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AWARENESS OF THE IMPORTANCE OF PERSONAL PROTECTIVE EQUIPMENT AND ITS INFLUENCE ON USAGE: THE CASE OF SOME COMPANIES IN BAMENDA MUNICIPALITY

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Abstract: Many companies nowadays focus only on output without thinking of the welfare of the workers, and some workers do not also think of their safety at the workplace. The study sought to investigate awareness of the importance of personal protective equipment and its influence on usage. The case of some companies in the Bamenda Municipality. The survey research design was used and a total sample size of 120 was recruited for the study that is 75 workers from Edge and 45 from SOTRASEFI companies. The purposive and accidental sampling techniques were used in order to enable the researcher met up with the population of interest. The questionnaire and an observational check list were used to collect data from the field, and inferential statistical methods were used to interpret the data, while the inferential statistical technique with the statistical package for social sciences (SPSS) version 20.0 were used to verify the hypotheses. Graphs, bar and pie charts were used to present data collected from the field. From the hypotheses of the study, the results proved that awareness of PPE influences its usage with a statistical significance of 0.003 which is less than 0.051. To ensure effective use of PPEs, recommendations have thus been made to the workers, management of companies and to the government, one of which is that the government should see that management of companies provide good and quality PPEs as well as regularly train their workers on how to use them.

INTRODUCTION

Every workplace and the kind of work that is being done there determines which kind of personal protective equipment to be used, and how they can use them. The work environment as a whole tells us which kind of PPEs is to be used. Thus, each workplace should always endeavour to see that PPEs are provided, that they workers should be thought on how to wear them, and each workplace should also follow up if the workers actually use them. Protective equipment may be worn for job-related occupational safety and health purposes, as well as for sports and other recreational activities. Personal protective equipment (PPE) is protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter. "Protective clothing" is applied to traditional categories of clothing, and "protective gear" applies to items such as, guards, shields, or masks, and others. In any company, especially building sites and quarries, the use of PPEs, leads to a success in the job. PPE usage has a great place in the companies because in the event of any accidents, not only the workers will suffer or loss, but the whole company, the proprietors and even the neighbourhood. PPE is so important that cannot be undermined in any company since its absence can cause daunting losses, ranging from time lost, loss of property and even loss of life. Personal Protective Equipment (PPE) at work means all equipment which is intended to be worn or held by a person who is at work and which protects him or her against one or more risks to his or her health and safety. Personal protection is one of the important measures to safeguard workers from exposure to occupational hazards (Occupational Safety and Health Administration-OSHA, 2007).

The environment of every workplace determines why and which type of PPEs can often be used. The different components of psychophysical factors vary from one workplace to another. The nature of the

environment, how workers relate with each other, that is interpersonal relationship all make up the psychophysical factors of the environment. Personal protective equipment (PPE) is an important means of preventing work injuries. Ideally, the best approach is to maintain a safe work environment and eliminate any potential hazards. PPE should only be relied upon as a last line of defense in places where it is not practicable to control the hazards at source. The use of PPE generally implies working in a potentially hazardous work environment and its use is a major means of injury prevention. Therefore, it is of prime importance to ensure that the equipment chosen is both reliable and effective, thus it is being properly used and maintained, and the user has undergone adequate training. The aim of this work is to raise the awareness of occupational safety and health practices and the proper use of PPE of people from all walks of life. The popularity of hazards in every company, especially quarry sites, possess great attention as to why people should put on PPEs. (Idoro, 2011).

The rate of accidents amongst workers is so common, ranging from hitting hands, falling from high buildings, and common issues in the quarry sites that often cause problems to health. Dust particles, sharp lights being emitted from machines and vehicles as well as noise are very common. The unfriendly topography and environment where machines do work and the kind of soils or sharp stones at the sites are so common that do not only burst light shoes, but also enter into the eyes, nostrils and causes damage to the ear drum through the heavy sounds being produced. Due to all these, factors that affect the use of personal protective equipment become so imperative since most workers often do not care about its usage.

