

# NURSES JOB'S STRESS DETERMINATION

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## ABSTRACT

Stress can affect the mental and physical health of a person; thus, it can decrease his/her performance in the workplace (Christos & Eleni, 2008). This fact cannot be avoided. Stress threshold is dependent on an individual's characteristics, experiences and coping mechanisms, but the negative effects of stress can further cause disadvantages to the person, and will also have an impact on the people surrounding him/her. Compared to other general and professional service jobs, nursing requires handling complicated and dynamic occurrences under strict time pressures.

Result of this quantitative descriptive correlation research found the correlations job stress level among nurses and their coping mechanism was not significant ( $p$  value 0,18) and concludes that stress level is not related to the coping mechanisms.

Based on the results of this study, a Healthy Job Stress Coping Mechanism can be created for the nurses as part of a stress management program and further studies should be conducted regarding the specifications of stress levels among small groups and homogenous job situations. The study can use the same instrument but should be conducted for special ward job stress determination. It can be used for job stress determination among emergency or ICU nurses.

## I. THE CONTEXT OF PROBLEMATIZING

### 1.1 Introduction

Stress can affect the mental and physical health of a person; thus, it can decrease his/her performance in the workplace (Christos & Eleni, 2008). This fact cannot be avoided. Stress threshold is dependent on an individual's characteristics, experiences and coping mechanisms, but the negative effects of stress can further cause disadvantages to the person, and will also have an impact on the people surrounding him/her. Likewise, nurses who experience work-related stress can experience an impact not only on themselves, but also on their patients and worse, even on the institution they are working in (Sveinsdottir, Biering & Ramel, 2006). Nurses, as one of the professional service groups, tend to be exposed to extreme workloads. Their work is generally characterized by a high contagious potential, being labor-intensive, having overwhelming job shifting, and experiencing malicious complaints from patients. Compared to other general and professional service jobs, nursing requires handling complicated and dynamic occurrences under strict time pressures. Previous studies have generally revealed that continuously excessive workloads tend to lower their job satisfaction and deteriorate in turnover intentions. These contextual difficulties indeed continuously challenge a nurse's temper and professional performance. This may be particularly true for nurses in the emergency departments. The main cause which exposes nurses in the out-patient department to a much higher stress level stems from the hospitals where they work, which generally lags in keeping pace with current competition.

According to Marin and Ramirez (2005), the job demands of nurses can also increase the job's stress. This statement supported by several researchers who found that the workload and the issues dealing with the death and dying of a patient are the most prevalent stressors among nurses (Lambert, et.al., 2004; Mann & Cowburn, 2005; Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, 2008). The nurses' roles are to take care of their patients in whatever situation they are in. But, nurses who take care of a patient with issues of death and dying, give more attention to their patient, which is an additional responsibility besides their ordinary workload. This study is supported by other researchers who found that working

conditions are more strenuous at a hospital setting (Sveinsdottir, Biering & Ramel, 2006) because shift work, nurses' educational level and model of nursing care provision were found to be the best predictors of the nurses stressors; furthermore heavy work load and high level of occupational stress diminish nursing quality (Bailit & Blanchard, 2004; Sochalski, 2004).

Among the workers in the hospital, the nurses' activities are mainly focused on the patient's welfare. Nurses working in the hospital are primarily viewed as part of the armed forces with military ranks (Liu, Wei-Wen., Pan, Feng-Chuan., Wen, Pei-Chi., Sen-Ji Chen, & Lin, Su-Hui., 2010). This means that nurses in the hospitals shall perform well and behave properly, not only in the nursing professional under normal nursing supervision, but also by incorporating the military command system. This creates more sources of stress for the nurses in the out-patient department, compared to those in the ward. AchirYani, (<http://health.kompas.com>) explains that about 60 percent of health workers are nurses and nurses stay 24 hours beside the patient. Nurses should know everything about the patient, and their treatments, because it is their responsibility to report the patient's condition to the physician and his team. These situations make the nursing profession highly stressful (Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, 2008). This study was specifically focus on nurses who are working in the ward or in-patient department at the RK Charitas Hospital Palembang, South of Sumatera, Indonesia.

RK Charitas Hospital, South of Sumatera is a Catholic charity health services. The biggest Catholic private hospital placed in the center of capitol city, Palembang, South of Sumatera. This study is important for this institution because it was the first study in nurses' job stress and coping mechanisms determination. Results of this study shown that effectively identifying and managing the sources of stress would be helpful in reducing the occurrence of bad stress, or alleviate its impacts on individual behavior as a stress management program.

On one hand, this study about Nurses' Job-stress and Coping Mechanisms, aims to determine job stress among nurses and their coping mechanism based on demographic profile like age, sex, education, present position, department, length of service, duty time/work shift, longest shift in hours, and number of patients, as well as to find out the relationship between nurses job' stress level and the coping mechanisms regardless of their coping mechanisms.

## **1.2 Research Impediments**

This study was conducted at the RK Charitas Hospital, Palembang South of Sumatera Indonesia. There were 3 limitations of this present study. First, it was limited by the location of the study. It was conducted in a private hospital with a limited number of respondents. The use of a larger sample with varied population from both government hospitals and private hospitals will strengthen future studies. The convenience sampling design introduces potential response bias due to the fact that nurses who are stressed in their work could be less inclined to participate in the study. The potential lack of their responses will create bias for the findings showing less stress and good coping ability.

A second limitation of the study is design used. This is a quantitative descriptive correlation study with stratified random sampling and limitation in the number of respondents. Although the research respondents include both male and female nurses, the number of both sexes was not counted, and it did not compare the stress level among sexes. They would be randomized; each item or element of the population had an equal chance of being chosen at each draw. A sample was random if the method for obtaining the sample meets the criterion of randomness (each element having an equal chance at each draw). It took only nurses who have been employed over one year in the hospital concerned. After one year of work they may already have similar experiences. The study involved all nurses from the chief ward nurses, assistant chief ward nurses, and practitioner nurses. Participants of this

study were from ward departments only, and it did not include nurses from specialized care of disease, as well as nurses working in the outpatient department or clinic. A quasi-experimental studies in this hospital of interventions aimed at reducing stress or increasing stress coping could target small group in the specific ward of stressors and provide valuable information as to the relative effectiveness of those interventions. The comparative study also will complete the validity of the study when the study is comparing the stress level & coping mechanisms among nurses who are working in the private hospitals and government hospital.

The third limitation is the use of the simplistic nine-item measure of job stress and eight-item measure of coping mechanisms. The job stress scale and coping mechanisms are general and provides only a global measure of overall. The use of a more comprehensive and relevant instrument to measure specific job stress/coping mechanisms and their relative importance would yield information that is more specific.

## II. THE RESEARCH QUESTIONS

This chapter discusses review of related literature, the framework, and the hypotheses.

