



**Workplace Stressors and Coping Strategies Among Public Hospital Nurses  
in Medan, Indonesia**

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Master of Nursing Science (International Program)**

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**Thesis title** Workplace Stressors and Coping Strategies among Public Hospital Nurses in Medan, Indonesia

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### **ABSTRACT**

This descriptive correlational study was conducted in order to examine the relationships between nurses' workplace stressors and coping strategies used by nurses of two public hospitals in Medan. The sample size of 126 nurses was drawn from selected in-patient units by using a stratified random sampling technique. Data were collected by using self-report questionnaires consisting of the Demographic Data Questionnaire which was developed by the researcher, the Nursing Stress Scale (NSS) which was developed by Gray-Toft and Anderson, and the Brief COPE which was developed by Carver. Cronbach's alpha coefficient to test the reliability for the NSS and the Brief COPE were .94 and .80 respectively. The majority of subjects experienced low workplace stressors, where death/dying was the most commonly reported workplace stressor followed by workload. Religion was the most commonly used coping strategy. Significant correlations were found between subscales of workplace stressors and coping strategies. Nurses' workplace stressors had a higher correlation with the use of emotion-focused and dysfunctional coping strategies than problem-focused coping strategies.

**Keywords:** workplace stressor, coping strategy, public hospital nurses

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# CHAPTER 1

## INTRODUCTION

### *Background and Significance of the Problem*

Nursing is considered as a stressful job when compared to other jobs (Chan, Lai, Ko, & Boey, 2000). A study among six professional groups (nurses, doctors, engineers, life insurance agents, lawyers, and teachers) found that nurses had the highest score of stress related to their workplace which had poor social relations with superiors and colleagues, bureaucratic constraints, and poor job prospects (Chan et al, 2000). Moreover, as the global nursing shortage increases, the aged population becomes larger, the incidence of chronic illnesses increases, and technology continues to advance, nurses continually are encountered with numerous workplace stressors (Lambert & Lambert, 2008). Meanwhile, a survey conducted in four provinces of Indonesia showed that more than half (50.9%) of nurses working at public and private hospitals' experienced workplace stress (Rachmawati, 2007). It was also found that more than half (60%) of a public hospital nurses in Indonesia experienced high level of workplace stress (Shaulim, 2008).

Nurses' workplace stressors defined as situations that had been identified as sources of stress for nurses in their work (Gray-Toft & Anderson, 1981). There were seven categories of nurses' workplace stressors: workload, conflict with physicians, conflict with nurses, death/dying, uncertainty treatment, inadequate preparation, and lack of support (Gray-Toft & Anderson). Recently studies reported different most nurses' perceived workplace stressors. Lambert, Lambert, Petrini, Li,

and Zhang (2007) and Xianyu and Lambert (2006) found that workload was the most frequently cited workplace stressors. A study in in-patient unit of a public hospital in Indonesia also found that workload was the most reported nurses' workplace stressors (Ilmi, 2003). Salmond and Ropis (2005) found that besides workload, lack of support (team building and collaboration issues) was the major stressors. However, inadequate preparation was the major workplace stressors in Li, Chen and Kuo's (2008) study. Such stressors might have impact on decrease job satisfaction which also might lead to increase turnover rate and reduce nursing quality (Sveinsdóttir, Biering, & Ramel, 2006).

Prolonged stress without effective coping strategies affects not only nurses' occupational life, but also their nursing competencies (Lee, Chen, & Lin, 2005). On the other hand, nurses who apply effective coping strategies when dealing with workplace stressors will increase their job satisfaction (Welbourne, Eggerth, Hartley, Andrew, & Sanchez, 2007). Coping strategies can be classified as problem-focused and emotion-focused (Lazarus & Folkman, 1984). In the previous studies, it was indicated that nurses used more problem-focused coping rather than emotion-focused coping (Chang et al., 2006; Healy & McKay, 2000; Tyson & Pongruengphant, 2004; Welbourne et al., 2007; Xianyu & Lambert, 2006). However, Carver (1997) found that people not only used problem-focused and emotion-focused coping, but also dysfunctional coping when they dealt with stressors. Problem-focused coping consisted of three coping strategies: active coping, use of instrumental support, and planning. Emotion-focused coping consisted of five coping strategies: acceptance, use of emotional support, humor, positive reframing, and religion.

Dysfunctional coping consisted of six coping strategies: behavioral disengagement, denial, self distraction, self-blame, substance use, and venting.

Medan is the biggest city out of Java Island and the third biggest city in Indonesia. It is the capital city of North Sumatera Province. There are two tertiary public hospitals in this city: Haji Adam Malik and Pirngadi Hospital. There are 650 beds in Haji Adam Malik Hospital and 600 beds in Pirngadi Hospital. Nurses in both hospitals are responsible for providing health service to people who live in not only North Sumatera, but also in neighboring provinces, including Nanggroe Aceh Darussalam, West Sumatera, and Riau Islands. Workplace stressors in both hospitals are considered relatively higher than other hospitals. Moreover, Jauhari (2005) found that more than 80% of nurses in Pirngadi Hospital performed non-nursing tasks, which burdened the nurses in this hospital.

Besides the nurses' workplace stressors, it is also important to investigate the nurses' coping strategies in dealing with the stressors. Therefore, this study was proposed to examine workplace stressors, coping strategies, and the relationships between workplace stressors and coping strategies among public hospital nurses in Medan, Indonesia.

### *Objectives of the Study*

The objectives of this study were to:

1. Identify the most frequently reported workplace stressors by public hospital nurses in Medan, Indonesia.

2. Identify the most frequently used coping strategy by public hospital nurses in Medan, Indonesia.
3. Examine the relationships between workplace stressors and coping strategies of public hospital nurses in Medan, Indonesia.

### *Research Questions*

The research questions of this study were:

1. What is the most frequently reported workplace stressors by public hospital nurses in Medan, Indonesia?
2. What is the most frequently used coping strategy by public hospital nurses in Medan, Indonesia?
3. Are there any relationships between workplace stressors and coping strategies of public hospital nurses in Medan, Indonesia?

### *Hypothesis*

There were significant relationships between nurses' workplace stressors and coping strategies.

### *Conceptual Framework*

The conceptual framework in this study was based on literature review. The variable of workplace stressors was derived from Gray-Toft and Anderson's study (1981). Gray-Toft and Anderson defined nurses' workplace stressors as situations that have been identified as causing stress for nurses in their job

performance. Gray-Toft and Anderson found that there were seven categories of nurses' workplace stressors. They were workload, conflict with physicians, conflict with nurses, death and dying, uncertainty treatment, inadequate preparation, and lack of support.

Gray-Toft and Anderson (1981) defined the seven categories of nurses' workplace stressors as the followings. Workload included stressful situations of nurses' workload, staffing and scheduling problems, and insufficient time to perform nursing tasks and to support patient emotionally. Conflict with physicians referred to stressful situations that occur from nurses-physicians interactions. Conflict with nurses was related to conflictual situations that occur between nurses and their colleagues or supervisors. Death and dying referred to stressful situations resulting from patients' death and dying. Uncertainty treatment was related to stressful situations that occur when there was uncertainty concerning the treatment of patients. Inadequate preparation referred to stressful situations that related to nurses' efforts to meet the emotional needs of patients and their families. Lack of support referred to stressful situations that related to the lack of opportunities to share experiences with other nurses.

