# Determining Influence of Age and Gender of Workers Involved in Occupational Health Hazards Preventive Practices: A Case Study of Anambra Motor Manufacturing Company (ANAMCO) Workers

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# Abstract

The study determined the preventive practices adopted by the male and female; older and younger workers of Anambra Motor Manufacturing Company (ANAMCO) Enugu regarding occupational health hazards. Two research questions were stated for the study and two hypotheses postulated were tested at .05 level of significance. The population for the study consisted of 521 workers of ANAMCO. The sample for the study was 261 workers selected by means of stratified sampling techniques. The instrument used for the study was Occupation Health Hazard Preventive Practice Questionnaire (OHHPPO) designed by the researcher. Frequency, percentages and chi-square statistic were adopted for data analysis. The result revealed that the male workers adopted more preventive practices than the female workers (e.g., the male workers put safety devices while performing their work more than the female workers) and that the older workers adopted more practices than the younger workers (e.g., the older workers observed most of the rules and regulations stipulated in the workplace more than the younger workers). The result of the Chi-square similarly, indicated significant differences, revealing that the male workers and the older workers adopted significantly higher practices than the female workers and the younger workers respectively. Following from this, it was recommended, among others, that the management of ANAMCO should try to organize more workshops, seminars, training, retraining on safety practices for all cadres of workforce, especially for the females and younger workers of the company.

Key words: Occupational health, hazard, preventive practices, age, gender.

# Introduction

Over the past few decades, many organizations around the world had begun to show an increasing interest in the concept of occupational safety management as a way of reducing the potential hazards associated with routine tasks. Malek, Adel, Amal and James (2010) observed that significant advances have taken place in the construction and industrial fields in the area of occupational safety since the emergence of occupational safety and Health Act (OSHA) of (1970). As such, there is need to protect workers and the general public against the danger which such industries may pose to them and the economy of any state.

In the world of work, the term "safety culture" has emerged to emphasize the need for safety practices within many companies in recent times (Malek et al., 2010). The authors affirmed that daily safety meetings or briefings take place before work is started in many industries today to ensure there is regular focus on safe work practices among workers. However, studies had shown that even with the dramatic improvements in safety practices among workers in different organizations across the world, there is still a large number of injuries and fatalities among workers in the construction companies each year (Farooqui, 2008). This according to Farooqui, could have been so because the effort on safety practices seems to have left very little concern and resources for the "health" aspect. The author also observed that the industries have more to do with the achievement of mass production of goods and items than maintaining equipment, safe work practices, health and social life of workers in the workplace, which is referred to as occupational health.

Occupational health is a cross-disciplinary area concerned with protecting the health and welfare of individuals engaged in work or employment (Jadab, 2012). The goal of occupational health programmes according to Jadeb is to foster a safe and healthy work environment. As a secondary effect, World Health Organization (WHO) (1997) had noted that occupational health can protect co-

workers, family members, employers, customers, suppliers, nearby communities and other members of the public. The WHO also reported that occupational health helps in reducing medical care, sick leave and disability benefit costs.

The three main objectives of occupational health as suggested by WHO (1997) are (i) the maintenance and promotion of workers' health and working capacity (ii) the improvement of working environment and (iii) development of work organizations and work culture to support health and safety at work and promote positive social climate that will foster smooth operation and enhance productivity. It then implies that workers' social life and welfare are crucial in the provision of occupational health services. This study therefore defines occupational health as the protection of workers from hazards of the workplace and improvement in the social life and welfare of workers.

Hazards are inherent property of a substance, agent and a source of energy or situation that has the potential of causing undesirable consequences (Aluko et al., 2016). Occupational health hazard therefore derives from the realization that workers are exposed to substances, agents, or situations that can cause harm to their health and well-being. Tziafer et al (2011) defines occupational health hazards as workplace activities that have the potential to cause/increase the risk of injury or ill health. WHO (1997) classified industrial hazards in terms of mechanical hazard; ergonomically poor working conditions; biological agents, physical factors, reproductive hazards, chemical hazards, psychological hazard, social hazards and allergenic agents.

Studies (e.g., Goetsch, 20003; Vyas, Das & Mehta, 2011) have observed that workers may be exposed simultaneously to those hazards as classified by WHO (1997). This becomes a problem for Nigerian industrial workers since according to Okwulehie (1997), Nigerian industrial workers are not knowledgeable of the substances used for production in their industries and as such are at special risks of injury and health impairment arising from exposure to hazards in the workplace.