According to Macewen (1999), the absence of training on how PPE is used and awareness on how and why it should be used possibly will enable workers not only to see the importance, but will adapt to it. Workers in the cause of being educated about its awareness, should be educated also how to wear and remove it. When workers are verse on the necessities of PPE, they turn not only to concentrate and be committed to their work but they also gain satisfaction from their work, which is one of the main components that will increase productivity and output. When an employee has to conduct a task in a risky environment, and they do not feel completely protected, they will be keeping an eye on protecting themselves rather than carrying out the task as efficiently and effectively as they could. Issuing basic protective work wear does help to overcome this risk, and also really place a value on helping the employee to be as comfortable and productive as much as possible. A good working environment where workers can easily lay hand on all the equipment they need, and when they know that their safety is guaranteed, they will turn to concentrate more in their job and avoid turning around during working hours.

Background

The Occupational Safety and Health Act of 1970 heralded a new era in the history of public efforts to protect workers from injury on the job. The Act established, for the first time, a nationwide, US federal program designed to protect nearly the entire work force from job-related injury, illness and death. At the time, the Secretary of Labor, James Hodgson, who had helped develop the law, said it was "the most significant legislative achievement" for workers in a decade. His first step was to establish OSHA as part of the Labor Department of the US Government, effective on April 28, 1971. This new agency was given the very difficult task of creating a program from scratch that would meet the legislative intent of the Act. A portion of the work of OSHA (besides investigating and preventing work-related accidents, among other things) was to define the appropriate personal protective equipment for every job description a company could have. Advances in safety equipment have come through OSHA and, in some cases, by industries or individuals themselves which responded to a need to keep workers safe.

During and after war world 1 and war world II, there was steady progress made in the development of fire fighter's PPE. During those times, they often wore long rubber boots, long rubber trench coats and the traditional fire fighting helmet. The boots were often above the level of the fire fighter's knees (Henryou, 1980). Based on the protection gotten by soldiers after the war, much emphasis was now linked to the PPE. Workers in different spheres of work started being moved on using the personal protective equipment.

One of the first large scale and well documented use of PPE was respiratory protection against chemical warfare during World War One. The use of chemical gases shifted the dynamics of the war, and the use of respirators allowed troops to nullify the toxic and harmful effects of the gas (Henryou, 1980).

Personal protective equipment (PPE), such as helmets, goggles, gloves, face shields, respirators, dust masks, safety shoes and safety glasses, are often very effective when donned and well fitted in preventing the exposure or impact to the various body parts of foreign bodies, chemicals, hot particles, biological agents, and radiation. The method of putting on these gadgets will also determine whether the worker can be prevented from these accidents or not. In addition they PPE reduce the severity when an exposure or an impact happens and it was well fitted and covered the appropriate sections (Mancilin, 2006). The reverse becomes true when an accident occurred and a worker was not putting on a PPE. For example, a worker putting on a gloves in a quarry site, carrying gravels, will prevent his hands from direct contact with sharp stones that can piece his hands and remove blisters on the palms or fingers.

Socio demographic characteristics such as age of the worker, gender of the worker, the level of education of the worker, work experience of the worker are also important determinants of personal protective equipment use by workers (Nichol et al., 2008).

Despite the importance of PPEs, many factors may lead to accidents in a work place. Workers who use of Personal Protective Equipment may be influenced by individual factor such as knowledge of hazards they are exposed to as well as knowledge on how they can protect themselves (Nichol, Adema, & Celenxis 2008). An idea on how to use personal protective equipment and why it should be used is very vital in a job site. More still, the consequences of what will befall an individual worker in the course of an accident without the PPE, is also very necessary, as this are some reasons that may cause one to be compared to put on, even in situations where the gadgets are not comfortable.

Personal beliefs about the efficacy and effectiveness of Personal Protective Equipment may also affect a workers decision of whether or not to use Personal Protective Equipment (IOM, 2008). In addition workers perceptions of risk, past injury history or experience may also influence their decision on use of personal protective equipment. There is a general saying, ‘that once beaten, twice shy’. A worker who has ones been hurt or have ever been involved in an injury or any mishap at a workplace will turn to put on his or her safety gadget irrespective of how discomfortable or inconveniencing it maybe. Many other workers who have never been involved in any injury will not really know the pains that may accompany them, or inconveniences they may be involved in once they have an injury.

