



ASTUDY ON OCCUPATIONAL HEALTH AND SAFETY MEASURES

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ABSTRACT

Employee health and safety are paramount in corporate responsibility, ensuring a quality work environment. Welfare initiatives encompass fair compensation, healthcare, and career growth opportunities, fostering work-life balance. Management must prioritize safety measures and facility accessibility to mitigate labour issues and prevent accidents. Surveys assess employee satisfaction and health concerns, informing improvements in welfare facilities and safety equipment awareness. Structured questionnaires gather primary data, analyzed through various statistical methods, yielding insightful suggestions for enhancing corporate health and safety measures.

KEY WORDS

Keywords: safety measures, occupational health, training programs, PPE, risk assessments, emergency response, safety culture, compliance, collaboration, continuous improvement.

INTRODUCTION

ONGC prioritizes workforce safety with comprehensive measures, including regular training and emphasis on PPE. Risk assessments and audits mitigate operational hazards, complemented by a robust emergency response system. Encouraging a safety culture, ONGC promotes open communication to address concerns promptly. Compliant with national and international standards, ONGC collaborates with regulatory authorities for excellence. Through training, risk assessment, and continuous improvement, ONGC ensures a secure environment for its employees and contractors, safeguarding both workforce and environment.

REVIEW OF LITERATURE

Patrick Gbadago, et al august 2019, The Impact of Occupational Health and Safety Measures on Employee Performance at the South Tongu District Hospital By Patrick Gbadago, Sedem N. Amedome & Ben Q. Honyenuga Ho Technical University Abstract- The study is about the impact of OHS measures on employee performance at the South Tongu District Hospital. The aim is to find out the level of employee awareness of the OHS Policy of the Ghana Health Service, determine whether the OHS Policy has been implemented in the organisational setup, identify the kinds of hazards that employees face due to the nature of their work, identify the challenges face in the implementation of OHS measures by management and finally to examine the impact of the OHS measures on employee performance. The study used both stratified and simple random

sampling methods to sample 116 employees of the Hospital including 5 management members. Questionnaires were administered and observation was carried out. However, only 88 questionnaires were retrieved and analysed using the SPSS software and results were displayed on tables. The study found out that the level of employee awareness of OHS Policy was 79.5 percent. The measures were seen to have been implemented adequately. Workers faced numerous hazards such as safety hazards, mechanical hazards, biological hazards, ergonomic, physical hazards and psychological hazards. Management was found to be constrained financially in the implementation and maintenance of OHS measures.

Michael T Jambwa ,et al June 2013 ,The major objective of carrying out this research study was to investigate the extent of occupational health and safety of workers in Marondera Municipality Department of Water Works and Sewer. This being an area prone to many diseases such as fungal, air borne and water borne, workers are at continual risk of being affected and infected with different diseases and accidents. The methods used to carry out the study were the interview method where workers were interviewed face to face by the researcher. Unstructured and structured interviews were used. Questionnaires were also used by the researcher when workers were given questionnaires to go and answer questions. Participant observation method was the last method used when the researcher had to go round with the workers during their daily chores. This proved to be quite helpful as the researcher had first hand information on what really goes on on the ground when workers are doing their duties. The major findings were that the Municipality is not doing enough to protect its workers from diseases and accidents. The rate of infection and accidents are on the increase. Workers are not given enough protective clothing and labour inspectors are not even going around inspecting the working conditions in the department. Accidents do occur due to negligence and over familiarization by the workers. The long serving workers are the ones who usually take things for granted. The researcher recommends that appropriate and effective health and safety management systems and procedures must be established, enforced and adhered to in order to ensure and assure the preservation.

Michael D. Oisamoje Enaruna Ehim ,et all ,Nigeria, April 2013 , All organizations have a duty of care to ensure that employees and other persons who may be affected by the company's undertakings remain safe at all times. This paper examines the background of occupational health and safety (OHS) practices in Nigeria, and highlights the importance of mitigating the OHS challenges identified from the moral, legal, financial and other dimensions. In the Nigerian context, the need to reinforce health and safety management (HSM) issues is exemplified from the unsavory recurrent reports of plane crashes in the aviation industry, high rates of motor vehicle accidents, numerous cases of death due to poisoning in the solid mineral sector, frequent accounts of disasters in the petroleum sector arising from oil spills, pipeline vandalism as well as accidents involving petroleum tankers. More effective and efficient management of these issues is a sine qua non to the industrialization efforts of an economy. Against the background of extant HS legislation in Nigeria, some reasons for the frequent violations of OHS standards and norms by the operators were identified as bribery

and corruption in the system, the 'Nigerian Factor', inadequate funding of monitoring institutions, low level of education of employees as well as problems of persistent unemployment in the country. While recommending ways to mitigate the OHS flaws in Nigerian institutions, the relative duties and responsibilities of stakeholders in the OHS business were identified. The paper concludes by noting the importance of a virile HSM environment to the overall economic development and industrialization of the nation.

