

Job Stress and Coping Mechanisms among Nursing Staff in Public Health Services

Loo-See Beh

Associate Professor Dr. Loo-See Beh, Faculty of Economics & Administration, University of Malaya, 50603 Kuala Lumpur, Malaysia. Email: lucybeh@um.edu.my

Leap-Han Loo

Human Resource Manager, private hospital, & postgraduate student, University of Malaya

Abstract

The main purpose of this study is to investigate the prominent causes and effects of job stress and coping mechanism among nurses in public health services. The research methodology included qualitative and quantitative survey. The results indicated that the major contributor of job stress among nurses is the job itself. Heavy workload, repetitive work, and poor working environment were among the stressors identified in the category of job itself. Respondents identified that inconsiderate and inequitable superior/matron, lack of recognition, and conflict within and between groups were the stressors. Respondents also view social support as a buffer against the dysfunctional consequences of stress emanating from the workplace and established network of friends, family, superior, peers, and colleagues to seek emotional support when faced with job-related stress in the workplace. Further, respondents adopt more than one coping mechanisms to combat job stress based on scenarios, situations, and level of job stress. This study is limited only to the investigation of job stress and coping mechanism among nurses in a public hospital. Other non-medical and medical staffs such as administrators and doctors were not included in this study. Suggestions for future research are also mentioned.

Introduction

Job stress among healthcare staff is becoming a common occurrence in most public health services (Winstanley and Whittington, 2002:303). In the high demand for effectiveness and efficiency of public health service delivery, nursing staff is placed on a high responsibility to ensure the demand of public citizen is satisfied (Ritter *et al.*, 1995:164). Nursing focuses on activities that relate to diagnosis and treatment of human responses to health and illness phenomena. However, inherent in this caring occupations are numerous sources of built-in stress that become occupational hazards for nurses (Huber, 1996:560). There are many components to this experience of stress such as staff shortages, high level of responsibility, dealing with the death and the dying, dealing with patient's relatives, coping with the unpredictable, making critical judgment about interventions and treatment, and balancing between work and family commitments. These are forces that realistically generate stress



among nurses (Gordon, 1999:285; Aurelio, 1993:1-10). The issue of insufficient nursing staff and its effects has caused many nurses experiencing job stress in carrying out their responsibility and maintaining the standards of patient care in public health services (Mackay, 1989:60-61). Furthermore, staff shortages with increasing workload raise concerns to the nurse's ability to cope and deliver adequate service to the client, which in turn create a stressful environment within nursing profession (Mackay,1989:60; Huber, 1996:561).

Background to the study in Malaysia

Nurses occupy a particularly interesting position in the provision of health care. Often they are the sole intermediary between the doctor and the patient and in the front line of health services. In Malaysia, nursing requires a great deal of collaboration with people of different professions, social backgrounds, cultures, as well as the ability to take on various roles during a single workday. These might include participation in teams, attendance during rounds and meetings, field trips, palliative work, providing counseling to patients and their families, and social services. These stressful situations obviously caused problems for nurses in their daily work.

Stress that is not well managed will bring negative consequences not only to an employee, but also to the organization (Schultz and Schultz, 1994:402-403). Stress that is not well managed can cause emotional and physical illnesses such as coronary heart disease, cancer, lung problems, diabetes, accident and committing suicide. Also there are some types of occupations which can cause an individual experiencing stress dilemma particularly occupations that involve public citizen and high risk of life, illness and safety. Even though stress is hardly to be eliminated in our daily life, a proper way of coping with stress can be practiced in order to reduce stress (Sutherland and Cooper, 2000:159-160). Understandably a holistic approach in stress management has to be practiced in order to effectively reduce stress. The Ministry of Health Malaysia in 1991, had initiated reducing stress drive through the National Healthy Lifestyle Campaign till to-date. In sum, job stress reduces the employees' effectiveness in their workplace. In order to reduce job stress, it is vital to understand the contributory factors and their effects on an individual and organization. Although job stress is often detrimental to an individual or organization, effective coping with job stress can often result in substantial benefits.

In line with the country's socio-economic development, the public health sector has undergone an extensive expansion of its services and facilities to meet the demands of a fast developing nation and a growing population. It was reported that there was a shortage of some 5,000 experienced nurses, 3,300 doctors, 700 medical specialists, 600 pharmacists and 500 dentists in Malaysia. Moreover, the mushrooming of hospitals in recent years further aggravated the issue of shortage of some 3,000 doctors and 4,000 experienced nurses in the country. A nationwide re-deployment exercise of doctors and nurses involving 117 government hospitals was underway to serve the public. The failure to distribute manpower based on "actual workload" has resulted in either under-utilization in some hospitals or "overloading" in others.



The issue of nurse shortages in Malaysia has caused nurses to be affected with stress in trying to cope with the heavy workload. Nurses are required to perform nursing and non-nursing work under a great deal of stress. Moreover, nurses are found to be lacking in confidence in their ability to deal with work demand and setting clearer goals for work activities, which then cause job-related stress. In her study, Hatijah Yusoff concluded that "stress too high" was a significant factor for nurses to leave their nursing job in Malaysia (Hatijah Yusoff, 2000:27). Recently, great stress has been placed on nurses as the front line of health care. It was reported that 80% of primer public health services are handled by nurses. It is noted that nursing is an interesting career as it required a lot of human interaction and entails great patience when caring for the sick. Additionally, the majority of nurses were not as efficient as their predecessors. They lacked expertise and professionalism, poor communication skill and not people-friendly. Furthermore nurses were expected to enhance their communication techniques to create a more conducive working relationship when attending to patient or while dispensing medicine although there was an acute shortage of experienced nurses in the country.

In addition to the task demand and shortage of nurses as sources of job stress, it is important to consider the stress associated with the physical nature of the working environment at workplace. The issue on deterioration of working condition due to faulty air-conditioning has created a hostile working environment for medical staff and patients. Air conditioning has become a key element in the running of a hospital, apart from electricity and water. Due to malfunction of air conditioning, medical staff and their patients encountered stifling work environment in most consulting rooms such as maternity ward, orthopedic ward and pediatric ward with some breakdown lasting from a few hours to eight days.

Referring to the issues discussed above, it has brought a great attention to the researcher to take a case study on job stress and coping mechanism among nurses in public healthcare. In the statistic perspective, the researcher found that public healthcare has a high average of bed occupancy with an average of bed turnover interval of 0.99%. This indicates a growth demand for health services by the public. In order to support the demand, an adequate number of nurses are required for the delivery of health care services. Due to insufficient nurses in the country, nurses are under stress and this effect their delivery of nursing care services. Therefore, nurses are facing a great challenge to cope with the pressure of the health care profession.

Job stress has been linked to literally a dozen of major stress sources (Woodman, 1995:22-21). Sources of job stress can be detriment to the health and well-being of an individual. For that reason, it is important to discuss the coping mechanism of responding to major sources of job stress on the individual level. An individual might experience positive stress simply from a challenging task. However, if an individual is prevented from achieving his or her targeted goal, it will hamper the individual's performance and lead to distress in the workplace (Marshall and Cooper, 1979:1-3). In this situation, a negative outcome of physical health, psychological and behavior of an employee will surface that will have a negative impact on an employee and organizational effectiveness (Yates, 1979:30-31).

The aim of this study is to examine the major causes and effects of job stress and how nurses cope with job stress. The study specifically investigated the following issues:

- 1. To investigate the most prominent sources of job stress among nurses in Hospital A.
- 2. To investigate the most prominent effects of job stress among nurses in Hospital A.
- 3. To explore the most preferred coping mechanism to reduce job stress among nurses in Hospital A.

More specifically, the research questions aim at identifying the causes of job stress associated with the job itself, role based, the changing nature of relationship with other people, organizational structure and climate, and home and work interface. This study also looks into the effects of job stress on physical health, psychological and behavioral of the nurses. Finally, the aspect of coping mechanisms which include control mechanism, escape mechanism, symptom management, and social support adopted by the nurses to cope with job stress were examined.

The main propositions of this research study regarding the present situation in Malaysia are:

- 1. Events that involve high expectation from the job itself are strongly associated with job stress among the nurses.
- 2. Nurses who encounter job stress will be more prone to have a negative outcome on psychological and physical health.
- 3. Nurses will adopt control mechanism and social support more than symptom management and escape mechanism to cope with job stress.

Significance of the Study

This research attempts to identify the major sources of job stress, effects of job stress on an individual and coping mechanism adopted among nurses to reduce job stress in public health services in Malaysia. Moreover, stress among nursing staff has received less publicity than the stress on doctors (Pascall and Robinson, 1996:97). In fact, the research on job stress issues among medical support staff on how to overcome job stress in public health service in Malaysia is still in initial stage (Hatijah Yusoff, 2000:8). Besides, most literature reviews on job stress and coping mechanism are merely based on the western experience and probably may not be applicable in our local public health service context. The aspect of cultural and ethnicity study on job stress in Malaysia may be quite different from the western nations. Therefore, study on job stress has to be done in home ground basis that will provide us the actual scenario on job stress in local public health service. It is hoped that the findings will provide great understanding of the major causes of job stress and its effects towards nurses in public health services. The findings will also address some implication concerning the coping mechanism adopted by nurses in the public healthcare when dealing with job related stress. Furthermore, the information gathered will provide us the most preferred coping mechanism adopted in dealing with job stress. The valuable information gathered in this study will provide helpful insights to public health services institution in Malaysia when dealing with job stress among nurses. Moreover, the findings will provide information on developing and implementing stress



program to assist medical support staff in public health service institution in Malaysia to cope job stress effectively.

Literature Review

Definition of Stress

In the 1930s, Hans Selye, a medical doctor had described stress as a strain on living organisms. Selye's concept of stress has been used to describe the body's mobilization on dealing with a challenge or threat (Griffin, 1990:585). Dr. Hans Selye, a pioneer in stress research, defined stress as "the body's non-specific response to any demand". Selye classified stress into two categories, each with two variations: distress (harmful or disease-producing stress) and eustress (beneficial stress) (Drafke and Kossen, 2002:409). In his study of stress, Selye introduced General Adaptation Syndrome (GAS) model, which consisted of 3 stages; alarm resistance and exhaustion. This model brings out a distinction between short and long term effects of stress on the body (Marshall and Cooper, 1979:5). The description and application of the GAS model will be explained in detail in the sub-topic theory of stress.

Besides the physiologically oriented approach to stress represented by the classic GAS model, which still remains a vital dimension of modern stress research and stress management, attention is also being given to the psychological (for example, mood changes, negative emotions, feeling of helplessness, etc) and the behavioral (for example, directly confronting the stressors, obtaining information about the stressors, etc) dimension of stress (Luthans, 1998:331). All three dimensions (physiological, psychological, and behavioral) are important to the understanding of job stress and coping mechanism in modern organizations.