Owumi (1997) and Ugwu (2015) equally observed from their respective studies that Nigerian workers have low knowledge of the harmful effects of substances that are used for production and as such, they encounter different forms of workplace hazards. Aliyu and Shehu (2006), Benedyk and Minister (2010), Dawoudu and Omoti (2010) and Aluko et al (2016) in their various studies have found that irrespective of many initiatives launched to spread awareness on occupational health hazards among all stakeholders and to reduce risks of workplace in Nigeria, large number of Nigerian companies are still faced with workers' safety and environmental challenges. Thus, Nigerian workers are exposed to hazardous conditions in the course of performing their jobs. The inherent increase in the levels of hazards encountered by Nigerian industrial workers, according to Malek et al (2010), emphasizes the need for occupational health programmes and awareness campaign that implement preventive practices.

Preventive practices refer to those measures adopted by workers and management that are geared towards averting or avoiding hazards of the workplace (Coiffi, 2014). Coiffi identified some workplace preventive practices to include, use of safety devices such as ear protector, hand glove while at work, reviewing and monitoring equipment used for production and observing work shift. Jadeb (2012) had earlier identified use of up to date protective devices, workers observation of rules and regulations guiding the performance of work and workers attendance to seminars, workshops, training and re-training programmes. This study determined the preventive practices adopted by workers towards occupational health hazards in Anambra Motor Manufacturing Company (ANAMCO).

ANAMCO situates in Enugu State, Nigeria. The company is an automobile company that assembles cars and fabricates car spare parts. They engage in clearing and repairing of cars. Like other automobile companies, ANAMCO is characterized by a high level of exposure to hazardous agents. These hazards significantly endanger the health and well-being of the workers and by extension, can affect their immediate and extended family members (Jadeb, 2012). Predominantly, hazards in ANAMCO as an automobile company, include allergic reactions to some chemical substances used for production; spills from chemicals, oils, grease and fumes, exposure to thermal radiation, reproductive hazards, biological hazards (Amosun et al, 2011). It also includes strenuous work postures, improperly designed tools and machinery, psycho-social hazards, strain and depression originating from work stress, back, neck and chest pains, cuts arising from machinery and tools and hot, noisy environment (Vyas, Das & Mehta, 2011).

Some theories such as theory of reasoned action (RA) by Fisher and Fisher (1992) had suggested the way in which individuals perceive their environment, which in turn may influence the nature and level of adopting preventive practices. The theory posits that individuals accept and adopt measures to avert hazards if they believe that the hazards have negative impacts on their health and safety. It suggests that individuals are likely to adopt preventive practices if they perceive that they are susceptible to illness; that consequences of infection are severe and/or that effective solution exists. The present study assumed, following from the tenet of this theory that ANAMCO workers are likely to adopt one or more preventive practices if they perceive that the work environment is full of potential dangers (hazards) and that the consequences of these hazards to their health are severe and effective ways of averting such situation exist.

Some factors that significantly influence the level of workers' adoption of preventive practices have been identified by researchers. Santaina and Loonus (2002) identified workers' health conditions, workers' stressors and their characteristics such as duration of employment, lifestyle, body mass, age, gender and marital status as factors that determine workers' level of adoption of preventive practices against workplace hazards. The present study looked at age and gender of ANAMCO workers with the view of clarifying the preventive practices adopted by the workers in averting occupational health hazards. Mital and Ghahramani (2011) had classified workers' age in terms of younger and older workers. The authors noted that younger workers are those within the age range of 19 -45 years while the older workers are within the age range of 20 - 45, while the older workers are those within the age range of 46 - 65. The present classifications were based on the fact that ANAMCO employs workers that are up to 20 years and above and retires their workers at the age of 65 years.

Assessing workers' age in relation to occupational health hazards preventive practices, Vyas, Das and Mehta (2011) studied occupational injuries in automobile repair workers in India. The finding showed that older workers adopted more preventive practices than the younger workers. Supporting this finding, Dwyer and Raftery (2014) asserted that social relations at work are important in averting workplace hazards and that the older workers socialize more than the younger workers. Therefore, the older workers adopted more preventive measures than the younger workers. On the contrary, Mital and Ghahramani (2011) found from a study of injury profiles of large communication company in Canada that older workers do not often us protective devices while at work and as such, encounter workplace accident and diseases than the younger workers.