### 2.1 Review of the Literature

#### 2.1.1 Job Stress

##### a. Stressors

Everyone has her/his own stresses. Stress is a term that is not easy to define and yet, the physical, mental, emotional and behavioral responses can be easily identified. Stress, as defined, is an unpleasant state of emotional and physiological arousal that people experience in situations that they perceive as dangerous or threatening to their well-being. Stress is an imbalanced condition of the psychological, physical and behavioral aspects of a person. Stress occurs when there is “substantial imbalance between environmental demand and the perceived response capability of the focal organism” (Muchinsky, 2003). The demands imposed on an individual that have potential to cause stress are called stressors.

Stress is a concept describing the interrelatedness of a person and his environment. It is the response by a person to stressors in the environment. Stressor is stress’ causing. These causes depend on the environment itself. Job stress describes the stress associated with the professional or work environment. Tension is created when the demands of the job or the job environment exceeds the capacity of the person to respond effectively. Job stress varies with each work environment.

Job stress or work stress, also called occupational stress, is a complex concept because its sources and consequences are not exclusive to the work environment, meaning, work stress affect, and is affected by other areas of life. This statement is supported by the results of the study of Kinman and Jones (2005) in the United Kingdom which states that work stress is multi-faceted. However, several factors such as personal, environmental, and social were identified as common representations of workers in determining work stress.

Greenberg (2009) explains that work stress is illustrated in his occupational stress model, which states that sources of stress at work include those intrinsic to the job, role in the organization, career development, relationships at work, and organizational structure and climate as well as extra-organizational sources of stress. These stressors would interact with the individual characteristics of workers such as personality, neuroticism, and tolerance for ambiguity and anxiety. If stressors at work lead to high level of work stress, workers may experience symptoms of occupational ill health that may lead to coronary heart disease or mental ill health. Moreover, stress that are intrinsic to the job include working conditions, shift work, long hours, risk and danger, new technology, work overload, and work under load (Greenberg, 2009).

According to AbuAlrub (2004), people with different jobs encounter different types and different quantities of stress. This statement is supported by the results of the studies of Brown, James, and Mills (2006), which found that the physiological stress responses among nurses were greater than teachers. Stress is also implicated with health. Mental or emotional in origin, the illness is manifested through physical symptoms and is usually brought about by, or aggravated by chronic stress. Therefore it is very important to reduce and to control stress, for reducing stress can prevent several diseases.

#### b. Coping Mechanisms

According to Drafke and Kossen (2002) there are two basic and ancient responses to stress—fight or flight. Of the two, the fight response is more powerful. With the fight response, the individual goes on full alert to defend himself/herself. The other basic response to stress is the flight response. Less drastic, the flight response prepares people to escape distress rather than to battle it. Although individuals have their own tolerance levels for stress, eventually a response is chosen. Effecting control over the responses selected can be the key to coping with distress and living healthier.

A recent review (Mimura & Griffiths, 2003) suggests that cognitive behavioral interventions and relaxation/meditation strategies are effective in reducing personal levels of stress. Meanwhile, Romas and Sharma (2010), explain, relaxation is vital for the normal functioning of any living organism. Relaxation techniques form the core of all stress management programs. When the body is functioning normally, relaxation through sleep is attained. Relaxation by deep breathing can reduce the emotion. By deep breathing, blood flows well to the whole body, and makes muscles more relaxed. Meditation-based stress management program can be effective in relieving anxiety symptoms (Lee, 2006).

Few studies have shown variables that might reduce or buffer the negative effects of stress. Domestic prior researcher in the local setting, Cabantog (2003) conducted an experimental research on college students experiencing emotional difficulties. She compared the effect of using expressive art therapy (specifically paintings and drawings) combined with group counseling, and inspirational readings without group counseling. Using the scores of the Emotions Profile Index (EPI) as gauge for the emotional dimensions, results suggested that both techniques were similar in effectiveness in the “treatment of the emotion dimensions of Trustful, Distrustful, and Gregarious”. Likewise, expressive art therapy with counseling and inspirational readings without counseling had equal potential in treatment of emotion dimensions of Dyscontrol, Timid, Depressed, Controlled, and Aggressive traits.

Dance therapy, art therapy, and music therapy are popular self expressive techniques for children and adults. These interventions are considered effective as they enable individuals to experience or internalize emotions related to life events and therefore, breakdown their inhibitions and defenses. Singing and drawing experiments also seem to reduce physiological levels due to the cathartic experience. These therapeutic activities provide a venue for self-expression and heightened self-awareness. However, they do not involve cognitive changes or lead to a deeper understanding of their thoughts and feelings unlike expressive writing that demands translating experiences into language (Pennebakers, 1990).

Following Pennebakers’s concept (1990), a military veteran who suffered from Post Traumatic Stress Disorder found a means of focus and emotional release through writing a manual reference intended to help fellow veterans in the process of healing, including writing a stress letter. Writing about traumas can make one free from the guilt and disgust and allow him/her to be understood and come to terms with what had happened. Traditional writing of a diary as a note pad to record the events every day is also one of the stress releasing activities

aside from the social support or talking/ sharing with others to release the emotion and tension.

Greenberg, (2009) explained that stress is due to pressure to meet expectations, and to be responsible for people both inside and outside the home. Women tend to use emotion-focused coping more than men, and also, request and receive more social support than do men as a means of coping with work stress. When social support is high, women report greater job satisfaction, family satisfaction, and less family interference with their work than men. Women's coping involves interpersonal relationship more than does men's coping. An important technique to release job stress is talking or sharing with others as a social support. Based on the explanation given above, we can conclude that coping mechanisms include: problem focused, seeking social support, blaming self, wishful thinking, avoidance, blaming others, counting your blessings and religiosity.

### c. Stress Impact

Stress is a general and global phenomenon encompassing man's psychological, physical, familial, and social dimensions. Today, in view of the complexity and ever-increasing changes of the society as well as the improvement of technology, stress has become a serious threat to humans so that it has severely affected the physical and mental health of employees.

The impact of stress according to Robbin, (2003) on Organizational Behavior, are as follows: 1) Physical symptoms: head ache, hypertension and liver disease; 2) Psychological symptoms: anxiety, depression, decreased job satisfaction; 3) Behavioral symptoms: decreased productivity, absence increasing.

According to Greenberg, (2009) occupational stress is related to illness and disease. This evidence falls into two categories: evidence of the physiological effects of occupational stress and evidence of disease states associated with occupational stress. Several studies have shown that physiological arousal accompanies occupational stress. For example, several investigators have found the work environment associated with hypertension, serum cholesterol, increase in left ventricular mass, high concentrations of catecholamines, high plasma fibrinogen concentrations, and associated behavioral risk factors such as tobacco use and ingestion of alcohol. An interesting finding is that, the amount of work does not seem as critical to health as the control the workers have over the work rate or related work processes. For example, workers in jobs with higher workload and pacing demands, and very little control of these demands, have increased rates of coronary heart disease and higher blood pressure than workers in jobs not so characterized. A disease state, Greenberg (2009) explains, is that given the increase in blood pressure, serum cholesterol, catecholamines, and plasma fibrinogen, it should be no surprise to learn that occupational stress is related to coronary heart disease and related to death from heart disease. It is also associated with obesity, probably because people eat as a way of relieving stress at work. Those workers experiencing occupational stress report low levels of job satisfaction and more psychosomatic symptoms as well as feelings of anger and alienation. Occupational stress also has consequences for psychological health: low in self-confidence, increased job tension, and lower job satisfaction. Then absenteeism and poor job performance are related to stress on the job as a psychological effect. Job satisfaction is important if for no other reason, it is associated with higher levels of job performance, lower levels of absenteeism, less tardiness, less turnover, and increased life satisfaction.

