ASSESSING THE AWARENESS, ATTITUDE AND PRACTICE OF LIQUEFIED PETROLEUM GAS STATIONWORKERS TO FIRE EMERGENCY RESPONSE IN IKOTUN, LAGOS.

Abstract

The incidents of fire associated with Liquefied Petroleum Gas (LPG) has been on a rampage, particularly since it has become a popular alternative to other energy sources. The study assessed the impact of level of awareness on attitude and practice of gas station workers on fire emergency.The Swiss cheese model was used to underpin the work. The study utilised a descriptive research design. The sample size was 60 managements and non-management staff from 5 LPG stations in Ikotun, Lagos. Data was collected by means of questionnaire. The data was analysed using descriptive statistics which is frequency and percentage; inferential statistics used includes Chi Square and Bivariate Correlation. The result revealed the following: There is no relationship between the level of awareness and the attitude of the gas stations' workers on fire emergency; There is relationship between the level of awareness and the practice of the gas stations' workers on fire emergency. The study recommended that management should spell out rules and policies to guide workers' attitude and practice towards fire emergency and state punishment for gas workers whose practices are contrary to the policies of the organisation. Management should conduct regular fire emergency training to ensure increased awareness among staff.

Keywords: Emergency preparedness, Fire Incident, Workers and Liquefied Petroleum Gas (LPG) Station.

Introduction

Cities are growing faster than governments can create the necessary infrastructure or pass and enforce the laws that make city living safe, enjoyable, and healthy in many nations. Okafoagu, Oche, Gana, Ango and Yunusa (2017) noted that due to the usage of fuel for almost all technological advancements, greenhouse gases has increasedcausing the ozone layer to be depleted, which has had a negative impact on climatic change. According to the International Energy Agency (2018) estimates, 890 million people in the sub-Saharan region cook with conventional energy sources such firewood, animal excrement, charcoal, crop residue, etc., while 600 million people in the region lack access to electricity. It is appropriate to state that ensuring access to affordable, dependable, sustainable, and modern energy for all is essential to achieving the most coveted Sustainable Development Goal number seven (7) set for 2030 (United Nations Environment Programme, 2019). Individuals, governments, and non-profit organisations have recognised the need to adopt a more environmentally friendly fuel alternative to fossil fuel and other fuel sources that generatesa large quantity of greenhouse gases in order to offset the impact of greenhouse gas usage on the environment and people(Elsayed, Ahmed, and Mohamed, 2018).

Amongother fuel alternatives, Liquefied Petroleum Gas (LPG) and Compressed Natural Gas were used to protect the environment from further harm. Because LPG doesn't emit any observable emissions, it is regarded as a "clean" fuel. But there are also minor levels of sulphur dioxide (SO2) and particulate matter (PM), as well as gaseous pollutants like nitrogen oxides (NOx), carbon monoxide (CO), and organic chemicals(Okafoagu, et al, 2017). Burner design, burner modifications, boiler operational settings, and flue gas venting are the main variables determining NOx, CO, and organic emissions. The product, which largely contains propane, is used to heat homes. Domestic and commercial use of LPG is the largest market, accompanied

by the chemical and agricultural industries. Awoyinfa (2023), stated that by nature, LPG produces flammable gas that readily ignites when subjected to an ignition source. It is heavier than air, and gathers in low lying areas that are improperly ventilated, which has led to the adoption of LPG for both domestic and commercial use, which has resulted in new levels of fire hazards. Nations around the world have kept records of incidents involving fire threats brought on by LPG home and commercial sources. Recent LGP station explosions in Romania resulted in multiple explosions that killed two persons and injured over twelve others (Alex, 2023). A private LPG cylinder company in India was destroyed by fire, according to claims from The Times of India (2022), resulting in the deaths of two persons and the serious injuries of ten more. Additionally, it was stated that some cylinders kept in units during the incident exploded, causing significant damage. A well-known cooking gas factory along the Effurun/Sapele route in Delta State's Uvwie Government Area was shaken by a fire explosion. According to Awoyinfa (2023), two attendants were killed and seven others injured in the Ogun gas plant explosion in the Adigbe neighbourhood of Abeokuta, Ogun State. Four stores were also destroyed in the event, and a motorbike and a Toyota vehicle that was parked inside the petrol station were both set on fire. The number of casualties reported in an incident depends on how well prepared people were to lessen the impact of any crisis, such as fire disaster caused by an LPG explosion. On the other hand, the degree of readiness is dependent on the level of awareness, attitude, and practises of those (workers and others) discovered at the location where fire occurred. Based on this context, the study will examine the impact of level of awareness on attitude, and practice of gas station employees in the event of a fire emergency in Ikotun, Lagos.

