



HEALTH EDUCATION IN THE CONTROL AND PREVENTION OF OCCUPATIONAL ACCIDENTS; A CASE STUDY OF UNITED CEMENT COMPANY MFAMOSING, AKAMKPA LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA, WEST AFRICA

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ABSTRACT

Health is wealth. Without good health, man cannot function optimally. This study is therefore carried out to investigate the role of health education in the control and prevention of occupational accidents with emphasis on united cement company (UNICEM), which is a cement manufacturing factory that is located in Akamkpa Local Government Area of Cross River State, Nigeria, West Africa. Two questions were formulated to guide the study. Questionnaire was the instrument used to gather data using one hundred (100) selected workers from ten units to elicit information for the study. Multipurpose sampling techniques of purposive and simple random sampling techniques were employed to select the sample for the study. Descriptive survey research design was adopted for the study. The research questions were tested using simple percentages analyses. The findings of the study revealed that 100% of the respondents affirmed and upheld that induction training given to workers at first engagement to duty and instruction guide given by supervisors to subordinate workers respectively lead to the control and prevention of accidents in the workplace. The study recommended that environmental health and safety education should be given in the work place.

KEYWORDS: Health Education, Occupational health, United cement company.

INTRODUCTION

Health is man's closest asset, and all physical, social, economic, political or religious activities depend on the state of health of individuals. World health organization WHO (1978), defined health as a state of complete physical, mental and social well-being of individuals not merely the absence of diseases or infirmity. This implies that good health can only be achieved when a state of equilibrium exists between man, his environment and his work place.

Education is the process of giving awareness to an individual or a group of persons so as for them to know and have idea and knowledge about issues. Knowledge is power, without good education, the world will still be in the primitive or stone age. Education has brought in enlightenment, awareness, exposure, innovation and knowledge leading to scientific innovation through research.

Through health education, the workers in the work place could be aware of how to maintain safety measures to protect themselves from accident in the work place. Through health education, management of an organization become aware of the need to provide health centres, facilities and educate the workers of the importance of maintaining good health and well-being of workers to improve productivity.

Ehrick (2010) asserts that health education is the translation of what is known about health into desirable persons individually and commonly guiding the behaviour pattern by means of educational process. It can be seen as an attempt that is made to equip the people with sufficient knowledge or skills that can enable them to take positive measures or actions on their own to promote personal health and that of the community.

Daniel (2008) observed that the role of health education in relation to occupational accident include giving of health induction or orientation training to newly engaged workers, giving first aid training to workers educated on the need and importance of wearing such gadgets as helmet, eye goggles, hand gloves, nose mask, safety boot etc while working.

Mathew (2012) supported Daniel (2008) when he opined that health education in the form of training, induction course seminar, workshop, and instruction, among others must of necessity be given to workers in industries that have staff strength of more than ten.

Occupational education aids the workers to know what they can do to remain healthy in the area of safety measures in order to promote productivity. The study organization, united cement company UNICEM with over one thousand workers both fully engaged and casual or temporary are using heavy machines and raw materials that contain chemicals and dusts, so there is need to health educate to their workers in order to control and prevent occupational and industrial accident.

Association of international scientific Expert on cement AISEC (2011) asserts that there are hazards and accidents connected with work place. AISEC see occupational accident as an occurrence that may result in a work place without being pre-arranged or planned, and which can result to injury, harm, hazard or death of a worker. Such occurrences include cuts from machines, respiratory tract problems from dust, burns from chemicals, etc.

AISEC (2011) further reiterated that good health and safety measures or management is vital in ensuring that safe practices are adopted and maintained in any organization. WHO (2013) maintained that health and safety policy is vital in organization. This provide employee with fundamental information about health safety while working.

In recent times modernization and industrialization have compelled manual labourers to be more prone to mechanization practice. The advent of modernization and industrialization has increased industrial accidents which triggered the need for health and safety education in the work place.

World Technical Experts on cement WTEC (2014) asserted that although one of the objectives behind setting up cement industries are to make profit, the health of those working in such industries has to be taken into consideration due to the nature of the work processes and environment. Health education needs to be given to workers to control and prevent industrial accident that can result to disability, injury and death.

The components of health education in relation to the control and prevention of occupational accident in

cement industries according to Esshoc (2013) are first aid training knowledge to workers, induction course given to new employees, health instruction given by supervisors to subordinate workers, among others. Induction course are training system to a worker in his first engagement in the work to guide him on the operation and safety in the work place. Mathew (2012) referred to it as orientation given to workers about the operation of an organization. Feyer and Williamson (2014) defined induction course as a training course for new employee on various issues including health safety and the operation of the organization against to pains, suffering, injury, loss of income and death. Accident in the workplace do not just happen, it happens due to ignorance or carelessness. Accident can be control and prevented or at least minimized if appropriate workers are given induction training and good supervision guide to have the awareness and understanding on why and how they should protect themselves. (Anderson, 2011).