In this study, the variable of coping strategies was derived from Carver's study (1997). Carver defined coping strategies as people's responses to the different stressors. Carver found 14 coping strategies which can be used in response to stressors. The 14 coping strategies were resulted from Carver's further review of the previous study on coping strategies which was conducted by Carver, Scheier, and Weintraub (1989). Those coping strategies were categorized into three groups:

problem-focused, emotion-focused, and dysfunctional. Problem-focused coping strategies consisted of active coping, use of instrumental support, and planning. Emotion-focused coping strategies consisted of acceptance, use of emotional support, humor, positive reframing, and religion. Dysfunctional coping strategies consisted of behavioral disengagement, denial, self-distraction, self-blame, substance use, and venting. In this study, substance use strategy was dropped by the researcher based on three experts' suggestions, due to cultural inappropriateness.

Carver et al. (1989) and Carver (1997) defined those 14 coping strategies above as the followings. Active coping referred to the process of taking active steps to try to remove the stressor or to improve its effects. Use of instrumental support referred to seeking advice, assistance, or information. Planning referred to action strategies, thinking about steps to take and best way to handle the problem. Acceptance included acceptance of a stressor as real occurs in primary appraisal and acceptance of a current absence of active coping strategies related to secondary appraisal. Use of emotional support referred to getting moral support, sympathy, or understanding. Humor referred to making jokes or fun on stressful situations. Positive reframing referred to managing distress emotions rather than at dealing with the stressor itself. Religion referred to finding comfort by turning to religion and practicing religious activities such as praying or meditating. Behavioral disengagement referred to reducing one's effort to deal with the stressor, even giving up the effort to achieve goals with which the stressor is interfering. Denial referred to reports of refusal to believe that the stressor exists or of trying to act as though the stressor does not exist. Self distraction occurred by a wide variety of activities that



provided to distract the person from thinking about the behavioral dimension or goal with which the stressor is interfering. Self blame included criticizing themselves or blaming themselves for things that happened. Substance use was a response by using alcohol, smoke, or certain drugs to help get through the problem or to make better feeling. However, this subscale was dropped in this study because it was not appropriate with culture's setting. Venting included say things to let unpleasant feelings escape and express negative feelings.

Based on literature review, it was found that there were significant relationships between nurses' workplace stressors and coping strategies (Cai, Li, & Zang, 2008; Lambert et al., 2007; Tyson, Pongruengphant, & Aggarwal, 2002; Xianyu & Lambert, 2006). The relationships between study variables are represented in figure 1.

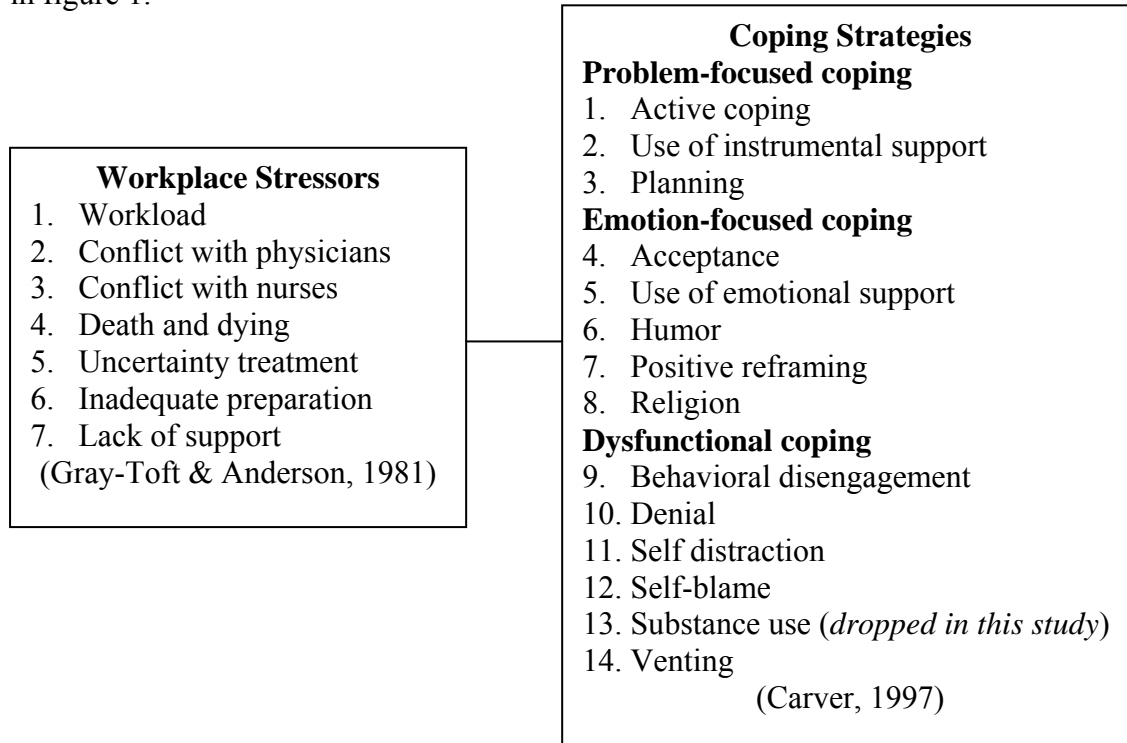


Figure 1 *Conceptual Framework of the Study*

### *Definition of Terms*

*Workplace stressors* referred to the frequency of workplace stressor reported by nurses in public hospital in-patient units. It was measured by the “Nursing Stress Scale” which was developed by Gray-Toft and Anderson (1981). This scale consisted of seven subscales, including workload, conflict with physicians, conflict with nurses, death and dying, uncertainty treatment, inadequate preparation, and lack of support. The higher score of every subscale indicated the higher frequently reported workplace stressor on such subscale, and the higher score of the overall score indicated the higher frequently reported workplace stressors.

*Coping strategies* referred to public hospital nurses’ ways of dealing with workplace stressors. It was measured by the “Brief COPE” questionnaire which was developed by Carver (1997). It consisted of 14 ways of coping which were reflected on active coping, planning, positive reframing, acceptance, humor, religion, use of emotional support, use of instrumental support, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame strategies. The higher score of each subscale indicated the higher frequent use of such ways of coping.

### *Scope of the Study*

This study was a descriptive research, which aimed to investigate the nurses’ workplace stressors and coping strategies. The subjects were nurses who working in in-patient units of two public hospitals in Medan, Indonesia from December 2009 to January 2010.

*Significance of the Study*

The findings of the study provide important information for nurse administrators to recognize the common source of workplace stress and the most frequently used coping strategies in the workplace, especially in the context of public hospitals in Indonesia. The findings also contribute to nursing education, in order to be a knowledge source in studying nurses' workplace stressors and coping strategies.

## **CHAPTER 2**

### **LITERATURE REVIEW**

In this chapter, several aspects relevant to the study are explored and reviewed. Information from this review is presented as follows:

1. Nurses' Workplace Stressors
  - 1.1. Concept of Nurses' Workplace Stressors
  - 1.2. Workplace Stressors in Nursing
  - 1.3. Factors Relating to Nurses' Workplace Stressors
  - 1.4. Measuring Nurses' Workplace Stressors
2. Nurses' Coping Strategies
  - 2.1. Concept of Coping
  - 2.2. Coping Strategies Used by Nurses
  - 2.3. Factors Relating to Nurses' Coping Strategies
  - 2.3. Measuring Nurses' Coping Strategies
3. Relationships Between Nurses' Workplace Stressors and Coping Strategies among Nurses in Indonesia
  - 3.1. Workplace Stressors of Nurses in Indonesia
  - 3.2. Coping Strategies of Nurses in Indonesia
  - 3.3. Workplace Stressors and Coping Strategies among Nurses in Indonesia

### *Nurses' Workplace Stressors*

The researcher reviewed workplace stressors variable based on findings from the literature. First, the review of concept of nurses' workplace stressors is explained. Then, the review of workplace stressors in nursing, factors relating to nurses' workplace stressors, and measuring nurses' workplace stressors are explored.