Regarding the issue of gender, Chine, et al (2003) observed from the study of 3, 112 Chinese workers on occupational injury occurrence that females adhered to rules and regulations stipulated in the place of work than males. As such, more male workers than female workers encountered injuries in the workplace. In contrast, Valuri and Routley (1994) and Rorigo (2004) in their various studies observed that males adopted more preventive practices than females. Aliyu and Shehu (2006) also found from Nigerian sample that females were more exposed to hazards than the males, indicating that males adopted more preventive practices than the females. However, Falana (1997) had reported that workers who were informed of the hazards associated with their jobs through programmes such as workshops, and seminars were aware of the dangers of their work environment. Thus, they adopted more precautionary measures than those who were not exposed to such programmes. The author argued that demographic variables are not related to the levels at which workers adopted preventive measures in averting hazards in the workplace.

The reviewed studies so far on age and gender showed conflicting findings, indicating no consensus in workers adoption of preventive practices. The reviewed studies also indicated that Nigerian workers are vulnerable and are poorly prepared to handle workplace hazards. As such, they sustain injuries and diseases in the course of performing their jobs. Following from this, there is the need to protect the workers from the dangers of their jobs. It then becomes expedient that study be conducted in area of occupational health hazard preventive practices adopted by workers, using Nigerian sample. The purpose of the study therefore is to examine the preventive practices ANAMCO workers adopted against occupational health hazards based on age and gender.

## **Research Questions**

- (1) What are the preventive practices adopted by ANAMCO workers against occupational health hazards based on gender?
- (2) What are the preventive practices adopted by ANAMCO workers against occupational health hazards based on age?

### **Hypotheses**

- 1. There is no significant difference between the male and female ANAMCO workers in the preventive practices they adopted against occupational health hazards ( p<.05)
- 2. There is no significant difference between the Older and younger ANAMCO workers in the preventive practices they adopted against occupational health hazards ( p<.05)

## Method

The study adopted the descriptive design. The study was carried out in Anambra Motor Manufacturing Company (ANAMOCO), in Enugu State, Nigeria. ANAMCO assembles cars and fabricates car spare parts and uses some chemicals that are hazardous to health of workers. Hazards associated with the nature of their job include physical hazards, chemical hazard, mechanical hazards, ergonomically poor working conditions, psychological stress, social conditions, reproductive hazards and allergenic agents. The workers' exposure to these hazards formed the bases for the choice of the company for the study.

The population for the study consisted of 521 workers of ANAMCO, Enugu. Out of this number, 346 of the workers were male workers while 175 of them were female workers. A total number of 212 (19 – 45 years old) of them were younger workers while 309 (46 – 65 years old) of them were older workers.

The sample for the study was 261 workers selected by means of stratified sampling techniques. Available data on the number of workers, per section, allowed stratification of workers and sampling from sections. In other words, workers were selected from the eight sections that make up the company in proportion of 1:2 of the number of workers in each section using proportionate sampling technique. The sections are administrative with 46 workers, mechanical 152, assemblage 142, health unit 62, security 43, bursary 38, catering 18 and laundry 20 workers.

The instrument used for the study was Occupational health Hazard Preventive Practice Questionnaire (OHHPPQ) which was designed by the researcher to measure the preventive practices of workers regarding occupational hazards. The instrument consisted of two sections. Section A comprised demographic variables of age and gender, while section B comprised 10 item instrument that measured workers' preventive practices regarding occupational hazards. Respondents were requested to tick "Yes" or "No" where appropriate in response to the question items.

Draft copies of the questionnaire were sent to three lecturers in the Department of Human Kinetics and Health education, University of Nigeria, Nsukka who critically examined the instrument in terms of appropriateness and suitability to the purpose of the study. The face validity of the instrument was determined through the judgment of these three experts. In order to establish the reliability of the instrument, 96 copies of the instrument were administered to workers of Emenite Nigeria Ltd, Enugu. The data were analyzed using product Moment Correlation coefficient which determined the reliability of the instrument. A reliability of .85 was obtained.

