

“A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION OF OCCUPATIONAL HAZARDS AMONG WORKERS WORKING IN A SELECTED FACTORY OF LUCKNOW.”

Minu S R, S. Andal, Madan Mohan Gupta, Manu Chacko, Moni Sachan

Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India

Email id: dean.nursing@ramauniversity.ac.in

ABSTRACT

An industrial worker is exposed to the risk of occupational disease and accidents which creates a feeling of physical economic and social insecurity. Non-experimental, descriptive research design was used for this study. 30 workers were selected through convenient sampling technique according to inclusion & exclusion criteria. A structured questionnaire was used to assess the knowledge of workers in the selected factory regarding occupational hazards and its prevention. The study reveals that the workers in the selected factory had mild knowledge regarding occupational hazards and prevention of occupational hazards. The study result was also shows that there was significant association between level of knowledge and their related demographic variables of the workers in the selected factory. Knowledge on occupational hazards and prevention of occupational hazards among the workers was poor they need strong emphasis on awareness to prevent hazards and promote optimum health. In knowledge score test, almost workers in the selected factory had Mild knowledge in the area of occupational hazards (73.33%) and moderate knowledge in the area of prevention of occupational hazards (50%). The result revealed that mean value of knowledge scores is $m = 12.20, SD = 4.38$ Chi-square test revealed that there was significant association between the Level of knowledge score of workers working in the selected factory and their related demographic variables.

Key words: *Prevention Of Occupational Hazards, Workers, factory.*

Introduction

“PREVENTION IS BETTER THAN CURE”

The working population represents half of the world's population are being the major contributors to socioeconomic development, their health is determined not only by the work place but also by social, individual factor as well as access to available health services. Surveillance to work environment, detection of workers knowledge, occupational hazards and safety measures is an important component of occupation health and safety services.

India has a population of over 1 billion approximately 33% which is working class out of more than 2 lakh registered factory around 5 thousand are classified as chemical industries. A part from large and medium industries small industries play an important role in the economy of the nation. The small industries play an important role in the economy of the nation. In the industrial population health is usually provided by the management through the employee's state insurance scheme. As per the amended factories act provision of the occupational health center in mandatory in factories carrying out hazardous process.

Many progressive industries have established preventive occupational health services to look after their workers occupational health needs. The scope of occupational health services includes preventing occupational hazards at work, projecting

workers against hazards at work, help in adopting work & the work environment to the physical mental and social well being of the workers.

Objectives of the study

- To assess the knowledge regarding occupational hazards and its prevention among workers working in the selected factory.
- To find out association between the knowledge score of workers and selected demographic variables .

Hypothesis:

H₁: There is a significant association between the knowledge score and selected demographic variables.

Assumptions

- The workers will have some knowledge regarding prevention of occupational hazards.

Material and methods used:

Research design: Simple descriptive design was used for the study.

Research approach: Non-experimental research approach was used.

Setting of the study:The study was conducted in ACCON HEALTH CARE Pvt. Ltd in Lucknow.

Population:In this study population comprises of workers, working in the ACCON HEALTH CARE Pvt. Ltd.

Sample size: Sample size- 30.

Sampling technique: Convenient Sampling technique.

Variables:

Research variable: In this present study knowledge of workers was the independent variables.

Demographic variable:age, Gender, education, work experience, religion, family type, residential area.

Sampling criteria

Inclusion criteria –

- Age 18-45 yrs.
- Those who are available at the time of study.
- Those who are willing to participate
- Those who are able to read and write.

Exclusion criteria-

- Age group more than 45yrs and less than 18yrs.

Development of the tool

Data collection tools are the procedures or the instruments used by the researcher to observe or measures key variables in research problem .Structured knowledge questionnaire was constructed after extensive review of literature and discussed with experts as tool to collect the data the tool consist of three sections.

Section –AIt deals with the demographic variables such as age,gender, work experience, education, type of family, residential area,

Section-BIt consist of 30 multiple choice questions which are formulated to assess knowledge of workers regarding occupational hazards .

Section-CIt consists of 15 questions to assess the knowledge of workers regarding prevention of occupational hazards.