#### *Concept of Nurses' Workplace Stressors*

Gray-Toft and Anderson (1981) explained nurses' workplace stressors as situations that had been identified as sources of stress for nurses in the performance of their duties. The stress itself defined as an internal sign in the physical, social, or psychological environment that threatened the balance of an individual (Appley & Trumbull; Lazarus as cited in Gray-Toft & Anderson). Therefore, the nurses' workplace stressors could be assessed based on the frequency of stress experienced by nurses with specific stressors in the hospital environment (Gray-Toft & Anderson).

Previous research has suggested that nurses are dealing with a variety of workplace stressors (Lambert & Lambert, 2008). Worldwide shortage of nurses, increase in the aged population, the intensity of health care problems, the incidence of chronic illnesses, and advanced technology contribute to the source of workplace stress (Lambert & Lambert). Workplace stress occurred when the challenges and demands of work become excessive (Lambert & Lambert). In addition, when discrepancy arises between person's expectations of the role and what actual occurrence within the role, the stress is likely to be taking place (Lambert et al., 2004).

### *Workplace Stressors in Nursing*

Gray-Toft and Anderson (1981) found seven major nurses' workplace stressors in their study. They are workload, conflict with physicians, conflict with nurses, death and dying, uncertainty treatment, inadequate preparation, and lack of support. Study findings of seven workplace stressors are explained below. In fact, a study in four different Asia Pacific countries found that workload and death/dying were the most frequent workplace stressors (Lambert et al., 2004). This finding suggest that, regardless of culture and country specific professional role, nurses identify the amount of work that they are expected to perform and the emotional issues surrounding death/dying to be overwhelming (Lambert et al.).

*Workload.* Workload was the most frequently cited workplace stressors in many studies (Cai et al., 2008; Callaghan, Tak-Ying, & Wyatt, 2000; Chang et al., 2006; Chang et al., 2007; Healy & McKay, 2000; Hegney, Eley, Plank, Buikstra, & Parker, 2006; Lambert et al., 2004; Lambert et al., 2007; Lee, 2003; Li et al., 2008; Li & Lambert, 2008; Makinen, Kivimaki, Elovainio, & Virtanen, 2003; McGrath, Reid, Boore, 2003; Salmond & Ropis, 2005; Santos et al., 2003; Tyson & Pongruengphant, 2004; Xianyu & Lambert, 2006). It includes stressful situations that occur from nurses' workload, staffing and scheduling problems, and insufficient time to perform completely nursing tasks and to support patients emotionally (Gray-Toft & Anderson, 1981).

*Conflict with physicians.* Conflict with physicians consists of stressful situations that occur from nurses' interactions with physicians (Gray-Toft & Anderson, 1981). Conflict with physicians was found as a significant stressor in

several studies (Chang et al., 2006; Xianyu & Lambert, 2006). This conflict happened when nurses' opinions about patient care differed from the physicians (Xianyu & Lambert). Thus, a study found that improvement in nurse-physician professional relationship had decreased nurses' workplace stress (Arikan, Köksal, & Gökçe, 2007).

*Conflict with nurses.* Conflict with nurses is related to conflictual situations that occur between nurses and their colleagues/supervisors (Gray-Toft & Anderson, 1981). Conflict with nurses was found as a significant stressor in several studies (Chang et al., 2006; Healy & McKay, 2000; Isikhan, Comez, & Danis, 2004; Lee, 2003; Mäkinen et al., 2003). Conflict with colleagues was possible in each environment where multidisciplinary intervention was needed (Isikhan et al., 2004). Therefore, co-operative relations with colleagues and working in a friendly environment were factors considered to develop a positive attitude towards nurses' jobs (Isikhan et al.).

*Death and dying.* Death and dying is related to stressful situations resulting from patients' death and suffering (Gray-Toft & Anderson, 1981). Death and dying was found as a significant stressor in several studies (Cai et al., 2008; Chang et al., 2006; Lambert et al., 2004; Payne, 2001; Tyson & Pongruengphant, 2004; Xianyu & Lambert, 2006). Xianyu and Lambert's study found that this stressor was one of the most nurses' common workplace stressors in China. They explained that nurses in China had not received adequate education about dealing with death/dying, so they do not know how to express their emotions when encountering the death or dying process of a patient (Xianyu & Lambert).

*Uncertainty treatment.* Uncertainty treatment is related to stressful situations that occur when there is uncertainty concerning the treatment of patients (Gray-Toft & Anderson, 1981). This may develop when communication between nurses and physicians are inadequate regarding patients' medical conditions (Gray-Toft & Anderson). Then, the nurses do not know how to tell patients or their family about the medical condition and its treatment (Gray-Toft & Anderson). Other stressful situations occur when a physician is not present in a medical emergency (Gray-Toft & Anderson). Uncertainty treatment was reported as a significant workplace stressor (Chang et al., 2006; Chang et al., 2007; Healy & McKay, 2000).

*Inadequate preparation.* Inadequate preparation is related to nurses' efforts to meet the emotional needs of patients and their families. Feeling inadequately prepared may lead to stress (Gray-Toft & Anderson, 1981). Inadequate preparation was found as one of significant workplace stressors (Isikhan et al., 2004). Nguyen (2009) said that as an essential part of the health care team, nurses act as patient advocates by collaborating with other professionals in providing information to meet the emotional needs of patients and their families.

*Lack of support.* Lack of support is related to nurses' assessment of the extent to which opportunities are available to share experiences with other nurses and to escape negative feelings of anger and frustration. The lack of such opportunities may lead to stress (Gray-Toft & Anderson, 1981). Lack of support was found as a significant workplace stressor (Salmond & Ropis, 2005; Tyson et al., 2002). Effective coping working relationships and communication with other nurses,



as well as adequate support from supervisors were required in performing nursing job (Salmond & Ropis).

*Factors Relating to Nurses' Workplace Stressors*

Lambert et al. (2007) found that age, number of years worked as a nurse, number of years worked on the current clinical unit and income level related significantly to workload as the most frequently cited workplace stressors. The findings suggested that the longer nurses are in the workforce, the more likely they perceive an increase in workload. In other words, when nurses became more experienced, the more that responsibilities and work demands increase (Lambert et al.).

Cai et al. (2008) also identified a positive correlation between age, number of years worked as a nurse, and conflict with physicians as one of workplace stressors. It was assumed that, when a nurse become older and more experienced in nursing role, he or she is less likely to adhere to his or her physicians' order (Cai et al.). As a result, conflict between physicians and the nurse is more likely to occur (Cai et al.). Salmond and Ropis (2005) also found that age and number of years worked as a nurse negatively related to the lack of support as one of workplace stressors. It was indicating that older nurses felt a lower frequency of lack of support (Salmond & Ropis).

Age was also found as a significant predictor of nurses' workplace stressors (Li et al., 2008). This finding indicated that the younger the nurse' age, the more perceived work stress (Li et al.). Liu (as cited in Li et al.) explained the reason

of this might be because the younger nurses felt less work commitment and also felt unqualified in their work.