Study Objective: To assess the impact of level of awareness on attitude and practice of Gas Station Workers towards fire emergency in Ikotun, Lagos.

To achieve the objective of the study, the following research hypothesis was statistically tested:

Hypothesis One (H_1): There is a significant relationship between the level of awareness and attitude of workers of the LPG to fire emergencies.

Hypothesis Two (H_2): There is a significant relationship between the level of awareness and practice of workers of the LPG to fire emergencies.

Literature Review

Conceptual Clarification

Emergency Preparedness

According to Hoyle (2010), an emergency is a sudden, dangerous condition, situation, or incident that calls for immediate action to lessen and control its effects. According to WHO (2007), an emergency is a condition that has the potential to endanger the health of a single person or a group of people and necessitates quick action. The word "preparedness" is frequently used to refer to the actions and steps taken by a company to improve its ability to react quickly and effectively to a series of activities intended to boost reaction in the case of an emergency (Moore, 2012).

According to Slepski (2005), "emergency preparedness" refers to the comprehensive knowledge, skills, abilities, and actions required to prepare for and respond to threats related to natural disasters, man-made incidents, actual or believed substance incidents, biological, radiological, nuclear, or explosive incidents, as well as other related events. The idea of disaster preparedness planning, according to Alimasunya, Inyang, and Clement (2019), includes actions aimed at boosting life safety when a disaster

happens, such as protective measures during an earthquake, toxic materials leak, or terrorist attack. The ability to participate in post-disaster recovery and early rehabilitation efforts, as well as the ability to take emergency measures to preserve property and limit disaster damage and disruption, are all included in this.

Fire Incident

According to Charles (2000), fire is an exothermic chemical method of combustion's rapid oxidation of a substance, which results in the release of heat, light, and different reaction products. When a combustible and/or flammable substance is exposed to a heat source or the surrounding temperature above its flash point for the fuel and is able to withstand a rate of rapid oxidation that results in a chain reaction, along with an adequate amount of an oxidizer like oxygen gas or another oxygen-rich compound, a fire incident occurs (Yusuf, 2012). This is also known as the "fire tetrahedron." Without all of these components present and in the proper ratios, fire is not possible. According to Ogbonna and Nwaogazie (2015), fire incident is a leading workplace hazard brought on by human causes like ignorance, carelessness, and a lack of fire safety comprehension.

Workers

Joseph and Dai (2009) observe that employees in organisations are agents that make things attainable for organisations to meet the demands of high changing environments by putting their skills to assist in achievement of organisational goals. Nwaeke and Obiekwe (2017) observed that no organisation could thrive in the long run without proficient and highly qualified staff members, as they are the lifeblood that sustains organisations. Therefore, employees are an organization's key to success. Employees in any organisation that views them as machines or as merely cogs in a machine will never reach their full potential and will instead constantly battle for survival in the face of threats and difficulties (Joseph and Dai, 2009). Organisations that don't involve their workers in decisions about their work procedures at their levels are inadvertently laying the groundwork for the company's demise.

Gas Stations

In urban or rural locations, liquefied petroleum gas is marketed and stored at gas stations. Gas stations are dangerous places to work because of the presence of volatile substances like CNG and LPG. It is typical for different types of vehicles to arrive and depart all the time to get gas. The public, employees, property, and the environment are always at risk due to the presence of combustible items at gas stations.

Safety Regulation in Nigeria

Federal laws in Nigeria control organisations' safety procedures, yet these regulations are rarely felt by organisations because the rules are ineffectively applied (Firth and Stickles, 2012). This lack of impact has been blamed for a number of difficulties. For instance, the manufacturing sectors in Nigeria frequently view government safety regulations as an effort to raise prices for goods. This is because there isn't a good model for establishing attainable goals for safety performance in the manufacturing sector (Adebiyi and Owaba, 2009). Important services like preventative maintenance plans and routine fire safety inspections are typically implemented in developing countries (including Nigeria) by subsidiaries of international firms.