Stress is an unavoidable feature of modern living impact of dynamic and uncertain environment characterized by restructuring, reengineering, layoff and downsizing which threatened one's personal security of employment (Huber, 1996:561). Generally, stress is always thought of in negative terms. That is, stress is perceived as something bad, annoying, threatening and not wanted (Mckenna, 1994:585). For example, words or phrases such as depression, feeling out of control, overworked, migraine or headache, time pressure, anxiety, cannot sleep, are commonly used to express what stress means to us personally (Sutherland and Cooper, 2000:45). Stress is one of those words that everybody knows the meaning of but none can define it (Woodham,1995:5). As a result, it is vital to give attention to what stress is not about in today's organization. As pointed out by Luthans (1998) three major misconceptions about stress are as follows:

- 1. <u>Stress is not simply anxiety</u>. Anxiety operates solely in the emotional and psychological sphere, whereas stress operates both and also in the physiological sphere. Thus, stress may be accompanied by anxiety, but the two should not be equated.
- 2. <u>Stress is not simply nervous tension</u>. Like anxiety, nervous tension may result from stress, but the two are not the same. Unconscious people have exhibited stress and some people may keep it "bottle up" and not reveal it through nervous tension.



3. <u>Stress is not necessarily something damaging, bad or to be avoided</u>. Stress is inevitable. Stress is not damaging or bad and is something people should seek out rather than avoid. The key is how the person handles stress.

Understanding the definition of stress, especially stress in organization is important because it can have both positive and negative effects and also learning on how to cope with job stress. Stress can be illustrated as a non-specific state that is composed of a variety of induced changes in the human biological system (Rice, 2000:28-29). For this reason, stress often creates a nonspecific response, which means that certain emotional, physical and cognitive responses occur automatically (Hellriegel and Slocum, 1996:566). In other words, stress is described as a personal response and phenomenon that occurs inside a body as a reaction to the stimulus of a stressor (Huber, 1996:561). The concept of stress has been applied from Selye's bio-physiology framework to psychosocial states in individuals. For example, stress has been viewed as something that occurs when individuals interact with their environment, which offered demand, constraints or opportunity (McGrath, 1976:1351-1395).

An alternate view of stress is a result of a dynamic process in which the individual faces a stressor situation (demand, constraint or opportunity) the resolution of which is uncertain and to which important outcomes are attached (Latack, 1981:3). Stress is also refers as internal reaction to any force that threatens to disturb one's psychological or biological balance (Dubrin, 1985:184). Stress can, at times derail people from following reasonable courses of action (Gatewood *et al.*, 1995:313). Then again, stress is extensively defined as a universal human and animal phenomenon results in intense and distressing experience and has tremendous influence in behavior of a person (Lazarus, 1966:2). Lazarus stated that the study of stress involved the fields of psychology, psychiatry, internal medicine, physiology, sociology and anthropology which devoted substantial resources to the research of stress.

In view of that, stress has been portrayed as a system of consequence response to an action or situation that places special physical or psychological demands or both on a person's result of the interaction of a person and that person's environment (Hellriegel *et al.*, 1986:516). According to Rue and Byars (1997), stress is the mental and/or physical condition that resulted from a perceived threat of danger (physical or emotional) and the pressure to remove it. The potential for stress exists when an environment situation presents a demand that threatens to exceed the person's capabilities and resources for meeting it, under conditions in which the person expects a substantial difference in rewards and costs resulting from meeting the demand versus not meeting it (Rue and Byars, 1997:323).

According to Robbins and DeDenzo (2001), stress is something an individual feels when faced with opportunities, constraints or commands perceived to be both uncertain and important which can show itself in both positive and negative ways (Robbins and DeDenzo, 2001:435). Stress is said to be positive when the situation offers someone an opportunity to gain something. On the contrary, stress that keeps individuals from doing what they desire is perceived as negative (Woodham, 1995:3). A certain amount of stress is essential to sustain life and moderate amounts serve as stimuli to perform but overpowering stress can cause a person



to respond in a maladaptive physiological or psychological manner (Sullivan and Decker, 2001:207). From the organization's viewpoint, stress in the workplace usually is perceived as something undesirable and is a normal pressure most people experienced at work (Krumm, 2001:494).

Stress is generally viewed in terms of the fit between people's needs, abilities, and expectations with environmental demands, changes, and opportunities (Cummings and Worley, 1997:430). Most of these definitions of stress contain three important components that associate the idea of demands taxing a system, some form of appraisal or perception of threat and the importance of the response of that system (Powell and Enright, 1993:3). That is to say stress is a pattern of emotional states and physiological reactions occurring in situations where individuals perceive threats to their important goals which they may be unable to meet (Baron and Greenberg, 1990:225-226).

Taking all these definitions into consideration, the term stress is not applied in a vague or illdefined way. The definition of stress incorporates most of the elements that researchers have used for identifying and studying the effects of this phenomenon. In conclusion, stress is an environmental action that places special physical and/or psychological demands that produce an adaptive response that is influenced by an individual differences (Kreitner and Kinicki, 2004:692).

Theory of Stress

The definition of stress has been varied in term of its conceptualization from different authors and researchers in the study of stress. At this stage, it is vital to assess the relevance of theoretical models of stress to enable us to fully understand the concept of stress, its applications and approaches that have been used and outcome measures stress. The General Adaptation Syndrome or GAS is an early model of stress which viewed stress response as a natural human adaptation to a stressor (to change or leave the stressors) in the individual's physical or psychological environment (Champoux, 2003:353). Selye described the process of GAS into three stages (Cooper and Marshall, 1978:2-3):

- 1. Alarm reaction in which an initial shock phase of lowered resistance is followed by countershock during which the individual's defense mechanisms become active.
- Resistance the stage of maximum adaptation and hopefully successful return to equilibrium for the individual. If, however, the stressor continues or defense does not work, the individual will move on to;
- 3. Collapse or Exhaustion when adaptive mechanisms collapse.

According to Selye, a full understanding of stress and its many effects must involve great attention to the three related stages (Selye, 1956:31). Arousal rises quickly to high levels and many physiological changes that prepare our bodies for strenuous activity (either flight or combat) take place. The body prepares to fight or adjust to the stressor by increasing heart rate, respiration, muscle tension and blood sugar. This initial reaction is soon replaced by the second stage known as resistance. Here, if a stressor is too intense the individual may feel



restless to cope with it. However, after a short period of alarm the individual will gather all strength and start resisting the negative effects of the stressor. The body tries to return to a normal state by adapting to the stressor. If stress persists, the body's resources may become depleted and the final stage known as exhaustion occurs. During the exhaustion stage the body begins to wear down from exposure to the stressor. At this point, the ability to cope decreases sharply and severe biological damage may result if stress persists. If a person experiences the stressor long enough and does not effectively manage the source of stress then stress-related illnesses can appear. The damaging effects of stress occur in this stage for both the individual and organization (Baron and Greenberg, 1990:224-225; Champoux, 2003:353; Payne and Walker, 1996:99; Greenberg, 2002:64; Griffin, 1990:585).

While stress is reflected by the sum of the nonspecific changes which occur in the body at any one time the GAS encompasses all nonspecific changes as they develop throughout time during continued exposure to a stressor (Selye, 1956:64). The GAS is a useful model for explaining physiological processes which may lead to stress-related illness (Payne and Walker, 1996:101). The GAS theory says (Selye, 1956:25-43; Rice, 2000:32; Lyon, 2000:6):

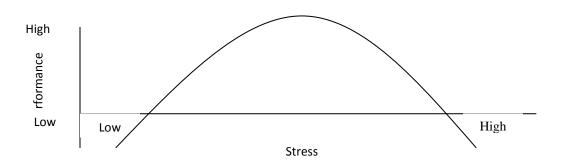
- 1. All life events cause some stress.
- 2. Stress is not bad per se, but excessive or unnecessary stress should be avoided whenever possible.
- 3. The stressor is the stimulus eliciting a need for adaptation; stress is the response.
- 4. The nonspecific aspects of the body's reaction to an agent may not be as obvious as the specific effects. Sometimes, only disease or dysfunction will make an individual realize that he or she is under stress.
- 5. Stress should be monitored.
- 6. Removal of the stressor eliminates stress.

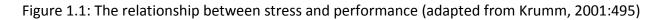
This theory also demonstrates that work stressors can also affect an individual in the home and social environment. Thus, when isolating the sources of stress one also has to be aware of the importance of extra-organizational sources of stress that can affect the behavior, performance, mental and physical health of an individual at work (Davison and Fielden, 1999:415). Selye stated that he did not believe people should aim for a stress-free life because some stress is positive and productive while some negative stress is simply unavoidable. The goal is to cope or minimize the assault of stress (Wade and Travis, 2003:533). Stress is a natural and essential part of living and growing (Burns, 1992:1). Moderate levels of stress and stimulation such as challenging but achievable goals can energize and motivate employees. The middle area of the graph shows the stress levels that result in the greatest performance. When a level of arousal exceeds our ability to meet the demand placed upon us we will experience feelings of burnout, exhaustion and ultimately will impair employee's performance (Wright and Noe, 1996:698). Extremely high and extremely low level of stress tends to have negative effects on performance.

A certain amount of stress among employees is generally considered to be advantageous for the organization because it tends to increase work performance. However, when an employee



experiences too much or too little stress, it is generally disadvantageous for the organization because it tends to decrease work performance (Certo, 2000:291).





Sources of stress

What factors contribute to stress in the workplace? The literature reviews illustrate many different conditions that play a vital role in this regard. For purposes of this study the literature reviews will consider each major sources of stress separately. In addition, for the purposes of clarity the literature reviews are divided into two major categories. The first category relates directly to organizations or jobs and the second category associates to other aspects of individuals' lives. A variety of studies have shown that guantitative work overloads are potent sources of stress in the workplace in which individuals are asked to do more work than they can complete in a specific period of time (Cassar and Tattersall, 1998:85-94; Mullins, 1999:641; Fox et al., 1993:289-318; Ganster and Murphy, 2000:37-40). Another major source of job stress is associated with a person's role at work (Marshall and Cooper, 1979:30). A great deal of research in this area has concentrated on role ambiguity and role conflict as job stressors (Sullivan and Decker, 1985:414-415; Johns, 2000:254; Baron and Greenberg, 1990:227-228; Greenberg, 2002:66; Mckenna, 1994:592-593, Powell and Enright, 1993:9). Role ambiguity refers to an employee who is uncertain about how to perform on the job, what is expected in the job and unclear relationship between job performance and expected consequences (Rue and Byars, 1997:324). Role conflict arises from inconsistent expectations of the organization or from job-related expectations conflicting with a person's other roles (Wright amd Noe, 1996:702). Cooke and Rousseau (1984) had conducted a study on Michigan teachers to investigate the effects of family roles and work-role expectations on strain. Role theory predicts that multiple roles can lead to stressors (work overload and inter-role conflict) and, in turn, to symptoms of strain. The results of this study were generally consistent with the role theory's prediction for work-role expectations that were found to be related to work overload and interrole conflict and these stressors were found to be related to strain. The finding also indicated that family roles found to be related to strain in three ways: interaction with work-role expectation, those who are married, and those who have children (Cooke and Rousseau, 1984:252-260).