### *Measuring Nurses' Workplace Stressors*

There are several instruments used to measure nurses' workplace stressors. Some of them could be used in general, and some specified for certain units. The researcher will explain three instruments which measure nurses' workplace stressors as below.

*The Post-Code Stress Scale.* The Post-Code Stress Scale was found appropriate for measuring workplace stressors experienced by critical care nurses (Cole, Slocumb, Mastey, 2001). This instrument was also found to be economical with only 14 items. It was practical and easy to conduct, needing minimal time commitment (Cole et al., 2001). However, additional psychometric testing was needed and confirmatory factor analysis was also required to examine the adequacy of the factor model's fit to the data (Cole et al.). Moreover, the contrasted group form of construct validity was also assessed and additional evidence of convergent validity was also needed and could be assessed by administering other scales that measure stress (Cole et al.).

*Nurse Stress Index.* The Nurse Stress Index (NSI) is a tool to measure workplace stressors among nurses (Flanagan, 2006). It consists of six components: managing workload/time, organizational support and involvement, dealing with patients and relatives; managing workload/priorities, home/work conflict, and confidence or competence in role (Flanagan). The NSI is a 30-item instrument developed through a repetitive process of testing among 1,328 nurses in

England (Flanagan). There are statements for each of the six major areas of nurse stress, totaling 30 items in the NSI (Flanagan). Response rate each of the 30 items on a Likert-type scale ranges from 1 (no pressure) to 5 (extreme pressure). The maximum stress score could be as high as 150. The internal consistency of Cronbach's alpha coefficient for the NSI was .92 for both the original and replication studies (Flanagan).

*The Nursing Stress Scale.* The Nursing Stress Scale (NSS) was developed by Gray-Toft and Anderson (1981). It consisted of 34 items that described situations identified as causing stress for nurses in the performance of their tasks. It provided a total stress score as well as scores on each of seven subscales that measured the frequency of workplace stressors experienced by nurses in the hospital environment. Those 34 items were distributed into seven heterogeneous and potentially stressful situations, including death and dying patients (7 items), conflict with physicians (5 items), inadequate preparation (3 items), lack of staff support (3 items), conflict with other nurses (5 items), workload (6 items), and uncertainty concerning treatment (5 items). A 4-point Likert scale was used to indicate the frequency of workplace stressors experienced by nurses from never (1), occasionally (2), frequently (3), to very frequently (4). The results were calculated from total scores ranging from 34 to 136. A higher score indicated a higher frequency of workplace stressors experienced by the participants.

The NSS has demonstrated acceptable reliability and validity estimates (Gray-Toft & Anderson, 1981). Factor analysis indicated seven major sources of stress that closely paralleled the conceptual categories of stress (Gray-Toft

& Anderson). Test-retest reliability as well as four measures of internal consistency indicated that the NSS and its seven subscales were reliable (Gray-Toft & Anderson). Internal consistency of the NSS was measured by the Spearman-Brown coefficient (.79), the Guttman split-half coefficient (.79), a coefficient alpha (.89), and a standardized item alpha (.89). Most subscales examined by these four statistical methods exceeded .70, except for the categories of lack of staff support (.46 – .65) and conflict with physicians (.68 – .71) (Gray-Toft & Anderson). A comparison of test-retest reliability for each subscale revealed that only the lack of staff support subscale was less than .70, which indicated that items in the lack of staff support category were unstable, showed less homogeneity, and did not precisely measure the frequency of workplace stressors (Gray-Toft & Anderson). Validity was determined by correlating the total score from the NSS with measures of trait anxiety, job satisfaction, and nursing turnover hypothesized to be related to stress. Factor loadings for the items of the NSS ranged from .34 to .86 and were quite consistently distributed among seven factors (Gray-Toft & Anderson).

The NSS has been translated into several languages, including Spanish and French, and recently into Chinese (Lee, Holzemer, & Faucett, 2007). There was adequate evidence of the reliability and validity of the NSS-Chinese as an instrument suitable to measure workplace stressors among Chinese nurses (Lee et al., 2007).

Based on the explanation above, it can be concluded that various stressors had been identified in previous studies. Workload was the most often reported stressor in several studies. In this study, the researcher selected the NSS to

measure public hospital nurses' workplace stressors, because it has been widely accepted to be used in many countries.

### *Nurses' Coping Strategies*

In this part, the researcher will present coping strategies variable based on findings from the literature. First, the review of concept of coping will be explained. Then, the review of coping strategies used by nurses, factors relating to nurses' coping strategies, and measuring nurses' coping strategies will be explored.

#### *Concept of Coping*

Lazarus and Folkman (1984) defined coping as a constant changing of cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person. This definition is more comprehensive than the traditional approaches, because it is process-oriented, limits coping to conditions of psychological stress, permits coping to include anything that the person does or thinks, and avoids equating coping with mastery (Lazarus & Folkman).

Lazarus and Folkman (1984) concluded that many sources of stress cannot be mastered, therefore, coping should not be equated with mastery over the environment. Effective coping under these circumstances is that which allows the person to tolerate, minimize, accept, or ignore what cannot be mastered (Lazarus & Folkman).

Modalities of coping may vary across cultural and historical divides, as will perceptions of the severity or otherwise of life-events (Keil, 2004). However, Keil explained that on a general level the term seems to attach to important features of lived experience, across both physical and psychological realities, and therefore it seems reasonable to suppose that it is a concept found in any culture or historical period. The ability of people to cope with a given set of circumstances, whether as patients or carers, will play an important role in the effectiveness of nursing interventions (Keil).

#### *Coping Strategies Used by Nurses*

There are 14 coping strategies used by people, which were classified as problem-focused, emotion-focused, and dysfunctional (Carver, 1997; Carver et al., 1989). Problem-focused coping strategies included active coping, use of instrumental support, and planning. Emotion-focused coping strategies included acceptance, use of emotional support, humor, positive reframing, and religion. Dysfunctional coping strategies included behavioral disengagement, denial, self-distraction, self-blame, substance use, and venting.

*Problem-focused coping.* Problem-focused coping is intended to problem solving or do something to alter to alter the source of stress (Carver et al., 1989). There are three coping strategies included in problem-focused coping: active coping, use of instrumental support, and planning (Carver, 1997).

### 1. *Active coping*

People use active coping as the process of taking active steps to try to remove the stressor or to improve its effects (Carver et al., 1989). Active coping consists of initiating direct action, increasing one's efforts, and trying to execute a coping attempt in stepwise way (Carver et al.). Li and Lambert (2008) found that nurses more frequently used this strategy as workload increased.

### 2. *Use of instrumental support*

Nurses use instrumental support by seeking advice, assistance, or information (Carver et al., 1989). A good collaboration with colleagues is one example of using instrumental support because colleagues often help to cope with tasks at work (Ekedahl & Wengström, 2006).

### 3. *Planning*

Planning is thinking about how to cope with a stressor, includes coming up with action strategies, thinking about steps to take and best way to handle the problem (Carver et al., 1989). Planning was reported as one of the most used coping strategies by nurses in several studies (Chang et al., 2006; Chang et al., 2007; Healy & McKay, 2000; Kalichman, Gueritault-Chalvin, & Demi, 2000; Lambert et al., 2004; Li & Lambert, 2008; Payne, 2001; Xianyu & Lambert, 2006).

*Emotion-focused coping.* Emotion-focused coping is intended to reduce or manage the emotional distress that is associated with the situation (Carver et al., 1989). There are five coping strategies included in emotion-focused coping: acceptance, use of emotional support, humor, positive reframing, and religion (Carver, 1997).