These multinational corporations frequently follow the practise of setting their corporate requirements in addition to those of the host nation (Atlan, 2003). Another frequent issue is that emerging

countries frequently adopt norms that are fashioned after highly developed western nations. Developing countries typically find it challenging to apply these standards because of their complexity. Firth and Stickles (2012) noted that determining a starting point of fire safety awareness among employees and fire safety practice at workplaces is necessary in order to address the aforementioned issues and subsequently improve fire safety in workplaces. This will allow changes to be made when gaps are found.

Theoretical Framework

Swiss Cheese Model

The most frequently utilized accidental analysis model is the Swiss cheese model. Reason (1990) invented the Swiss cheese model. According to Ahmad and Pontiggiaa (2015), this model utilized the idea of safety layers, with gaps in the safety layers standing in for shortcomings brought on by latent faults (such as organizational errors, environmental factors, etc.). According to Bonsu et al. (2016), hazard can result in an accident when the gaps in the protective layers line up. Pontiggiaa and Ahmad (2015) opined that the model includes the fundamental building blocks of all effective production systems, including decision-makers, line managers, prerequisites for productive work, production activities, and precautions against known dangers. Only when the appropriate decisions are made at every stage of the production chain can effective production be attained. When flawed decisions made at the executive and management levels spread throughout the various parts of the production system, the accident process can begin in specific situations (Bonsu et al. 2016). These choices lead to "holes" in the barriers set up to stop accidents. When gaps in the various safety measures line up for the accident trajectory to be completed, an accident is likely to happen. The Swiss Cheese Model has been criticised for not having enough specifics for real-world applications, despite the fact that it is generally acknowledged to be able to portray conditions leading to accidents in or (Shappell and Wiegmann, 2000). The Swiss Cheese Model was not meant for such details, according to a later article by Reason, Hollnagel, and Paries (2006); rather, it is a simplification designed to make it simpler to understand the key elements of an accident in an organisation. Going by the Swiss Cheese Model's premise, gas stations are accident-prone, and whether an accident happens or not depends on the mixture of activities carried out nearby. For instance, a gas station whose management does not instruct its employees on activities that need to be avoided inside the facility has created a hole that, when coupled with other flaws, can result in an accident. Inadequate practises such as allowing cell phone use, smoking, failing to examine whether a gas cylinder is expired, selling gas into a gas cylinder that is leaking, not having fire extinguishers on hand, not knowing how to operate fire extinguishers, etc., can result in mishaps in a gas station. Engineering, enforcement, and education are the three E's of safety. The workers should use Personal Protective Equipment (PPE), which refers to equipment or gadgets worn to minimize contact with a variety of risks. Gas stations must stock boots, an apron, masks, gloves, goggles, earplugs and uniforms to encourage frequent use of such equipment. The use of fire extinguishers, understanding of the fire triangle, cylinder safety, worker and workplace-related safety are further precautions (Rocha et al., 2014; WLPGA, 2018).Engineering, enforcement, and education are the three E's of safety. Therefore, management must take steps to prevent connections between these flaws, and both petrol station employees and customers must abide by the safety regulations.

Empirical Review

By means of an interviewer-administered

survey, field measurements, and qualitative assessment, Anang, Anyomi, Afotey, Rockson, Kwao-Boateng, Antwi, and Tagoe (2022) looked into the fire safety awareness of 45 fuel pump employees and the adherence of all 19 active Petrol Filling Stations in the Ho Municipality (Ghana) with regulatory standards. Utilising the software Origin 2020, data was collected and examined. The findings show that the majority of pump employees in the area are educated about what causes fires and the safety precautions that management has put in place to prevent fire outbreaks.

