

Awareness of the Regulations and Industry Codes of Practice Vis-a-Vis the Occupational Safety and Health Act 1994: A Study among the Masters and Crews Working in Vessels of Commercial Fishing Industry

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Abstract

The Fisheries Act 1985 is the current legislation regulating the fishing industry in Malaysia. However in terms of occupational safety and health at the workplace, the Occupational Safety and Health (OSH) Act 1994 are applicable to all the fishing operations in Malaysia. The activities of fishing on vessels are exposed to lots of hazards due to unsafe act and unsafe conditions. As a result, accidents at the workplace happen due to the aforementioned reasons. Hence, the workplaces for Masters and Crews in fishing vessels must be safe and conducive to work. Following the enactment of the OSH Act in 1994, various initiatives have been implemented by the Department of Occupational Safety and Health (DOSH) to increase awareness and knowledge of OSH in the workplace, including among Masters and Crews working in fishing vessels. DOSH have also circulated "Guidelines on Occupational Safety and Health in Fishing and Aquaculture Operations". At this juncture, both the employer and employees ought to be well-informed of some of the requirements stipulated in the OSH Act 1994 which have bearing on the safety of the Masters and Crews working in fishing vessels. The objective of this study was to determine the level of OSH awareness and knowledge among the Masters and the Crews working in fishing vessels with regards to the safety at the workplace. A study was conducted using questionnaire addressing general OSH issues, OSH legislations, occupational hazards at the workplace and the use of personal protective equipment (PPE).

Keywords: safety and health, laws, general safety requirements

1. Introduction

Any jobs that entail working on water meet the criteria as a hazardous occupation (Health and Safety Report, 2011). Thus, commercial fishing is qualified to be classifying as hazardous occupation (Lincoln, Davis, & Lucas, 2014). Fishing is considered to be the world's most dangerous occupation with more than 24,000 casualties per year (which corresponds to approximately 80 fatalities per 100,000 fishers per year) (Safety at Sea in Fisheries Sector, 2012).

The objective of Department of Fisheries Malaysia is to realize the production of 2.6 million tonnes of food fish through an optimum contribution of 1.8 million tonnes from capture fisheries and 0.8 million tonnes from aquaculture (Fisheries, 2015). Consequently, to meet the aforementioned targets, there are about 32,672 licence fishing vessels in Malaysia. Subsequently, there are about 54,054 workers working in licence fishing vessels (LKIM, Annuar Report, 2015).

Hence, in the marine capture fisheries industry, one feature that is noteworthy is the incidence of accidents and illness at the workplace.

The commercial fishing industry has noteworthy hazards. For every 1,000 fishing boats, there are 55 accidents (Watson, 2012). Statistics from Department of Fisheries Malaysia, for year 2013 indicate that there are were 62 reported cases of accident at the workplace. Assistance paid out to the victims' totalling to RM 49, 719 (LKIM, Annuar Report, 2015). The occupational accident rate is considered small as compared to the total number of the occupational accident for the whole country. Although this is the prevailing situations, however with intensified actions on the part of the employers and employees, causes of accidents may be further reduce.

2. Definitions

In these paper:

- a. "Crew" means any person working on a fishing vessel not including the vessel owner or master (Ministry of Human Resources, 2001).
- b. "Master" with regard to a fishing vessel, includes every person (excluding a pilot or port officer as describe in section 2 of the Merchant Shipping Ordinance 1952) being in command or person in charge of the vessel (Ministry of Human Resources, 2001).

3. Aim

The aim of this paper is to:

- a. Establish the level of awareness among the Master and Crew working on fishing vessels with regards to safety and health at their working environment.
- b. Examine whether the Occupational Safety and Health Programmes is being carry out at the workplace.

4. Problem Statement

Employer and Master of Fishing Vessel must undertake the training of the crew to suite to equipments used; provision of adequate protective attire and safety equipment; establishment of workplace access to medical or first aid treatment facilities; and designing comprehensive risk management systems for continually improve OHS processes, systems and protocols . To implement those OSH mentioned Program, it is tied down to "money". Unfortunately this obligation is not always high on employers' priority list and it often takes a backseat to the perceived cost to implement OHS program (Moral Obligation, 2015).

The laws spell out the responsibilities of both employers and employees with regards to the implementation of a favourable work environment. However, some of the frequently heard reasons for non compliance to the laws as expressed by both the employer and employees are:

- a. Employers who alleged are not aware of the law with regards to the occupational safety and health matters and also feel occupational safety and health matters are not important and have no time to think about such matters and do not have enough allocation of funds on the issue.
- b. Employees on the other hand said that they are not aware of the safety rules and regulations in force. The employees too have the notion that complying with some of the rules and regulations causes discomfort and are also difficult to follow (Bahari, Hassan, & Wahab, 2014).