### 1. *Acceptance*

Acceptance occurs on two aspects of the coping process: acceptance of a stressor as real occurs in primary appraisal and acceptance of a current absence of active coping strategies relates to secondary appraisal (Carver et al., 1989). Nurses might expect acceptance to be particularly essential when stressor must be accommodated to rather than can easily be changed (Carver et al.).

### 2. *Use of emotional support*

People use emotional support by getting moral support, sympathy, or understanding (Carver et al., 1989). It is evident that emotional support can be given not only by family but also by colleagues (Ekedahl & Wengström, 2006). In their study, Callaghan et al., (2000) found that most nurses used emotional support strategy from colleagues and family members. Those findings confirm the buffer theory of social support which suggests that significant others are a primary source of social support because they buffer a person from the stresses of life (Callaghan & Morrissey as cited in Callaghan et al.).

### 3. *Humor*

People use humor strategy by making jokes or fun on stressful situations (Carver, 1997). Humor is one strategy nurses can use to cope with very stressful workplace environment (Miracle, 2007). It is also used as a coping strategy at the individual and group level (Ekedahl & Wengström, 2006). Humor can minimize the tension of stressful times in nursing workplace and can also help co-workers take a quick break and become recharged for the next nursing task (Huntley, 2009).



#### 4. *Positive reframing*

Carver et al. (1989) used this term based on Lazarus and Folkman (1984) concept of positive reappraisal. Positive reframing is a type of emotion-focused coping which aimed at managing distress emotions rather than at dealing with the stressor itself (Carver et al.). Positive reframing was found as one of the most used coping strategies in Asian nurses' context (Lambert et al., 2004; Lambert et al., 2007). In addition, Cai et al. (2008) found that nurses used this coping strategies as part of positive coping strategies more frequently than negative coping strategies.

#### 5. *Religion*

People might turn to religion when they are under stress for widely varying reasons, religion might provide as a source of emotional support, as a frame for positive reinterpretation and growth, or as a tactic of active coping with a stressor (Carver et al., 1989). They might find comfort by turning to religion and practicing religious activities such as praying or meditating (Carver, 1997). Therefore, a study on oncology nurses found that religious awareness was important to create spirit at work (Medland, Howard-Ruben, & Whitaker, 2004). Praying as a coping strategy could be practiced during work and personal time (Ekedahl & Wengström, 2008).

*Dysfunctional coping.* Dysfunctional coping is coping responses that arguably less useful (Carver et al., 1989). There are six coping strategies included in dysfunctional coping: behavioral disengagement, denial, self-distraction, self-blame, substance use, and venting (Carver, 1997).

### 1. *Behavioral disengagement*

Behavioral disengagement refers to reducing one's effort to deal with the stressor, even giving up the effort to achieve goals with which the stressor is interfering (Carver et al., 1989). Behavioral disengagement is found in phenomena that are also identified with terms such as helplessness. In theory, behavioral disengagement is most likely to arise when people expect poor coping outcomes (Carver et al.).

### 2. *Denial*

Denial is a response that sometimes emerges in primary appraisal (Carver et al., 1989). Denial refers to reports of refusal to believe that the stressor exists or of trying to act as though the stressor does not exist. Denial is often useful by minimizing distress, but it can create additional problems (Carver et al.).

### 3. *Self distraction*

Self distraction occurs by a wide variety of activities that provide to distract the person from thinking about the behavioral dimension or goal with which the stressor is interfering (Carver et al., 1989). Nurses used this strategy in their workplace by doing cognitive management (not thinking about work when off duty) (Callaghan et al., 2000), and it found to be significant effectively strategy to reduce workplace stress (Tyson et al., 2002). Reading a book, petting the cat, watching movies, cooking or playing a game are examples of self distraction (Ekedahl & Wengström, 2006). Another example of self distraction used by a nurse is spending time with his or her own children, by doing so he or she temporarily forgets his or her work and is re-energized through that relationship (Ekedahl & Wengström).

#### 4. *Self-blame*

There are two types of self-blame: behavioral and characterological (Janoff-Bulman as cited in Alexis, Vydelingum, & Robbins, 2007). Behavioral self-blame relates to modifiable source, such as a person's behavior. In contrast, characterological self-blame relates to non-modifiable source, such as one's character. Nurses use self-blame strategy by criticizing themselves or blaming themselves for things that happened (Carver, 1997). Corney (2008) found that the nurses in her study blamed themselves as soon as or even before something went wrong.

#### 5. *Substance use*

Substance use is a response by using alcohol, smoke or certain drugs to help get through the problem or to make better feeling (Carver, 1997). Self-medicating by using alcohol, smoke or drugs may seem like an easy way to escape from stress, but it is only temporary relief (Lambert & Lambert, 2008). In addition, the side effects of the substances have been proven fatal (Lambert & Lambert).

#### 6. *Venting*

Nurses use venting strategy when they tend to focus on whatever distress or upset experience and to ventilate those feelings (Scheff as cited in Carver et al., 1989). They say things to let unpleasant feelings escape and express negative feelings (Carver, 1997). In Ekedahl and Wengström's (2006) study, it was found that an oncology nurse used venting feelings to her family members and friends.

### *Factors Relating to Nurses' Coping Strategies*

There are two factors relating to a person's coping strategy: coping resources and coping constraints (Lazarus & Folkman, 1984). Coping resources include health and energy, existential beliefs (for example belief about God or general beliefs about control), commitments, problem solving skills, social skills, social support, and material resources (Lazarus & Folkman). Coping constraints include personal constraints (including internalized cultural values and beliefs that prohibit certain ways of behaving and psychological deficits), environmental constraints (including demands that compete for the same resources), and high levels of threat which prevent a person from using coping resources effectively (Lazarus & Folkman).

Particularly in nursing, Lambert et al. (2007) found that age, number of years worked as a nurse, number of years worked on the current clinical unit, likelihood of leaving nursing profession within the next 12 months, number of people in the household related to coping strategies. Cai et al. (2008) also found that number of years worked as a nurse was found to be positively correlated with negative ways of coping. In other words, as nurses become older, they often tend to use negative ways of dealing with stressful events (Cai et al.).

### *Measuring Nurses' Coping Strategies*

A variety of distinctive coping measures exist, but in recent years, researchers have usually used one of two instruments: the Ways of Coping Questionnaire (Lazarus & Folkman, 1984) or the COPE/Brief COPE (Carver et al., 1989). Both instruments are explained below.

*Ways of Coping Questionnaire.* The Ways of Coping Questionnaire was developed by Lazarus and Folkman (1984). It measures coping by having people reconstruct recent stressful encounters and describe what they thought, felt, and did. It can either be self-administered or administered by an interviewer (Lazarus & Folkman).

In addition to the broad functions of emotion- and problem-focused coping, the items on the checklist consist of four basic modes of coping: direct action, inhibition of action, information search, and a complex category referred to as intrapsychic or cognitive coping (Lazarus & Folkman, 1984). Factor analyses of the Ways of Coping Questionnaire differentiate seemingly problem-focused factors, made up of cognitive and behavioral problem-solving strategies and a number of emotion-focused factors (Lazarus & Folkman).