Sex differences in a work place also greatly influences the use and how important PPE can be in a workplace. The way a woman will use a PPE maybe different from the way a man will use it. This is because women may generally not like some inconveniences, while men will not bother themselves putting on whatever they have. Again, the hairdo of some women, their finger nails and extra make up on their bodies will influence their use of PPE for example wearing globes with long finger nails, as compared to men who do not keep much hair, long nails and other parts of their bodies that can retard the wearing of PPE.

Looking at the conceptual origin, Availability of equipment and organizational factors, such as training, encouragement from co-workers in terms of PPE use and general social support including peer or co-workers use of may also be important determinants of personal protective equipment use by workers (IOM, 2008). Some workers may turn to use PPE in the workplace ones all other workers are using. The reverse is true when in a workplace where many are not using it. Once many workers are fun of wearing the PPE, their colleagues will also cherish using it. In situations where other colleagues are being encouraged by their co-workers, by putting on theirs, as well as their during discussion sessions, some others who didn’t cherish putting on PPE will love doing so. In all, education and training, availability of the PPE and the discomforting nature of the PPE will determine its usage in a workplace.

The interest that workers have towards the use of PPE also greatly determine how and the more they will use it. Personal protective equipment as the name goes, does not only protect workers from injuries,

but goes a long way to increase productivity since time is not wasted in the hospitals to cure workers once they are injured. Also, in quarry sites, different Personal Protective Equipment are required depending on the activities workers are involved or specialization. The personal protective equipment is aimed at limiting exposure to various hazards that workers are exposed to including dust, noise, fumes, chemicals, welding sparks, welding glare, heavy objects, electrical current, sharp objects among others. A quarry generally is an open surface excavation of building stones, slate, marbel that is gotten by drilling, blasting, digging, cutting or using explosives. From this definition, one turn to see that the activities being carried out at the quarry site is risky both to the workers and even those around. Added to the definition of a quarry, one sees that it is not only a site where stones are being dug, but after being dug, they pieces and chop off the stones to have smaller ones, such as gravel, quarry stones, dust gravel amongst others. It could also be seen as an area that is dug out from a piece of land or side of a mountain or land in order to get stones or minerals. In a quarry site, machines such as heavy duty trucks and small explosives are being used. These are machines that produce a lot of noise and its use is so dangerous to the workers, such as the explosives. Not only the noise that comes out from the machines and the explosives, but also the particles that are being emitted ones stones explode. Panel beaters are and those working on heavy duty trucks are required to wear ear protectors, safety goggles, safety shoes, hand gloves, overalls and dust masks.

Awareness and use of PPE

Cruz (2017) holds that Personal Protective Equipment are the tools that ensure the basic health protection and safety of users. PPE is any device or appliance designed to be worn by an individual when exposed to one or more health and safety hazards. Awareness of this equipment is therefore not only imperative, but compulsory for every worker, but to employees, so that they will train their workers on how they can now use them and how they can use them.

PPE includes all clothing and other work accessories designed to create a barrier against workplace hazards, and using PPE requires hazard awareness and training on the part of the user. Employees must be aware that the equipment does not eliminate the hazard; if the equipment fails, exposure will occur. To reduce the possibility of failure, workers must be versed that the equipment must be properly fitted and maintained in a clean and serviceable condition. If the workers are not therefore aware, they will not know how to fit their PPEs, how to wash them and when to wear.