Using a source-pathway-receptor and GIS-based approach, Daines et al. (2011) described a thorough analysis on the environmental vulnerability of 86,000 PFSs across 13 European countries to comprehend how they damage groundwater, surface water, and ecological receptors. The findings show that there is extremely little chance that FFS may endanger a specific receptor, regardless of where the country is located. Ansah and Mintah (2012) evaluated the safety management systems put in place by owners for the protection of 114 pump workers from Goil, Shell Ghana, Total Petroleum, along with Allied Oil in the Central and Western regions of Ghana. The analysis came to the conclusion that the PFSs assessed had high levels of safety administration policies in place.As a result of management's support for a small number of PPEs, however, attendants were probably exposed to dangerous petroleum vapour. The knowledge, attitude, and safety precaution practises of cooking gas refill attendants in Zaria, Kaduna State, Nigeria were evaluated by Joshua, Muhammad, Sufiyan, Olaniyan, Sabitu, Ibrahim, Olasinde, Igboanusi, and Usman (2020). Utilising a structured interviewer-administered survey and checklist, the study took place as a cross-sectional study of cooking gas refill attendants in January 2019. 121 people made up this study of the entire population. The data was gathered using an Android device running the Open Data Kit (ODK) software version 1.21.1, and it was examined using SPSS version 25.0. 5.8% of the fire extinguishers that were examined were found to be out of date according to the checklist. Level of education, age, and ethnicity were all connected with the respondents' knowledge, attitudes, and safety precaution practises. The majority of the attendants who refilled petrol had good knowledge, attitudes and safety precautions in place, but there were some shortcomings. To ensure that personal protective equipment is used and that fire extinguishers that have expired are replaced, supervision and training are required. Okafoagu, et al., (2017) studied Knowledge of workplace hazards and safety measures among petrol station workers in Sokoto metropolis, Sokoto State, Nigeria. The study was a cross-sectional descriptive research Using a multi-staged sample technique, 108 petrol station employees were chosen for the study. A semi-structured questionnaire that was modified from existing literature and given to the participants by an interviewer was used to collect the data. SPSS software was used to impute and analyse the data. The discovery of inadequate VOC knowledge and the low adoption of workplace safety practises highlights the requirement for employers in this industry to identify potential risks at work, adopt safety measures to control them, train new hires and retrain staff on security precautions, along with offering personal protective equipment (PPE) for everyday use. Evaluation of Occupational Health Risk Management and Performance in China: A Comparative Analysis of Petrol Station Workers by Mohsin, Yin, Huang, Zhang, Zhang, and Mehak (2022). According to research, chemical risks alongside biological risk response plans perform the worst and should be given priority for improvement.Elsayed, Ahmed, and Mohamed (2018) used a descriptive analytical design to evaluate the

occupational health risks among petrol station employees across 53 stations. According to the study, there is a statistically significant correlation between petrol station employees' knowledge and their age, education, and monthly income. Though there was a statistically significant connection between petrol station workers' contact with occupational health hazards and their level of education, there was also a significant relationship between workers' knowledge and their susceptibility to occupational hazards and a negative correlation between exposure to hazards and their working conditions. Based on International Civil Aviation Organisation (ICAO) standards, Wambugu, Mburu, and Gatebe (2016) evaluated the fire safety preparedness systems in place at Jomo Kenyatta International Airport. A proportional random sample strategy was used in the study's descriptive research design, which included 340 respondents as its target population. Data were gathered via a questionnaire. According to the study's findings, there are insufficient preventive and preparedness strategies in place at Jomo Kenyatta International Airport to lessen a chance effects of any fire disaster incidence. It lacks a system to combine the safety policies and procedures of the various parties at the airport and nearby.Ogbonna and Nwaogazie (2015) assess the degree of worker fire safety awareness and the degree of fire safety practice in Port Harcourt workplaces. The findings showed that employees confirmed their knowledge of workplace fire safety precautions and procedures. The majority of employees do not know how many different types of portable extinguishers are available, and the majority of employers do not hold fire drills to evaluate their emergency preparation.

Gap in Literature

Only a relatively small number of researches were carried out in gas stations, and almost all of the literature evaluation focused on the knowledge, attitude, and practises of fuel station employees. This research aims to bridge this gap.

Materials and Methods

Introduction

The process through which a research project is carried out can be summed up as methodology. It includes the instruments and methods used to carry out a certain investigation or discovery. A variety of tools are utilised for various types of questions in research methodology. Therefore, it is crucial to use a precise approach that is appropriate for the research's goal.

Area of Study

The location of the research, Ikotun, is in Alimosho, Lagos State (see picture 1). Lagos State is located in Nigeria's southwest. Lagos is situated at a distance of 3°15'21" east of the Greenwich Meridian and 6°36'38" north of the equator. According to Oladunjoye and Ayedun (2019), the Ifako-Ijaiye Local Government Area borders the study area Ikotun, Alimosho to the north, Kosofe Local Government Area to the east, Agege and Alimosho Local Government Area to the west, and Isolo and Mushin Local Government Area to the south. Ikotun is around 10.4 kilometres (or 6.5 miles) away from Alimosho'sIkeja neighbourhood. As the crow flies, Ikeja and Abuja, the nation's federal capital, are separated by 543 kilometres (338 miles). Like Ikeja, Ikotun is recognised as Lagos' economic hub.