*COPE and the Brief COPE.* COPE was developed by Carver et al. (1989). It is a multidimensional coping inventory which assesses the different ways in which people respond to stress (Carver et al.). Five scales (of four items each) measure conceptually distinct aspects of problem-focused coping (active coping, planning, suppression of competing activities, restraint coping, and seeking of instrumental social support); five scales measure aspects of what might be explained as emotion-focused coping (seeking of emotional social support, positive reinterpretation, acceptance, denial, and turning to religion); and three scales measure coping responses that arguably are less useful (focus on and venting of emotions, behavioral disengagement, and mental disengagement) (Carver et al.). They state that the starting point for conducting research regarding this instrument was the

conceptual analysis of stress and coping offered by Lazarus and Folkman (1984) model of coping (Carver et al.).

Carver et al. (as cited in Carver, 1997) found that samples became impatient when completing COPE. COPE also has been considered redundant, because it consists of 60 items instruments with 4 items per scale (Carver). Therefore, Brief COPE as a brief form of COPE is designed. This instrument has been proven to be useful in health-related research. The Brief COPE consists of 14 scales, of two items each. Two scales from the full COPE were removed from the brief form because they had not proven useful in previous work. Three other scales were refocused slightly, because they had proven to be problematic in previous work. One scale was added because of evidence of the importance of the response (Carver).

It can be concluded that people use their coping strategies to deal with many stressors. Thus, in their daily work, nurses also use coping strategies to deal with their daily stressors. The most common used coping strategy in previous studies was planning. In this study, the researcher selected the Brief COPE to examine public hospital nurses' coping strategies, because it is more useful and practical than the full COPE and other instruments.

#### *Relationships Between Nurses' Workplace Stressors and Coping Strategies among Nurses in Indonesia*

A previous study found that there were relationships between nurses' workplace stressors and coping strategies (Cai et al., 2008; Lambert et al., 2007; Xianyu & Lambert, 2006). Cai et al. found the significant positive correlation

between ways of positive coping strategies and the workplace stressors (workload, conflict with physicians, and death/dying). They also found the positive correlation between negative ways of coping and both the workplace stressors of inadequate preparation and uncertainty treatment (Cai et al.). Moreover, Tyson et al. (2002) found that workload and work conflicts were correlated with avoidance strategy.

#### *Workplace Stressors and Coping Strategies of Nurses in Indonesia*

Several studies on nurses' workplace stressors conducted in Indonesia, however, limited studies were found on nurses' coping strategies and the relationships between nurses' workplace stressors and coping strategies. A survey found that 50.9% nurses who work in four provinces in Indonesia experienced work stress, frequent headaches, exhaustion, and sleep disturbance (Rachmawati, 2007). It was also found that the top three nurses' workplace stressors were workload, unfair salaries, and workplace conditions (Ilmi, 2003; Rofiah, 2006).

In summary, previous studies in some countries found that there were relationships between nurses' workplace stressors and coping strategies. However, in Indonesian context, studies on the relationships between nurses' workplace stressors and coping strategies were seldom found. So, it was considered important to investigate those variables and the relationships between them particularly in Medan.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

This chapter describes the research design, population and setting, sample and sampling, ethical considerations, data collection procedure, and data analysis that were used in the present study.

#### *Research Design*

This is a descriptive correlation study. A cross-sectional design was used to examine data in public hospitals in Medan, North Sumatera Province, Indonesia.

#### *Population and Setting*

##### *Population*

The populations of this study were nurses who work in public hospitals in Medan, North Sumatera Province, Indonesia.

##### *Setting*

There are two public hospitals in Medan, Haji Adam Malik Hospital and Pirngadi Hospital. Both of them were the settings for this study. There are 650 beds in Haji Adam Malik Hospital, and 600 beds in Pirngadi Hospital. These hospitals are similar in that they are referral and teaching hospitals. The nurses in both hospitals work with high technology equipment in their daily nursing activities. They also use complicated treatment as patients from other hospitals are referred to both



hospitals. Therefore, the nurses' workplace stressors in both hospitals may be felt relatively more frequently than those in other hospitals in Medan.

### *Sample and Sampling*

#### *Sample Size*

Power analysis was used to determine the number of subjects needed in this study. The accepted minimum level of significance ( $\alpha$ ) to estimate the sample size was .05 with the power of .80 ( $1 - \beta$ ). The values of  $\alpha$  and  $1 - \beta$  are the conventional standard for most nursing studies (Polit & Beck, 2008). The estimated population effect size was predicted based on available evidence from a previous study by Li and Lambert (2008). The researcher used the lowest effect size ( $\gamma$ ) .25 of Li and Lambert's finding. Therefore, the number of subjects who were involved in this study was 126 (Polit & Beck).

#### *Sampling Technique*

The researcher applied a stratified random sampling technique to select the subjects. In order to enhance the representativeness for the involvement of nurses in all in-patient units, the researcher stratified the population based on unit groups. The groups of units were determined based on the similarity of the unit's nursing tasks and working situations. There were three groups of units: (1) Medical Integrated In-Patient Care Unit (including adult, pediatric, and obstetric/gynecologic units), (2) Surgical Integrated In-Patient Care Unit (including adult, pediatric, and obstetric/gynecologic units), and (3) Critical Care Unit (including Intensive Care Unit, Cardio-Vascular Care Unit, and Stroke Unit). The researcher obtained the number of

subjects by using a proportionate stratified sampling technique for each group of units. In other words, 126 subjects were distributed proportionately for each group of units. The researcher divided the 126 subjects between both hospitals, so in each hospital 63 subjects were recruited.

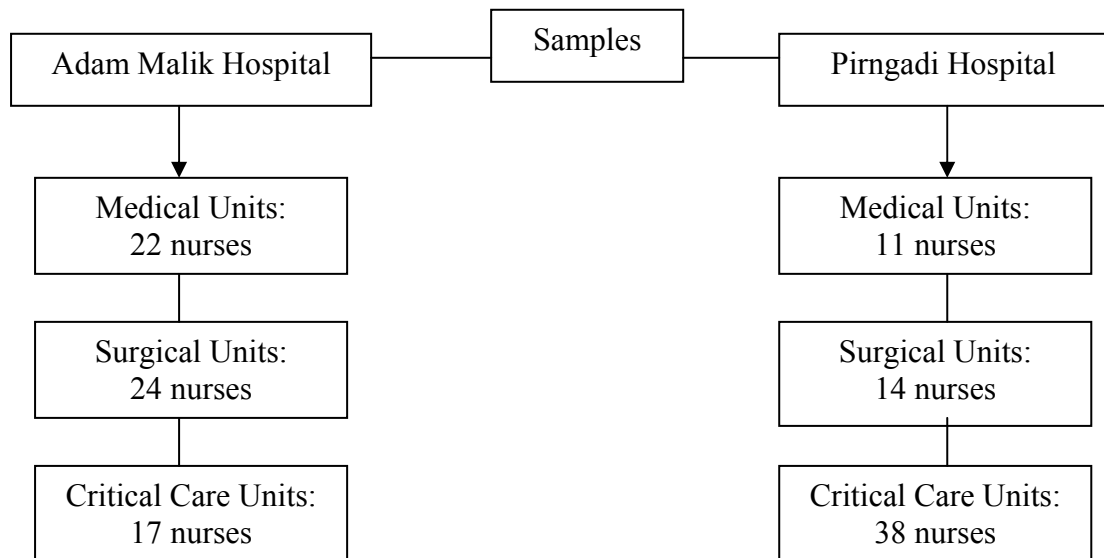


Figure 2 *Numbers of Samples for Each Hospital*

A sampling frame was prepared based on the name list of the nurses who met the inclusion criteria in each group of units. Then, the researcher randomly selected a certain number of nurses in each group of units. In order to help the researcher in the randomization process, a free-online randomization website ([www.randomizer.org](http://www.randomizer.org)) was applied.