In order to facilitate the distribution of the questionnaire, the researcher raised an introductory letter to the General Manager Personnel unit of the organization. A total number of 261 copies of the questionnaire were distributed to the workers? This was done through the eight sectional heads of the company. The time allotted for the filling of the questionnaire was thirty minutes and these were filled and collected on the spot. A hundred percent return rate was achieved. However, during sorting for analysis, only 221 (86.73) copies were correctly filled and therefore used for data analysis.

The research questions were answered using frequencies and percentages, while the hypotheses were tested using the Chi-Square statistics. In determining the level of preventive practices adopted by workers, Ashur (1977) criteria were applied. By these criteria, less than 40 percent of response, in any of the hazard items investigated, were considered low level practice; 40 - 59 percent were considered moderate level practice, while 60 - 80 percent were high level practice, and above 80 percent were classified as very high-level practice.

# Results

This section is concerned with the presentation of the summary of the analyzed data

**Research Question One:** What are the preventive practices adopted by ANAMCO workers against occupational health hazards based on gender?

## Table 1:

Preventive Practices of Male and Female ANAMOCO Workers against Occupational Health Hazards											
s/n	Items	Male					Female				
			(N = 166)				(N = 5)				
		Yes			No		Yes		Ν	No	
		F	%	F	%		F	%	F	%	
- 1		0.4	56.6		70	42.4	20	545	25	45.5	
1.	The management of this organization sends us on periodic training on safety devices	94	56.6		12	43.4	30	54.5	25	45.5	
2	Workers of this organization are not provided	19	114		147	88.6	5	91	50	90.9	
	with safety gadgets	17	11.1		117	00.0	5	7.1	50	20.2	
3.	I put safety devices such as ear protector in our	102	61.4		64	38.6	27	49.1	28	50.9	
	work environment										
4.	The management does not regularly review and	58	34.9		108	65.1	13	23.6	42	76.4	
_	monitor equipment used for production		100		0	0.0	~	0.0		0.0	
5.	I observe work shift as introduced by the	166	100.0	)	0	0.0	0	0.0	55	0.0	
(	management of this organization	150	02.2		12	7.0	25	15 5	20	5 A 5	
6.	The management of this organization does not	155	92.2		13	7.8	25	45.5	30	54.5	
7	I observe most of the rules and regulations	19	114		147	88.6	36	65 5	19	34 5	
/ <b>·</b>	stipulated in my place of work against hazards	17	11.1		117	00.0	50	00.0	17	51.5	
8.	Some of the high temperature protective devices	161	97.0		5	3.0	44	80.0	11	20.0	
	are outdated and as such I do not put them on										
	while on duty										
9.	I try as much as possible to put into practice the	86	51.8		80	48.2	28	50.9	27	49.1	
	entire preventive practices taught in the seminars										
10	and workshops.	22	10.2		124	007	0	145	47	05.5	
10.	I do not remember or put on the vibration	32	19.3		134	80.7	8	14.5	47	85.5	
	protective devices										

Findings in Table 1 indicated that the male workers adopted more preventive practices than the female works (items 1, 2, 3, 5, 6 and 9). The male workers showed very high practices on items 5, 6 and 8, while revealing high practice on item 3. The male workers also showed moderate practices on items 1 and 9. The female workers, on the other hand, revealed very high practice only on item 8, while indicating high practice on item 7 only. The female workers equally reported moderate practices on items 1 and 9. This implies that gender is related to occupational health hazards preventive practices adopted by workers.

**Research Question Two:** What are the preventive practices adopted by ANAMCO workers against occupational health hazards based on age?

Table 1	2:
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Preventive Practices of Older and Younger Workers of ANAMCO against Occupational Health Hazards