All workers irrespective whether they are part time staff, contractual staff or permanent staff needs to be aware of the issues that have an effect on their health and safety at the workplace. On the same note, all workers have a right to work in the workplace where risk to their health and safety are properly controlled. The obligation to ensure these situations exist lies with the employer. However both the workers and the employers have a legal responsibility to look after health and safety at the workplace.

Workplace safety and health laws establish regulations designed primarily to eliminate personal injuries and at the same time preventing it to reoccur at the workplace. The main statute protecting health and safety of workers at the workplace in Malaysia is the OSH Act 1994 (Act 514).

5. Profile of Hazards Faced by Crews Working in Fishing Vessels

Basically, the commercial fisheries sector is categorized into marine capture fisheries, aquaculture, and inland fisheries. As the marine capture fisheries in Malaysia, it can be categorized into coastal or inshore fisheries, and deep-sea fisheries. The fishermen used either the traditional or the commercial fishing gear in the marine capture fisheries sector to harvest the fishes found in Malaysian waters. The commercial fishing gears used is trawl, fish purse seine, driftnet, gill net. Consequently, the traditional fishing gears used is hook-and-line, bag net, trammel net, lift net and traps. The coastal or inshore fishery, operate within 30 nautical miles from the coastline. The fishing vessels use range from the traditional type to commercial vessels of less than 70 Gross Registered Tonnage (GRT). The deep-sea fishing is carry out beyond the 30 nautical miles from the shoreline. The fishing vessels are 70 GRT and above.

Crews working in fishing vessels often work under hazardous conditions that can lead to injuries or fatalities. Due to the nature of work, accidents at the workplace which caused serious on-the-job injuries and fatalities are common features among crews working in fishing vessels. The crew of commercial fishing industry are also exposed to illness and

diseases. The most common work related injuries among the commercial fishing crew members being struck by objects, crew members caught in or compressed by equipment, and overexertion, sprains, strains, tears, fractures, cuts, lacerations, and bruises or contusions.

Health and hazards prevail in all place of work. Poor work practices (unsafe work and unsafe safety act) create hazards (Physical hazards, Electrical hazards, Biological hazards, Chemical hazards, and Ergonomic hazards). During work activities, some of the hazard that exists and injury or potential injury at the workplace is per Table 1 (Bahari, A., & Jainoo, H. H. 2013).

Table 1 - Hazard and Injury or Potential Injury at the Workplace

Job List	Workplace Hazards	Consequences/Impact
Embark and disembark the Vessel	Slips/Fall (same level, from height)	Fatality
Common work area on the deck of the Vessel	Hazards from rollers, conveyors, hoists, lifters	Traumatic amputation
Hauling work areas	Hazards from machinery (operation, maintenance, modification, installation, commissioning, repair and dismantling).	Fractures
Catch managing areas	Hazards from lifting/handling of tools, materials	Severe Cut
Upkeep or maintenance job	Transporter hazards (trolley, forklift, trailer, lorry)	Severe Burn
Spoiled Gear/Gear Mending	Fire and explosion	Loss of eyesight or hearing
Catch store	Chemicals/substances causing harm to eyes, skin, body	Unconscious
Galley	Harmful energies (electricity, radiation, noise, vibration)	Effects of weather, exposure, air pressure and other external causes (including bends, drowning electrocution)
Living area	Environmental hazards (lighting, temperature, air quality)	Poisoning and toxic effects of substances
Machine or Engine Room	Slippery, uneven ground/surface	Serious injury
Landing process		Drowning
		Back injuries, sprains etc
		Hearing damage,

6. The Legal Framework for Working on Fishing Vessels

The Fisheries Act 1985 is the current legislation regulating the fishing industry in Malaysia. However in terms of safety at the workplace, the OSH Act 1994 are applicable to all the fishing operations in Malaysia (Department of Occupational Safety and Health, 2006). This study aims to study awareness with regards to safety and health. Hence the most appropriate law which is related to safety and health at the workplace is the OSH Act 1994. The government on 25 February 1994 enacted the OSH Act 1994. An Act is statute passed by Parliament, complement by subsidiary legislations and, endorse code of practice and guidelines. This Act applies throughout Malaysia to Agriculture, Forestry and Fishing Sectors in particular and in general to other industries such as the Manufacturing; Mining and Quarrying; Construction; Utilities – Electricity, Gas, Water and Sanitary Services; Transport, Storage and Communications; Wholesale and Retail Trade; Hotels and Restaurants; Finance, Insurance, Real Estate and Business Services; and Public Services and Statutory Authorities (Department of Occupational Safety and Health, 2006).

The OSH Act 1994 or Act 514 requires the workers, employers, societies and government to be involved in ensuring a safe and conducive working environment at the work place against risks to safety or health arising out of the activities of persons at work. Employers are responsible to ensure the implementation of OSH at the workplace. Part IV of the Occupational Safety and Health (OSH) Act 1994 provides for "General Duties of Employers and Self Employed Persons to Their Employees". Hence, it is the vessel owner's duty to ensure as far as practicable, the safety, health and welfare at work of all his employees in fishing operations. These requirements of the law can be translated into OSH Program so as to ensure, so far as is practicable the safety, health and welfare at work for all employees. In the nut shell the law requires the employer to formulate safety policy, set up safety committee, appoint Safety Health Officer, and maintain workplace and working environment that is safe and healthy.