The researcher set the following inclusion criteria:

1. Nurses who had a minimum 12 months nursing experience.
2. Nurses who had had experience of working in their current position for at least 6 months.

### *Instruments*

An instrument package consisting of 3 parts was used in this study. They were: (1) the “Demographic Data Questionnaire”, (2) the “Nursing Stress Scale”, and (3) the “Brief COPE”.

#### *Part 1: The “Demographic Data Questionnaire”*

The Demographic Data Questionnaire was constructed by the researcher. It asked for information regarding the name of the unit, the subject's age, gender, religion, ethnicity, marital status, type of nursing education, current position, years of experience in nursing, years of experience in the current area of work, and the likelihood of leaving the nursing profession within the next 12 months.

#### *Part 2: The “Nursing Stress Scale”*

The Nursing Stress Scale was developed by Gray-Toft and Anderson (1981). It measures the frequency and sources of nurses' workplace stress. The reliability scores of most subscales exceeded .70 and factor loadings for the items ranged from .34 to .86 (Gray-Toft & Anderson). The 33-item scale consists of seven subscales. There are 5 items measuring workload, 5 items on uncertainty treatment, 5 items on conflict with other nurses, 5 items on conflict with physicians, 3 items on inadequate preparation, 3 items on lack of support, and 7 items on death/dying. Originally, this instrument consisted of 34 items but 1 item was excluded by the researcher. That item was question number 1 “Breakdown of computer” which was considered not relevant in the context of the selected hospitals.

The Nursing Stress Scale (NSS) was rated on the following four response categories: 1 = never, 2 = occasionally, 3 = frequently, and 4 = very frequently. The levels of the NSS subscales were identified based on its total mean score: 1.00 – 2.00 = low level, >2.00 – 3.00 = moderate level, and >3.00 – 4.00 = high level. The higher score of every subscale indicated a higher frequency of workplace stressor for that subscale as perceived by nurses.

*Part 3: The “Brief COPE”*

The Brief COPE was developed by Carver (1997) to measure a person’s coping strategies. Carver found that all primary loadings of Brief COPE exceeded .4 and 22 of 28 were above .6. The alpha’s coefficients of all items exceeded .50. The Brief COPE consists of 28 items which measures 14 ways of coping: self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. The scale is rated on the following 4 response categories: 1 = I have not been doing this at all, 2 = I have been doing this a little bit, 3 = I have been doing this a moderate amount, and 4 = I have been doing this a lot. In this scale, the researchers measured the average mean score of each subscale as follows: 1.00 – 2.00 = low level, >2.00 – 3.00 = moderate level, and >3.00 – 4.00 = high level. A higher score on each subscale indicates a higher frequency of using such ways of coping.

In order to maintain the copyright issue, the researcher asked for permission to use the NSS and the Brief COPE from the developers. The letters of permission are attached in Appendix B.

### *Translation of the Instruments*

The NSS and the Brief COPE developed in the English language were translated into the Indonesian language using the back translation method. The Indonesian translation and back translation were done by two bilingual experts. Then, comparisons of the back-translated English version of the instruments were checked against the original English version, by a native English speaker for similarity and consistency and to ensure no changes in meaning occurred during the translation process.

### *Cultural Applicability and Reliability of the Instruments*

The original NSS and Brief COPE were checked for cultural applicability by three Indonesian experts. Two experts were recruited from the Nursing Faculty, University of Sumatera Utara, and another expert was recruited from Adam Malik Hospital. Based on the experts' suggestions, the researcher deleted two items of the Brief COPE: item number four "I have been using alcohol or other drugs to make myself feel better" and item number eleven "I have been using alcohol or other drugs to help me get through it". Both items were deleted because drinking alcohol is not commonly used as a coping strategy when people deal with stressors in the cultural context of Medan.

In order to test the reliability of the NSS and the Brief COPE, the researcher tried out the translated instruments with 30 subjects who had similar characteristics to the population of the study in the pilot study. Cronbach's alpha coefficients were computed to assess internal consistency of the NSS and the Brief COPE. Cronbach's alpha coefficients of the NSS and Brief COPE in the pilot study

were .94 and .80, respectively. In addition, the researcher also computed the alpha coefficients for the actual data and found the alpha coefficients of the NSS and Brief COPE to be .92 and .86, respectively.

### *Ethical Considerations*

This study was conducted with the intention of protecting the human rights of all subjects. The approval of the Institutional Review Board, Faculty of Nursing, Prince of Songkla University, Thailand was obtained. The permission for data collection in this study was also obtained from the Directors of Adam Malik and Pirngadi Hospital, Medan, Indonesia. Every subject had freedom to ask for explanation regarding the instrument or to withdraw from this study at any time with no consequences. Subjects were assured that the data would be kept confidential. The researcher also used a coding system for subjects' identity and protected privacy to ensure anonymity.

### *Data Collection*

Data collection was conducted at the selected hospitals from December 2009 to January 2010. The steps of data collection were conducted as follows:

#### *Preparation Phase*

1. Permission was obtained from the Director of each hospital.
2. The Head of the Nursing Division in each hospital was approached and permission was asked for, for collecting data, and the nurses' name list was also requested.

3. The samples were randomly selected as discussed earlier.
4. The head nurse of each unit was approached and informed about this research and their cooperation was also asked for during data collection.

#### *Implementation Phase*

1. The questionnaire package was given to the head nurses, and they were asked to distribute these to the selected nurses in their units.
2. One week was given to the selected nurses to answer the questionnaires and they were requested to return the completed questionnaires to their head nurse.
3. The completed questionnaires were collected from all head nurses, and each was checked for completeness.

#### *Data Analysis*

##### *Demographic Data*

Descriptive statistics were performed to analyze the subjects' demographic characteristics. Then, demographic data were presented in frequency and percentage. The researcher also provided mean, standard deviation, and range for the subject's age, number of people in their household, number of years of experience in nursing, and number of years of experience in the current area of work.

##### *Nurses' Workplace Stressors and Coping Strategies*

Descriptive statistics were performed to analyze each variable. The total scores of workplace stressors for each subject were classified into 3 levels, and frequency and percentage for each level were displayed. In addition, each subscale of

workplace stressors and coping strategies were also presented in mean, standard deviation, and subscale level.

The normality assumption and linearity of most subscales in this study was met. Pearson's moment correlation coefficient ( $r$ ) was used to test the correlations between nurses' workplace stressors' and coping strategies' subscales. However, total workplace stressors and three workplace stressors' subscales, workload, uncertainty about treatment, and conflict with other nurses, and also one of the coping strategy subscales, religion were not normally distributed for these subscales. The Spearman coefficient ( $\rho$ ) was applied. The level of significance  $p < .05$  for a two-tailed test was considered statistically significant for the relationship of both variables.



## CHAPTER 4

### RESULTS AND DISCUSSION

#### *Results*

This chapter presents the results from the study and a discussion of the results. This research was designed to examine the relationship between workplace stressors and coping strategies among public hospital nurses in Medan, Indonesia. One hundred and twenty six subjects were recruited from medical, surgical, and intensive care units in Adam Malik and Pirngadi Hospital, Medan, Indonesia. The results of this study are presented in two parts. The first part is demographic data and the second part is nurses' workplace stressors and coping strategies.