E. Vagka et al ,20 December 2010,The expansion of chemotherapy raised concerns about the health and safety of hospital personnel. Very little is known about the conditions of handling of chemotherapeutic agents by healthcare workers in Greece and possible adverse effects related to their safety practices, as well as the safety policies adopted by the Greek hospitals. A self-evaluation questionnaire was completed by 353 healthcare workers involved with the use of chemotherapeutic drugs in 24 Greek hospitals and the answers were statistically analysed. The majority of the healthcare workers are aware of the dangers of their work, although they had received limited training and medical surveillance. A significant percentage of them does not use personal protective equipment or use it inadequately. The safety design of their workplace is rather poor. Different health problems have been experienced, deriving from the respiratory, central nervous system, reproductive, gastrointestinal and musculoskeletal system. The improvement of safety training and procedures as well as medical surveillance seems to be a vital priority of hospital administration in Greece, in order to comply with the European guidelines and for the prevention of occupational diseases and environmental pollution.

Muhammet Gul,02 february 2018,Occupational health and safety (OHS) is a multidisciplinary activity working under the tasks of protection of workers and worksites. Risk assessment, as a compulsory process in implementation of OHS, stands out as evaluating the risks arising from the hazards, taking into account the required control measures, and deciding whether or not the risks can be reduced to an acceptable level. The diversity in risk assessment approaches is such that there are many methods for any industry. Multicriteria decision-making (MCDM)-based approaches contribute to risk assessment knowledge with their ability on solving real-world problems with multiple, conflicting, and incommensurate criteria. This article conducts a critical state-of-the-art review of OHS risk assessment studies using MCDM-based approaches. Additionally, it includes fuzzy versions of MCDM approaches applied to OHS risk assessment. A total of 80 papers are classified in eight different application areas. The papers are reviewed by the points of publication trend, published journal, risk parameters/factors, and tools used. This critical review provides an insight for researchers and practitioners on MCDM-based OHS risk assessment approaches in terms of showing current state and potential areas for attempts to be focused in the future.

OBJECTIVE OF THE STUDY

- ✓ To determine whether have employees have safe and secure working environment.
- ✓ To determine how far the existing health facilities are helpful to employees.

- ✓ To analyze the effectiveness of safety training programmes conducted among the employees.

RESEARCH MEHODOLOGY

Research Methodology is the specific procedures or techniques used to identify, select, process and analyse information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. More precisely, research methods help us to get a solution to a problem. Research Methodology, is a way to systematically solve research problem. It is a science of studying how research is done scientifically. Essentially it is the procedure by which the researchers go about their work of describing, evaluating and predicting phenomenon. It aims to give the work plan of research.

Key tools and techniques include percentage,chi square,correlaction,anova.

DATA ANALYSIS AND INTERPRETTIONS

PERCENTAGEANALYSIS

FINDINGS

- Gender equality initiatives for a balanced workforce and inclusive workplace.
- Well-being programs to support work-life balance and mental health.
- Job security measures and tailored training for temporary workers.
- Educational partnerships and financial literacy workshops for skill enhancement.
- Comprehensive health and safety training and continuous improvement protocols.

CHI – SQUARE

WORK EXPERIENCE VS TRAINING

Analysis of association between work experience and training before working on dangerous machinery

HYPOTHESIS:

NULL HYPOTHESIS (H₀):

There is no significant relationship between work experience and training before working on dangerous machinery.

ALTERNATIVE HYPOTHESIS(H1):

There is significant relationship between work experience and training before working on dangerous machinery.

TABLE SHOWING WORKING EXPERIENCE OF THE RESPONDENTS

EXPERIENCE	NO OF RESPONDENTS	PERCENTAGE(%)
Less than an year	54	45
Between 1 year to 3year	20	17
Between 3 year to 5 year	35	29
More than 5 year	11	9
Total	120	100

TABLE SHOWING TRAINING BEFORE WORKING

PARTICULARS	NO OF RESPONDENTS	PERCENTAGE(%)
YES	101	84
NO	19	16
TOTAL	120	100

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Experience * dangerous machinery	120	100.0%	0	.0%	120	100.0%

Experience * dangerous machinery Crosstabulation

Count		dangerous machinery		Total
		yes	No	
		Experience	Less thanan year	
	Between 1 year to 3 year	20	0	20
	Between 3 year to 5 year	27	8	35
	More than 5 year	0	11	11
Total		101	19	120

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	73.690 ^a	3	.000
Likelihood Ratio	67.227	3	.000
Linear-by-Linear Association	48.801	1	.000
N of Valid Cases	120		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.74.