In addition, there is a consistent relationship between the behavioral characteristic¹ of different jobs and the levels of various stresses experienced by group of employees. The findings indicated that five of the divisional job dimensions² correlate with at least half of the 18 stress variables. This study suggested that certain jobs have characteristic that increased the likelihood of the job incumbents to experience stress (Shaw and Riskind, 1983:253-261). Motowidlo et al. (1986) conducted two studies³ on occupational stress and its relation with antecedent variables and job performance among nurses in four hospitals. The finding of the first study indicated that work overload, uncooperative patients, criticism, negligent coworkers, lack of support from supervisors, and difficulties with physician caused stress to hospital nurses. As a result, nurses performed their jobs less effectively. The finding of the second study indicated that there was no significant relationship in years of nursing experience, age, tenure in their nursing unit, tenure in their hospital, or whether they worked full time or part time with job-related stress and job performance among nurses (Motowidlo et al., 1986:618-629). In addition, Frese (1985) conducted a study on job stressors among German male blue-collar workers who had worked at least 6 months in the metal industry of the Federal Republic in Germany. The findings indicated that uncertainty in the job (such as role ambiguity and role conflict), organizational stress, environmental stress (noise), danger of accident, intensity (speed of work), and job insecurity (danger of unemployment, leisure time stress, lack of wife support and labor union activities) were among the job stressors most experienced in the workplace (Frese, 1985:314-328). A person who works in shifts frequently experiences physical distress or mental distress, or both (Pierce and Dunham, 1992: 1086-1098; Drafke and Kossen, 2002:412; Luthans, 1998:333). Shift work requires an employee to work a variety of shifts from Monday to Friday, for example, working the day shift for a week, the afternoon shift for a week, night shift for a week, and then back to the day shift (Sutherland and Cooper, 2000:78). Research has also demonstrated that stress increases incrementally as the number and length of night shifts increase (Daus et al., 2001:303). There are fairly solid evidences of negative effect on physical, social and psychological of an individual working rotating shift work. Part of the shift-work problem is adjusting to changes in routines and cycles of activities (Saal and Knight, 1988:489).

Furthermore, it is important to relate stress with the physical work environment. Poor working conditions such as crowded work area, noise, heat, strong odor, dangerous conditions and physical strain are considered as potential sources of stress in the workplace (Follman, 1978:219; Luthans, 1998:333; Sutherland and Cooper, 2000:86). Sutton and Rafaeli (1987) conducted a survey⁴ among 109-clerical workers from University of Michigan explored work

¹ Behavioral characteristic of jobs were assessed with data from the Position Analysis Questionnaire (is a job analysis inventory of 194 different job elements used to derive scores on 32 divisional job dimensions).

² Job dimensions consist of various sources of information used, making decisions, performing controlled manual and/or related information, communicating judgments and/or related information and working in businesslike situation.

³ The first study was designed to identify specific events associated with stress among hospital nurses. The second study examined relationship between the stressful events identified in the first study, work condition, individual characteristics, subjective stress, affect, and job performance.

⁴ The study consists of hotness, coldness, and poor quality lighting was the three indicators in the first category. The second category consists of intrusion from others such as noise and distractions, density, and control over privacy intrusion from others.



station's characteristics as potential occupational stressors. The findings stated that intrusion from other might be stressors because they hamper control and decrease predictability of important events. Interruption from noisy co-worker, noisy machines, ringing telephone, and people walking in and around a work station lead employees to perceive that they have little cognitive control over important events and causes stress (Sutton and Rafaeli, 1987:260-276). Another environmental factor that may affect work behavior is the thermal condition of the workplace. Extreme levels of heat can have detrimental effects on the performance of physical and mental tasks due to heat stress (Saal and Knight, 1988:500-502). Besides, Parkes (1982) conducted a study among student nurses from British and Irish nationality of medical and surgical wards on the occupational stress and causal role of work setting in influencing mental health and well-being. The findings indicated that medical wards gave rise to higher levels of distress compare to surgical wards (Parkes, 1982:784-796).

The lack of supportive relationship or poor relationship with peers, colleagues and the superiors are also potential sources of stress, leading to low trust and low interest in problem solving (Khan and Byosiere, 1995:198; Baron and Greenberg, 1990:230-231; Schultz and Schultz, 1994:414). Relationship at workplace can be classified into relationship with superiors, colleagues, subordinates, those who use your goods/services, those who supply you with goods/services and those whose decisions affect your status and resources (Ward, 1987:55). Crabbs et al. (1986) carried out a study⁵ to illustrate that three of the top six events that caused job stress were concerns with relationships (lack of support from superior, poor relationship with superior, and poor relationships with colleagues and subordinates) and the other three concerns which involved career development (lack of expected promotion, lack of job security, and requirements of job exceed one's skills or abilities). These indicated that poor relationships at work and thwarted career development contribute to stress on an individual (Crabbs et al., 1986:2-7). Being responsible for other people demands a stressful extensive period of time spent on interacting with people (Baron and Greenberg, 1990:229; Greenberg, 2002:65). This means increased responsibilities for people, one has to spend more time interacting with others, having to attend more meetings, and having to meet deadlines (Mckenna, 1994:594). Repetitive work is also found to be a source of stress in the workplace (Drafke and Kossen, 2002:411). Cox (1980) proved that workers on repetitive work reported that their jobs were too monotonous, boring, ideas and knowledge were underutilized, tied up with the job, and felt isolated from their work mates (because of the noise, physical constraints of work and pace of work) made them felt distressed/uneasy reporting to work (Cox,1980:25). Home-work conflict occurs when work role stressors interfere with an individual's ability to fulfill home and family obligations (Dubrin, 1980:161). Home-work interface is especially important among female workers who bear the burden of looking after the children, caring for elderly relatives, cooking, cleaning, shopping, etc. Long working hours mean less family life and this will develop stress on the relationship with partners, children, family and friends (Dalton, 1998:139). The main forms of multiple-role conflicts among working women revolve guilt feelings, lack of emotional and domestic social support from partners and inadequate childcare facilities. Furthermore,

⁵ A study of 101 participants which composed of 60 men and 41 women on the importance of work events as a source of stress and examined these events separately from other life events or hassle by using Work Events Inventory.



evidence found that in dual-career couples, men were reluctant to increase their participation at home even though their wives were experiencing high levels of work and family role stress (Davidson and Fielden, 1999:422).

Understaffing (Sullivan and Decker, 1985:414-415), office politics (Hellriegel et al., 1986:521), organization interfaces with the outside world (Nelson and Sutton, 1990:859-869), job insecurity (Goetsch, 1999:179), job content that is too narrow for the individual, work paced control, poor participation (Drafke and Kossen, 2002:411-412), organizational characteristic and climate (Hart and Cooper, 2002:103-104), task demands, organization leadership, interpersonal demands (Robbin and DeDenzo, 2001:437-438), downsizing, competitive pressures, bureaucratic rules (Luthans, 1998:333), sexual harassment (Greenberg, 2002:68), new patterns of employment - growing number of younger workers and workers of diverse ethnic backgrounds who may bring to the job various attitudes, habits, and cultural values (Schultz and Schultz, 1994:414), boundary roles, personality, redundancy and domestic consideration (Mckenna, 1994:591-594) are other potential sources of job stress in the workplace. It is not possible to obtain a complete stress profile by looking only at sources of stress in the workplace. Thus, it is vital to consider the interfaces that exist between work, home and social life of an individual that contribute to stress. These include marriage, pregnancy, illness, divorce (Baron and Greenberg, 1990:230-231), hassles of daily life-household hassles, time pressure hassles, inner concern hassles, environmental hassles, financial responsibilities (Baron and Greenberg, 1990:234-235), worries about children, health, misplacing things, worry about crime and rising prices (Schultz and Schultz, 1994:414).

Effects of Stress

By understanding the nature of stress and major sources of job stress, it is vital to know the effects of job stress on physical health, psychological and behavioral on an individual. There is overwhelming evidence to indicate that continuous exposure to stressful situations, or an accumulation of stressors over a period of time, is directly associated with the onset of illness, emotional stress and engaging negative activities (Burns, 1992:25-34; Jones *et al.*, 1988:727-735). The fact that stress can make people ill and is implicated in the incidence and development of coronary heart disease, mental illness, certain types of cancer, smoking, dietary problems, excessive alcohol consumption and substance abuse, life dissatisfaction, accident and unsafe behavior at work, migraine, stomach ulcers, hay fever, asthma and skin rashes, marital and family problems (Dalton, 1998:136-137; Cooke and Rousseau, 1983:446-458). Moreover, it was identified that an individual who has poor problem-solving and coping skills, inability to understand and cope with own emotions, and lack of social and self- assertion skills is more vulnerable to stress and subsequent alcohol and drug misuse (Vetter, 1981:172).

Generally, the effects of work stress occur in three major areas. The effects of stress on physiological include increased of blood pressure, increased of heart rate, sweating, hot and cold spells, breathing difficulty, muscular tension and increased of gastrointestinal disorders. Effects of stress on psychological consist of anger, anxiety, depression, lowered self-esteem, poorer intellectual functioning, inability to concentrate and make decisions, nervousness,



irritability, resentment of supervision and job dissatisfaction (Chen and Spector, 1991:398-407). Decreased performance, absenteeism, higher accident rates, higher turnover rates, higher alcohol and other drug abuse, impulsive behavior and difficulties in communication are few effects of stress on behavioral (Hellrigel *et al.*, 1986:527;Bhagat *et al.*, 1985:202-214).

According to Cunningham (2000), in addition to physical illnesses, individuals experience significant pain and discomfort due to disturbances of the psychological and emotional systems. An angry, frustrated, emotionally unstable person is not capable of rational responses and good judgment. Such stress repercussions hinder a person's effectiveness in relating to others. They result in emotional disturbances, alcohol or drug use, impaired relationships, sleeping difficulties, disturbances in one's thought processes and concentration, behavioral disruptions and occupational burnout (Cunningham, 2000:36). Hackett et al. (1989) conducted a study among nurses⁶ of two metropolitan hospitals on reasons absent from work. The findings indicated that nurses' daily expressed desires to be absent from work were related to tiredness, personal problems, ill health, stress and work interfering with home activities (Hackett et al., 1989:424-453). In addition, absence also has high significant with demographic factors such as age, tenure of service, gender, salary and seniority (Thomson et al., 2000:16-34; Scott and McClellan, 1990:229-253; Kroesser et al., 1991:171-180; Martocchio and O'Leary, 1989:495-501). In addition, Muhammad Jamal (1984) examined the relationship between job stress and employees' performance and withdrawal behavior among nurses of two hospitals in a metropolitan Canadian city on the east coast⁷. The results demonstrated that role ambiguity, role overload, role conflict and resources inadequacy significantly related to employees' effectiveness and withdrawal behavior. Job stressors such as role conflict, role overload, and resource inadequacy are found related to job performance, motivation and patient care in a negative linear fashion. The stressor role ambiguity shows a monotonic nonlinear relationship with job performance and motivation and a negative linear relationship with patient care. Role overload and role conflict are found related to absenteeism, tardiness, and anticipated turnover in a positive linear fashion. Both role ambiguity and resource inadequacy are also related to tardiness and anticipated turnover in a positive linear manner (Muhammad Jamal, 1984:1-21). Moreover, high level of stress affects the changes of one's self-reports of sleep, mood, symptoms and social satisfaction over consecutive rest days following by day and night shift. Totterdell et al. (1995) conducted a study to investigate the effects of changes over consecutive day and night shifts among nurses⁸ and rest day. The results indicated that measures were worse on rest days that followed a night shift rather than a day shift and tended to be worse on first rest days compared with subsequent rest days. Alertness was lowest on the

⁶ A total of 120 respondents of two metropolitan hospitals took part in this study on rating the degree to which certain events relevant to absence during each of their scheduled workdays. The event ratings for days when the nurses decided to be absent were then compared with those for days when the nurses attended. Respondents were asked to complete a questionnaire regarding the work-related attitudes, values and stressors. The study also included two items on major self-reported reasons for absences and attendance; (1) think of the times when you took time off from work in the past –list as many reasons for these absences as you can remember and (2) think of the times when you felt like taking time off from work but choose not to-list as many reasons for having made this decision as you can remember. In this literature review, concentration will be made on the first item of self-reported reasons for absence among the nurses.

