“PERCEPTION ON OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT AND FACTORS CONTRIBUTING TO SAFETY SATISFACTION AND FEEDBACK AMONG HOSPITAL STAFF NURSES IN SABAH STATE HEALTH DEPARTMENT”

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Master of Public Health
2010
DECLARATION

I declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been acknowledged.

Signature: .................................................................

Name: ......... DR NELBON B GILOI ............

Date: ........ 10TH MAY 2010 ..........................
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ABSTRACT

This study examined the perception of employees regarding Occupational Safety and Health
(OSH) Management and factors contributing to safety satisfaction and feedback among grade
U29 hospital staff nurses in the Sabah Health Department. It is a cross-sectional study using a
validated self-administered questionnaire which consists of ten independent variables using 5-
point Likert-type scales. A total of 135 nurses randomly selected from seven government
hospitals that responded have participated in the study with a response rate of 63.4%. This study
reveals that training & competence (4.04 ± 0.65) is perceived as the most important component
of their workplace OSH practice followed by safety rules & reporting (3.70 ± 0.63), and work pressure was the least important (2.76 ± 0.48). Safety satisfaction & feedback on safety mean score are 3.28 ± 0.51 and 3.57 ± 0.73 respectively. From a Pearson’s correlation analysis result, it indicated that safety communication, safety responsibility training & competence, safety rules and reporting, health safety goal, role of supervisor as well as supervisor’s leadership have a significant positive relationship with employee outcome while safety incidents has a negative correlation to it. This is expected as safety incidents are undesired occurrences at workplace. However this relation is not significant. A regression analysis was conducted to examine the relationship between OSH management components and employee outcome. Two components namely safety rules & reporting (Adj. $b=0.26$, CI 0.13-0.4, $p<0.001$) and work pressure ($Adj. b=0.22$, CI 0.09-0.34, $p=0.001$) contributes significantly to the prediction of employee outcome ($R^2 = 0.29$). The overall observation from this study indicated that the perception on OSH management in this population is low. Efforts and new strategies on how to improve OSH management need to be identified and implemented in order to ensure better safety climate in the public hospitals which would eventually improve the quality of service rendered to the population at large.
"PERSEPSI TERHADAP PENGURUSAN KESELAMATAN DAN KESIHATAN PEKERJAAN DAN FAKTOR PENYEBAB KEPADA KEPUASAN DAN MAKLUMBALAS KESELAMATAN DI KALANGAN JURURAWAT TERLATIH DI HOSPITAL, JABATAN KESIHATAN NEGERI SABAH"

ABSTRAK

Kajian ini dibuat untuk menentukan tahap persepsi mengenai pengurusan Keselamatan dan Kesihatan Pekerjaan dan faktor penyebab kepada kepuasan dan maklumbalas keselamatan di kalangan jururawat terlatih gred U29 di hospital-hospital Jabatan Kesihatan Negeri Sabah. Ini merupakan satu kajian irisan lintang yang dilaksanakan dengan menggunakan borang soalselidik yang terdiri daripada sepuluh pembolehubah tidak bersandar berdasarkan skala jenis Likert 5-
poin. Seramai 135 jururawat yang dipilih secara rawak dari tujuh buah hospital kerajaan telah mengambil bahagian di dalam kajian ini. Bilangan ini memberikan kadar respon sebanyak 63.4%. Kajian ini menunjukkan bahawa persepsi ke atas latihan & kompetensi (4.04 ± 0.65) adalah komponen yang paling penting di dalam amalan Keselamatan dan Kesihatan Pekerjaan di tempat kerja, diikuti dengan peraturan-peraturan & laporan keselamatan (3.70 ± 0.63), dan tekanan kerja adalah merupakan persepsi yang paling kurang (2.76 ± 0.48). Markah purata bagi kepuasan keselamatan dan maklumbalas keselamatan adalah masing-masingnya sebanyak 3.28 ± 0.51 dan 3.57 ± 0.73. Melalui analisa korelasi Pearson, telah ditunjukkan bahawa komunikasi keselamatan, tanggungjawab keselamatan, latihan dan kompetensi, peraturan-peraturan & laporan keselamatan, matlamat keselamatan & kesihatan, peranan penyelia serta cara kepimpinan penyelia mempunyai hubungan secara positif dengan kesan kepada pekerja sementara insiden keselamatan mempunyai korelasi negatif dengannya. Ini dapat dijangka oleh kerana insiden keselamatan adalah kejadian-kejadian yang tidak diingini di tempat kerja. Analisa regresi telah dijalankan untuk mengenalpasti hubungan di antara komponen-komponen pengurusan Keselamatan dan Kesihatan Pekerjaan dengan kesan kepada pekerja. Dua komponen iaitu peraturan-peraturan & laporan keselamatan (Adj. b=0.26, CI 0.13-0.4, p<0.001) dan tekanan kerja (Adj. b=0.22, CI 0.09-0.34, p=0.001) menyumbang secara signifikan dalam meramal kesan kepada pekerja (R²=0.29). Pemerhatian secara keseluruhan kajian ini menandakan bahawa persepsi pengurusan keselamatan dan kesihatan pekerjaan di kalangan populasi ini adalah rendah. Usaha-usaha serta strategi-strategi baru perlu dikenalpasti dan dilaksanakan untuk memastikan suasana yang lebih selamat diperolehi di hospital-hospital awam yang mana akan akhirnya dapat memperbaiki kualiti perkhidmatan kepada pihak awam secara keseluruhan.