Aghaei, et.al. (2010) found that after privatization, the job stress of employees increased significantly and this increase was associated with a decrease in mental health. Another study revealed that organizational restructuring had consistent negative effects on employees' level of job security, organizational commitment, perceptions of time pressure

and psychological well-being. Effects on job satisfaction, physical health, and perceptions of role ambiguity were less consistently noted. The employees of a large healthcare provider in Canada concluded that the employees surviving the downsizing had a higher degree of delay and also a higher degree of stress due to less control exercised over their jobs. Consequently, they enjoyed less job satisfaction and living standards and worse general health.

Stress may have an effect on health and performance. It can be mitigated if somehow people learn how to cope with it. Presumably, those who cope well with stress will have fewer illness, fewer infections, and fewer days lost from work than those who do not cope well (Christos & Eleni, 2008).

### 2.1.2 Stress in the Nursing Profession

Stress has become a more recognized term over the past decade and is a major cause for concern for many nurses at work (Murray, 2005). A number of commonly occurring workplace stressors have been identified in prior research. These stressors include, work load (McVicar, 2003; Pinikahana & Happel, 2004; Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, 2008); professional conflict/coworkers or physicians (McVicar, A., 2003; Tyson et al., 2002); leadership/management style (McVicar, 2003); dealing with death and dying patients (Lambert, V., Lambert, C., & Ito, 2004; Mann & Cowburn, 2005; Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, 2008); lack of organizational support (Tyson et al., 2002). Some recent studies identified that lack of reward and shift worked as major sources of distress (Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, 2008). Stressors include work overload, lack of control at work, lack of support for staff, limited promotion, unclear roles, the suffering and death of patients, shift work, routine and underpaid work (Palfi, 2003); Gelsema, VanderDoef, Maes, Akerboom, & Verhoeven, 2006); Pearson, 2006).

Another research done in South Africa reported that the most severe stressors for nurses included health risks posed by contact with patients, lack of recognition and insufficient staff. Watching patients suffer, demands of patients and staff issues were also severe stressors for the professional nurse. The severity of stressors was higher for professional nurses compared with enrolled and auxiliary nurses (Rothmann, S., van der Colff, & Rothmann, J., 2006). Supported by Makie, 2006 in the study of 'Stress and coping strategies among Registered Nurses working in a South African', found that Registered nurses are stressed, the greatest perceived source of stress appears to be workload followed by emotional issues related to death and dying. Registered nurses seem to be resorting more to positive reappraisal, planful problem solving and seeking social support strategies. Another study in Taiwan, Lin, Lin & SHIAO (2007) found that the level of self-perceived job stress was associated with a risk of irregularity in menstrual cycles and a risk of prolonged menstrual bleeding periods. Various sources of job stress have been identified in the nursing work environment. Cohen-Mansfield (1995) divided work related stressors for nursing into three categories: the institutional level, the unit level and the patient level. Leveck & Jones (1996) used four categories of stressors modeled after Hinshaw & Atwood's Job Stress Scale/JSS (1983). The JSS measures competence, physical work environment, staffing, and team respect. Other stress method identification is Nurse Stress Index (NSI) developed by Hingley (1986) as sources of occupational stress. Hingley found that stress is caused by difficulties in managing the workload; conflicts between staff; inadequate preparation for current role; conflict between home and work; and dealing with death and dying. Both job stress investigation models have been developed by several researchers for identification of job stress among nurses and they found different stressors. For example, high psychological demands and low support in the work place are the most common stressors among nurses in psychiatric institutions in Taiwan (Shen, Cheng, Tsai, Lee & Guo, 2005). Other studies have identified heavy workload, urgency of work to be performed, dying and death of patients,

role conflict, lack of autonomy in practice, lack of social support, poor job fit, insufficient knowledge base, unsafe workplace, and a rapidly changing health care environment as stressors for nurses (William, Welch, Scott, & Hartley, 2003). There were also some similar studies done by Rout, (2000); Sveinsdóttir, (2004); Rothmann, S., vanderColff, & Rothmann, J.C. (2006); Chimanikire, (2007); Li & Lambert, (2008); DosSantos, (2009); King, Vidourek, & Schwiebert, (2009). All of them were found out to be stressors for nurses related to hospital work.

Based on the above, the following were named as stressors for nurses related to hospital work: dying and death of patients, conflict with physicians, inadequate emotional preparation, problems relating to peers, problems relating to supervisors, workload, uncertainty concerning treatment, patients and their families and discrimination.

Heavy workload and the consequent occupational stress can have serious consequences for nurses and their patients (Sveinsdottir, 2004). Caring for patients can be stressful and arduous work. Too much stress may cause physical or mental illness and impaired judgment, making it impossible for nurses to overcome the stressors (Scott, et.al., 2006; Elfering, et.al., 2006). In order to manage effectively the delivery of nursing care in hospitals, it is essential to understand the complexity of the nursing work environment, including the relationship of violence to patient outcomes.

Sveinsdottir, (2004) and several nursing researchers found that nurses working outside the hospital setting were older and had more children than nurses working in hospitals. How come? Hospital nurses who have shift work are risk to hormonal dysfunction and affect their menstrual pattern. Self-perceived high job stress was significantly associated with irregular menstrual cycles and longer menstrual bleeding periods, but was not significantly related to long or short menstrual cycles. International research has demonstrated a significant relationship between occupational stress and its influences on the function of endocrine and reproductive health (Lin, Hsin-Tsui., Lin, Li-Chan & Shiao, 2007).

Peter Carter (<http://www.thejakartapost.com/>) explains nurses are under pressure, under value and under paid. Stress is a serious issue for nurses who run the daily gamut of violence and abuse from patients and relatives, as well as coping with the day-to-day pressures of having to do ever more with fewer resources because of deficit-led cost cutting.

Nurses employed in hospitals come from a variety of cultural backgrounds. According to Amdal (2006), a critical factor in stress level is how a nurse values a particular stressor based on his/her cultural orientation (i.e., value system assigned to certain social factors). That is why in some hospitals, there is a shortage of nurses in their organization. For example, several studies found that as job satisfaction increases, intent to leave employment decreases (Williams, Welch, Scott, & Hartley, 2003; Alnems, 2005; Zeytinoglu, et al. 2006). All of these studies concluded reasons for shortage of staff or difficulty with retaining of nurses in their hospitals and in the profession.