Employers and employees are compared to be aware of the different types of PPEs as well as their different grades so as to assess the workplace to determine if hazards that require the use of head, eye, face, hand, or foot protection are present or are likely to be present. If hazards or the likelihood of hazards are found, employers must select, and have affected employees use, properly fitted PPE suitable for protection from these hazards. Before doing work requiring the use of PPE, employees must be able to know when PPE is necessary, what type is necessary, how it is to be worn, and what its limitations are, as well as its proper care, maintenance, useful life, and disposal. This can only be possible when aware of the necessity of the PPE. (Dekker 2002)

Non awareness of PPEs, leads to accidents at the job site and its non-use. Every participant of a work place that uses PPEs is expected to be educated on the different types of PPEs, so that they can become aware. Awareness though cannot compare the workers to use their personal protective equipment, but a persistent follow up and sanctions will be a necessary prerequisite. Every workplace therefore is expected to come out with different fines or sanctions that await workers who do not use their PPEs all the times, or when they are expected to use them. Once workers are aware, there is expected to be s serious follow up, because many workers often neglect it, especially as some of the PPEs are too bulky and heavy when put on them. (Cheyne 2006)

The lack of adequate legislation and enforcement may also contribute to the low use of PPE reported in several developing countries. Legislations in most cases comes as a result of the fact the many employers as well as employees are aware of not only them importance, but of the different grades, types and when to use the PPEs. The government of every country is therefore expected to come out

with strike laws and good parameters on how to implement these laws so as to prevent its citizens from possible hazards, in other to save their lives. Availability of PPE will be the next concept to be treated.

The PRECEDE Model Theory

The PRECEDE model was developed by these authors (Green and Kreuter, 1991; Green, and Partridge, 1980). "PRECEDE" is an acronym for "predisposing, reinforcing as a framework to be used in planning health education programs (Dejoy, 1996).

The PRECEDE model is a contextual and environmental model that attempts to explain why people engage or fail to engage in health promoting behaviors (Dejoy, 1996). The model postulates that individual and work environmental factors combine in influencing worker safety behavior. The health belief model is classified as a decision making model. The main tenet in the model is the notion that people estimate how serious the risk is, analyze the benefits and costs of various actions and then choose a specific course of action that will maximize a desired outcome (DeJoy, 1996).

Health behavior is another factor that will determine and cause a worker or influence him or her to use PPE. Certain cause to action may trigger or initiate a change in behavior including internal cues such as social pressure. This model further postulates that when an individual is anticipating negative repercussions from their behavior, the more they tend to take action aimed at self-protection. Anticipation for negative repercussions has to be accompanied by the desire to avoid the repercussions and the ability to take precautionary measures. In addition, the motivations to take preventive measures require one to be aware of the risks and have the knowledge and skills to take preventive actions. Furthermore, the model postulates that, those that are more likely to take risks tend to be less aware of risks and lack the ability to protect them. Cherry. (2009).

This model additionally highlights the role of social influences on individuals. The desire to gain social approval from supervisors or mangers or generally role models at workplace can influence the decision of workers to use PPE (DeJoy, 1996). The Model further points out the importance of social support and encouragement from those around them.

The health belief model emphasizes how individual attitudes, beliefs, risk perceptions influence their reactions to various health threats in or outside the workplace. These perception, as well as the knowledge they have on the PPE, or the knowledge they have concerning the risk that awaits them, will determine and influence them to use PPE. Although the individual level factors that influence behavior are important, the main postulates that individual and work environmental factors combine in influencing workers behavior.

The model further takes social and environmental factors and the context in which the individual operates into consideration. The model goes beyond person-focused variables and takes a more holistic approach to analyzing what determines health behaviour (DeJoy, 1996) and is more suited to examine work-related health behaviours.

The PRECEDE model is particularly important in understanding healthy behavior in the workplace as it seeks to direct attention to the skills and resources that are prerequisite to the achievement of behavioral goals, and viewing the environment as an important source of social support for behavior change and maintenance.

Any employer trying to develop intervention strategies to change worker safety and health behavior should first understand that efforts to influence the beliefs and attitudes of workers and, thus, motivate them to follow safety practices that may fail if the work environment is non-supportive. This diverts the attention to the importance of task related barriers, the availability of PPE, and the importance of safety training in facilitating self-protective behavior. Additionally, even a well-motivated and well trained worker may not respond appropriately if doing so is not recognized by fellow workers supervisors or those around the work environment (DeJoy, 1996).

