupational morbidity drastically. Still occupational health is seen as a secondary issue while formulating health policy and health-related programmes. As per the Director General of Factory

Advisory Services and Labour Institutes Report (1998) Occupation health authorities around the world have established safety regulations and/or guidelines to limit workers' exposures to solvents at the worksite, both by controlling the air concentrations of solvents in the work environment and by helping workers to avoid unnecessary exposures through safe practices and personal protective equipment (PPE). Theoretically, safe practices depend on having an appropriate attitude toward the health risks associated with exposure to dyes, which in turn depends on knowledge about the danger and harmful effects of dyes. Millions of workers are occupationally exposed to dyes in the world, but little is known about their knowledge of the effects of dyes. In India, occupational health is more than simply a health issue, which includes child labour, poor industrial legislation, vast informal sector, less attention to industrial hygiene and poor surveillance data. Statistics for the overall incidence and prevalence of occupational disease and injuries for the country is inadequate.

Objectives of the Study

- To develop a planned health teaching on prevention of industrial hazards in selected industries.
- To assess the pre test & post test knowledge regarding prevention of industrial hazards among the workers of selected industries in Jabalpur.
- To associate the demographic variables and pre test knowledge regarding prevention of industrial hazards among the industrial workers in selected industries of Jabalpur.
- To assess the effectiveness of planned teaching on knowledge regarding the Prevention of industrial hazards among the industrial workers in selected industries in Jabalpur

Methods: An evaluative approach with one group pre-test, post-test design was used for the study. The samples consist of 50 industrial workers. They were chosen by Non probability convenient sampling technique. The study was conducted at selected industries of Jabalpur. The data was collected prior and after the planned health teaching programme by a structured knowledge questionnaire.

Data Analysis and Interpretation

The baseline data of the workers indicate that 40% of workers were in the age group of 21-30 years and 32% were in the age group of 31-40 years while 18% of workers were in the age group of 41-50 years. But of 50 workers there were (74%) having nuclear family and (26%) having joint family. Majority (48%) of the employees was educated up to higher secondary or above but 10% were up to primary level while (14%) were illiterate and only (28%) were educated up to middle level.

Working experience of workers, 64% were having more than 3 years of experience and 18.00% of workers were having working experience of 2-3 years .6% of workers were having experience less than 1 year. More ever 12.00% workers were having work experience of 1 year-2year 04% of workers having their monthly income <2001 Rs, 10.00% were having in between 2001-3000 Rs. 26.00% were having monthly income between 3001-4000Rs. Moreover, 60% were having monthly income more than 4001Rs,

Table 1: Association between demographic variable and occupational knowledge on prevention of industrial hazards

SN	Demographic Variables	Poor	Average	Good	Total	D.f	X2 Value
1	Age						
	21-30	6	13	1	20	6	6.07 S
	31-40	6	10	0	16		
	41-50	0	8	1	09		
51-60	2	3	0	05			
2.	Marital Status						
	Married	8	32	1	42	6	11.74S
	Unmarried	3	1	0	4		
	Divorce	2	0	0	3		
Widow	1	1	0	2			
3	Types of Family						
	Nuclear	11	24	2	37	2	1.06 S
Joint	03	10	00	13			
4.	Religion						
	Hindu	10	32	2	44	6	5.12 S
	Muslim	4	2	0	6		
	Christian	0	0	0	0		
Other	0	0	0	0			
5.	Educational Status						
	Illiterate	4	3	0	7	6	8.26 S
	Primary	2	3	0	5		
	Middle Class	3	11	0	14		
Secondary and Above	5	17	2	24			
6	Total Experience						
	Less than 1	1	2	0	3	6	17.24NS
	1-2 Year	1	3	2	6		
	2-3 year	1	8	0	9		
3-4 year	11	21	0	32			
7.	Monthly Income						
	Below 2000	1	1	0	2	6	27.64NS
	2001-3000	1	3	1	5		
	3001-4000	2	11	0	13		
4001 or above	10	19	1	30			

The study shows that there is significant variation between age, marital status, type of family, religion, educational status, working experience, except in type of experience and income. There was a significant $\chi^2 = 6.07$ ($P < 0.05$) association between age in years and knowledge on prevention of industrial Hazards.