7. Research Methodology

This study used social survey to study the Awareness of the Regulations and Industry Codes of Practice vis-a-vis the Occupational Safety and Health Act 1994: A Study among the Masters and Crews Working in Vessels of Commercial Fishing Industry. Unit of analysis in this study were the Masters and Crews Working in Vessels of Commercial Fishing Industry. The approach in this research is quantitative in nature. The instrument used in the study is questionnaire. This

study used a standard questionnaire, which is modified and adapted by the researcher from previous studies relevant to the needs and purposes of the study.

In determining the sample size of this study, according to de Winter, small sample size of $N \leq 5$ can be applied research (De Winter, 2013). Hence, a quick random survey is made on 100 selected employees who are working in fishing vessels in Northern Peninsular Malaysia. The respondents were selected using purposive sampling. Purposive sampling is a form of non-probability sampling (Polit D.F. & Hungler B.P., 1999). The objective of the survey is to ascertain the safety awareness among crews in fishing vessels. The respondents were asked to state a YES/NO or NOT SURE answer. Simple frequency distribution was used to analyze the data collected.

8. Result of the Survey

8.1 OSH Program at Workplace.

The Master of fishing vessels were posed with Questions with regards to OSH program put into practice at the workplace. The result of the survey shows that the Master of fishing vessels (84.62percent) agree that they have the responsibility to ensure the crewmembers safety. With regards to safety policy, 85 percent of the Master of fishing vessels indicates that there is no safety policy placed on board the fishing vessels. Further 85percent of the Master of fishing vessels does not know how to conduct the process of HIRARC (Hazard Identification, Risk Assessment and Risk Control). Masters of vessel also indicate that in-house training is provided to all crewmembers on board fishing vessels.

8.2 Conducive Working Environment

From the survey it is identified that 100 percent of the respondent agree on the importance of having a conducive working condition in the workplace based on the beneath questions posed to them:

- a. Providing a workplace that is conducive to the worker
- b. To ensue workers are safe from injury and health hazard while undertaking work activities.

8.3 Accidents at the workplace

The respondents were asked with regards to accidents at the workplace. The respondents (80.0 percent) indicate that they knew about the accidents that happened in their friend's workplace that have causes injuries or death at the work place. The respondents were also asked on occupational hazards at the workplace. The respondents were asked to identify the types of hazards they faced at the workplace. The respondents (80.0 percent) indicate Physical hazards as the main hazards in fishing vessels.

8.4 Knowledge of the OHS Act 1994, its regulations and Guidelines

The result of the survey demonstrates that the 95 percent of the respondents were not aware of the existence the OSH Act 1994. The respondents (95 percent) indicate that they have not heard about the OSH Act 1994 being talk about or air in the TV or radio.

8.5 Usage of PPE at the Workplace

The respondents (85 percent) felt that they should be provided with the proper PPE for them to carry out their job. The respondents indicate the PPE provided to consist of Working gear i.e. suitable working clothing for the type of fishing operation and expected weather conditions; Protective gear such as Personal Flotation Devices (PFDs); Face, eye, ear and hand protection, Head protection and Specialist protective gear such as safety belt or harness for Fall protection

8.6 Working Atmosphere at the Workplace

The results of the survey have shown that 98.5 percent of the employees agree that there should be a favourable environment of a good professional's relationship between the employers and employees. The majority (100 percent) of the employees also agree that, it is very important for them to have sufficient leisure time for themselves and their family.

9. Conclusion

Safety at work in the fishing sector is a shared responsibility of the master of the vessels and the crewmembers. Safety at work in the fishing vessels is directly related to the master of the vessels and the crewmembers ability to perform their jobs without making errors. Employers and master of the vessels and the crewmembers are to be aware of federal "standards" as lay down in the OSH Act 1994. Compliance with the law goes a long way to assure workplace safety.

A number of key findings emerged from the study. Occupational accidents at the workplace happened due to hindrance in implementing of Safety and Health measures by respective employers and master of the vessels. The lack of knowledge concerning occupational risks and applicable regulations, lack of training, lack of resources were among the reasons to why these accidents occurred at the workplace.

10. Recommendations

The following recommendations are suggested:

- a. The employers to consult the nearest Department of Occupational Safety and Health to get their advice on the implementation of OSH at the workplace.
- b. To carry out Hazard Identification, Risk Assessment and Risk Control (HIRARC) at the workplace to determine hazards and so as to implement the most suitable OSH system at the workplace. Assistance from University of Perlis, Malaysia (UniMAP) can be sought to carry out HIRARC.

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