According to a non-experimental study by Nabirye (2010), nurses who have higher job stress levels also reported lower levels of job satisfaction and performance. Meaning, nurses' job stress has negative impact on their job performance as a result of studies by Roche, et.al.(2009); Li & Lambert, (2008); Chimanikire, et. al.(2007).

How do nurses cope with their job stress? Some nurses have change their behavior whenever stress surfaces. Studies found that nurses have high levels of perceived job stress and low levels of body satisfaction because of disordered eating involvement (King, Vidourek, & Schwiebert, 2009). Eating disorder is a behavior of violence as the compensation of nurses surfacing their job stress besides sickness, absence and early retirement (Gilworth, 2006).

Few studies have shown the specification of reducing stress in the nursing job. Social support is one of those variables. Social support among nurses needs further investigation to



better understand if it has only a direct effect on job stress or job performance, or if it buffers the effect of stress on job performance. Providing environment with enhanced levels of social support and reduced levels of stress might help retain staff and thus alleviate the nursing shortage (AbuAlrub, (2003); Marin & Ramirez, (2005); Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, (2008)). Researches that could demonstrate the moderating effect (buffering) of social support on the stress-performance relationship is important to verify the significance of using sources of social support in the workplace for highly stressed employees. According to AbuAlRub (2004), to demonstrate more social support for nurses in the workplace, a nurse- manager should promote an organizational culture characterized by cooperation, social integration, and teamwork among nurses to show the importance of social support from coworkers. The positive effect of social support on job performance could help in enhancing the quality of care.

In Jordanian, Hamaideh (2008) found that emotional support was the most supportive social behavior that nurses usually receive and social support is needed to decrease the nurses' stressor. This finding is consistent with the study of Sveinsdottir (2004) who found that the hospital nurses reported support from staff nurses and hospital administrators.

According to Goodwin (2006), all nurses, at all levels, need to embrace safety, including psychological safety, and consider it integral to the way work is planned, resourced, performed, monitored and evaluated. While stress cannot be prevented, it could be minimized only. Thus, nurses will have a better performance in their job if they can reduce their stress and minimize the negative effects of them.

Better working conditions, autonomy, professional development and promotion for nurses may play an important role in reducing work stress and burnout (Wu, Zhu, Wang Z., Wang M. & Lan 2008). Prior research has suggested that people, while using a variety of coping strategies when contending with workplace stressors, may tend to select specific strategies. For example, it was found that hospital nurses from Japan tend to use, most often, the coping strategy, self-control; nurses from South Korea preferred positive reappraisal, while nurses from USA favored the use of problem solving (Lambert, V., Lambert, C & Ito, 2004).

The present nursing workforce is multi-ethnic, multi-cultural, thus different nations might have different strategies for reducing stress. For example: The Filipino nurses' traditions, cultural background, which may affect their perception of stressors in the workplace, are of interest as these nurses comprise a substantial part of the nursing workforce in many U. S. hospitals and abroad (Amdal, 2006). In Hong Kong, the most frequent strategies used by surgical nurses to cope with stress can be characterized as evasive, confrontative and optimistic, all of which are also rated as the most effective strategies in reducing stress levels (Wang, Kong, & Chair, 2009). Nineteen (19) competencies (or sets of behavior) were identified in the management of stress and the most frequently reported were: managing workload and resources, individual consideration and participative approach (Lewis, et.al, 2010). Effectiveness of stress management depends on individual characteristics and culture, but social support and organizational leadership are commonly used.

## **2.2 Theoretical Framework**

Scientist Hans Selye (1907-1982) introduced the General Adaptation Syndrome model in 1936 showing in three phases what the alleged effects of stress has on the body. Selye, the father of stress research, developed the theory that stress is a major cause of disease because chronic stress causes long-term chemical changes. He observed that the body would respond to any external biological source of stress with a predictable biological pattern in an attempt to restore the body's internal homeostasis. This initial hormonal reaction is fight



or flight stress response - and its purpose is for handling stress very quickly! The process of the body's struggle to maintain balance is what Selye termed, the General Adaptation Syndrome (GAS). Pressures, tensions, and other stressors can greatly influence your normal metabolism. Selye determined that there is a limited supply of adaptive energy to deal with stress. That amount declines with continuous exposure.

Job stress is extremely difficult to construct or to define. Obviously, stress on the job occurs in every person. Here is where Greenberg (2009) runs into a problem because many workers bring to their job a level of predisposition to be stressed. Note that several sources of job stress exist. Some of these stressors are intrinsic to the job. Some are related to the employee's role within the organization, some to career development, some to relationships at work, and some to the structure and climate of the organization.

Interacting with these work stressors are the individual's characteristics. These are brought to the workplace rather than being a function of it, but they are important ingredients in job stress, nevertheless. These characteristics include the worker's levels of anxiety and neuroticism, tolerance of ambiguity, and Type A behavior pattern.

Added to this brew are the sources of stress that come from outside the workplace and outside the worker. These extra organizational sources of stress may stem from family problems, life crises, financial matters, and environmental factors. Mix it all up and the outcome would be symptoms of occupational health problems that may develop into full-blown disease.

This model of job stress, as complex as it appears, is simplified by limiting the examples of stress at work, individual characteristics, and extra-organizational sources of stress. A lot more may be included. Further, the interaction of these three factors is depicted as evenly weighted. In actuality, different workplaces have different levels of intrinsic job stressors and career development stressors. Different workers have different levels of anxiety and tolerances of ambiguity and different workers experience different amounts of family and financial problems. To assume that all of these ingredients can be quantified is naïve.

### **2.3 Research Questions**

The following related questions will be used to find out the nurses job-stress and coping mechanisms.

*Question number 1:*

What is the demographic profile of the respondents?

*Question number 2:*

What are the stress levels of nurses as measured by ENSS according to categorized demographic profile?

*Question number 3:*

What are the coping mechanisms adapted by the nurses as measured by WCCL according to categorized demographic profile?

*Question number 4:*

Is there a significant relationship between job stress level and demographic profile among nurses?

*Question number 5:*

Is there a significant relationship between coping mechanisms and demographic profile among nurses?

*Question number 6:*

Is there a significant relationship between job stress level and the coping mechanisms among nurses regardless their demographic profile?