⁷ Job stressors assessed include role ambiguity, role overload, role conflict, and resources inadequacy. Employee's performance was measured in terms of job performance, motivation, and patient care. Withdrawal behaviors assessed were absenteeism, tardiness, and anticipated turnover.

⁸ A total of 61 female nurses from England and Wales took part in this study. They were asked to complete a questionnaire on General Health Questionnaire and Chronic Fatigue scales of the Standard Shift Work Index).



1st rest day following a night shift. Social satisfaction was better on workdays that were preceded by two rest days rather than one rest day (Totterdell *et al.*,1995:43-57). In sum, stress is a normal part of everyday life and affects all living creatures. According to Selye, stress is differentiated between eustress and distress. Eustress refers to the level of stress which motivates us to perform well, solve problems, be creative and grow in confidence. Contrary, distress causes our performances to deteriorate, our adaptive bodily functioning becomes disrupted and our response, whether physiological, cognitive, emotional or behavioral becomes maladaptive.

Coping Mechanisms

Based on the above reviews, job stress can be a detrimental to the health and well-being of an individual. Therefore it is important to discuss effectively ways of responding to stress on the individual level. The major purpose of this sub-section is to summarize and integrate a body of literatures pertinent to understanding how an individual copes with stress occurring in organizational and non-organizational life. The mechanisms to be discussed are mainly from the clinical, counseling and social psychological areas where evaluative information is more readily available from the literatures. Generally, coping has been focused on internal and external resources for coping with stress which deal with work and general life stresses (Cartwright and Cooper, 1996:203). Coping can be defined as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus and Folkman, 1984:141). Coping is also viewed as a dynamic process and response to situation characterized by uncertainty and important consequences (Latack, 1986:377). Furthermore, coping is illustrated as a process oriented, nonautomated adaptive behavior, effort, and managing life stressors (Backer et al., 2000:224). According to Lazarus (2000), he defined that coping consisted of all the things people done to control, tolerate or reduce the effects of life's stressors namely perceived threats, existing problems or emotional losses (Wade and Tavris, 2003:566). With these general definitions, coping can be best illustrated as managing taxing circumstances, expending efforts to solve life's problems and seeking to master or reduce stress (Burke and Weir, 1980:300).

Coping with stressful events is complex, highly dynamic and is directed toward moderating the impact of such events on an individual's physical, social and emotional functioning (Davidson and Fielden, 1999:423). Generally there are three actions to achieve effective coping. Firstly, one has to attempt to anticipate potential stressors before encountering them and prepare appropriate plans of attack for the various outcomes. Then an individual has to reduce the physical arousal caused by stressors. It is vital that the individual has the capability to separate the facts from emotions in order to reduce the stressors. Finally, increasing positive feelings under stressful conditions help to decrease the level of stress (Miller and Pfohl, 1982:236). Social support has been recognized and proved to be an excellent coping mechanism to reduce stress (Cassidy, 1999:70; Blau, 1981:279-302). Social support can be defined as a friendly, approachable, trustworthy, cooperative and warm attitude among members of the social network to which a person belongs (Brief *et al.*, 1981:99). A helpful attitude by a partner or friends regarding problems gives the individual concerned the opportunity to find support in



solving stressful event. This means an individual begins to build connection between members in the work-place by providing opportunities, understanding, expressing views and to be involved in decision making processes in the work-related matters (Dijkhuizen, 1981:215). Participation in decision-making is found to be able to increase communication among workers and improves the interpersonal relations within work units. As a result of these communications, social support increases, and hence, experienced job-related strain decreases (Jackson, 1983:3-19; Nelson and Burke, 2000:182-183). Furthermore, it is well acknowledged in most organization that social support mechanism is an effective form of stress management to relieve job-related stress in the workplace⁹ (Ritter et al., 1995:170-175). In addition to that, social support mechanism is considered positive and additive rather than interactive or buffering in reducing stress¹⁰ (LaRocco and Jones 1978:629-634). The role of family as a support system has various functions in coping with stress. The role of family can act as a collector and disseminator of information about the world to the family members, providing feedback guidance system and source of ideology, offering guidance and mediator in problem-solving, giving practical service and concrete aid, ensuring a haven for rest and recuperation, acting as a reference and control group and contribution to emotional mastery to reduce stress among family members (Payne, 1980:279-282). Control mechanism, escape mechanism and symptom management also have been widely adopted as stress prevention mechanism. Latack (1986) conducted a study to identify individual's coping preference to reduce job stress¹¹. The findings showed that individuals adopting a control strategy are less likely to report job-related anxiety, job dissatisfaction and leaving the organization. Those favoring an escape or symptommanagement strategy are more likely to report psychosomatic complaints (Latack. 1986:377-385). Besides that, individual who adopted problem-solving mechanism to reduce stress is able to achieve high performance under stress while individual who adopted emotional-defensive mechanism has lower level of performance when under high stress¹² (Anderson, 1976:30-34). Individuals with high problem-solving mechanism are capable to manage work stress effectively (Parkes, 1990:399-409). It was found that individuals with high demands and low coping skill had the most health problems. Individual with low demands and high coping had the lowest level of health problems. On the other hand, individuals with high demands and high coping

⁹ A study was done on social support mechanism among 25 psychiatric nurses to relieve stress in the workplace. Each nurse involved in the study is required to complete a demographic data sheet and five different questionnaires (Coping Skills Questionnaire, Maslach Burnout Inventory, General Health Questionnaires GHQ-28, Minnesota Job Satisfaction Scale, and Self-Attitude Questionnaire). The finding showed that the most stressful events experienced among psychiatric nurses are violent/aggressive incidents on the ward, time (too much to do, not enough time), working with the patients, shortages of either staff or resources, and dealing with suicidal patients. Moreover, the finding also proved that intensive social support is an effective form of stress management among psychiatric nurses to reduce stress in the workplace.

¹⁰A sample of 3725 U.S. Navy enlisted men aboard 20 ships in the Atlantic and Pacific fleets took part in this survey. Two hypotheses were tested on this study. The first hypothesis holds that stress and support is additive. Each exerts a direct influence on outcomes such as satisfaction, self-esteem, retention, and so forth. The second hypothesis holds that supports buffers or moderates the effects of stress.

¹¹A sample of 81% from 109 participants (managers and professional in a medium-sized manufacturing firm and in an osteopathic hospital) responded in this study. Respondents were required to complete a questionnaire consisting 23 action items of control strategies, 14 cognitive reappraisal items of escape strategies, and 27 symptom-management items. Variables on role conflict, role ambiguity, role overload, and personal life changes, social support, Type A personality, anxiety, psychosomatic symptoms, job satisfaction, and propensity to leave were tested to indicate how frequently respondent react in a given way in each situation.

¹² A study on relationship between stress, coping behavior, and performance among 93 owner-managers of small businesses damaged by hurricane floods. Two hypotheses were tested (1) perceived stress and performance displayed an inverted-U relationship, and (2) emotional coping mechanism increases under higher stress. Subjects were asked a series of questions dealing with organization performance, perceive stress (Subjective Stress Scale), stressful stimulus, and coping mechanisms (problem-solving and emotional-defensive).



skill had high reports of job stress, but not high levels of health problems¹³ (Eriksen and Ursin, 1999:238-250). Studies also found that strategies such as seeking reassurance and understanding root causes of job stress (Bernier, 1998:50-65) and have great sense of control in a stressful situation (Troup and Dewe, 2002:335-355) are more competent to cope with job-related stress. Christie and Shultz (1998) conducted a research on coping with job stress between men and women showed that men and women differed on few coping responses¹⁴. Control coping was significantly higher for women as compared to men. Escape coping indicated no significant difference between men and women. Women reported higher levels of social support on all scales compared to men (Christie and Shultz, 1998:351-361). An individual who used problem-focused coping strategies such as seeking information and advice tend to cope job stress effectively, whereas less effective individual seems to have used strategies such as resigned acceptance¹⁵ (Long, 1988:37-44).

From the literature, successful coping does not mean eliminating all stress. It is important to understand the nature of stress at workplace and its effect before we can reduce or moderate stress. A healthy person will face stress confidently, deals with it and gets beyond it. It is important for an individual to develop coping mechanisms to reduce job stress and apply these coping mechanisms into use in his/her everyday life (Krohne, 1996:400-401). The involvement of workers or workers group of all phases is equally necessary to ensure successful implementation of stress intervention to combat job stress in the workplace (Murphy, 1995:11-12). A coping mechanism can be effective if resources are targeted to specific problems and aimed at the elimination of the sources of stress. The success to reduce job stress in the workplace embraces both individual coping mechanism and effective organizational intervention on stress management.

Conceptual Model of the Study

Figure 1.2 presents a model summarizing the job stress and coping mechanism discussed in this study. The development of this model will be the framework of this study to examine the sources of job stress, effects of stress and coping mechanisms. This model is originally developed for this study. This model is to identify specific job stressors that may result in

¹³ A total of 1060 employees working in the Norwegian postal service took part in this study. Respondents were required to fill up questionnaire on psychological demands (5 items), control (6 items), coping (Utrecht Coping List- 47 items: active problem solving, palliative responses, avoidance and passive expectancy, seeking social support, depressive reaction pattern, expressing emotions, and comforting cognitions), job stress (19 items), and subjective health complaint (Subjective Health Complaint Inventory – 29 items).

¹⁴ A total of 56 men and 125 women from psychology and business class took part in this study. Participants were asked to complete a 113items questionnaire (control and escape coping, social support, physical exercise, job strain, absenteeism, turnover intention, job satisfaction, and job stress).

¹⁵ 20 professional women were studied on their work-related stress and coping strategies. Respondents were interviewed and to describe a work-related stressor that they had occurred during the past week or two. Each woman identified one stressor but stressors provided varied considerably. 40% of the women perceived stressor as a challenge, 35% considered it a threat, and 25% associated a loss with a stressor.70% believed there was little they could do to change the situation and that they had little control or no control over the occurrence of the stressor. The women were shown a list of eight classes of coping strategies and to indicate whether or not they used these coping strategies and to briefly describe the one they used. 19 participants indicated that they "thought about solutions to the problem or actually did something to try to solve it", a proactive coping approach. The next most frequently used strategies were to "accept that the problem had occurred, but decide that nothing could be done about it, and to "seek spiritual comfort". 90% of the respondent reported an average of three people with whom they could talk openly outside of work (social support).

dysfunctional consequences to an individual in the workplace. This model shows that almost any dimension of the organization causes job-related stress. In addition, this model also suggests that good coping mechanisms play a vital role in reducing job-related stress in the workplace.