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CHAPTER 1

INTRODUCTION

1.1 Background

The Constitution of World Health Organization (WHO) and International Labour Organization (ILO) stipulate that all people should attain the highest possible Occupational Safety and Health (OSH) standards as a fundamental right (WHO, n.d). The Occupational Health and Safety Assessment Standard (OHSAS 18001 2007) refers to Occupational Safety and Health as an area that is concerned with all factors and conditions that affect or could affect health and safety in the workplace. It is concerned about protecting the safety, health and welfare of people engaged in the work environment (BSE, n.d). By law, the area of Occupational Safety and Health not only affect employees but also it extends to contractors, visitors, and anyone else that are present in the workplace.

Several definitions are given by different professional bodies, international organizations as well as national bodies and other authorities on describing OSH and occupational health services (WHO, n.d). WHO summarises occupational health as a multidisciplinary activity which aims at protecting and promoting health to the workers. This activity includes prevention and control of occupational diseases and accidents by eliminating occupational factors and conditions hazardous to safety and health at work; development and promotion of
healthy and safe work, work environments and work organizations; enhancement of physical, mental and social well-being of workers and support for the development; maintenance of their working capacity, professional and social development at work; and enablement of workers to conduct socially and economically productive lives and to contribute positively to sustainable development.

Histories of accidents, injuries, diseases and deaths over decades have led to the formulations of industry-specific legislations. These formulations contain provisions that oblige employers to improve safety. After World War II (post-1945), professionals began to look at why workplace injuries occur and demand safer equipment and machinery in order to prevent accidents. They began to think more about workers' health and safety rather than the workers being just another machine who are fitted into the overall structure of the workplace (Winder, 2009). Societal pressure also plays a role in requiring attention to safety to be extended to environmental and occupational health issues (Hudson, 2003).
1.2 Research Justification

The Sabah State Health Department is a big organization. It is an organization involved in providing health care to the general public in the state of Sabah. Depending on the categories of staff, health workers are constantly exposed to a host of workplace hazards. Other than infections and ergonomic hazards, accidents such as explosions, fires, electrical accidents, and other type of injuries, radiation hazards, exposure to chemical such cytotoxics drugs and anaesthetic gases are among many occupational hazards that are faced by health workers in the hospitals. Drug addiction and psychic problems are also important problems which are associated with shift work, promotion, emotional stress as well as assault by aggressive patient (Gestal, 1987).

According to Lim (2004), the number of reported cases of needle stick injuries per year from 1999 to 2004 in the Health Department of Sabah are 38 cases (1999), 47 cases (2000), 75 cases (2001), 81 cases (2002), 80 cases (2003) and 25 cases (2004) respectively. It must be remembered that these cases include only those that were reported. It did not take into account unreported cases, near misses nor other types of injuries.

This statistic is just the tip of the iceberg in term of occurrence of safety and health issues. There are other consequences associated with it. Quoting the opening text by the Malaysian Minister of Human Resource during the opening of the Third Regional Conference of Occupational Safety and Health (COSH) in 2008, he said that during the previous year the compensation cost paid by SOCSO for industrial accidents and occupational diseases
amounted for almost 413 million ringgit which includes payment for temporary disablement, permanent disablement and also dependent benefit. Further he said that according to the Accident Iceberg Theory, the hidden or indirect costs of an accident is eight to thirty percent, more than that of its apparent or direct costs. Based on this theory, one can imagine the huge amount of hidden costs spent yearly to finance the accidents and occupational diseases. These costs among others include rehabilitation, retraining, loss of man days, legal cost, reduced morale, all of which translate into reduced productivity.

The implications and magnitude of occupational and occupationally related safety and health issues is beyond simple injuries or accidents. Take for example an unfortunate staff nurse who, as a result of a simple needle prick accident, becomes HIV postitive. This could have happened as she was busy caring for her patients in a busy ward. This accident could affect her life, her family, other dependents, relatives and how she suffers the stigma associated with it. To the government this would mean loss of work, loss of productivity, retraining of a new worker, cost of hospitalization and medication, rehabilitation, and of course a loss of a persons life. Furthermore that infection can accidentally spread to many of her patients in the ward.