There was a significant $\chi^2 = 11.74$ ($P < 0.05$) association between marital status of Worker and knowledge on prevention of industrial Hazards. there was 8 significant $\chi^2 = 0.106$ ($P < 0.05$) association between type of family and knowledge on prevention of industrial Hazards.

There was a significant $\chi^2 = 5.12$ ($P < 0.05$) association between religion and knowledge on prevention of industrial Hazards.

There was a significant $\chi^2 = 8.26$ ($P < 0.05$) association between educational status and knowledge on prevention of industrial Hazards.

Hypothesis H-1: “There is a significant difference between the mean pre test and post test knowledge score after attending planned teaching regarding the prevention of industrial hazards among the workers of selected industries at the level of .05 significance level” is selected & null hypothesis “Ho: There is no significant difference between the mean pre test and post test knowledge score after attending planned teaching regarding the prevention of industrial hazards among the workers of selected industries at .05 significance level” is rejected.

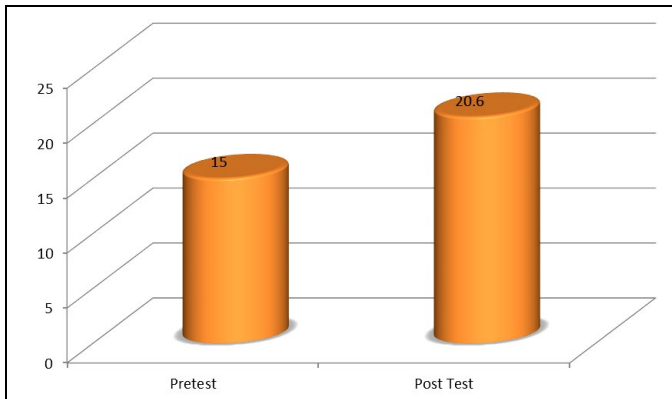


Fig 1: Comparison of increase in knowledge of workers with the pre test knowledge

This study shows that there is a significant increase in knowledge of workers after the planned health teaching program. Where the t-value is 9.28 ($P < 0.05$)

In this study hypothesis H₁ made by the investigator is accepted that there is significant association between demographic variables and pretest knowledge of Workers regarding the prevention of industrial hazards among the industrial workers at 0.05 level of significance.

Summary and Conclusion

Data presented shows that 30.43% workers has poor knowledge regarding the prevention of industrial Hazards while 73.91% 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 industrial Hazards. Which is calculated by t-test and the result was 9.28

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

Hence Hypothesis H₁. “There is a significant difference between the mean pre test and post test knowledge score after attending planned teaching regarding the prevention of industrial hazards among the workers of selected industries at the level of .05 significance level” is selected.

In this study hypothesis H₂ made by the investigator is accepted that there is Significant association between demographic variables and pre test knowledge of workers regarding the prevention of industrial hazards among the industrial workers at 0.05 level of significance.

References

1. Enterlinet, Philip E. Mortality among workers due to Asbestos. *Annals of New York Academy*. 2006; 136:155-156.
2. Raghvan K, Shobha B. *Workers at industries Indian Journal of occupational and environment medicine*. 2005; 32:15-17.
3. Sudha K. Family industrial safety, *Nursing journal of India*. 2007; 23:42-44.
4. Santosh P. Adoption of protective measures at workplace. *Nursing journal of community health nursing*. 2007; 32:21-23.
5. Moly. *Health & safety in industry International journal of occupational and environment medicine*. 2005; 13:56.
6. Radhakrishnan & Venkatesh. Developing countries & Textile Industries. *The India Textile Journal*. 2008; 6:15-17.
7. Proxy, Joy. Workers in India. *Textile research journal*. 2007; 39:24-27.
8. Briyard K. & Health. *Journal of Community Health Nursing*. 2004; 21:29-38.
9. More Andrew. *Occupation and Health Journal of American Medical Association*. 2005; 1:12-13.
10. Paramasivam et al. Health at Indian industry. *Indian Journal of Nursing Studies*. 2010; 43:86-89.