The model is relevant to this study as it points out that individuals likely to be adherent to the use of PPE have to perceive themselves as more vulnerable to the hazards posed by their work, perceive the

risks from hazards as a serious threat to their health and evaluate the benefits of the health behavior in these PPE usage, to outweigh personal discomfort that they may be associated with the use of PPE. Thus they will turn to use the PPEs irrespective of how discomfortable it maybe, since the consequences in the risk will higher than the discomforting nature of any PPE they may use. Also, the theory holds that from the risks one aspire to come, will determine your usability of something. Therefore from the theory, once a worker determines that the risk is higher, he or she will have to better use the PPE, so as to curb it.

Statement of the Problem

Many workers in companies these days do not make use of personal protective equipment (PPE). At the Edge Company and Societe de Transformation des Produits Semi Fini on daily bases workers are often seen with red and swollen eyes and they are directly not putting on their goggle glasses. Whenever you interact with workers, you see that the workers always crash their eyes and often upon questioning, we come to see that the dust particles at the quarry often enter their eyes. While on internship, no refresher course or seminar was programmed to drill workers on the use of their PPEs as well as how they should use it. He also realized that the helmets of workers, especially female workers often fall off in the course of work.

Also, surface modification or TPR shoes, Puma men's quarry Danner quarry shoes were not worn by the workers. In the companies, you see that many of the workers move in the workplace carrying out their tasks without safety gadgets like rain boats, noise cover, eyeglasses to prevent dust particles as well as hair maids. In addition, the researcher realized that in Edge Company and Societe de Transformation des Produits Semi Fini, workers wear their overall suits mostly in the morning periods, while in afternoon, they remove them and stay without wearing it, putting their own lives at risk during these afternoon periods. It was also very glaring in the sites, where helmets where not put on because the workers complained of the much heat and that with the helmets they feel so much heat as well as when they put on their safety jackets. A few of them who were not putting on the helmets complained that they were not convenient and that to them, they do not think it is compulsory wearing the helmet. This could have been as a result of the fact that they were either not trained on how to use it, why they should use it as well as the fact that they could not even be aware of it.

Objective

General research objective

To investigate whether awareness of the importance of personal protective equipment will influence its usage.

Research Question

To what extent does awareness on the importance of personal protective equipment has an effect on its usage?

- To what extend does the availability of personal protective equipment affect its usage by workers?

Hypothesis

Ha1: Awareness on the importance of personal protective equipment significantly influences its usage by workers.

Ho1: Awareness on the importance of personal protective equipment does not significantly influence its usage by workers.

METHODOLOGY

The survey research design was used in this study. This is one in which a group of people or item is studied by collecting and analysing data only from a few people or item considered to be a representation of the entire group. However, there are some surveys in which the entire population is

being studied, known as census survey as compared to sample survey where only a proportion is studied.

In this study, the sample survey was used in the Edge construction company because the researcher worked only with those in the quarry, while in the Societe de Transformation des Produits Semi Fini (SOTRAPSEFI) Company, the researcher used the census survey research design, since he involved all the workers.

This study was carried out at Edge Construction Company, and the SOTRAPSEFI Company, all in Bamenda. Bamenda is a city in North Western region of Cameroon and headquarter being Mezam Division. It has a density of 300.35 inhabitants per square kilometer. Its subdivisions are; Bafut, Bali, Bamenda I, II, III, Santa and Tubah subdivisions. Bamenda is a cosmopolitan town comprising of both young and old citizens hailing from all over the national territory and having different cultural backgrounds. Bamenda is known for its cool climate and scenic hilly location. Agriculture wise, different crops are often grown in Bamenda, especially maize, beans and coco yams.

The population of the study was made up of all the factories around Bamenda municipality. The target population was made up of all the workers of Edge Company and the SOTRAPSEFI, while the accessible population was made up only the workers in the quarry section of the Edge company, that is 75 workers and all the workers of the SOTRAPSEFI which is 45 in number, making a total accessible population of 120 persons.