The study of sources of job stress consists of the job itself, role based, and the changing nature of relationship with other people, organizational structure and climate and home and work interface. Variables of the sources of job stress of each aspect will be identified. Once a person is exposed to job stress, the effects of job stress on physiological, psychological and behavioral of a person will be identified. The coping mechanisms used will determine the ability of a person to cope with job stress. Effective coping mechanism indicates positive outcome while a person with poor coping mechanism will show negative outcome.

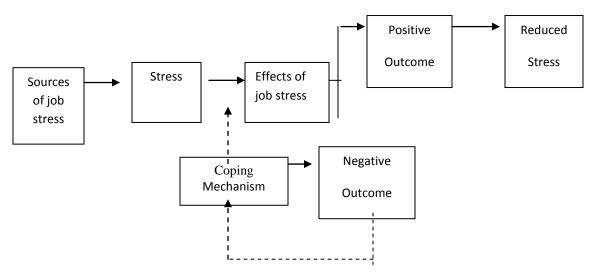


Figure 1.2: Model of Job Stress and Coping Mechanism

Research Methodology

This research was based on a case study in Hospital A, which was situated in the state of Selangor Darul Ehsan, in Malaysia. The respondents comprised of nurses from the Nursing Unit. According to the Malaysian Nurses Union, nursing profession is an ideal feminine occupation in Malaysia. The male nurse in the health service goes for a separate course of training and is known as a Medical Assistant. Therefore, the subject of study consists of only female nurses. The selection area of study consists of variety of units and diverse characteristics of samples were studied. The study is to identify major job stressors, its effect and coping mechanism to reduce stress among nurses in Hospital A. A total of 185 samples were obtained from the Nursing Unit of Hospital A. In this study, the samples are to be divided into two groups to make comparison and to identify similarity or differences of both findings. Group 1 consisting of 160 respondents and Group 2 consisting of 25 respondents from various units were selected for the



survey. The method used for data collection in Group 1 is questionnaire survey (quantitative data) and Group 2 is interview survey (qualitative data).

Self-administered questionnaire survey was chosen in this study because it offers anonymity and avoids bias. Besides, the response rates may be high among respondents who have a strong interest in the issue of job stress. Moreover, respondents can complete the questionnaire when it is convenient during or after working hour. The interview survey will elicit more detailed information and illustrations of the job stress and coping mechanism among nurses in Hospital A. It is important to listen actively and observe their facial expression as well as body movement about their job stress experiences in Hospital A as information elicited from interviews allowed a deeper insight into underlying issue of job stress and coping mechanism. Moreover, nurses are able to express their feelings, opinions and concerns more freely and openly. The data gathered from the questionnaires survey was analyzed and the findings from the interview will be quantified to illustrate nurses' work-related stress and coping mechanism.

Sampling Procedures

For the purpose of this study, a simple random sampling was used. The population studied was comprised of nurses from Hospital A. A comprehensive sample of 185 nurses was identified for this study. The samples of study were divided into two groups. Group 1 consisted of 160 respondents selected for questionnaire survey and Group 2 consisted of 25 respondents selected for interview survey. Of the 160 questionnaires sent out in this study, 159 questionnaires were returned yielding a response rate of 99.38%. Of the 25 respondents selected for the interview, 21 respondents came for the interview session yielding a response of 84%. The study consisted of mixed samples with respect to diverse demographic profiles. Respondents selected were ranged from various categories of age, marital status, service, race, academic qualification and station unit of work.

Research Instrument

The items of questionnaire were constructed based on the literature review. The questionnaire was designed in four sections to suit the purpose of the study and public health services in Malaysia's condition, the case of Hospital A. The questionnaire has four sections consisting of 49 items. Section A consisted of five demographic questions. Respondents were asked to categorize their demographic profiles such as age, marital status, race, length of service, and academic qualification. Section B focused on causes of job stress. Eighteen selected and modified items were constructed to identify stressors that caused job stress among nurses. The items were divided into five major causes of job stress. They are job itself (item 6, 11, 16 and 23), role-based (item 7, 12 and 20), changing nature of relationship with other people (item 8, 13, 17 and 21), organizational structure and climate (item 9, 14, 18 and 22) and home and work interface (item 10, 15 and 19). Each of the item was represented by a three-point Likert scale. Likert scale 1 represents "if the condition is never a cause of stress", 2 "if the condition is sometimes a cause of stress" and 3 "if the condition is always a cause of stress". Respondents



were asked to indicate how often the causes of job stress in the questionnaire occurred in their work life. For Section C, twelve selected items giving the effect of job stress were constructed. Respondents were asked to indicate how often the effect of job stress occurred rated on a five-point Likert scale 1 represents "never", 2 "nearly every two months", 3 "nearly every month", 4 "nearly every week", and 5 "nearly every day". The items were divided into three major effects of job stress. They are physical health (item 24, 27, 30 and 35), psychological (item 25, 28, 31 and 33), and behavioral (item 26, 29, 32 and 34). Section D contained fourteen items on coping mechanism used to cope with job stress. The items are divided into four types of coping mechanisms. They are control mechanism (item 36, 40, 42 and 45), escape mechanism (item 38, 44, 46 and 48), symptom management mechanism (item 37, 41 and 47), and social support (item 39, 43 and 49). Respondents were requested to score each item rated on three-point Likert scale ranging from 1 "I never do this", 2 "I sometimes do this", and 3 "I always do this".

The interview session consisted of four sections. Type of interview used was structured interview. The first section consisted of two questions on the understanding of stress. Ten questions on causes of job stress were investigated in the second section of the interview. In the third section, respondents were required to answer five questions on the effects of job stress. The final section consisted of ten questions on coping mechanism.

Ethical Consideration

Approvals were obtained from the Health Department of Selangor, and Hospital A respectively. Ethical considerations concerning respondents and procedures were strictly observed. The answers provided by the respondents were on voluntary basis and all information gathered for the study was treated strictly private and confidential. Permission to access to the library of Hospital A, information, documentation and interview were obtained from the Director of Hospital A.

Data Collection Procedures

Before the actual data collection process was carried out, a pilot study was conducted among the Administration staff, Chief Matron, Matron and Sr. Counselor from Psychiatry unit of Hospital A to determine the feasibility of the study and issue pertaining job stress among nurses. The researcher started his fieldwork and attended numerous visits at Hospital A for data collection and interviews. The content of the questionnaire was presented and discussed with the Chief Matron. The Chief Matron was asked to give her comments on any difficulty in understanding the questionnaire. The Chief Matron found no difficulty understanding the content of the questionnaire. A total of 160 questionnaires were distributed by hand through Matrons. Matrons were briefed beforehand about the requirements to be adhered to answering the questionnaire before distributing the questionnaires to respondents. Selfadministered questionnaire was used in this study. The cover letter explaining the purpose of the research and the questionnaires were given to the respondents at their place of work. Respondent was given 5 – 10 minutes to complete the questionnaire. The questionnaire was translated in Malay language for the convenience of the respondents to understand the



content of the questionnaires. Completed questionnaires were collected personally by the researcher from the Matrons. A total of 159 questionnaires were returned. Out of 25 selected respondents for interview session, a total of 21 respondents participated for the interview survey. For this purpose, in-depth interviews were conducted face-to-face with the 21 respondents to gather information on the articulation of the concept of job stress and coping mechanism. The interview session was held at the Meeting Room of the Administration Department of Hospital A. Before proceeding to the interview session, the researcher introduced himself and briefed on the objectives of the study. Respondent's particulars were recorded before the interview started and permission was granted to disclose their identification for this study. Respondent was advised to give her most typical thoughts, concern and actions on job stress and coping mechanism. They were asked to recall an extremely stressful work experiences and to describe in detail how the problematic situation took place, the person involved, where and when it started, what are the effects of job stress, and how they cope with it. Time allocated for an interview session was 15-20 minutes per respondent. The interview was conducted before or after the working hour of the respondents. Permission was also granted to tape record the interview held between the researcher and respondents. Refreshment was provided to the respondents after the interview session as an appreciation for their time and effort to participate in this study.

Data Analysis Techniques

The data gathered from the questionnaires were analyzed and presented in a high-low percentage form of the findings. The analysis of data gathered in the interview survey will be presented in text form. All relevant factors pertaining to the issue of job stress will be discussed critically based on the information provided by the key informants.

Part A: Data Analysis (Quantitative Data)

Demographic Profile

Out of 160 questionnaires distributed, only 159 questionnaires were received, a return rate of 99.38 %. Therefore the data were analyzed by a sample of 159 respondents. Of those who responded, 140 or 88.1% were Malays. A total of 116 (73%) respondents were married and majority was 25 years old and above (81.8%). Only 70 (44%) respondents obtained Diploma in Nursing. In term of years of experience, 41.5 % (66 nurses) of the respondents had more than 10 years of nursing experience in public health services. Table 1.1 is a summary of the findings of the demographic profile of respondents in Hospital A.



Table 1.1:

Characteristics of respondents in Hospital A

Demographic Factors	Frequency	Percentage (%)
AGE:		
Below 25	29	18.2
25-30	46	28.9
31-40	37	23.3
41 and above	47	29.6
MARITAL STATUS:		
Single	41	25.8
Married	116	73
Divorced	2	1.3
RACE:		
Malay	140	88.1
Chinese	5	3.1
Indian	11	6.9
Others	3	1.9
LENGTH OF SERVICE:		
Below 5 years	62	39
5-10	31	19.5
> than 10 years	66	41.5
ACADEMIC:		
SPM	73	46
STPM	14	8.8
DIPLOMA	70	44
DEGREE	1	0.6
OTHERS	1	0.6

Remark:

Total frequency (respondents) and percentage of each demographic factor is 159 and 100 %.

Sources of Job Stress

The sources of job stress among nurses in Hospital A are categorized into five major sources (Job itself, role-based, changing nature of relationship with other people, organizational structure and climate, and home and work interface) with 18 measured variables. The finding shows that repetitive work (73%) is always a source of job stress experienced among respondents in Hospital A. This is followed by inconsiderate or inequitable supervisor/Matron (71.7%), working condition (67.9%), conflict within and between groups (67.9%), excessive specialization & formalization (65.4%), work overload (64.2%), responsibility for people (55.3%) and role ambiguity (50.3%). Table 1.2 shows the most contributed sources of job stress among nurses in Hospital A.



Table 1.2: The condition that is always a source of stress

<i>" If the condition is always a source of stress"</i>		
Sources of stress at workplace	Response (%)	Category
Repetitive work	73	Job itself
Inconsiderate or inequitable supervisor/Matron	71.7	Changing nature of
		relationship with other
		people
Working condition	67.9	Job itself
Conflict within and between groups	67.9	Changing nature of
		relationship with other
		people
Excessive specialization & formalization	65.4	Organizational structure
		and climate
Work overload	64.2	Job itself
Responsibility for people	55.3	Role-based
Role ambiguity	50.3	Role-based
Lack of recognition or acceptance	17	Changing nature of
		relationship with other
		people
Frequent relocation unit of work	16.4	Organizational structure
		and climate
Obsolescence	14.5	Home and work interface
Role conflict	10.7	Role-based
Job insecurity	10.7	Home and work interface
Rotating work shift	8.8	Organizational structure
		and climate
Lack of trust	6.9	Changing nature of
		relationship with other
		people
Mid-career crisis	6.9	Home and work interface
Centralization; low participation in decision	6.3	Organizational structure
making		and climate
Low skill	0	Job itself

The ranking of the condition that is sometimes a source of stress is tabulated in Table 1.3. Almost half of the respondents at times perceived lack of trust, low participation in decision-making, role conflict, low skill and lack of recognition or acceptance as sources of stress in the workplace.