## 2.4 Research Paradigm

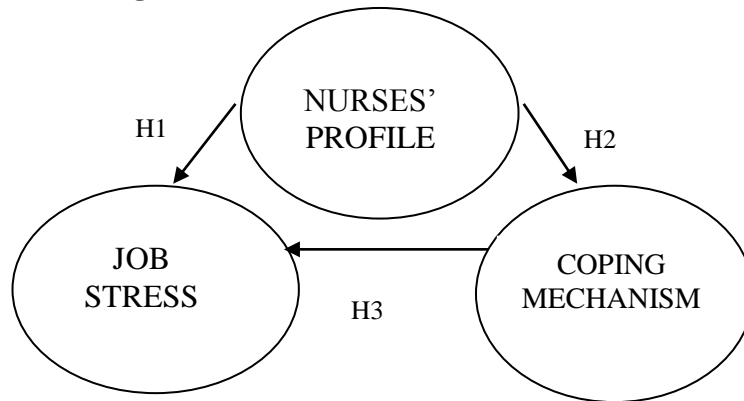


Figure 1. The Relationship of Nurses' Demographic Profile, Job Stress and Coping Mechanisms

- H1. There is a significant relationship between Job Stress and the demographic profile among nurses.
- H2. There is a significant relationship between coping mechanisms and demographic profile among nurses.
- H3. There is a significant relationship between Nurses' Job Stress and Coping Mechanisms regardless their demographic Profile.

## III. METHODS

This chapter presents: 1) the research design; 2) meaning; 3) subjects and study site; 4) the research instruments; 5) the data gathering procedures; 6) the ethical consideration, and 7) data analysis.

### 3.1 Research Design: Descriptive-Correlation

This study utilized the quantitative descriptive correlation design of research since it focused on the association of the demographic profile, job stress and coping mechanisms of nurses working in the hospital. Tan (2006) described non-experimental research often known as surveys, as one which has less control over the study subjects and setting where it is conducted. It also describes the nature of the phenomenon under investigation after a survey of current trends, practices and conditions relating to the problem.

The quantitative descriptive correlation research design wants to find out how the job-stress and the coping mechanisms among nurses of RK Charitas Hospital Palembang, South of Sumatera Indonesia are related. All related information needed for this research is concerned with the current situation of the RK Charitas Hospital.

According to Schindler (2003), descriptive research is a study typically structured with clearly stated hypotheses or investigative questions. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions. As inferential design, the study will make conclusions about the existing

phenomena among the respondents. For this purpose, the researcher will also analyze how the findings of this study relate to information from books, journals, the internet, and magazines.

Correlation research attempts to establish the relationship between two or more variables. It gives an indication of how one variable may predict another. However, correlation does not imply causation; that is, simply because two events are in some way correlated or related does not mean that one necessarily causes the other (Stangor, 2007; Bold, 2001 as cited by Williams, 2007). In this study, the relationship is between 9 items nurses' profile with 9 job stress indicators; relationship between 9 items nurses' profile with 8 ways of coping; and relationship between 9 job stress indicators with 8 ways of coping.

### **3.2 Subjects and Study Site**

Two hundred male and female nurses in the ward were chosen for this study. Stratified random sampling was implemented, wherein the researcher classified the respondents into four (4) groups according to their present position as chief nurses, assistant chief nurses, supervisors and practitioner nurses. They were employees who have been in service for at least one (1) year. The survey conducted by the researcher aimed at generating information about the job-stress and the coping mechanisms among nurses at RK Charitas Hospital to determine what recommendations could be made in addressing aspects which may need improvement for the employees and organizational development especially as a basis for a management stress program. The actual observation of prevailing conditions is carried out. Chief nurse, assistant chief nurse, supervisors and practitioner nurses were the respondents for the research upon permission granted by the management.

### **3.3 Research Instrument (Data Measure)**

Two assessment tools or instruments were utilized to collect data for this research. Data yielded from these instruments will be used in publications. Each tool is described in detail below:

#### **3.3.1 Expanded Nurse Stress Scale (ENSS)**

The ENSS measures the independent variable of job stress. The ENSS is an expanded and updated revision of the classic Nursing Stress Scale (NSS) developed by Gray-Toft & Anderson (1981b). The NSS was the first instrument to target nursing stress rather than general job stress. The original 34 items of the NSS measured the frequency and major sources of stress in patient care situations.

Major changes in health care delivery and the work environment of nurses since the development of the NSS stimulated French et al. (2000) to identify stressful situations not reflected in the NSS and develop an expanded version useful for diverse work settings. First, focus groups in Canada comprised of registered nurses (RNs) and registered practical nurses (RPNs) from diverse work settings identified 20 stressful situations not included in the NSS. Secondly, a survey of 18 RNS and 18 RPNs using the NSS and the 20 additional items was tested. The survey contained an open-ended question to identify further stressful situations. Thirdly, researchers reviewed the 25 additional stressful situations to determine conceptual fit with the original seven scales of the NSS. Of the 25 additional stressors identified, 14 showed conceptual fit with five of the seven original NSS subscale; three were grouped in a new subscale reflecting discrimination in the workplace, and eight were grouped into a new subscale concerning patients and families. The researchers then tested the 59 item ENSS in a larger sample ( $N = 2, 280$ ) after which two items were removed from the instrument. The completed ENSS contained 57 items in nine subscales: (a) Death and Dying, (b) Conflict with Physicians, (c) Inadequate Emotional Preparation, (e) Problems Relating to Peers, (f) Problems Relating to Supervisors, (g) Work Load, (h) Uncertainty Concerning Treatment, (i) Patients and their Families, and (j) Discrimination. The 57 items were arranged in a 5 point

Likert response scale. The responses were 'never stressful' (1), 'occasionally stressful' (2), 'frequently stressful' (3), 'extremely stressful' (4), and 'does not apply' (5) (French et al., 2000). Based on permission used from the authors, the researcher uses these tools translated into Indonesian for the data gathering.

### **3.3.2 The Ways of Coping Check List (WCCL)**

The ways of coping checklist (WCCL) is based on Lazarus transactional model of stress and coping (Lazarus & Folkman, 1984). This instrument also used by WCCL-ASIAN (Sawang,2010), on his study aims to explore the psychometric properties, generalizability, and applicability, of the WCCL-R scale by Vitaliano et al. (1985) for use in the Asian population. So, this is a standardized test (see appendix).

The researcher adopted this tool and translated it into Indonesian under permission of Vitaliano (see appendix) to investigate the coping mechanisms among nurses at RK Charitas hospital. There are eight sub scales: problem focused, seeks social support, blamed self, wishful thinking, avoidance, blamed others, count your blessing and religiosity. These questions contain 57 items and a five point response scale was used from 0 (never used); 1 (rarely used); 2 (sometimes used); 3 (regularly used); and NA (Non Applicable). In this study, the researcher translated this tool into the Indonesian language for the data gathering. All of the permit letter from the author and expert licence are included in this paper in the appendix.

### **3.3.3 Procedure for Instruments translation into Indonesian**

The two instruments namely ENSS and WCCL were translated into Indonesian by the researcher and an expert translator. To be sure in translation, the researcher checked with another translator. First, the Indonesian version was translated back to English, and second, the English translated tools were translated back to Indonesian. For this procedure, the researcher also had consultation with the tools to the professionals discipline such as: HRM, Nursing, and Psychology for suggestions about the content of the tools, validity and the reliability so that these tools would be useful and really applicable to Indonesian nurses especially nurses who are working in the hospital.