Table 1: Showing the accessible and target population

S/No	COMPANY	ACCESSIBLE POPULATION	SAMPLE
1	Edge construction Company	265	75
2	SOTRAPSEFI	45	45
	TOTAL	310	120

Source: field work 2019

The researcher used the purposive and accidental sampling technique in this study. The purposive sampling technique was used in order to enable the researcher meet with the population of interest. This sampling technique implied that working with groups of participants who was to help provide adequate information for the inquiry. As such, the sample of the study was chosen based on the requirements or purpose of the study which is to study the use of personal protective equipment. The study thus deals directly with workers or individuals who are involved in tasks that enable them to use personal protective equipment.

Also, this sampling technique will be appropriate because it will enable the researcher to focus on specific characteristics of the population which will help provide answers to research questions. Furthermore, the accidental or convenience sampling technique will equally be used in this study. This is because data will only be collected from respondents that are available and easy to reach.

For the purpose of this research, questionnaires (quantitative approach) were used to collect the relevant data. This approach increased the overall validity and credibility of the data collected since the data collected will be from the questionnaires to be answered separately. In the questionnaire, the workers will be given the opportunity to express their minds in relation to the use of PPE. Also, the workers here will be given the liberty to indicate their attitudes and motives as far as non-usage of PPE is concerned, since they will be able to freely answer the questionnaires.

Also, an observation guide was used to observe the usage of PPE in these two companies. An observation guide having six main items and sub items will be constructed and used by the researcher to actually fine out if the workers are using the PPEs. This is important to actually ascertain if the workers are using the PPEs, and at which period of time, and which are the type of PPEs they are actually using, and which they are not using.

After collecting the data, it was recorded and interpreted using a series of descriptive and inferential statistical methods. Descriptive statistics consist of the use of tables containing various weighted

responses, percentages and measures of central tendencies. Charts and graphs were equally used for further clarification and representation of figures for better clarity.

Inferential statistical techniques with the Statistical Package for Social Sciences (SPSS) version 20.0 was used to verify the hypotheses of the study.

FINDINGS

The findings of this study are presented based on the research questions and hypotheses under investigation

Research question: How does the awareness of the importance of personal protective equipment affect its usage?

In an attempt to answer research question one, data from questions 1-4 of section B of the workers' questionnaire were analyzed using descriptive statistics in the form of percentage, frequencies ,means($\bar{X}$) and standards deviations presented as follows;

Table 2: Showing the extent of awareness of PPEs.

Items	Positive response			Negative response			X	SD
	SA	A	Total	D	SD	Total		
I am aware of all the different PPEs to be used by workers, such as gloves, safety harness, safety mask, goggles, helmet, overall	7(5.8%)	82(68.3%)	89(74.2%)	25(20.8%)	6(5%)	31(25.8%)	2.73	.77
I am versed with the different grades/qualities of PPEs	10(8.3%)	30(25%)	40(33.3%)	44(36.7%)	36(30%)	80(66.6%)	2.12	.94
I aware of the necessity of PPEs	25(20.8%)	85(70.8)	110(91.6%)	4(3.3%)	6(5%)	10(8.4%)	3.08	.66
Aware that workers may be involved in accidents whenever they do not put on PPE	47(39.2%	43(53.8)	90(75%)	28(23.3%)	2(1.7%)	30(25%)	3.11	.87

Statistical evidence as presented on table 2 indicates that when asked if the workers are aware of all the different PPEs to be used by workers in a quarry or SOTRASEFI such as gloves, safety harness, safety mask, goggles, helmet, overall etc., a majority of 89(74.2%) out of the 120 respondents agreed while 31(25.8%) disagreed. Similarly when demanded to know if they are aware of the necessity of PPEs, a sweeping majority of 110(91.6%) accepted while only 10(8.4%) respondents denied having knowledge of the necessity of these gadgets. Equally a majority of 90(75%) agreed that they are aware that they may be involved in acci dents whenever they do not put on PPE while a minority of 30(25%) disagreed. On the other hand when verified to know if they are versed with the different grades/qualities of PPEs, a majority of 80(66.7%) respondents were negative while a minority of 40(33.3%) were positive

Three out of the four items that make up the variable "awareness" each had a mean higher that the hypothesized test value of 2.5. We therefore infer that the workers awareness on PPEs was quite high.