Scoring key

Scoring key was prepared for section- A by coding the demographic variables.For section-B & C knowledge item score (1) was awarded for correct response and (0) for wrong response , thus a total score of 30 was allotted under knowledge aspect and to interpret the level of knowledge, the scores were distributed as follows

- Mild knowledge less than 50%
- Moderately adequate knowledge 51-75%
- Adequate knowledge more than 75%

Data collection procedure

After obtaining permission from the principal of Sahara College of Nursing and Accon Health Care, the main study was started. Investigators personally visited each respondent, introduced themselves to the workers and explain the purpose of the study. The knowledge was assessed by structured questionnaire that is multiple choice questions

Plan of data analysis

The data collected from the subject will be grouped and analyzed by using statistical measures in terms of objectives. The plan for the data analysis will be as follows:-

- The collected data was coded & transformed to mastersheet for statistical analysis.
- The response items from demographic profile planned to summarize in terms of frequency & percentage, knowledge scores of the participants were planned to be summarized in mean , standard deviation & mean percentage
- The chi square values used to find out the association between the knowledge score of workers regarding prevention of occupational hazards & their selected demographic variables like age , gender , work experience etc.
- The finding presented in the form of tables & diagrams .

Data analysis and major findings

Section A:

Table 1. Frequency and percentage distribution of subject by age, Gender,education, work experience, religion, family type, residential area.

| SL.NO. | CHARACTERISTICS | CATEGORIES | FREQUENCY | PERCENTAGE |
|--------|-----------------|------------|-----------|------------|
| 1 | AGE | 18-25yrs | 7 | 23.33% |
| | | 26-30yrs | 8 | 26.67% |

N=30

| | | | | |
|---|------------------|------------------|----|--------|
| | | 31-35yrs | 9 | 30% |
| | | 36-40yrs | 6 | 20% |
| 2 | GENDER | Male | 27 | 90% |
| | | Female | 03 | 10% |
| 3 | EDUCATION | Primary | 11 | 36.67% |
| | | Secondary | 14 | 46.67% |
| | | Higher secondary | 5 | 16.67% |
| | | Graduation | 0 | 0 |
| 4 | WORK EXPERIENCE | New experience | 11 | 36.67% |
| | | 1-2yrs | 6 | 20% |
| | | 2-3yrs | 7 | 23.33% |
| | | 3yrs and more | 6 | 20% |
| 5 | RELIGION | Hindu | 21 | 70% |
| | | Muslim | 8 | 26.67 |
| | | Christian | 1 | 3.33% |
| | | Sikh | 0 | 0 |
| 6 | FAMILY TYPE | Joint | 18 | 60% |
| | | Nuclear | 12 | 40% |
| 7 | RESIDENTIAL AREA | Urban | 8 | 26.67% |
| | | Rural | 22 | 73.33% |

Section –B Knowledge scores of workers regarding occupational hazards and prevention of occupational hazards.

Table2. Level of knowledge score of workers about occupational hazards and its prevention.

N = 30

| S.N O | DESCRIP TION | LEVEL OF KNOWLEDGE SCORE | | | | | |
|-------|--------------------------------------|--------------------------|---------|----------------|--------|--------------|---|
| | | MILD<50% | | MODERATE 51-5% | | ADEQUATE 75% | |
| | | F | % | F | % | F | % |
| 1 | Occupation al hazards | 22 | 73.33 % | 8 | 26.66% | 0 | 0 |
| 2 | Prevention of occupation al hazards. | 15 | 50% | 15 | 50% | 0 | 0 |

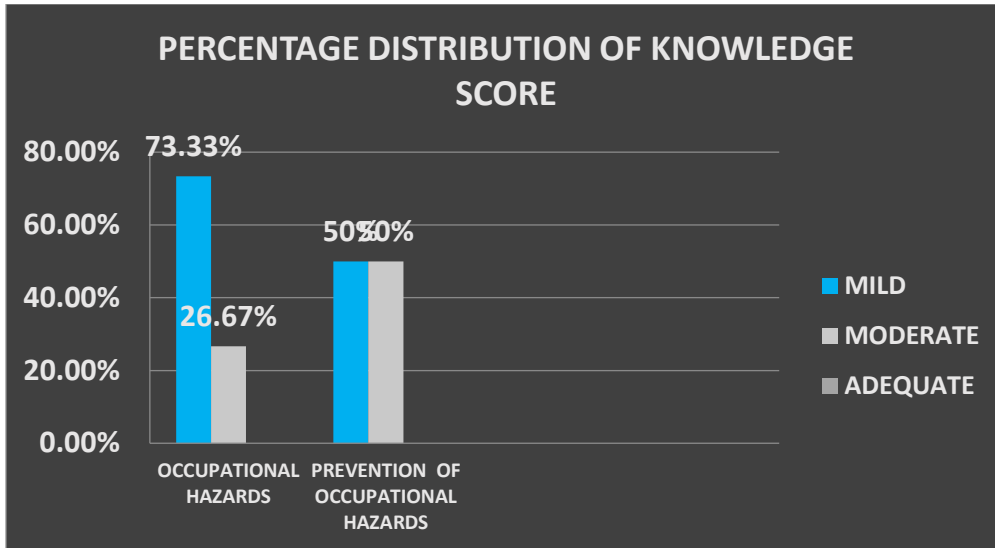


Figure2.Level of knowledge score of workers about occupational hazards and its prevention. Shows that workers in the selected factory had mild knowledge i.e. 73.33% and moderate knowledge i.e. 26.67% about occupational hazards and 50%each mild and moderate knowledge about prevention of occupational hazards.