### **3.3.4 Pilot Study**

The pilot study was conducted at Myria hospital, Palembang South of Sumatera, Indonesia. It is a branch of the Charitas hospital. The researcher asked 30 nurses to answer the questionnaire; results were not included in the mean data gathering because from this pilot study, the researcher only evaluated whether the tools are applicable and understandable by respondents. Results of this pilot study were also checked for validity and reliability by a statistician, expert translator and professionals discipline. Respondents' answers did not to be a part of the actual study process; they used for testing purposes only. Based on the finding of the first pilot study when alpha Cronbach was 0.725, the researcher had checked the tools by expert translator and professional discipline then there were some revised on the translation using the most familiar words to be understood by nurses. The second pilot study was done by another 30 nurses and found alpha Cronbach 0.879 so it was higher than the first finding. Based on the finding of alpha Cronbach of the second pilot study, the researcher used these tools in the data gathering of this mean study. All of these finding were only for determination of the tools that it was applicable and understandable to the respondents and it did not included in the finding of this study.

Validity and reliability of this study used psychometric properties of ENSS by French, 2000 and WCCL by Vitaliano, 1985.

### **3.4 Data Gathering Procedure**

The data used in this descriptive correlation study were from the respondents: chief nurse, assistant chief nurse, supervisors, and practitioner nurses. The techniques of gathering data were through the used of questionnaire survey.

#### **Preparations Phase**

1. The researcher presented a letter to the chief director of RK Charitas Hospital for the purpose of the study and the gathering of data. This was also done with the director of Myria Hospital for the pilot study.
2. After the granting of permission, the researcher conducted the pilot study and checked the results. Data collection procedure followed.

#### **Action Phase**

1. All of the respondents were in one room with the researcher. After the aim of this study was explained, the researcher distributed the questionnaire and for them to answer completely. While the questionnaire was being answered, the researcher went around collecting the signatures of the respondents on their consent form.
2. All of respondents answered all the questions and returned them to the researcher in 50-60 minutes only.

### **3.5 Ethical Considerations**

The ethical standards were followed in the conduct of this study. First, the researcher contacted the prior researchers and got permission for using and translating the ENSS and WCCL tools (see appendix).

Secondly, the researcher applied for a permit from the chief director of RK Charitas Hospital to conduct this study, and from Myria hospital to conduct the pilot study.

Lastly, the respondents had to sign the consent form after being informed about the pattern and objectives of the study. Anonymity and confidentiality of the data gathered were always observed using code numbers.

### **3.6 Data Analysis**

Inferential statistics were employed to analyze the data. The Chi Square was used to determine significant relationship between job stress level and the coping mechanisms. The grade of the relationship between two groups is measured by Cramer's V Coefficient (V). Useful for comparing multiple  $X^2$  test statistics and is generalizable across contingency tables of varying sizes. It is not affected by sample size and therefore is very useful in situations where we suspect a statistically significant chi-square was the result of large sample size instead of any substantive relationship between the variables. It is interpreted as a measure of the relative (strength) of an association between two variables. The coefficient ranges from 0 to 1 (perfect association). In practice, we may find that a Cramer's V of .10 provides a good minimum threshold for suggesting there is a substantive relationship between two variables. Describing Strength of Association by Cramer's V is as follows. Characterizations  $>.5$  is high association; .3 to .5 is moderate association; .1 to .3 is low association and 0 to .1 is little if any association.

All of the statistical analyses were done through the Statistical Package for Social Sciences version 17.00 (SPSS version 17.00).

#### IV. PRESENTATION, ANALYSES, AND INTERPRETATION OF DATA

The data gathered by researcher were tabulated, statistically treated and analyzed. This chapter contains the presentation, analysis and interpretation of data based on what the researcher gathered from the respondents. For consistency, the researcher followed the sequence of the specific questions shown in Chapter 2, which the study endeavored to answer.

##### **Research question #1. What is the demographic profile of the respondents?**

Table 1 shows the demographic profile of the respondents.

Table 1. Demographic distribution of the Respondents (n=200)

Variable	Category	Frequency	Percent
Age	20 - 29	80	40
	30 - 39	77	38.5
	40 - 49	38	19
	50 – 59	5	2.5
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Sex	Female	182	91
	Male	18	9
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Education Background	Diploma (3 years preparation)	191	95.5
	College (5 years preparation)	9	4.5
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Present Position	Practitioner	141	70.5
	Supervisor	31	15.5
	Assistant Chief Nurse	14	7
	Chief Nurse	14	7
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Shift Work	Day	120	60
	Afternoon	54	27
	Night	26	13
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Length of Service	≤5 years	83	41.50
	≥16years	58	29
	6-10 years	30	15
	11-15 years	29	14.50
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Department	Medical Ward	67	33.5
	Surgical Ward	32	16
	Child Ward	32	16
	OR	24	12
	Maternity Ward	21	10.5
	ICU	14	7
	Emergency	6	3
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Number of Patients	21-30	42	21
	31-40	41	20.5
	11-20	40	20
	10 or less	37	18.5
	41-50	26	13
	51-60	14	7
<b>TOTAL</b>		<b>200</b>	<b>100</b>
Longest Duty in hours	10	136	68
	8	36	18
	7	27	13.5
	9	1	0.5
<b>TOTAL</b>		<b>200</b>	<b>100</b>

Respondents were 182 female nurses (91%) and 18 male nurses (9%). As shown in Table 1 above, the demographic profile of the respondents when grouped according to age revealed that the nurses were 20-29 years old (40%), followed by 30-39 years old (38.5%), 40-49 years old (19%), 50-59 years old (2.5%). This age range starting from 20years old is in accordance with the educational system in Indonesia. Generally, one begins to enter an



elementary school at age of 5-7 years old. Then elementary school itself lasts 6 years, followed by 3 years of secondary school and 3 years in high school. So, the respondents started nursing education at 17-19 years old. That is why all of the nurses started nursing profession at 19-21 years old after graduation. (Accordingly, one will be in the first year of nursing diploma at age of 17-19 years old). However, there are two kinds of school system in Indonesia. Diploma for 3 years academic and college for 4 years academic followed by nursing profession for 1 year. There are 191 diploma nurses (95.5%) and 9 college graduated nurses (4.5%).