Table 1.3: The condition that is sometimes a source of stress

" If the condition is sometimes a source of stress	,11			
Sources of stress at workplace	Response (%)	Category		
Lack of trust	62.9	Changing nature of relationship with other people		
Centralization; low participation in decision making	62.9	Organizational structure and climate		
Role conflict	61.6	Role-based		
Low skill	58.5	Job itself		
Lack of recognition or acceptance	55.3	Changing nature of relationship with other people		
Role ambiguity	49.7	Role-based		
Mid-career crisis	47.2	Home and work interface		
Frequent relocation unit of work	32.7	Organizational structure and climate		
Rotating work shift	31.4	Organizational structure and climate		
Work overload	28.9	Job itself		
Obsolescence	27.7	Home and work interface		
Job insecurity	24.5	Home and work interface		
Responsibility for people	23.9	Role-based		
Inconsiderate or inequitable supervisor/Matron	18.2	Changing nature of relationship with other people		
Working condition	17.6	Job itself		
Conflict within and between groups	17	Changing nature of relationship with other people		
Excessive specialization & formalization	17	Organizational structure and climate		
Repetitive work	11.9	Job itself		

Table 1.4 shows the condition that is never a source of stress. The ranking of the top four conditions that respondents perceived not a source of stress are job insecurity, rotating work shift, obsolescence, frequent relocation unit of work, and mid-career crisis.



Table 1.4: The condition that is never a source of stress

<i>" If the condition is never a source of stress"</i>				
Sources of stress at workplace	Response (%)	Category		
Job insecurity	64.8	Home and work interface		
Rotating work shift	59.7	Organizational structure and climate		
Obsolescence	57.9	Home and work interface		
Frequent relocation unit of work	50.9	Organizational structure and climate		
Mid-career crisis	45.9	Home and work interface		
Low skill	41.5	Job itself		
Centralization; low participation in decision making	30.8	Organizational structure and climate		
Lack of trust	30.2	Changing nature of relationship with other people		
Lack of recognition of acceptance or acceptance	27.7	Changing nature of relationship with other people		
Role conflict	27.7	Role-based		
Responsibility for people	20.8	Role-based		
Excessive specialization & formalization	17.6	Organizational structure and climate		
Repetitive work	15.1	Job itself		
Conflict within and between groups	15.1	Changing nature of relationship with other people		
Working condition	14.5	Job itself		
Inconsiderate or inequitable supervisor/Matron	10.1	Changing nature of relationship with other people		
Work overload	6.9	Job itself		
Role ambiguity	0	Role-based		

Effects of Job Stress

The findings of effects of job stress are presented in Table 1.5. Of the 12 items representing effects of job stress on physical health, psychological and behavioral, respondents were found to encounter tiredness (62.3%) almost every day. Respondents were found to have lost of concentration (44.7%) nearly every week due to stress in the workplace. Moreover,



respondents were reported to encounter headache (36.5%) nearly every month and bore (20.1%) nearly every two months when experiencing job stress. The findings show that misuse of drug (95%) was never an effect of job stress among respondents.

Effects of Job Stress	Category	"Nearly every day"	"Nearly every week"	"Nearly every month"	"Nearly every 2 months"	"Never"
		Response (%)	Response (%)	Response (%)	Response (%)	Response (%)
Headache	Physical Health	17	28.3	36.5	8.8	9.4
Angry	Psychological	28.3	44	18.3	3.1	6.3
Misuse drugs	Behavioral	0.6	1.3	0.6	2.5	95.0
Tiredness	Physical Health	62.3	17	8.2	7.5	5.0
Low self-esteem	Psychological	30.2	42.1	5.7	5.0	17.0
Been absent more than usual	Behavioral	1.3	0	2.5	2.5	93.7
Bodily-injuries	Physical Health	0.6	3.8	1.9	4.4	89.3
Lots of concentration	Psychological	18.9	44.7	11.3	6.3	18.8
Have poor interpersonal relationship	Behavioral	18.2	27.7	28.3	4.4	21.4
Bore	Psychological	10.1	15.1	13.8	20.1	40.9
Eating disorder	Behavioral	12.6	10.7	6.3	8.2	62.2
Rapid heart rate	Physical Health	11.9	9.4	14.5	13.8	50.4

Coping Mechanisms

The ranking of the six most preferred coping mechanisms among nurses to reduce stress in the workplace are to "have a close friend to confine in" (72.3%), "compartmentalize work and home life" (71.1%), "hobbies, leisure activities, recreation" (67.9%), "turn to prayer or spiritual thoughts (62.9%), "plan instead of responding to pressure" (59.7%), and "building work-group norms of cooperation not competition" (54.7%) (see Table 1.6).



Table 1.6: Most commonly adopted coping mechanism to reduce job stress.

Coping Mechanisms	Category	"I never do this"	"I sometimes do this" <i>Response (%)</i>	"I always do this"
		Response (%)		Response (%)
Building work-group norms of cooperation not competition.	Control	10.1	35.2	54.7
Hobbies, leisure activities, recreation.	Symptom management	2.5	29.6	67.9
Leave job for another.	Escape	77.3	21.4	1.3
Develop peer support.	Social support	2.5	49.1	48.4
Compartmentalize work and home life.	Control	3.1	25.8	71.1
Turn to prayer or spiritual thoughts.	Symptom management	3.1	34	62.9
Build satisfactory relationship with supervisor/Matron.	Control	14.4	53.5	32.1
Discuss problem with family members.	Social support	7.5	40.9	51.6
Avoid being in this situation if I can.	Escape	16.4	54.1	29.6
Plan instead of responding to pressure.	Control	3.8	36.5	59.7
Accept this situation because there is nothing I can do to change it.	Escape	15.1	57.2	27.7
Tranquilizers/drugs.	Symptom management	95	3.8	1.2
Take it out on family or friends.	Escape	56.6	34.6	8.8
Have a close friend to confide in	Social support	6.9	20.8	72.3

Data Analyses And Findings

PART A: FINDINGS FROM THE QUESTIONNAIRE SURVEY

A summary of the major sources of job stress is tabulated in Table 1.7. The table shows that job itself is always a major contributor of job stress. Role-based, organizational structure and climate, home and work interface, and changing relationship with other people are at times contributed to job stress among nurses in Hospital A.



Major sources of job stress	never a source of stress"	stress"	always a source of stress"
	Response (%)	Response (%)	Response (%)
Job itself	0	48.4	51.6
Role-based	3.8	70.4	25.8
Changing nature of relationship with other people	1.3	61	37.7
Organizational structure and climate	10.1	84.2	5.7
Home and work interface	48.4	49.7	1.9

Table 1.7: Summary of the sources of job stress from questionnaire survey

Table 1.8 shows the findings of three major effects of job stress. A total of 86.2 % of the respondents encountered psychological problems at least once in every month. This is followed by physical health problems (74.2%) and behavioral problem (20.1%).

Regularity of occurrence	Physical health	Psychological	Behavioral
occurrence	Response (%)	Response (%)	Response (%)
Never	1.3	0	18.3
Nearly every two	24.5	13.8	61.6
months			
Nearly every	56.6	34	18.2
month			
Nearly every week	15.7	44.7	1.9
Nearly everyday	1.9	7.5	0
Total	100	100	100

Data on the coping mechanism of respondents shows that respondents preferred control mechanism (66.7%) and social support (53.5%) compare to escape mechanism (5%) and symptom management mechanism (1.3%) to reduce or cope with job stress (see Table 1.9).



Coping mechanism	<i>"I never do this"</i>	<i>"I sometimes do this"</i> <i>Response (%)</i>	"I always do this"
	Response (%)		Response (%)
Control	0.6	32.7	66.7
Escape	12	83	5
Symptom	1.9	96.8	1.3
management			
Social support	0.6	45.9	53.5

Table 1.9: Summary of the coping mechanisms from the questionnaire survey

Part B: Findings From Qualitative Data

The Interview And Sample

For the interview, a simple random of 25 respondents were selected from the study population. A total of 21 respondents participated in the interview, yielding a response rate of 84%. The interview consisted of open-ended questions and had the aim of encouraging responses and eliciting more detailed information and illustration of situations. Respondents then were coded with identification numbers as key informant of the study. Because of the need for confidentiality, the researcher did not collect individual demographic data of the informants. Throughout this qualitative method, the remarks, comments and description reported are solely those of the informants. In some places, informants are quoted directly in order to allow them to describe specific situations in their own words.

Nurses' Understanding of Stress In The Workplace

Informants were questioned on the definition of stress in the workplace on the first session of the interview. In conversation, the researcher asked the informants what they knew about stress, when and what made them felt stress in the workplace. All the informants understood the definition of stress in the workplace and were able to provide situation when and what made them felt stress. The demands of life and work are contributing factors to stress. Whenever work or non-work demands exceed an individual's coping abilities, some form of stress occurs. Most respondents have their own unique definitions of stress. Informants were also able to define stress with physical health, psychological, and behavioral perspective. In sum, there is no single definition of stress, as one can see from the above definitions. The characteristic of many of these definitions are focused on work related stress, external factors, and life-related stressors. In addition, they also indicated that stress may cause discomfort, disturbance, frustration and irrational judgment. Therefore, stress is a global human response resulting from the perception of an intense or trauma experience and has tremendous influence on one's physical health, psychological and behavioral.