Verification of hypothesis

Ho1: Awareness of the importance of personal protective equipment does not significantly affect its usage

Table 3: Model summary showing the explanatory power of awareness on the usage of PPEs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.197[a]	.039	.031	6.51672

According to table 3, a linear regression analysis was conducted to verify the relationship and the impact of awareness of the importance of personal protective equipment on its usage. The sample correlation coefficient R (.197) indicating that 3.9% which is (R^2) of the variance in the usage of

personal protective equipment by these workers was accounted for by their awareness of personal protective equipment.

Table 4: ANOVA for regression analysis showing the explanatory power of awareness on personal protective equipment

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	201.612	1	201.612	4.747	.031
	Residual	5011.188	118	42.468		
	Total	5212.800	119			

Table 4 reveals that the awareness of personal protective equipment has a significant relationship with its usage (F =4.74, df=118, P=0.031). The coefficient of correlation is low (0.20) and positive. The two variables are positively and significantly related. We can therefore infer that an increase in the awareness of personal protective equipment leads to small increase in its usage and vice versa. The p value=0.031 which is less than 0.05 indicating a significant relationship between the awareness of personal protective equipment and its usage. We reject the null hypothesis and uphold the alternative.

Discussion of Findings: To investigate if awareness of the importance of personal protective equipment will influence its usage.

The research findings corroborate to the work of Cheyne (2006) who holds that awareness though cannot compare the workers to use their personal protective equipment, but a persistent follow up and sanctions is considered to be a necessary prerequisite. One therefore sees that the workers are expected not only to be aware, but are expected to be trained so that they can use it. One therefore holds that even though workers are aware of the different PPEs in the work place such as gloves, safety helmets, safety mask, goggles, helmets, they are expected to be trained and the PPEs must be available before the workers use them correctly and at the right time. Furthermore, even though the workers are aware of the different grades, it does not influence their usage of the PPE as indicated from the results. From the different questions under awareness, we see that the question that was asking about the workers awareness on sanctions to be meted on them, was answered in favour of this objective. It is therefore obvious awareness of workers on the PPE cannot cause them to use it always, but the fact that they are aware of the different sanctions to be meted on them, will make them to use the PPEs correctly and at all times.

This work also corroborate with the EU regulation as stated by Mark (2017) who holds that even in situations where PPE is provided employees must be informed and aware of the risks against which they are being protected by the PPE. This goes ahead to tire to the results of this work as one come to see that even though people are aware of PPEs, they need to be informed of the risk which they stand to be protected by the different PPEs. This was glaring from the findings showed that 90 agreed that they were aware that they could be involved in accidents whenever they do not put on their PPEs while a minority of 30 disagreed to the fact. So they can only conveniently and correctly use the PPEs when they are sure of the risk to be covered by the said PPE.

Conclusion

This work was geared at looking the awareness of the importance of personal protective equipment. The results show that the use of personal protective equipment is limited because of lack of awareness,. One thus conclude here that if proprietors of companies and the government create persistent awareness on the use of PPE, and that these proprietors of companies make the PPEs available and the available ones being comfortable and lastly train their workers on how to use them, then the workers will turn to make use of the PPEs.

RECOMMENDATIONS

Based on the results of this study, the following recommendations have been made to the workers of companies, the proprietors and to the government.

The workers

The workers who are the prime users of personal protective equipment are hereby recommended make good use of any protective equipment they find at their job sites. That is they should not bother whether it fits them or not, but they should do all their best to see that they do not carry out any activity without putting on their PPEs, because their life's are at risk.

Secondly, they are advised to attend all possible training programs or seminars that are organised in their workplace on the training of personal protective equipment. They are also advised to form trade unions and so that through such forums, they could always advice their employers to organise workshops and drill them or how to use new PPEs as well as refresh their minds on the existing ones. They are also advised that through such forums, they can always emphasis that new PPEs be bought after a period of time.

In addition, workers are cautioned to always see that they create time to wash their own personal protective equipment, so that they will always feel comfortable putting them on. In situations where cleaners are available at their companies, they should always reiterate and follow up that their PPEs be well washed and kept clean.