s/n	Items		Male (N = 151)				Female (N = 70)			
		Yes	(1) = 151) No			Yes	(1)	No		
		F	% F	%		F	%	F %	,	
1.	The management of this organization sends us on periodic training on safety devices	94	62.3	57	37.7	30	42.9	40	57.1	
2.	Workers of this organization are not provided with safety gadgets	19	12.6	132	87.4	5	7.1	65	92.9	
3.	I put safety devices such as ear protector in our work environment	102	67.5	49	32.5	27	38.6	43	61.4	
4.	The management does not regularly review and monitor equipment used for production	58	38.4	93	61.1	13	18.6	57	81.4	
5.	I observe work shift as introduced by the management of this organization	151	100.0	0	0.0	15	21.4	55	78.6	
6.	The management of this organization does not have a social welfare scheme	151	100.0	0	0.0	27	38.6	43	61.4	
7.	I observe most of the rules and regulations stipulated in my place of work against hazards	19	12.6	132	87.4	36	51.4	34	48.6	
8.	Some of the high temperature protective devices are outdated and as such I do not put them on while on duty	151	100.0	0	0.0	54	77.1	16	22.9	
9.	I try as much as possible to put into practice the entire preventive practices taught in the seminars and workshops	86	57.0	65	43.0	28	40.0	42	60.0	
10.	I do not remember or put on the vibration protective devices	32	212	119	78.8	8	11.4	62	88.6	

Result in Table 2 revealed more preventive practices for the older workers than the younger workers. The older workers showed very high practices on items 5, 6 and 8, while showing high practices on items 1 and 3. The older workers also showed moderate practice on item 9. On the other hand, the younger workers reported high practice only on item 8, while showing moderate practice on item 7 only. This means that age in related to the occupational health hazard preventive practices adopted by workers.

**Hypotheses One:** There is no significant difference between the male and female ANAMCO workers in the preventive practices they adopted against occupational health hazards (p<.05).

Result in Table 3 showed significant differences on 5 items among all the items tested. This is because the calculated  $x^2$  of the items are greater than the table  $x^2$  at .05 level of significant. The male workers showed significantly higher preventive practices than the female workers by inculcating more preventive practices on four items out of the five items found significant. The male workers showed significantly higher preventive practices on items 3 "I put safety devices such as ear protector in our work environment" ( $x^2 = 22.595$ , P<.05); 5 " I observe work shift" ( $x^2 = 221.00$ , P<.05); 6 "the management of this organization does not have a social welfare scheme" ( $x^2 = 57.527$ , P<.05) and 8 "some of the high temperature protective devices are out dated and as such I do not put them on while on duty" ( $x^2 = 17.753$ , P<.05). On the other hand, the female workers showed significantly higher preventive practices on only item 7 "I observe most of the rules and regulations stipulated in my workplace against hazards" ( $x^2 = 64.465$ , P.05). Therefore, the null hypothesis was rejected. However, there were no significant differences found on question items 1, 2, 4, 8 and 10.

# Table 3:

Differences between Male and Female ANAMCO Workers on the Preventive Practices they adopted against Occupational Health Hazards

s/n	Item	Ν	X <sup>2</sup> cal	Table X <sup>2</sup>	P.val	df
1.	The management of this organization sends us on periodic training on safety devices	221	.073	3.84	.788	1
2.	Workers of this organization are not provided with safety gadgets	221	.237	3.84	.627	1
3.	I put safety devices such as ear protector in our work environment	221	22.595	3.84	.010*	1
4.	The management does not regularly review and monitor equipment used for production	221	2.421	3.84	.120	1
5.	I observe work shift as introduced by the management of this organization	221	221.00	3.84	.000*	1
6.	The management of this organization does not have a social welfare scheme	221	57.527	3.84	.000*	1
7.	I observe most of the rules and regulations stipulated in my place of work against hazards	221	64.465	3.84	.000*	1
8.	Some of the high temperature protective devices are outdated and as such I do not put them on while on duty	221	17.753	3.84	.000*	1
9.	I try as much as possible to put into practice the entire preventive practices taught in the seminars and workshops	221	.013	3.84	908	1
10.	I do not remember or put on the vibration protective devices	221	.624	3.84	.430	1

**Hypotheses Two:** There is no significant difference between the Older and younger ANAMCO workers in the preventive practices they adopted against occupational health hazards (p<.05).