Sources of Job Stress

The researcher encouraged informants to describe sources of job stress that had occurred during their tenure with Hospital A. Each informant identified more than one stressor and varied considerably. Most of the respondents identified that work overload is the main workrelated stressor. The workload had increased and informants appeared to regularly carry out tasks, which should be carried out by the others. Regarding staff shortages, informants reported that they were required to perform administrative, counseling and physical activity (lifting patients) which is not central to nursing care. As such, informants are having difficulty in maintaining standards of patient care. At times, informants experienced role ambiguity in performing their daily job. Most informants commented that heavy paper work such as data entry, recording inventories, report writing and filing are time consuming and required informants to stay back after working hours to complete non-nursing task. Moreover, unrealistic time and deadlines pressures to complete nursing and non-nursing task create more burnout among the informants. Most informants worked overtime and seldom seemed to get their "time back". Overtime payment is strictly monitored and working beyond finishing time is a frequent occurrence. Working late is a reflection of the workload, which many informants bear due to understaffing. Furthermore, informants have also other duties to perform as housewives and mothers at home after working hours. In addition to the task demands of the job as a source of job stress, it is important to consider the stress associated with the physical nature of the environment at work place. The issue of air conditioning failure has caused discomfort among the medical staff. Informants have to work under hot condition and are less tolerant of frustrations with patients. It was reported that due to the frequent break downs of the air-conditioning system, most medical staff used table fans as an alternative to reduce heat in the work place. According to informants, extreme levels of heat can have detrimental effects on the job performance. Informants described that inconsiderate or inequitable Matron on delegating task and handling subordinates is a source of job stress. Few informants reported that they had "bad" experiences with the Matron's style of leadership. For example, there are Matrons who practice rigid and autocratic leadership and always giving constant pressure and demand to informants. Moreover, there are Matrons who practise favoritism in task delegation and promotion. It was also stated that Matrons have biased and injustice treatment among informants. Informants who are labeled as troublemaker, least popular or extrovert can have many consequences. It can affect promotion, application to move to another unit or enrollment for further training. The informants also declared that certain Matrons do not allow direct communication without prior approval or appointment. This arrangement created a low morale and frustration among informants. The informants pointed that the lack of support and poor relationship between Matron and informants are potential source of stress, leading to low trust and low interest in problem solving. Some Matrons are classified as fault-finding, uncompromising, fussy and unapproachable, which create a hostile working environment. For example, the Matron's frequent criticism on the behavior and communication skill of informants, physical environment, nursing style and attire but neglected problem solving. Not surprisingly, informants are left alone and silence at all times when encountered with problems



because the one-way communication. The issue of conflict within and between groups does contribute to job stress. Informants stated that conflict does occur between senior nurses with junior nurses, senior nurses between groups, nurses between groups, and nurses with patients. The large hospital with the generally low morale among nurses reflected the way in which nurses relate to one another. Senior nurses frequently do not to give much support to their junior nurses due to competition with junior nurses. Many of the junior nurses are disappointed with the immature behavior of senior nurses who are reluctant to provide guidance, advice, or cooperation in their daily work. Senior nurses do not appreciate the efforts of their junior nurses such as working longer hour and backing up senior nurses who are on emergency call. Conflict was often reported to occur between nurses on night and day shift. Complaints about work undone, misplace of tools and equipments, and unclean station unit of work generate dispute between groups when interchange shift work took place. Conflict also occurs between doctors and informants in terms of job demands. Doctors tend to demand a great deal of nursing job from informants during their ward rounds. The informants are required to deal with patients' relatives to leave the ward, to ensure the physical environment is clean, patients are neatly dress and clean and assisting on recording data during ward rounding at different times of the day and night. At all times, doctors will call on any nurses to perform such tasks without considering whether the nurses are available to attend to the doctors' requests.

Informants also mentioned that interface between work and family is an issue that inflicts stress at workplace. Most informants have family and children that demand high level of attention, care and support from informants as a wife or mother. Working long hour causes informants to sacrifice their time with family and children at home. Working mothers are always worried of their children safety at home if they are required to stay back from work. Moreover, working mother has a role to play at home such as cleaning, cooking, tutoring, etc that required high physical and mental capability to cope with such activities. Besides, a few informants had difficulties sourcing baby sitter to look after their children due to their shift works. Obviously, job satisfaction and work performance are influenced by the demand and conflicts of home and family life. It would appear that informants may bring internal personal emotional conflicts and reduces the level of satisfaction and productivity in the workplace. Bureaucratic pettiness towards policies and procedures was expressed by informants as stressor in the workplace. It was highlighted that there are too many procedures to adhere to, slow in approval process, poor incentives, long-winded promotion and lack of facilities. Informants commented that there are too many paper works (requirement of ISO) to follow up, to acknowledge and filing for future reference. The informants complained that they were not keen to do clerical task and much prefer to practice nursing. Doing both tasks at one time is stressful for most respondents. Moreover, the process of posting to different station unit of work (upon request by informant) is slow and slim. The process requires too many levels of approval and recommendation. Matrons and Chief Matron play a significant role to approval such posting. Informants whose applications are rejected will suffer stressful working life in the station unit of work they can hardly cope especially with the workload. Consequently, this will negatively affect the career advancement or promotion of the informants.



Informants who work after official working hours seldom get paid for the time sacrificed to complete tasks given by their superior. Even though no such regulation or procedure states that overtime claim is not allowed, the existing practice prohibits informants to make claim of the overtime done. Informants also mentioned that their superiors are reluctant to acknowledge such claim because it involved complexity of approval for payment from higher management. Besides that, informants complained that their salary is too low compare to the responsibilities and workload they carried out. Moreover, no additional allowances are provided and the existing salary structure is intolerable with their qualifications. One informant pointed that the government service regulation has to revise the medical staff wage structure in order to ensure future employability of nurses in public health services. Nursing involves high responsibility for patient's health, welfare, and security. Being responsible for patients requires informants to have high level of concentration and interaction with the sick at all times. For example performing dressing of wound, distributing medicines to patients, etc required professional nursing skill in order to avoid mistake that may threaten the life of the patient. The informants also mentioned that insufficient skill and knowledge to perform task indirectly causes stress. Older nurses are hardly able to adapt and accept new technology such as computerized system and new equipments. Therefore, they are required to undergo external training and on the job training to keep abreast with the latest technology. Some senior informants mentioned that it is stressful to attend such intensive classes to study on how to use and operate new technology. They are more comfortable with the old method of handling their job and are willing to give junior nurses the opportunity to enhance their skills and knowledge. Besides, informants also encountered stress when there are insufficient tools and facilities to accommodate for emergencies. There are times informants need to rush to another unit to borrow tools or equipments such as blood pressure instrument, sterile sets and sanitary appliances for patient care. Informants stated that although reports have been lodged to the respective personnel of the issue on shortage of medical equipments, there was still delay on receiving the medical supplies. Most informants feel bored with their routine job and even stressful to perform repetitive task. Informants feel lacking of challenge in their work that required only low participation in decision-making process. Sometimes, informants feel their contribution is not appreciated and recognized by their superiors. Repetitive job, low involvement in decisionmaking and monotonous task may produce alienation and job stress for informants who value challenge or personal growth on the job.

Effects of Job Stress

Headache tends to be a common reaction of job stress among informants and is probably the most important one. Informants complained that they have frequent headache because they are unable to relax and forget the work problems. Besides, informants hardly have break from work. Some informants mentioned that they have difficulty to sleep thinking of work problem, which caused them to have dizziness the next day. Informants reported that nursing is a stressful occupation. They are like "care taker" to the patients, doctors, and superiors. Informants are not only providing nursing services but play an active role as a counselor, a listener and mediator. However, informants are disappointed that their contribution and efforts are not appreciated. During the interview, some informants said that they were treated as



"second class workers". Such allegation makes it particularly difficult and causes mental stress for some informants. Informants claimed they have low self-esteem being in this profession. They are doctors who are inconsiderate and hardly communicate with informants due to different level of status/profession. Such treatment causes informants lost of motivation to carry out work and feel sad being treated as less important colleagues. The informants highlighted that there was low participation of decision making among nurses in their workstation. Frequently, nurses' viewpoints are not put into consideration for development of the nursing unit. Informants concluded that such occurrence was due to communication breakdown between upper management and lower management. Informants also said that they could easily get angry when they are stressed from work. The informants stated that uncooperative patients, insufficient staff, heavy workload, office politics, crowding in the work place, stay back from work and many more, contribute to bad tempered. At times informants are unable to control their temper and take it out on patients or colleagues. For example, informants are having difficulties to communicate and to seek cooperation with foreign patients (Nepal, Vietnam, and Myanmar) who seek medical treatment. Informants have to spend a huge amount of time to assist them and that will affect informants' other responsibilities. The informants described that nursing is a job that requires massive physical movements such as lifting patients, handling bed, carrying medical equipments, ward rounding and attending activities (practical training). Nursing is a continuous job that demands high obligation and attention on patient care. It is obvious that most informants work longer hours than they are required to. Referring to the current shortage of nurses, informants are to sacrifice their own interest in order to suit the more urgent need to keep the wards or units running. Therefore informants experienced tiredness due to stressful workload and high demand of physical movement. Informants claimed that they are having weak working and interpersonal relationship with their colleagues. Issues of high practice of cronyism, favoritism and office politics among colleagues frequently cropped up in the interview and the informants claimed that these issues jeopardize the relationship between nurses. Such environment is stressful because nurses are monitoring and gossiping each other. Furthermore, with the heavy workload and time constraint to complete task, most informants hardly smile or greet each other during working hour. Informants believed that all nurses are doing their fair share of work and those who are unable to complete their tasks, comments will be made on them. Nurses are always alert of their roles and responsibilities and hustle to finish the jobs immediately.

Coping Mechanisms

Informants were questioned on the important of coping mechanism to reduce stress in the workplace. All informants agreed that good coping mechanism helps to combat stress and enable them to control their emotion and mental health from depression and burnout. Informants claimed that they do not have specific stress management approach to reduce stress in the workplace. The prime steps in coping with job stress among informants are to take constructive actions in reducing job stress such as to tackle the root cause of job stress, talk out problems with relatives or friends, learn to relax when encountered with stressful event and involve in non-work activities. Informants were requested to reveal what coping mechanism they would adopt in dealing with job stress caused by the job itself. Informants preferred to



adopt daily planning and scheduling approach in their daily activities. By doing so, informants will be able to control and concentrate on daily activities without interruption and delays which will later cause stress. Informants believed that such system will be able to keep track on their regular activities, meetings, and appointments. Moreover, such system helps to structure their hectic daily tasks from least important task to high priority task. This application will be able to lessen the workload among informants. Informants mentioned that their routine nursing job can turn to be stressful when there is no development in the tasks they have carried out. In the interview, informants were found to adopt a positive-attitude mechanism such as positive affirmation, tolerate with stressful work life, individual assessment, and seeking counseling services on how to control stress. Informants who have trouble or difficulties with their job will seek advice from their superiors. Informants believed that alternatives could be offered by their superiors to solve their work problem. Informants also agreed that turning to prayer or spiritual thought help to ease stressed emotion.

When informants are tense, upset, frustrated or angry of work, relaxation is a way to cope with such stressful events. Informants will take short break from work for vacations, listening to music, exercise, participate in out-door activities and visiting relatives. Such activities help informants to put behind problems at workplace and relieve some of the stress the informants are facing. Besides, many informants agreed that talking to a close friend or colleague about work and personal problems helps to reduce stress. Informants believed that talking about problems with a sympathetic listener is a good way towards driving away stress. The interviewer was told by the informants that stress caused by role-based can be solved by improving their decision making skill. Informants believed that they are in charge of what they can achieve, taking account their own limitations to perform their roles as nurses. Informants reported that high tolerance for ambiguity is able to reduce tension in response to role ambiguity. Informants stated that tolerance for ambiguity helps them to redefine their roles and eliminate their involvement in unnecessary scope of activities. Informants make choices about the roles they are to pursue and analyze their work role in order to achieve their desired goal. The issue of poor relationship among nurses and nurses with superior, doctors and the patients is a common problem for the informants. Informants mentioned that such poor connection among colleagues creates a stressful working environment. In order to build a healthy relationship and to reduce misunderstanding among nurses, informants seek to have common interests with colleagues and regularly communicate to each other in the workplace. Another way to build relationship among nurses is to back each other up and to help colleagues who are in trouble. Although most informants are fully occupied with heavy workloads, helping one another with their workloads is a way to build teamwork among staff and foster good understanding among each other. Informants believed that by contributing their help, care and compassion to their colleagues, it helps to strengthen their "sisterhood" relationship. Informants know that working with public health services required them to go through structured and bureaucratic system of work. Informants understand and are alert to the requirements of the method of work in the public sector. Informants mentioned that taking control is one of the prerequisites for dealing effectively with job stress. Diagnosing of the problems, recognition of the need for change and development of coping mechanism are the process most informants practiced to cope with job stress. Informants also stated that it is vital



to have positive attitude about job stress and see it as an opportunity or a challenge of working life. Informants suggested that nurses have to rethink the way they do their work. Although certain jobs are potentially more stressful, informants believed that much can be gained through understanding the way the job is designed. Informants acknowledged that those who control what they do, how and when they do it portray lower level of job stress than those nurses who have low level of control over their works. Informants suggested that building co-operation between management and nurses to produce positive outlook about the organization such as providing positive method of feedback and comments helps to reduce job stress among nurses.

