"A Study to Assess the Level of Knowledge Regarding Occupational Health Hazards and First Aid Measures Among the Workers of Selected Dairies at Jaipur, Rajasthan"

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Abstract

Occupational health hazards refer to risks and dangers that workers may be exposed to in their workplace, which can negatively impact their health and well-being. These hazards can arise due to physical, chemical, biological, ergonomic, or psychosocial factors present in the work environment. First aid in the context of occupational health hazards refers to the immediate assistance given to workers who suffer injuries or illnesses due to workplace-related risks, before professional medical help arrives. Timely and appropriate first aid can prevent the situation from worsening and can even save lives. A descriptive design within a quantitative research approach was employed for this study. Data was collected using a self-structured questionnaire to evaluate level of knowledge regarding occupational health hazards and first aid among dairy workers. A convenient sampling method was employed to select 60 Diary workers from Amul dairy, Bisangarh road, Manoharpur, Jaipur. The questionnaire gathered both demographic details and knowledge-related questions about occupational health hazards and first aid. The collected data was organized, analyzed, and interpreted utilizing descriptive statistics. The results revealed shows that maximum 48 (80%) Dairy workers had poor knowledge. Middle 10 (17%) Dairy worker had average knowledge and Minimum 02(03%) Dairy workers had Good knowledge regarding occupational health hazards and first –aid measure. The mean score for overall level of knowledge among dairy workers was 9.783333with standard deviation of about 4.119432.

Keywords: occupational hazards, First aid, Knowledge, Dairy workers.

Introduction: occupational health hazards are conditions or substances in the workplace that pose risks to the health and safety of workers. With rapid industrialization, urbanization, and technological advancement, the nature of work has become more complex, increasing the risk of exposure to physical, chemical, biological, ergonomic, and psychosocial hazards.

This research study aims to explore the various types of occupational health hazards faced by workers across different sectors and assess their impact on physical and mental well-being. It also investigates the level of awareness, safety practices, and preventive measures adopted in workplaces.

Understanding occupational health hazards is crucial not only for protecting individual health but also for improving workplace productivity, reducing absenteeism, and ensuring compliance with health and safety regulations. By identifying common hazards and evaluating the effectiveness of existing control measures, this study seeks to contribute to the development of safer and healthier work environments.

Objectives of the study

1 .ToDetermine the level of knowledge among dairy workers regarding occupational health hazards .

2.To Assess the level of knowledge among dairy workers regarding first- aid measures .

3.To Find out relationship between knowledge score regarding occupational health hazards and utilization of first-aid measures.

4. To find out the association between knowledge score of dairy workers on occupational health hazards with selected demographic variables such as age,gender,educationalqualification,monthly income and total work experience.

Methodology

A descriptive correlative research design was adopted. A convenience sampling technique was employed to select 60 Diary worker from Amul dairy,Bisangarhroad ,manoharpur ,jaipur. A structured questionnaire was developed to gather socio-demographic data and knowledge about occupational health hazard and their first Aid .The reliability of half test was found by using Karl Pearson's product moment correlation formula. Spearman Brown prophecy formula was used to find out the reliability of the full test. Necessary permissions for the study and data collection were secured, and informed consent was obtained from participants while ensuring confidentiality and autonomy.

Statistical analysis:Data was analyzed using percentage, mean, mode, median, and standard deviation. To assess the level of knowledge regarding occupational hazards and first ais among dairy worker and selected background characteristics, a chi-square test was conducted.

Result:

Frequency and percentage distribution ofknowledge of dairy workers regardingoccupational health hazards and first –aid measure

N-60

Level of Knowledge	Score	Frequency	Percentage (%)
Poor (0-50%)	0-12	48	80%
Average (51-75%)	13-19	10	17%
Good (76-100%)	20-25	2	3%
tOTAL		60	100%

Data of Table shows that maximum 48 (80%) Dairy workers had poor knowledge and middle 10 (17%) Dairy worker had average knowledge and Minimum 02(03%) Dairy workers had Good knowledge regarding occupational health hazards and first –aid measure.

Association with Background variable- This study reveals Association between knowledge test and Age was notsignificant. Association between knowledge test and gender was not significant. Association between knowledge test and monthly income was not significant Association between knowledge test and Occupational Work Experience was Significant Association between knowledge test and Educational Qualification was not Significant.

Discussion: Occupational hazard, as a term signifies both long-term and short-term risks associated with the workplace environment. It is a field of study within occupational safety and health and public health.[3] Short term risks may include physical injury (e.g., eye, back, head, etc.), while long-term risks may be an increased risk of developing occupational disease, such as cancer or heart disease. In general, adverse health effects caused by short term risks are reversible while those caused by long term risks are irreversible.

Conclusion: The workers should have the right to refuse or stop unsafe work if there is a possibility of accident or injury. Assessment which will include the identification, assessment and control of hazards. Risk assessment should be done with full participation of those who face the risk.The mean score for overall level of knowledge among dairy workers was 9.783333with standard deviation of about 4.119432.

Implication: The findings of the present study have implications in the field of community health nursing practice, nursing education, nursing research and nursing administration.

Recommendations: A similar study may be repeated on a large sample covering all thedairyworkers in the District.

>   A similar study can be conducted among other dairy workers.
>   An experimental study can be undertaken on occupational hazards
>   A study may be undertaken on workers of different dairies to evaluate the effectiveness of SIM on occupational hazards.
>   A similar study may be undertaken on workers of different dairies to assess the knowledge on occupational hazards
>   A study may be conducted to find out the prevention strategies undertaken by the employers and employees in a dairy.

References:

1.   "International Hazard Datasheets on Occupations (HDO)". International Labour Organization. Retrieved December 26, 2012.

2.   Ladou, joseph (2006). Current occupational & environmental medicine (4th ed.). Mcgraw- hill professional. ISBN 0-07-144313-4.

3.   World Health Organization (2016) International statistical classification of diseases and related health problems (ICD-10) in occupational health.

4.   International labour conference, sixty –sixth session. Amendment of the list of occupational diseases appended to the employment injury Benefits convention. No. 121; 1964.

5.   International Labour Organization (2016) International Labour Standards on occupational safety and health.

6.   International journal of occupational and environment medicine,april-2005,issue-1

7.   Gullani K K. Occupational health nursing. Community health nursing, principles and practices, first edition; Kumar publishing house: 2005.

8.   National   institute of occupational safety and health bulletin.newdelhi;2005