Table:3 Aspect wise mean , mean percentage , standard deviation of knowledge score of workers regarding occupational hazards and prevention of occupational hazards.

| S.NO | COMPONENT | MEAN | MEAN PERCENTAGE | STANDARD DEVIATION |
|------|------------------------------------|-------|-----------------|--------------------|
| 1 | Occupational hazards | 6.13 | 40.89% | 1.92 |
| 2 | Prevention of occupational hazards | 6.07 | 40.33% | 2.46 |
| 3 | TOTAL | 12.20 | 81.22% | 4.38 |

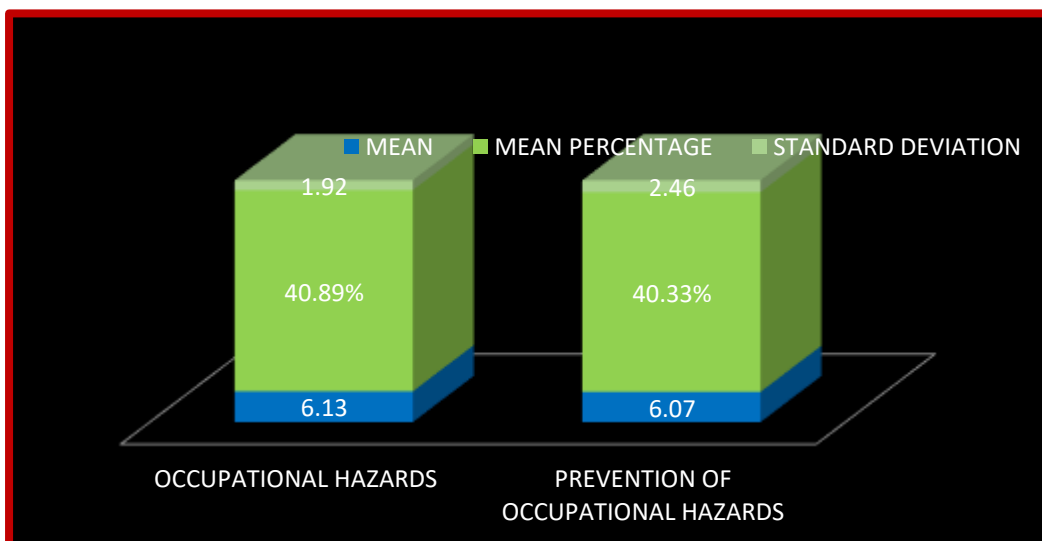


Figure 3: Aspect wise mean, mean percentage, standard deviation of knowledge score of workers regarding occupational hazards and prevention of occupational hazards.

Section- C

- The findings of the present study showed that there was no significant association between the knowledge scores of workers with their selected demographic variables working in the selected factory.

Recommendation

- The study may be replicated in a large sample.
- A co- relational study can also be conducted with the same topic.
- A comparative study can also be conducted with same topic.

Bibliography

- 1- PARK K, Parks, textbook of preventive and social medicine, 20th edition, published by M/S Banarsidas Bhanot Publishers , page no. 708- 721
- 2- SWARNKAR `S “Community Health Nursing” 3 rd edition , published by N. R. Brothers publishers , Indore , page no. 670
- 3- GULANI K . K. “Community Health Nursing Principal And Practices” Published by Kumar publishing house , Delhi , India page no. 501 Ravi Prakash Saxena “textbook of community health nursing II ” published by , Lotus publishers Jalandhar page no. 273
- 4- BRUNNER AND SUDDHARTH`S “textbook of Medical Surgical Nursing” 11th edition volume 2 , published by Wolter Kluwer and Lippincott Williams and Wilkins , New Delhi Page no. 2427 – 2429
- 5- Community health nursing (principal & practice) SUNITA JOSEPH aitbs publishers India page no -390
- 6- Textbook of community health for nursing DR. GN PRABHAKAR MD principal of medical science and hospital, Manjushree nagar , sattur Dharwad page no 387-393
- 7- Community health nursing second edition B.SRIDHAR RAO EX. PROFESSOR ,community by medicine ,J .N Medical college kamothe and Siddhartha medical college ,Karnataka , page no 35