Informants cope with interface home and work stress by practicing effective time management. Informants schedule their time between work and home tasks to achieve personal enjoyment. Informants stressed that it is important to set priorities, both work and home tasks. Informants also highlighted that one should not overload the schedule because overloading schedule will add more stress in work and home life. Taking vacation is another way to reduce stress. Informants believed that staying away from work for short vacation can break up the stress load and refresh one's mental and physical well-being. Moreover, having vacation with family can foster family relationship with spouse, children and family members. Social support from family and friends is important to most informants as a mechanism to cope with job and home stress. A helpful hand by partner and friends regarding work and home problems, gives most informants the confidence and opportunity to look for support in their work-home situation. Informants described that social support helps to build bridges between the work and the home providing opportunities for informants' partners to understand the duties of the informants as nurses. Moreover, this will offer the informants' partners to express their views about the consequences of the informants' works on family life and be involved in the workrelated decision-making that will affect all members of the family unit. During the interviews, some informants disclosed that taking leaves from work, leaving the unsettled work problem, keep silence, pretending to forget the problem, and accepting the work problem as it is, are ways to escape stress in the workplace. Informants mentioned that there are times certain problems are hard to settle due to lack of information, resources and time constraint. Informants also said that shifting their problems to other people or superiors helps to free their minds from stress on finding ways to settle their problems.

Summary of Findings From The Interview Survey

Table 1.10 shows the findings of major job stressors experienced among informants in the workplace. Workload was found to be the most prominent sources of job stress among the informants. This was followed by working condition, inconsiderate superior, conflicts among colleagues and superior, bureaucratic system of work, high responsibility and accountability for patients and interface between home and work.



Table 1.10: Summary of the sources of job stress from the interview survey
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Source of job stress	Response (%)
Workload	71
Working condition	48
Inconsiderate superior	43
Conflicts among colleagues and superior	33
Bureaucratic system of work	33
High responsibility and accountability for patients	19
Interface between home and work	19

The findings of the interview also concluded that headache was the most prominent effects of job stress. This was followed by low self-esteem, angry, tiredness and having poor interpersonal relationship with people. Yet it appears that informants also encountered lost of concentration to perform their job, rapid heart rate and boredom among effects of job stress in the workplace (see Table 1.11).

Table 1.11: Summary of the effects of job stress from the interview survey

Effects of job stress	Response (%)
Headache	52
Low self-esteem	48
Angry	43
Tiredness	38
Having poor interpersonal relationship	38
Lost of concentration	24
Rapid heart rate	24
Boredom	19

Table 1.12 shows that informants preferred to adopt control mechanism such as discussion of work problem with superiors, building relationship with superiors and colleagues and rational thinking to deal with job stress. Besides, informants also favored social support such as family and friends support to cope with job-related stress. This was followed by symptom management mechanism that consisted of time management, vacation, relaxation, outside activities and recreation in dealing with job stress. The least preferred coping mechanism among informants was escape mechanism. It was concluded that all informants adopted more than one coping mechanism to cope with job stress depending on the situation in their daily work life.



Table 1.12: Summary of the coping mechanisms from the interview survey

Coping mechanism	Response (%)
Control mechanism	45
Social support	38
Symptom management mechanism	30
Escape mechanism	19

The majority of respondents from both questionnaire and interview surveys showed similar findings of causes and effects of job stress and coping mechanism in Hospital A. The comparison of both surveys on job stressors, its effects and coping mechanism among respondents is shown in Table 1.13. It can be concluded that the job itself is the major cause of job stress among nurses in Hospital A. Repetitive work, heavy workloads and poor working condition are a few job stress contributors experienced among the respondents.

Variable	Questionnaire survey	Interview survey
	Response (%)	Response (%)
	Job itself (51.6%)	Workload (71%)
	Changing nature of relationship	Working condition (48%)
	with other people (37.7%)	Inconsiderate or inequitable
Causes of job stress	Role-based (25.8%)	supervisor/Matron (43%)
	Organizational structure and	Conflict within and between
	climate (5.7%)	groups (33%)
	Home and work interface	Bureaucratic system (33%)
	(1.9%)	High responsibility (19%)
		Interface between home and
	Note: "if the condition is	work (19%)
	always a source of stress".	
	Psychological (86.2%)*	Headache (52%)
	Physical health (74.2%)*	Low self-esteem (48%)
	Behavioral (20.1%)*	Angry (43%)
Effects of job stress		Tiredness (38%)
	* (Nearly everyday (%) + Nearly	Poor interpersonal relationship
	every week (%) + Nearly every	(38%)
	month (%))	Lost of concentration (24%)
		Rapid heart rate (24%)
		Boredom (19%)

Table 1.13: Comparison between the quantitative and qualitative data

	Note: "Encountered at least once in every month".	<i>Note: "Encountered at least once in every month".</i>
Coping mechanism	Control mechanism (66.7%) Social support (53.5%) Escape mechanism (5%) Symptom management mechanism (1.3%)	Control mechanism (45%) Social support (38%) Symptom management mechanism (30%) Escape mechanism (19%)
	Note: "I always do this".	

This is followed by changing nature of relationship with other people. Respondents felt that poor networking and communication among nurses with doctors, superior, patients and the public play a significant role to create hostile working environment which later will bring conflicts, misunderstanding, ill-treatment and low bonding of relationship among nurses. The role-based stressor such as role ambiguity and high responsibility for patients and people also contributed as job-related stressor among the respondents. Other sources of job stress such as organizational structure and climate and home-work interface do not highly contribute to job stress among nurses. The researcher was informed by informants that they are well accepted of the bureaucratic system of work as part of the public health sector work culture. Moreover, respondents said that as their profession being a fulltime nurse, they are fully prepared with the home and work challenge. Only unpredicted or unforeseen matters will treat these sources as job stressors to respondents. Psychological and physical effects are the dominant among the respondents in considering the effects of job stress. Angry, low self-esteem, bore, lost of concentration, no mood to work, anxious and imbalance of emotion are examples of psychological effects experienced by the respondents when encountering job stress. Physical effects such as headache and tiredness are the main effects most respondents faced when encountering high level of stress in the work place. The findings showed that effect of job stress on the behavioral of the respondents was low. However, most respondents stated that they had only poor interpersonal relationship effects when dealing with stress associated with changing nature of relationship with other people. The most preferred coping mechanism adopted to reduce job stress among respondents are control mechanism (planning and building work group norms and relationship) and social support mechanism (supports from family, friends, and colleagues) compare to symptom mechanism (vacations and hobbies) and escape mechanism (avoiding problem) to cope with job stress in the workplace. Therefore, effective coping mechanisms are essential to stress-control in the workplace. Undoubtedly, stress management in the workplace must be a joint responsibility of both the organization and the individuals.

Implications Of The Study

The results of this study provide several implications that are beneficial to the Management and Nursing Unit of Hospital A. The study has identified the major causes and effects of job stress encountered among the nurses. Besides, the study also managed to identify the most preferred coping mechanism among nurses to reduce job stress in the working environment in



local public health services. This will enable Ministry of Health, Malayan Nurses Union, Management and Nursing Unit of Hospital A, and nurses to take steps to alleviate or minimize the issue of job stress in public health services in Malaysia. This information gathered can be used in developing effective coping system and strengthening the Employee Assistance Programs in the workplace to combat job stress. The Management can work with individuals, teams or groups to educate and train nurses to cope effectively with of job stress. The Management are also is able to place strategies or interventions to deal with job stress among nurses from becoming victim of exposure to stress. For example, conducting a stress audit enables the Management to identify both target and strategy for stress management actions. Besides, the Management of Hospital A can provide facilities for physical and psychological activities such as recreational infrastructures, child care center, and individual and/or group counseling session to help nurses manage or cope with job stress effectively. The findings from the interview survey suggested that nurses generally like to take charge of the stressful situation that have negative impact on them in the workplace. To that, the Management and Nursing Unit can implement open door policy whereby nurses can share their problem and propose suggestion with the Management and Matrons. Employees' participation and involvement in decision-making process will help to reduce any threat or fear associated with potentially sensitive stress issues in the workplace. Furthermore, the Ministry of Health Malaysia can carry out assessment of the relationship between current recruitment of nurses, training and development, promotion, grading system, general employment policies and practices of nursing staff, equal opportunities, organizational culture issues, and attitudes and behavior of nurses and job stress in public health services in Malaysia. Such assessment illustrates a wider scope of the stress issues that might be incorporated and considered to contribute to job stress among nurses in public health services. The Ministry of Health Malaysia then can respond positively by formulating and disseminating a policy document or an action intervention on combating stress and improve the well-being of the nurses in the workplace.

Limitations Of The Study

Although this study has been useful in forwarding our understanding of job stress and coping mechanisms, several limitations exist in the study. This study is limited only to the investigation of job stress and coping mechanism among nurses in a public hospital. Other non-medical and medical staffs such as administrator and doctors were not included in this study. In addition, this study was only confined in public health services of a district in Selangor. Furthermore, investigation on individual's personality dealing with job stress was not included in this study. This is an initial stage of research study on job stress and coping mechanism among nurses in the local public health services. Due to time constraint, measurement on effects of job stress was on three main categories namely physical health, psychological, and behavioral of respondents. Moreover, measurement on task overload was not explored to determine the level of workload that causes job stress among nurses.

Suggestions For Future Research

It would be useful to have more research that extends the sampling of other non-medical and medical staff in Hospital A. The wider coverage of sample studied will enable us to evaluate the extent level of the issue on job stress and coping mechanisms among civil staff of public health services in Malaysia. Moreover, it is also suggested that this study should cover other parts of the public health services so that generalization on the issue of job stress and coping mechanisms among nurses in local public health services in Malaysia can assertively be made. It may also be beneficial to conduct research on nurses in private health services so that comparison and differences between both public and private health services can be assessed. Variables of study should be extended to organizational outcomes such as productivity, customer satisfaction and work motivation effects of job stress in the public health services. By doing so, pragmatic action to resolve the issue of job stress among nurses in the workplace can be implemented effectively. This is vital because ways of responding to effects of job stress will influence the level of work performance produced. The investigation of correlation between demographic factors, causes and effects of job stress, and coping mechanism needs to be explored in order to determine how different individuals perceive stress and how they cope with it in the workplace. Another area that could be of interest is to focus on personality traits of an individual to cope with job stress. Furthermore, other sources of job stress and coping mechanism could be explored in the context of Malaysia to enhance the understanding and knowledge on job stress and dealing with job stress among civil servants in the public health services or other public organization in Malaysia.

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