The biggest population among them according to their present positions were 141 practitioner nurses (70.5%), followed by 31 supervisors (15.5%), assistant chief nurses, 14 (7%), and chief nurses 14 (7%). They were spread in 8 wards, namely medical ward 67 nurses (33.5%); surgical ward and child ward 32 nurses each (16%); OR 24 nurses (12%); maternity ward 21 nurses (10.5%); ICU 14 nurses (7%); emergency 6 nurses (3%); and Haemodialysis ward (HD) 4 nurses (2%). For their shift in work, they have 3 kinds of shift. They were 120 nurses (60%) most often on day duty time; 54 nurses (27%) have afternoon shift work; and 26 nurses (13%) most often have night duty. Based on their length of service, there were 83 nurses (41.50%) on less than 5 years of service; 58 nurses (29%) on their 16 years and above work experiences; and there were 30 nurses (15%) population between 6-10 years; and 29 nurses (14.50%) between 11-15 years of service. In the number of patients taken care of them, there were 14 nurses (7%) who took care of 51-60 patients; 26 nurses (13%) who took care of 41-50 patients; there were 41 nurses (20.5%) who took care of 31-40 patients; 42 nurses (21%) who took care of 21-30 patients; they were 40 nurses (20%) who took care of 11-20 patients; 37 nurses (18.5%) who took care of 10 or less patients. Based on the longest duty time per shift, 136 nurses (68%) who had 10 hours; 1 nurse (0.5%) who had 9 hours; 36 nurses (18%) who had 8 hours; and 27 nurses (13.5%) who had 7 hours.

The majority of the respondents are young female nurses (91%) on age 20-29 years old (40%), with diploma education background (95.5%), as a practitioner nurse (70.5%), working at day time shift (60%), on 5 years length of service (41.29%), assign in the medical ward (33.5%), and handling of 21-30 patients (21%) in 10 hours longest duty (68%). It is common that most of nurses are female and in this hospital most of them were young female practitioner nurses. It is also a high risk for them to get stress as new nurses who are working in the hospital as well as their stressful can put them in the high risk of negative effect of the job stress. In the future they maybe have difficulties in getting pregnant as Taiwanese nurses who were stressful and having irregularity in menstrual cycles and prolonged menstrual bleeding periods. It is also reasonable for some of Charitas hospital nurses are not yet having kids and take long time to get pregnant after their wedding.

***Research question #2. What are the stress levels of nurses as measured by ENSS according to categorized demographic profile?***

Answering this research question, data analyzed based relationship between 9 items of demographic profil of nurses and their job stress. The job stress among nurses based on their demographic profile was majority stressors were 'patient and their families', 'Uncertainty concerning treatment' and 'death and dying'.

Table2. Ranking of Job Stress of the Respondents

Rank	Stressors	mean	St d
1	Patients & their families	2.72	0.8
2	Uncertainty concerning treatment	2.66	0.64
3	Death & dying	2.64	0.68
4	Workload	2.57	0.62
5	Discrimination	2.52	1.08
6	Problems relating to supervisor	2.5	0.7
7	Conflict with physician	2.46	0.67
8	Inadequate preparation	2.37	0.76
9	Problems relating to peers	2.14	0.73

The respondents capitalized on different levels of stress depending on their day-to-day situation in their job.

Based on the statistical results, the Job stress levels among nurses in the Charitas hospital in Table 2 as measured by ENSS are ‘patients and their families’; ‘uncertainty concerning treatment’; ‘death and dying’; ‘workload’; ‘discrimination’; ‘problems relating to supervisor’; ‘conflict with physician’; ‘inadequate preparation’; and ‘problem relating peers’.

According to French et al (2000), the 57 ENSS’s items arranged in a 5 point Likert response scale of Job Stress were ‘never stressful’ (1), ‘occasionally stressful’ (2), ‘frequently stressful’ (3), ‘extremely stressful’ (4), and ‘does not apply’ (5). Job stress was arranged in nine subscales: (a) Death and Dying, (b) Conflict with Physicians, (c) Inadequate Emotional Preparation, (e) Problems Relating to Peers, (f) Problems Relating to Supervisors, (g) Work Load, (h) Uncertainty Concerning Treatment, (i) Patients and their Families, and (j) Discrimination. This study, supported by several researchers, found out that the issues dealing with the death and dying of a patient are the most prevalent stressors among nurses (Lambert, et.al., 2004; Mann & Cowburn, 2005; Hamaideh, Mrayyan, Mudallal, Faouri & Khasawneh, 2008). This is different from the study done by Wang, Kong & Chair (2009) using Nursing Stress Scale. That study found that workload (M = 15.36), lack of support (M = 13.32), and inadequate preparation (M = 12.33) are the most common stressors for Hong Kong surgical nurses.

Results of this study found that patients and their families are the most stress makers during hospitalization. Nurses get stressful from the patients and their families because of the demands of human needs of the patients and their families especially during sickness. They want to be served perfectly, quickly and satisfactorily. This is a human reality which may happen to anyone.

**Research question #3. What are the coping mechanisms adapted by nurses as measured by WCCL according to categorized demographic profile?**

Answering this research question, data analyzed based relationship between 9 items of demographic profil of nurses and their coping mechanisms. The coping mechanisms among nurses based on their demographic profile and the majority ranking of the coping were ‘religiosity’, ‘problem focused’ and seek ‘social support’. The ranking of nurses’ coping mechanisms seen as follow on the table 3 is ranking in general.

Table 3. Coping mechanisms of the respondents

Rank	Coping Mechanisms	mean	St d
1	Religiosity	2.52	0.49
2	Problems focused	2.35	0.36
3	Seek social support	2.26	0.51
4	Count your blessings	2.01	0.55
5	Wishful thinking	1.95	0.53
6	Avoidance	1.75	0.55
7	Blamed self	1.7	0.61
8	Blamed others	1.55	0.54

The respondents capitalized on different ways of coping with their day-to-day work. In terms of religiosity, problem focus, and social support, the respondents showed the most common coping mechanisms. These could be because most of the nurses are faithful people. Even though they vary in their religious beliefs, they are really faithful and religious people. In the hospital there is prayer before duty and they also support one another so that they would be able to cope with everything they face during duty time.

Most of them were also educated as seen in the data yielded in the educational background of the respondents. On the basis of their background, they could face their stresses better. Respondents blaming others as their coping mechanism is the least used. A person of faith and who is educated will never blame others but will tend to look at himself first before blaming others.

In the beginning, a nurse nun always headed all of the ward departments in this hospital. Nowadays some of the ward departments are headed by lay nurses. The presence of the Sisters as head of the ward departments was affecting practitioner-nurses in using the effective coping mechanisms. This situation still prevails in some ward departments when a nurse nun is the chief nurse in that department. Based on the observation of this researcher all of the prayers and pre-conferences in the ward which are done every day really affect how they cope with job stress and make them depend on each other in their group. They always learned from one another during the prayer and sharing. That is why they relate with the next coping mechanism: seeking social support and problem focusing in their coping. These three kinds of coping, namely: religiosity, problem focus, and seeking social support, were the most commonly used by nurses in coping with their job stresses.

**Research question #4: Is there a significant relationship between job stress level and the demographic profile among nurses?**

H1: There is a significant relationship between job stress level and the demographic profile among nurses.