Figure 1: The Alimosho Local Government Area in Lagos is shown as the

study area on the map [Source: Google Map, 2023].

Methodology

Research design often refers to a framework for organising and carrying out a certain investigation. A quantitative research approach was used. Quantitative research is a rigorous, impartial, systematic technique for describing and testing correlations as well as looking at cause-and-effect interactions between variables. Descriptive, explanatory, and exploratory research can all be conducted using surveys. We employed a descriptive survey design. A survey is used to gather first-hand information about a group that is too big to observe in person. In a survey, samples of people are asked to provide information about them by responding to a series of questions that the researcher has prepared. In this study, data were gathered through self-administered questionnaires that the researcher physically gave to the study participants. Descriptive research was chosen because it accurately depicts or accounts for the traits of a specific person, circumstance, or group, such as their behaviour, views, abilities, beliefs, and understanding. The goal of the study is to evaluate the degree of awareness, attitude, and behaviour of petrol station Workers regarding fire emergencies in Ikotun, Lagos. This design was adopted to achieve that goal. A sample is a subset of respondents chosen from the target population, and sampling is frequently more practical than examining the whole population.A sample serves the objective of obtaining an outcome that is equivalent to the entire population that was surveyed without having to go through the hassle of asking everyone, even if no sample is certain to be truly representative.

Sampling Technique and Sample Size

Purposive and quota sampling methods were combined in this study's non-probability sampling strategy. Randomization is not crucial in nonprobability sampling when choosing a sample from the target population. From five distinct Liquefied Petroleum Gas (LPG) Stations in Ikotun, Lagos, a total of sixty samples were purposefully chosen. Quality Point, Omolad, RoseLaw, Nigeria National Petroleum Corporation (NNPC), and Gasland petrol stations are among the LPG stations chosen. Each of the five Liquefied Petroleum Gas (LPG) Stations had twelve samples collected.

Data Collection, Instrumentation and Completion rate

The study adopted a well-structured self-administered questionnaire to get the perceptions of the selected Management and Staff of Liquefied Petroleum Gas (LPG) stations on the level of awareness, attitude and practice of Gas Station Workers towards fire emergency. The questionnaire was divided into four (4) sections; with the section A capturing the respondents' sociodemographic information, section examines B Level of awareness of fire emergency, section C assesses the Attitude towards fire emergency and section D investigates the Practices of the workers on safety measures. The questionnaire was designed using options in sociodemographic section and dichotomous option for the other sections.The administration of the chosen LPG stations in Ikotun was contacted and given permission to perform the study. The gas refill attendants were asked verbally for their informed consent after being fully briefed regarding the study and given guarantees regarding their anonymity. After requesting and receiving permission, data collection began with each team member delivering printed physical copies of the questionnaire to available employees (The Administration and Staff) of the LPG stations for a period of two weeks. Sixty surveys in total were issued, and 56 were recovered with valid responses, representing a 93.3 percent completion rate.

Data Analysis

The retrieved questionnaires were sorted with instruments assigned numerical values and coded using numerical values on Spread Sheet for Social Science (SPSS) version 22 for analysis. The data gathered was subjected to reliability test prior analysis(see table 1).Result of the survey was presented on table, using descriptive statistical analytics such as frequency & percentage and inferential statistics was carried out using chi-square and bivariate correlation at 99% confidence level (0.01 significant level).

The result of the reliability test

Reliability Statistics

Cronbach's Alpha	N of Items
.825	25

demonstrated an acceptable CronbachAlpha for all the twenty-five items of the questionnaires used for survey of the study, this is an indication that the tools is devoid of bias and error from both the researcher and respondents respectively.

Table 1: Showing the output of the reliability tests

Results and Data Analysis

The results and analysis of the survey conducted is presented in this section of this study. There are fifty-six valid responses which are analysed and presented in this section of the study.

Table 2 Socio-demographic characteristics of respondents.