# Table 4:

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Differences between Older and Younger ANAMCO Workers on the Preventive Practices they adopted against Occupational Health Hazards

s/n	Item	Ν	X <sup>2</sup> cal	Table X <sup>2</sup>	P.val	df
1.	The management of this organization sends us	221	7.305	3.84	.007*	1
2.	Workers of this organization are not provided with safety gadgets	221	1.462	3.84	.227	1
3.	I put safety devices such as ear protector in our work environment	221	16.529	3.84	.000*	1
4.	The management does not regularly review and monitor equipment used for production	221	8.633	3.84	.000*	1
5.	I observe work shift as introduced by the management of this organization	221	157.952	3.84	.000*	1
6.	The management of this organization does not have a social welfare scheme	221	115.165	3.84	.000*	1
7.	I observe most of the rules and regulations stipulated in my place of work against hazards	221	38.609	3.84	.000*	1
8.	Some of the high temperature protective devices are outdated and as such I do not put them on while on duty	221	37.208	3.84	.000*	1
9.	I try as much as possible to put into practice the entire preventive practices taught in the seminars and workshops	221	5.504	3.84	.019*	1
10.	I do not remember or put on the vibration protective devices	221	3.076	3.84	.079	1

Table 4 revealed significant differences on 8 items out of the 10 items tested. This is because the calculated  $x^2$  of the various items are greater than the table  $x^2$  at .05 level of significant. The older workers indicated significantly higher preventive practices than the younger workers by showing higher preventive practices on 7 out of the 8 question items found significant. The older workers showed significantly higher practices on items 1 "the management of this organization sends us on periodic training" ( $x^2 = 7.305$ , P<.05); 3 " I put safely devices in our work environment" ( $x^2 =$ 16.529, P<.05) 4 "the management does not regularly review and monitor equipment used for production" ( $x^2 = 8.633$ , P<.05), 5 "I observe work shift" ( $x^2$  157.952, P<.05); 6 " the management of this organization does not have a social welfare scheme" ( $x^2 = 115.165$ , P<.05); 8 "some of the protective devices are outdated and I don't put them on while at work " (( $x^2 = 37.208$ , P<.05) and 9 " I try as much as possible to put into practice the entire preventive practices taught in seminars and workshops" (( $x^2 = 5.504$ , P<.05).

On the other hand, the younger workers reported significantly higher practice on only item 7 "I observe most of the rules and regulations stimulated in my place of work against hazards" (( $x^2 = 38.609$ , P<.05),therefore, the null hypothesis was rejected. Nevertheless, there were no significant differences found on items 2 and 10.

#### Discussion

Result in Table 1 revealed that the male workers adopted more preventive practices than the female workers. In the same vein, the finding of the Chi-square in Table 3 indicated that the male workers showed significantly more preventive practices than their female counterparts. The result is in line with the earlier findings by Valuri and Routley (1994); Rorigo (2004) and Aliyu and Shehu (2006). Their various findings indicated that males adopted more preventive practices than females in their workplace. Contradictorily, Chien et al (2003) had observed that females took more precautionary measures in averting workplace hazards than the males. On the other hand, Falana (1997) had argued that organizing programmes such as workshops, seminars, training and re-traing for workers help workers in adopting proper preventive practices, irrespective of demographic characteristics of the workers. This implies that demographic variables (gender) does not relate to workers level of adoption of preventive practices in their place of work. This present finding has debunked Falana's argument because the males agreed that they put on safety devices and observed work shift as stipulated by the management while the females reported on the contrary.

This result could be explained based on the earlier observation by Vyas, Das and menta (2011). The researchers found that automobile workers are characterized by predominantly male workers. This scenario is the same with ANAMCO workers. The workers are predominantly males and the males assemble cars, fabricate car spare parts. They also engage in painting, washing, cleaning, and repairing of cars, while the females work mostly as administrative staff. It could, therefore, be likely that since the males performed these functions, they would be more knowledgeable about the inherent dangers associated with the jobs and as such they made more efforts in adopting preventive practices against the hazards. Also, because the males than females indicated that some of the high temperature protective devices were outdated and that they do not put them on while on duty. The males used the devices regularly and they knew when the devices were procured and how effective the equipment were in the past and at the present. Furthermore, the females significantly reported that they observed all the rules and regulations as stipulated in the workplace. This could be in line with the administrative job they performed, which did not allow or require much of the use of protective devices.