Association of international scientific Experts on cement AISEC (2011) in a study conducted between 1995 to 1999 discovered that 0.8 % of industries in less developed nations do not give induction course or training that even if a worker have worked in the same type of industry before being engaged by another, there is need for him to be properly trained so that he can have knowledge of operation of the new engagement.

Supervisor is the boss to the junior subordinate worker so there is need for them to give health and safety education to their subordinates so as to control and minimize accidents in the work place. Supervisor's role is to give adequate information and guidance to his subordinate on how to work in order to avoid hazards of injury or death in the work place. It is on this bases that the researcher intend to investigate on health education in the control and prevention of occupational accidents in united cement company in Mfamosing, Akamkpa Local Government Area of Cross River State, Nigeria. West Africa.

METHOD

The research design used was the descriptive survey design. This design was adopted for this study because it explains the present situation as it concerns health education in the control and prevention of occupational accident in united cement company in Mfamosing, Akamkpa Local Government Area of Cross River State, Nigeria. The population of the study was made up of workers of both full time engagement and casual workers covering all levels of placement or grade. The respondents were selected from ten units of Administration, Operations, Security, Medical, Maintenance, Personnel, account, Transports production and sales/marketing.

Purposive sampling technique was employed to get the units while simple random sampling technique was used in selecting the respondents or subjects from each units

in order to maintain fair representation. Ten respondents were selected per unit making a sample size of one hundred. Questionnaire was used in collection and was administered to the respondents for opinions, and then retrieved for analysis at an interval of one hour. The instrument was validated to ensure that items in the questionnaire represent the subject of interest and are accurate. The test-retest method of the reliability was used in ensuring reliability of the instrument. The researcher administered thirty (30) questionnaires to (30) workers to those not used in the pivot study. The thirty (30) instruments were administered at one-week interval. That is, in the first week, the researcher administered the first set of thirty (30) questionnaires (test-retest method). Result obtained from the first and the second test were analyzed using Pearson Product Moment correlation coefficient to establish the relationship between the two results. The result was 0.86 (high relationship).

RESULT

The result of data analysis carried out on data collection on demographic information was done using frequencies and percentages. The analyzed demographic variables are presented in table 1 to 6.

Table 1: Frequency and percentages of study sample on age.

Variable	No. of respondents	Percentage %
18-25	10	10
26-30	30	30
31-35	30	30
36-40	20	20
41 and above	10	10
Total	100	100

Table 2: Frequency and percentage of study sample on gender.

Variable	No. of respondents	Percentage %
Male	70	70
Female	30	30
Total	100	100

Table 3: Frequency and percentage of study sample on marital status.

Variable	No. of respondents	Percentage %
Single	60	60
Married	40	40
Total	100	100

Table 4: Frequency and percentages of study sample on educational status.

Variable	No. of respondents	Percentage %
Primary school level	5	5
Secondary school level	55	55
Tertiary education level	40	40
Total	100	100

Table 5: Frequency and percentages of study sample on religion.

Variable	No. of respondents	Percentage %
Christianity	55	55
Moslem (Islam)	45	45
Traditional	0	0
Total	100	100

Table 6: Frequency and percentages of study sample on units.

Variable	No. of respondents	Percentage %
Administration	10	10
Operations	10	10
Security	10	10
Medical	10	10
Maintenance	10	10
Personnel	10	10
Accounts	10	10
Transports	10	10
Production	10	10
Sales/marketing	10	10
Total	100	100

Table 1 shows the description of the sample in terms of age. From the data obtained, out of 10 respondents 10 (10%) of the respondents were between the ages of 18-25 and 41 years and above respectively 30 (30%) of the respondents were between the ages of 26-30 and 31-35 years respectively, while 20 (20%) were between the ages of 36-40 years.

Table 2 shows the description of the sample in terms of gender. From the data obtained, out of the 100 respondents 70 (70%) of the respondents were male while 30 (30%) of the respondents were female.

Table 3; shows the description of the sample in terms of marital status. from the data obtained, out of the 100 respondents 60 (60%) of the respondents were single while 40 (40%) of the respondents were married.

Table 4 shows the description of the sample in terms of educational status. From the data obtained, out of the 100 respondents 5 (5%) of the respondents had primary school education while 55 (55%) of the respondents had secondary school education while 40 (40%) of the respondents had tertiary education qualification.