Characteristics of Respondents	Frequency (%)
Total respondent [N = 56].	
Age group	
15-24years	12(21.4)
25-34years	24(42.9)
35-44years	16(28.6)
45-54years	4(7.1)
Gender	
Female	40(71.4)
Male	16(28.6)
Marital Status	
Single	36(64.3)
Married	20(35.7)
Ethnic group	
Igbo	12(21.4)
Hausa	0(0.0)
Yoruba	32(57.1)
Other Nigerian ethnic groups	12(21.4)
Educational qualification	
No formal education	0(0.0)
Primary education	0(0.0)
Secondary education	24(42.9)
Tertiary	32(57.1)
Gas station	
Omolad	12(21.4)
Quality Point	12(21.4)
NNPC	9(16.1)

Gas land	12(21.4)
Rose Law	11(19.7)

Table 2 presents the sociodemographic information of the respondents it demonstrated that the highest age distribution was age 25-34years, with 24 respondents representing 42.9% falling between the age group. The result also showed that female had that highest distribution 40(71.4%) in terms of gender. The majority of the respondents 36(64.3%) were female, with Yoruba being the ethnic group with the most respondents 32(57.1%). Majority of the respondents 32(57.1%) have completed Tertiary education. Omolad, Quality point and Gasland Gas Stations provided the greatest numbers of respondents 12(21.4) each.

Table 3 Showing the responses on level of awareness of fire emergency

Variables	Frequency (%)
Total respondent [N = 56].	
Have knowledge on fire triangle	28(50.0)
Aware of the hazards associate with a gas station	32(57.1)
Knowledgeable on the appropriate ways to use PPEs	32(57.1)
Can use a fire extinguisher	20(35.7)
Can distinguish when to use a particular type of fire extinguisher	24(42.9)
Know how and when to use a sand box	24(42.9)
Been trained on fire emergency/ safety	40(71.4)

Table 3 presents the responses on level of awareness of fire emergency. It demonstrated that, 28(50.0%) of the respondents have knowledge on fire triangle, 32(57.1) were aware of the hazards associate with a gas station, the same number of respondent are knowledgeable about the appropriate ways to use PPEs, only 20(35.7%) of the respondents can use a fire extinguisher, and just 24(42.9) can distinguish when to use a particular type of fire extinguisher andknow how and when to use a sand box respectively. As much as 40(71.4) have been trained on fire emergency and safety.

Table 4 Showing the responses on attitude of workers towards fire emergency

Variables	Frequency (%)
Total respondent [N = 56].	
Checks expiry date of cylinders	32(57.1)
Checks expiry date of fire extinguishers	24(42.9)
Gives customers safety tips	12(21.4)
Observe no smoking	32(57.1)
Recommends the use of safety measures to others	28(50.0)

Table 4 presents the responses on attitude of workers towards fire emergency. It demonstrated that, majority of the respondents' 32(57.1)checks expiry date of cylinders, but only 24(42.9), checksthe expiry date of fire extinguishers in the gas stations. As low as 12(21.4) respondents gives customers safety tips, with majority 32(57.1) ensuring the observation of no smoking signage. It also shows that 28(50.0) of respondents recommend the use of safety measures to others.

Table 5 Showing the responses on workers' practices of safety measures

Variables	Frequency (%)
Total respondent [N = 56].	
Regularly conduct gas cylinder valve check	20(35.7)

Checks for gas cylinder expiry date and leakage	20(35.7)
Discourages phone calls within the gas station	32(57.1)
Discourage smoking within the gas station	44(78.6)
Use PPEs regularly	20(35.7)
Use operation manual	24(42.9)
How can workers of gas stations be best prepared for fire emergencies?	
Training by the organisation	40(71.4)
Personal development	16(28.6)

Table 5 presents the responses on workers' practices towards fire emergency. It demonstrated that, only 20(35.7%) respondents regularly conduct gas cylinder valve check as well as checks for gas cylinder expiry date and leakage respectively. The highest numbers of the respondents 32(57.1%)discourages phone calls within the gas station, with majority of the respondent 44(78.6%)discourage smoking within the gas station. As few as 20(35.7) and 24(42.9)use PPEs and operation manualregularly respectively. Majority of the respondents 40(71.4) believe that workers of gas stations can best be prepared for fire emergencies through training by the organisation.

Hypothesis One (H_1): There is a significant relationship between the level of awareness and attitude of workers of the LPG to fire emergency.

Table 6 Showing the result of the chi-square test for level of awareness and attitude of workers on fire emergency.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.133[a]	4	.274
Likelihood Ratio	5.347	4	.254
Linear-by-Linear Association	.486	1	.486
N of Valid Cases	56		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 3.43.