Furthermore, workers who use PPEs are advised to always keep their bodies in good other, so that these PPEs can fit correctly. Women and men who keep overgrown hair and very think hair that makes some helmets not to fit correctly are advise to always keep low hair, to enable these PPEs fit well. Also for example, people with very long nails that makes their gloves not to fit well, could also trim them correctly, so that PPEs like gloves can be well fitted in their hands.

Lastly, workers are advised to always concentrate on whatever they are doing, and stop unnecessary conversation during working hours, as these put their lives at risk, especially when they are forcing to talk when they have put on complete PPEs that may disturb them from conversing freely. All these well enable them to work well and avoid their PPEs falling during working hours and also help prevent them from any possible injury and in all increase their productivity.

To proprietors/management of companies

Proprietors who are owners of companies are expect to provide the workers with every necessary protective gadgets they are expected to get at the workplace. In the course of making the PPEs available or buying them, proprietors are expect to buy the different basic size of the different PPEs, and most often, those that have materials like bugles that can be well fitted on the workers. The sizes of the PPEs to be bought by proprietors should be those that are not too heavy on the bodies of the workers as putting on such PPEs turn to discourage many of the workers, and so they thus abandon it because wearing them and working make them to be lazy and not finish their given task on time.

Also, they are expected to come out with a series of internal rules and regulations concerning the use and handling of personal protective equipment as well as put in place sanctions that will follow in case these rules are not followed. That is, they should follow up to see that each worker should not only work without wearing his or her PPE, but to see that the PPEs are well fitted on him or her. Proprietors should follow up that sanctions be meted on workers who do not fit their PPEs correctly, especially those whose own fall off during work and those who remove theirs during working sessions. The owners of companies are also advised to see that workers keep themselves in good shapes and conditions that when they come to work, their PPEs will be well fitted on them. Safety information and reminder messages should also be written and pasted on many places in the site, so that it should act as a reminder to all the workers each time they come to work. Example "working without PPE is putting your own life at risk", " wearing of PPE is compulsory", etc. These messages will also remind visitors who come to the site that it is also advisable to wear PPEs before moving around the factory or work site.

Furthermore, the proprietors of companies should organise workshops and training programs at least quarterly every year to see that workers are enlightened on their using of PPEs and how to fit them on

their bodies. They are also expected to hire and bring in expects once in a while, so that their workers can be well drilled on aspects concerning the PPEs. Still in this line, once proprietors buy any new PPE, workshops should be organised immediately on how such PPEs can be used. Owners of businesses should also make these training workshops compulsory for every worker, and that any worker who absents without justification should be punished.

Lastly, the proprietors are called upon to make the working environment friendly enough for all their workers. The working relationship between workers and administration should be friendly and cordial, so that each worker should feel happy working in the said organisation. Also, in situations of good working environment, most workers will always remind their colleagues who forget putting on their PPEs at any point in time. This will all go a long way to improve on them use of PPEs, thereby reducing accidents at the workplace and increasing productivity.

To the government

The government is hereby recommended to come out with serious measure and fines to companies that do not provide all the available PPEs to their workers. In this line therefore, the government should see that before they give an authorisation to any individual or group of individuals to open a company, they are expected to show proof of having bought all their PPEs, as well as the fact that they have ample amounts of moneys that they can buy many other PPEs as time goes on.

Also, a good and follow up mechanism should be put in place to see that the proprietors actually follow up these workers to use these PPEs. In this line therefore, surprise checks should be done at working sites to actually find out if they workers are using these PPEs all day long and if they actually fit on them correctly. Also, the qualities of the PPEs should also be checked to see that owners of businesses actually buy what it will serve the purpose. This is because some of the qualities of the personal protective equipment are so low that even discourage the workers from putting them on, because they believe it cannot serve them.

The government is also recommended to carry out awareness campaigns most often. They can also do this through television programs and other avenues, so that many workers come to see the importance of this, as well as the fact that those who are even planning to enter into such jobs will love going there because they believe their own life's are safe. All these will increase awareness on PPEs, thereby increasing its use at every workplace where it is required.

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