Regarding the issue of workers age and the preventive practices they adopted, Table 2 showed more preventive practices for the older workers than the younger workers. Similarly, the result of the Chi-square in Table 4 revealed that the older workers indicated significantly higher preventive practices than the younger workers. The result is congruent with Vyas Das and Mahta (2011) finding, which reported that older workers adopted more preventive practices than the younger workers. Dwyer and Raftory (2014) also asserted that because the older workers socialize more than the younger workers, they adopted more preventive practices than the younger workers. Conversely, Mital and Ghahramani (2011) found that the older workers were more exposed to workplace accidents

than the younger workers. While the majority of older workers agreed that the management sent them on programmes like seminars and workshops, on safety devices and that they tried to put into practice all the preventive practices taught to them in the programmes, only very few younger workers accepted that. Similarly, while the older workers reported that they put on safety devices while at work and observed work shift as introduced by the management, the younger workers reported on the contrary.

This could be explained on the premise that the older workers may have in the course of performing their jobs, experienced hazards in form of infection or may have encountered accidents or near miss accidents from the use of equipment. They also may have observed their colleagues who had encountered minor/major accidents within the occupational environment. Thus, they became more proactive in adopting preventive practices against the hazards of their jobs than the younger workers who may still be relatively new in the job. Further explanation could be that the older workers, who may had begun to age, may because of old age, have perceived themselves vulnerable to accidents and diseases inherent in the job and may have learnt to put in more effort in adopting appropriate measures to protect themselves from the dangers of the job. The management may have been more interested in sending or organizing seminars, workshops and training for the older workers than the younger workers. On the other hand, the older workers, because they have stayed longer in the job, may have had greater opportunities for such programmes than the younger workers who may be relatively new in the job.

The finding of this study is also in line with the theory of Reasoned Action (RA) by Fisher and Fisher (1992). The theory suggested that workers adopt measures to avert workplace hazards only when they perceive that the hazards hove negative impacts on their health and wellbeing. It could therefore, imply that the younger ANAMCO workers may not have believed or perceived their work environment as hazardous. They may not have perceived the equipment they used for production as hazardous. Hence, they failed to adopt necessary preventive practices against the hazards of their job.

Furthermore, the older workers reported significantly that the equipment they used for production were not regularly being reviewed by the management and that some of the high temperature protective devices were outdated and as such they do not use them. This could be reasoned on the premise that because the older workers had worked for a long time in the industry and were used to equipment they worked with, they knew when the equipment were getting older and they equally knew that the management had made no effort to review them. In other words, the management made no efforts to procure new equipment or replace the older and outdated equipment with new and modern ones. Thus, the older workers became scared of using the equipment. The younger workers on the other hand may not have worked for a longer time in the industry as to know how long equipment had been in use in the company and as such were not burdened about the condition of the equipment.

Majority of the older workers than the younger workers indicated that the organization do not have a social welfare scheme. The likely reason for this could be that what preoccupies the minds of the older workers, as they are aging is social support scheme because they need it for their own wellbeing. Contradictorily, majority of the older workers than the younger workers indicated that they did not observe the rules and regulations finding the work environment. This could be attributed to the fact that as workers become more and more familiar with workplace environment, they may have also learnt other ways and means of coping with the environmental challenges at work than the ones stipulated by the management.

#### Recommendations

- 1. More workshops, seminars, training, re-training on safety practices should be organized for all cadres of workforce, especially the younger and female workers in order to reduce their risk-taking practices and create awareness of prevalence of, and risk associated with hazards in ANAMCO industry.
- 2. The management should try and show stronger and true commitment to the provision and enforcement on the use of safety devices among workers.
- 3. There is need for the management to always monitor and supervise equipment used for production. This will help in, early detection of damaging equipment.

- 4. The management should always replace old equipment with new and modern ones to avoid workers encountering hazards in the course of handling old equipment.
- 5. Orientation programme to be organized for new workers. This will help them in understanding the nature of the hazards inherent in the job and the consequences of the hazards on their health and well-being.

#### Conclusion

The study determined the preventive practices adopted by male and female, older and younger ANAMCO workers against occupational health hazards. The result revealed that the male workers adopted more preventive practices than the female workers and that the older workers adopted more practices than the younger workers. The result of the Chi-square similarly, indicated significant difference, revealing that the male workers and the older workers adopted significantly higher practices than the female workers and the younger workers respectively.

It therefore implies that the workers especially, the females and the younger workers of ANAMCO are not well informed about the dangers inherent in their workplace and as such do not adopt the necessary preventive practices against the hazards. It also indicates that the management of the company is not enforcing properly, the implementation of policies by workers in the workplace.

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