The table 6 shows the result of the Chi-square test for level of awareness and attitude of workers on fire emergency shows p-value to be 0.274, indicating statistically not significant (p greater than 0.01), in which case the null hypothesis is accepted.

Hypothesis Two (H_2): There is a significant relationship between the level of awareness and practice of workers of the LPG to fire emergency.

Table 7 Showing the result of the chi-square test for level of awareness and practice of workers on fire emergency

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.373[a]	4	.006
Likelihood Ratio	16.205	4	.003
Linear-by-Linear Association	.489	1	.484

N of Valid Cases	56		

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.71.

The table 7 showsthe result of the Chi-square test for level of awareness and practice of workers on fire emergency shows p-value to be 0.006, indicating statistically significant (p less than 0.01), in which case the null hypothesis is rejected.

Table 8 Showing the result of the bivariate correlation test for level of awareness and attitude and practice of workers on fire emergency

Correlations

		LEVEL_OF_AWARENESS	ATTITUDE	PRACTICE
LEVEL_OF_AWARENESS	Pearson Correlation	1	-.094	.349**
	Sig. (1-tailed)		.245	.003
	N	56	56	56
ATTITUDE	Pearson Correlation	-.094	1	-.370**
	Sig. (1-tailed)	.245		.006
	N	56	56	56
PRACTICE	Pearson Correlation	.349**	-.370**	1
	Sig. (1-tailed)	.003	.006	
	N	56	56	56

**. Correlation is significant at the 0.01 level (1-tailed).

The result of table 8 is the bivariate correlation test for level of awareness and attitude and practice of workers on fire emergency. It is demonstrated from the Correlation coefficient is (-0.094) and p-value 0.245 for level of awareness and workers attitude, while the output for correlation coefficient is 0.349 and p-value is 0.003 for level of awareness and practice of workers on fire emergency.

Discussion of Findings

The analysis of the first hypothesis revealed thatthere is no relationship between the level of awareness and the attitude of the gas stations' workers on fire emergency. This indicates Gas station workers can put up wrong attitude even though they are aware that it can lead to a top event, which is escalation of fire incidence. This finding is contrary to that of Ebadi, Kamali, Arghami (2017) who found a relationship between workplace safety culture and attitude and awareness in the form of training. According to Haris, Ipop, and Khotijah (2016), workers' negative attitudes towards fire crises might result in losses, both direct and indirect losses. Fires frequently have unintended effects on material activity, stop business operations, cause environmental harm, or endanger human lives. Having a fire

emergency in a gas station would have highly bad effects for both human life and property damage if not well managed. According to Baker, Bouchlaghem, and Emmitt (2013), management standardisation to back up the significance of safety in the workplace also influences fire safety behaviour. Additionally, the deliberate efforts of the gas station employees to lessen laziness and procrastination and develop positive attitudes like being safety attentive. The analysis of hypothesis twotwo showed a connection between the employees' level of awareness and their training in fire emergencies. In line with this discovery, Risyanto (2010) revealed that understanding is one of the elements that serve as the foundation for any action or the execution of fire prevention measures. Risyanto (2010) highlighted that knowledge is an indicator that serves as the foundation or motivation for taking action to lead a healthy life. In the event of a fire or other emergency at work, having a solid understanding of fire evacuation procedures and safety equipment is crucial. Practise, according to Haris, Ipop, and Khotijah (2016), is the capacity to demonstrate or carry out a specific action in response to knowledge because knowledge will result in attitudes towards an unknown object, which will then result in action on the stimuli or a specific object. Roles and responsibilities of workers are crucial in the process of putting out fires and rescuing victims in order to increase fire safety in the work environment (Ru, Gui, Jun, 2016). Practises for preventing fires will not only safeguard the company's assets but also the people working there (Jiang et al., 2015). The ability to execute the right standard operating procedure, practise fire safety, and achieve the best fire safety results at the gas station can be acquired through training provided by the gas station management.

Conclusion and Recommendations

The study assessed the impact of level of awareness on attitude and practice of gas station workers on fire emergency.The study found that there is no relationship between the level of awareness and the attitude of the gas stations' workers on fire emergency.There is relationship between the level of awareness and the practice of the gas stations' workers on fire emergency. Management should spell out rules and policies to guide workers' attitude and practice towards fire emergency and state punishment for gas workers whose practices are contrary to the rules of the organisation. Management should conduct regular fire emergency training to ensure increased awareness among staff.

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