In the Sabah State Health Department, the Occupational and Environmental Health Unit was started since 1998. It is one of the main objectives of this unit to make sure that all of the facilities in the department is complying as far as practicable with all the rules and regulations under the Occupational Safety and Health Act (OSHA), 1994. This was done through numerous programmes and activities since the start of the unit as recorded in the book "Sedekad Perkembangan & Pencapaian Kesihatan Pekerjaan, JKN Sabah, 1998-2007."
This study is important as it would help to gauge the level of occupational safety and health implementation as well as safety performance in the state. The information obtained from this study could provide a valuable indicator to evaluate and to help in formulating future plans and programme in order to further improve and maintain the safety and health performance at the highest level possible in all the health facilities in Sabah.

1.3 Literature Review

In the current trend of increasing safety and health legislation and liabilities, organizations and industries are now implementing management systems to improve health and safety performance in their workplace. The term occupational health and safety management system (OHSMS) as describe in OHSAS 180001 is a system used to establish an OSH policy and to manage OSH risks. This management system is a network of interrelated elements consisting of different elements such as responsibilities, authorities, relationships, functions, activities, processes, practices, procedures, and resources. A management system uses these elements to establish policies, plans, programs, objectives and to develop ways of how to implement them, and how to achieve these objectives. OSHMS is a documented and verifiable set of plans, actions and procedures that can assists both employers and employees to clearly identify their OSH responsibilities and manage them in an organized manner. Effective and systemic safety management system results in working environment where risks are controlled and employees are not exposed to hazards, and goods and services are produced efficiently and safely (CFOSH, 2007).
Organizations and industries choosing to implement formal safety and health management system ensure that they remain compliant to law and at the same time enjoy a host of other benefits that comes together with the system (NQA, n.d). Those benefits include the identification of legal and other requirements that needs to be followed, obtain clearer and measureable objectives for improvements, a more structured approach to risk assessment, have a planned and documented approach to safety and health, and finally a systematic way to monitor the health and safety issues and auditing of performance of their organization.

In addition to those above, there are other important associated benefits obtained by these organizations by formally implementing safety and health management system. These include the reduction in occupational accidents and illness, reducing loss due the likelihood of paying legal costs and compensation, reducing stress among workers which in a way leads to increase in productivity, and of course obtaining major improvements in underwriting risks.

Failure to take this responsibility in the other hand can lead to serious consequences. Apart from safety cultural issues, poor safety management systems have been identified as one of the prime causes of a number of modern disasters such as that of the 1986 explosion at the Chernobyl nuclear power station in the Ukraine (Johnson, 2002). In a safety and health occurrence, not only organizations and industries face risks of large financial penalties, but their reputation could also be at stake through public naming and shaming. (NQA, n.d).

Mearns et al. (2003) studied safety climate, safety management and safety performances in offshore oil and gas installations, and noted that proficiency in some safety management practices was associated with lower official accidents rates and fewer reports of accidents.
They have examined the relationship between safety management and safety climate and saw that a more favourable safety management practices are expected to result in improved safety climate on the whole general work force, and vice versa.

A similar observation was made by Mark et al. (2007) where organizational approaches to injury reduction are of critical importance in developing a strong safety climate. Managements' participation in safety creates positive effect on the safety climate attitudes (Thomas et al., 2005; Flin & Yule, 2004). Safety climate refers to perceptions of policies, procedures and practices relating to safety in the workplace (Mearns et al., 2003). It is reflected as attitudes in relation to safety within an organization (HSE, 2002) and it is influenced by the perception of safety at work (Dejoy et al. 2004).

Flin et al. (2006) systematically reviewed different literatures to study sample and questionnaire design characteristics, construct validity as well as the level of analysis, and came out with 73 safety climate dimensions which they categorised into 10 safety management themes to be applied in the healthcare system (See Figure 1.1).
In the study done locally by Abdullah et al. (2009), they summed up and proposed in their framework several components namely leadership style, safety involvement, management commitment, safety communication, role of supervisor, training & competence, safety objective, safety reporting and work pressure from other earlier studies to be as their tool components to measure safety and health management level in healthcare settings that they have included in their study.
1.3.1 Leadership Style

The Health and Safety Executive (HSE) is a body that is responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare, and for research into occupational risks in the United Kingdom. They embed safety and health excellence within their organizations by publishing guidance for Directors and Board Members. From this publication, several essential principles for excellence have been given. These principles stress that a strong and active leadership need to be exercised in order to achieve a good health and safety performance in an organization. This has to be strengthened by the involvement of the employees. Regular assessment and review is to be made compulsory in order to identify and manage health and safety risks within the organization. At the same time it has to be supported by accessing and following advice from competent people, and lastly, there must be a good system of monitoring and reporting, and regular review of performance which is to be conducted from time to time.

Leadership style is described by Clark (n.d) as the manner and approach of providing direction, implementing plans, and motivating people. According to Flin & Yule (2004), there have not been many systematic researches on leadership and safety in health care so far. In their reviews on several industrial safety literatures however, they demonstrated that effective leadership plays an important role in improving safety performance especially in high hazard and complex working environments. Examples of such working environments are as in the aviation, energy and manufacturing industries. In their study they examined leadership behaviours that is relevant to safety in health. They divided leadership levels to supervisors,