Table 4. Summary of Relationship Between Job Stress Level and Demographic Profile of the Respondents

Demographic Variables	Correlation	p-value	Interpretation
Age	0.02	0.80	Not Significant
Sex	0.04	0.59	Not Significant
<b>Education</b>	<b>0.213</b>	<b>0.002</b>	<b>Significant</b>
Position	0.13	0.36	Not Significant
Shift	0.08	0.86	Not Significant
Length of Service	0.08	0.26	Not Significant
Department	0.22	0.10	Not Significant
Number of patients	-0.13	0.08	Not Significant
Longest duty in hour	-0.09	0.22	Not Significant

Table 4 presents the relationship between job stress levels and demographic profile of respondents. Pearson or *r*-test was used to determine the significant correlation between job stress level and the demographic profile of nurses. Educational background was significantly correlated to job stress level among nurses. Chi Square Point Biserial determined the significant correlation and *p* value as 0.002 meaning less than ( $\alpha$ ) 0.05 which therefore accepts the H1.

This concludes that the demographic profile was positively correlated to the stress levels among nurses. Although stress level among nurses was positively correlated to demographic profile of nurses, it was not significant. By the Cramer's V the 0.25 obtained means, it is low in association. This rejects the H1, and concludes that the demographic profile is not related to stress level among nurses.

Educational background of nurses is the only one related to job stress levels, meaning, the educated nurses are more stressful. When the researcher was doing unstructured interview among college graduated nurses and diploma graduated nurses, the college nurses were more stressful than the diploma nurses because they have more tasks and they were leaders for other nurses. It was their responsibility to know everything for the successful execution of their work shift. They should give all the patients good services, their staff good team work, and to their boss a good job performance. That is why colleges nurses experience more stresses than diploma nurses.

**Research question #5: Is there a significant relationship between coping mechanisms and demographic profile among nurses?**

H2: There is a significant relationship between coping mechanisms and demographic profile among nurses.

Table 5. Summary of Significant Relationship between Coping Mechanisms and Demographic Profile of the Respondents

Demographic Variables	Correlation	p-value	Interpretation
Age	0.03	0.62	Not Significant
Sex	-0.04	0.61	Not Significant
Education	0.10	0.16	Not Significant
Position	0.08	0.86	Not Significant
Shift	0.07	0.72	Not Significant
Length of Service	0.04	0.53	Not Significant
<b>Department</b>	<b>0.25</b>	<b>0.03</b>	<b>Significant</b>
Number of patients	0.04	0.53	Not Significant
Longest duty in hours	0.03	0.69	Not Significant

Since the beginning, Charitas hospitas had only nun sister as chief ward but now there are some lay partners. The differences between both of them that the nun sisters always continue their habit in giving time to discussion everything happened in their ward after the morning prayers. Then all of the nurses will give opinion and suggestion to improve their service in the ward. After discussion, the chief ward asks what will they do in the future based on their experiences, then all of them will follow whatever they affirmed at that time.

Based on the observation, different ward has different coping mechanisms. It was seen in how the nurses response to their stress and how their performance in serving patients. Even they have different religion but they can accept one another by understanding and forgiveness. They are learning by doing. Then day by day they will become more solid team in the ward. Supporting Andal studied that culturally, Filipino look to supervisors highly and place importance on their roles and title. One's supervisor is considered in a position of authority and therefore able to help in problem solving. If there was a problem, the nurses always ask their chief to facing and finishing it. Some Indonesian also still put their leadership in front.

Table 5 above, presents the responses of nurses whether their coping levels are different based on their demographic profile. *R*-test was used to determine the significant relationship. All of the variables were analyzed and there was no significant relationship in the coping mechanism among nurses based on their demographic profile except the department where they are assigned to. Although coping mechanism was positively correlated to demographic profile of nurses it was not significant. By the Cramer's V the characteristic was 0.25 meaning, is low association. This rejects the H2, and concludes that the demographic profile is not related to coping mechanisms among nurses.

**Research question #6: Is there a significant relationship between job stress level and coping mechanisms among nurses regardless their demographic profile?**

H3: There is a significant relationship between job stress level and the coping mechanisms among nurses regardless their demographic profile.

Table 6: Relationship between job stress level and coping mechanisms regardless their demographic profile.

Pearson's r	p-value	Interpretation
0.10	0.18	Not Significant at 0.05 level

Table 6 above, presents the relationship between job stress level and the coping mechanisms. Pearson  $r$  was used for variable job stresses: (a) Death and Dying, (b) Conflict with Physicians, (c) Inadequate Emotional Preparation, (e) Problems Relating to Peers, (f) Problems Relating to Supervisors, (g) Work Load, (h) Uncertainty Concerning Treatment, (i) Patients and their Families, and (j) Discrimination, to determine degree of relationship to the scales of coping mechanism: problem focused, seeks social support, blamed self, wishful thinking, avoidance, blamed others, count your blessing and religiosity.

The data revealed that the job stress variable has no relationship to coping mechanisms. Pearson correlation yielded the not significant correlation coefficient or the value of the not significant relationship or the  $r$  between the variables. The  $p$ -value or the probability value is used to interpret the correlation coefficient or the  $r$ . It will determine if the relationship is significant or not. The relationship is significant if the  $p$ -value is less than or equal to the alpha level ( $< 0.05$ ). The relationship between job stress levels and coping mechanisms when  $p$ -values is equal to, or greater than 0.05, was not significant and rejected the H3, and concludes that stress level is not related to the coping mechanisms.

## V. CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the study which leads to the conclusions and recommendations for future research.

### 5.1 Finding

The following interferences were made in the light of the above-mentioned findings:

1. There is no significant relationship between job stress level and the demographic profile among nurses.
2. There is no significant relationship between coping mechanisms and the demographic profile among nurses.
3. There is no significant relationship between job stress level among nurses and coping mechanisms.

### 5.2 Conclusion

Based on the findings of this study there is no significant relationship between stress level and demographic profile among nurses. It means there is a relationship between stress level and demographic profile among nurses but the characteristics of the association is low only and it's not significant. The correlation between coping mechanisms and demographic profile of nurses is also low association and it is not significant. As well as between coping mechanisms and job stress level among nurses has no significant relationship.



### **5.3 Recommendations**

The following recommendations were based on the above mentioned significant findings. Data gathered by the researcher and consultation with related literature in the course of the experiment contributed to the formulation of the following recommendations:

#### **For nursing research**

Further studies should be conducted regarding the specifications of stress levels among small groups and homogenous job situations. The study can use the same instrument but should be conducted for special ward job stress determination. It can be used for job stress determination among emergency or ICU nurses.

#### **For hospital administration**

This study could contribute by enhancing the basis of planning hospital protocol especially in dealing with job stress among nurses. Hospitals should be concerned with minimizing negative impact of job stress and improving coping skills of nurses. Thus nurses will be healthy and more productive in their job and definitely increase the hospital income as a consequence.

#### **For nursing practice**

To improve the quality of coping skills, the nurse practitioner should be provided information on how job stress affects the nurses themselves. In this way, they will be able to find ways to better deal with stress coping. Based on the results of this study, a Healthy Job Stress Coping Mechanism can be created for the nurses as part of a stress management program. Nurses can improve their own skills in coping with their job's stresses so that by using healthy coping techniques they will be more satisfactory in the performance of their nursing profession.

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