INFERENCE:

The calculated value is 73.690 and significant at this level of 0.5 degree of freedom 3 less than so, reject the null hypothesis and accept the alternative hypothesis. Hence there is significance difference between work experience and training .

CORRELATION

HYPOTHESIS:

NULL HYPOTHESIS (H0):

There is no significant relationship between the training on safety procedures and emergency protocols and lack of concern for own safety.

ALTERNATIVE HYPOTHESIS(H1):

There is significant relationship between the training on safety procedures and emergency protocols and lack of concern for own safety

TABLE SHOWING TRAINING ON SAFETY PROCEDURES &EMERGENCY PROTOCOLS

PARTICULARS	NO OF RESPONDENTS	PERCENTAGE(%)
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YES	98	82
NO	22	18
TOTAL	120	100

TABLE SHOWING RESPONDENTS LACK OF CONCERN FOR OWN SAFETY

PARICULARS	NO OF RESPONDENTS	PERCENTAGE(%)
Highly Agree	0	0
Agree	9	8
Neutral	29	24
Disagree	65	54
Highly Disagree	17	14
Total	120	100

Correlations

		safety procedures	own safety
safety procedures	Pearson Correlation	1	.615**
	Sig. (2-tailed)		.000
	N	120	120
own safety	Pearson Correlation	.615**	1
	Sig. (2-tailed)	.000	
	N	120	120

** . Correlation is significant at the 0.01 level (2-tailed).

The significant value obtained is .000 which is less than 0.05, null hypothesis is accepted and alternate hypothesis is rejected.

INFERENCE:

From the SPSS output generated, the Pearson's correlation value obtained is .615 which indicates that there is a good positive correlation between safety and emergency protocol and lack of concern of own safety

ANOVA

Analysis of variance between enhance effective human relation and opinion and responsibilities.

HYPOTHESIS:

Null Hypothesis (Ho): There is no significant group difference in mean between enhance effective human relation and opinion and responsibilities

Alternate Hypothesis (H1): There is a significant group difference between enhance effective human relation and opinion and responsibilities

TABLE SHOWING WORKING EXPERIENCE OF THE RESPONDENTS

EXPERIENCE	NO OF RESPONDENTS	PERCENTAGE(%)
Less than an year	54	45
Between 1 year to 3year	20	17
Between 3 year to 5 year	35	29
More than a year	11	9
Total	120	100

TABLE SHOWING RESPONDENTS HEALTH & WELLNESS SUPPORT

PARICULARS	NO OF RESPONDENTS	PERCENTAGE(%)
Excellent	43	36
Good	48	40
Average	19	16
Fair	10	8
Poor	0	0
Total	120	100

Oneway

ANOVA

Experience	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	104.728	3	34.909	143.612	.000
Within Groups	28.197	116	.243		
Total	132.925	119			

Post Hoc Tests

Homogeneous Subsets

Experience

Duncan

wellness	N	Subset for alpha = 0.05			
		1	2	3	4
Excellent	43	1.00			
Good	48		2.12		
Average	19			3.05	
Fair	10				4.00
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

INFERENCE

Based on the results generated by SPSS for ANOVA it depicts that significant value is 0.000 which is less than 0.005. Hence we reject null hypothesis and accept alternate hypothesis. Hence there is significant difference between each one of the four levels.

SUGGESTION

- **Gender Equality Initiatives:** Implement programs to promote gender balance and inclusivity in the workplace.
- **Employee Well-being Programs:** Introduce work-life balance, mental health, and family support initiatives for a predominantly married workforce.
- **Job Security Measures:** Enhance job security for temporary workers through training and upskilling opportunities.
- **Experience-Based Training:** Develop tailored training for different experience levels to ensure effective onboarding and skill development.
- **Environmental and Safety Training:** Launch environmental awareness and comprehensive health and safety training to address workplace conditions.
- **Enhanced Health and Wellness Programs:** Evaluate and promote health and wellness programs, ensuring they meet diverse employee needs and encourage participation.

CONCLUSION

The study highlights a predominantly male workforce with varying job permanency, necessitating gender equality and job security initiatives. Tailored well-being programs should address marital status and job security concerns, fostering inclusivity and stability. Environmental challenges like pollution and adverse weather impact well-being; thus, environmental awareness training and infrastructure improvements are crucial. Robust health and safety measures, including wellness programs, safety protocols, and high-quality PPE, are essential. Lastly, fostering a positive work culture through stress management, organizational climate initiatives, and continuous improvement is vital for sustained success.

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