Table 5 shows that the description of the sample in terms of religion. from the data obtained, out of the 100 respondents 55 (55%) of the respondents were Christians while 45 (45%) of the respondents were Muslims.

Table 6 shows the description of the sample in terms of units. from the data obtained, out of the 100 respondents

10 (10%) of them respondents were from administration, operations, security, medical, maintenance, personnel, Accounts, Transports, Production and sales/marketing unit respectively.

Research Questions 1

To what extent does induction course given to workers at first engagement help in controlling and preventing occupational accidents?

Table 7: Percentages analysis of induction Course and occupational accident control/ prevention.

Variable	Sampled units	Response Yes, No	Total (%)
Induction course training	Administration	10 0	
Given to workers at first	Operations	10 0	
Engagement to duty	Security	10 0	
Helps in controlling and prevention of accident in the work place	Medical	10 0	
Total	Maintenance	10 0	
	Personnel	10 0	
	Accounts	10 0	
	Transports	10 0	
	Production	10 0	
	Sales/marketing	10 0	
Total		100 0	100%

Table 7 indicate that 10(10%) of the respondents workers in the units of Administration, operations, security, medical, maintenance, personnel, Accounts, Transports, Production and Sales/Marketing respectively affirmed and upheld that indication course was given to newly engaged workers and training knowledge helps in controlling and preventing accident in the work place.

Research Question 2

To what extent does supervisor instruction given to subordinate workers on health safety help in controlling and preventing occupational accident?

Table 8: Percentages analysis of supervisor instruction and occupational accident and prevention control.

Variable	Sample Unit	Responses Yes NO	Total %
Supervisor instruction	Administration	10 10	10
Given to subordinate workers on	Operations	10 10	10
Health safety help in	Security	10 10	10
Controlling and preventing	Medical	10 10	10
Accident in the work	Maintenance	10 10	10
Place	Personnel	10 10	10
	Accounts	10 10	10
	Transports	10 10	10
	Production	10 10	10
	Sales/Marketing	10 10	10
		100 0	100%

Table 8 indicate that 10(10%) of the respondents workers in the units of administration, operations, security, medical, maintenance, personnel, Accounts, Transport, Production and Sales/Marketing respectively affirmed and upheld that supervisor instruction given to subordinate workers on health safety help in controlling and preventing accident in the work place.

100 respondents workers used as sample, 100% affirmed and upheld that induction course training given to workers at first engagement to duty help in controlling and preventing accident in the work place.

DISCUSSION

Findings of the research question one revealed that there is a significant influence between induction course training given to workers at first engagement to duty and control and prevention of accident in the work place. The findings discovered in this study proves that out of the

The findings discovered is in line with Association of International Scientific Expert on cement AISEC (2011) who discovered greater number of industries in developing countries giving induction course training to newly employed workers and recommended for periodic training retraining programme for workers in industries.

Findings of the research question two revealed that there is a significant influence between supervisor instruction

given to subordinate workers on health safety and control and prevention of accident in the work place. The findings discovered in this study proves that out of the 100 respondents workers used as sample, 100% affirmed and upheld that supervisor instruction given to subordinate workers on health safety helped in controlling and preventing accident in the work place.

The findings discovered is in line with Association of International Scientific Expert on cement AISC (2011) who observed that instruction given to workers by the supervision in the work place help the subordinate workers to carry out their duty consciously and add to the knowledge of health safety while carrying out the daily routine work.

CONCLUSION

The researcher looked at health education in the control and prevention of occupational accidents in united cement company UNICEM, Mfamosing, Akpamkpa local Government Area of Cross River State, Nigeria. West Africa. It was prompted by the fact that, health education helps in giving workers knowledge on health safety thus controlling and preventing accidents in the work place. With the help of health education in terms of giving of induction course training to newly engaged workers and supervisor guidance and instruction given to subordinate workers, it became obvious that accidents in the work place are controlled with the knowledge and skill of using nose masks to prevent dust, hand gloves, eye goggles, helmets, safety boots and other gadgets. However, the inferences deduced in the discovery indicated that health education significantly influence the controlling and prevention of accident in the work place.

RECOMMENDATION

Based on the findings of the study, the following recommendations were necessary.

1. Companies or industries should give health education and health safety education to their workers.
2. Agencies responsible for supervision of industries should carry out inspection and supervision to industries frequently to ascertain the level of their compliance with health and safety standard of workers.
3. Legislation should be enforced for employer and employee to maintain environmental health safety measures in their working environments.

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