#### *Demographic Data*

Table 1 shows the demographic characteristics of the subjects. The average age of the subjects was 37 years ( $SD = 8.02$ ) and most of them (92.1 %) were female. The majority of the subjects' ethnic was Batak (71.4%), and more than half of them (62.7%) were Christians. Most of the subjects (66.7%) had certificate in nursing diploma. The majority of the subjects (84.9%) were married. Almost all of the subjects (96%) were staff nurses and the rest of them (4%) were clinical instructors. The average year of subjects' experience in nursing was 13 years ( $SD = 7.27$ ) and the average of their experience in current area of work was 7 years ( $SD = 4.91$ ). Nearly all subjects (98.4%) did not intend to leave their nursing profession within the next 12 months.

Table 1

*Frequency and Percentage of Subjects' Demographic Characteristics (N = 126)*

Subjects' Characteristics	Frequency	Percentage
Age (years)		
≤ 30	29	23.0
31 – 40	49	38.9
41 – 50	41	32.5
51 – 60	7	5.6
<i>(M = 37.33, SD = 8.02, min – max = 22 – 56)</i>		
Gender		
Male	10	7.9
Female	116	92.1
Ethnic		
Batak	90	71.4
Javanese	17	13.5
Malay	6	4.8
Others	13	10.3
Religion		
Islam	47	37.3
Christianity	79	62.7
Level of education		
Senior High School in Nursing	13	10.3
Diploma	84	66.7
Bachelor	29	23.0
Marital Status		
Single	17	13.5
Married	107	84.9
Widowed	2	1.6

Table 1 (Continued)

Subjects' Characteristics	Frequency	Percentage
Current position		
Staff nurse	121	96.0
Clinical Instructor	5	4.0
Years of experience in nursing		
1 – 9 years	39	31.0
10 – 19 years	62	49.2
≥ 20 years	25	19.8
$(M = 13.05, SD = 7.27, min - max = 1 - 34)$		
Years of experience in current area of work		
6 months – 5 years	60	47.6
6 – 10 years	44	35.0
> 10 years	22	17.4
$(M = 7.05, SD = 4.91, min - max = 1 - 26)$		
The likelihood of leaving nursing profession within the next 12 months		
Yes	2	1.6
No	124	98.4

### *Nurses' Workplace Stressors and Coping Strategies*

Table 2 shows the frequency and percentage of subjects classified by the levels of stressors. Most of the subjects (70.6%) were in the low category that means they seldom experienced workplace stressors. However, there were only 2.4% of the subjects frequently experienced workplace stressors.

Table 2

*Range of Score, Frequency, and Percentage of Subjects Classified by the Level of Total Workplace Stressors (N = 126)*

Item	Frequency	Percentage
Workplace stressors (M = 61.69, SD = 14.12)		
Low	89	70.6
Moderate	34	27.0
High	3	2.4

Table 3 shows the mean, standard deviation, and level of every subscale of the workplace stressors and coping strategies. Death and dying was the most frequently reported workplace stressors by the subjects. In addition, the most frequently used coping strategy was religion.

Table 3

*Mean, Standard Deviation, and Level of Subjects' Workplace Stressors and Coping Strategies (N = 126)*

Item	M	SD	Level
Total workplace stressors	1.32	0.51	Low
Death/dying	2.07	0.57	Moderate
Workload	1.96	0.63	Low
Uncertainty about treatment	1.91	0.58	Low
Conflict with physicians	1.89	0.53	Low
Lack of support	1.69	0.57	Low
Inadequate preparation	1.67	0.59	Low
Conflict with other nurses	1.65	0.52	Low

Table 3 (Continued)

Item	M	SD	Level
Coping strategies			
Problem-focused coping			
Active coping	3.00	0.72	Moderate
Planning	2.89	0.68	Moderate
Use of instrumental support	2.86	0.67	Moderate
Emotion-focused coping			
Religion	3.51	0.66	High
Positive reframing	2.94	0.67	Moderate
Acceptance	2.66	0.71	Moderate
Use of emotional support	2.27	0.69	Moderate
Humor	1.89	0.64	Low
Dysfunctional coping			
Venting	2.41	0.65	Moderate
Self distraction	2.29	0.69	Moderate
Self-blame	2.23	0.71	Moderate
Denial	1.87	0.61	Low
Behavioral disengagement	1.69	0.65	Low

*Correlations Between Nurses' Workplace Stressors and Coping Strategies*

Table 4 and 5 shows that a number of significant correlations were found. Total workplace stressors and all of workplace stressor's subscales were significantly and positively correlated. It was also significantly and positively correlated with emotion-focused coping strategies and dysfunctional coping strategies. However, total workplace stressors was significantly and negatively correlated with problem-focused coping strategy: planning.

Four of workplace stressors' subscale (workload, uncertainty treatment, conflict with nurses, and conflict with physicians) and both of emotion-focused and dysfunctional coping strategies were found to have significant positive correlations. In addition, three of workplace stressors (workload, uncertainty treatment, and conflict with physicians) and problem-focused coping strategies were not significantly correlated.

Significant negative correlations were found between three of workplace stressors (conflict with nurses, inadequate preparation, and death/dying) and problem-focused coping strategies. Significant negative correlations were also found between two of workplace stressors (inadequate preparation and death/dying) and emotion-focused coping strategies.

Table 4

*Correlation Matrix between Subscales for Workplace Stressors and Coping Strategies (N = 126)*

Subscale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Workplace stressors <sup>a</sup>	—	.73**	.74**	.75**	.75**	.73**	.53**	.63**	.28**	-.01	-.07	.18*	-.02	.30**	.16	-.01	-.26**	.36**	.08	-.11	.29**
2. Workload <sup>a</sup>		—	.67**	.51**	.65**	.39**	.25**	.23**	.12	-.01	.15	.22**	.16	.09	.39**	.12	-.11	.24**	.15	.07	.35**
3. Uncertainty treatment <sup>a</sup>			—	.45**	.63**	.41**	.26**	.31**	.25**	.09	.09	.27**	.09	.15	.25**	.11	-.05	.26**	.16	.06	.33**
4. Conflict with nurses <sup>a</sup>				—	.59**	.63**	.37**	.35**	.23**	.01	-.06	.06	-.04	.24**	-.01	-.09	-.28**	.41**	.10	-.09	.17
5. Conflict with physicians					—	.51**	.36**	.33**	.21*	.09	.14	.21*	.16	.22*	.29**	.14	-.02	.23	.13	.02	.38**
6. Inadequate preparation						—	.48**	.56**	.27**	-.08	-.10	.07	-.11	.42**	.03	-.09	-.31**	.31**	-.07	-.25*	.23**
7. Lack of support							—	.52**	.16	.20*	.17	.07	-.05	.32**	-.09	-.07	-.08	.14	.10	-.14	.19*
8. Death/dying								—	.24**	.07	.20*	.12	-.02	.28**	.03	-.04	-.22*	-.26**	-.02	-.26**	.21*
Coping strategies																					
9. Self distraction									—	.32**	.09	.36**	.21*	.25**	.22*	.39**	.11	.52**	.42**	.13	.24**
10. Active coping										—	.27**	.32**	.41**	.01	.10	.47**	.54**	.10	.45**	.37**	.21*
11. Denial											—	.16	.21*	.14	.18*	.27**	.13	.15	.25**	.01	.20*
12. Use of emotional support												—	.48**	.16	.42**	.49**	.34**	.32**	.47**	.27**	.52**
13. Use of instrumental support													—	.01	.53**	.72**	.50**	.20*	.54**	.49**	.35**
14. Behavioral disengagement														—	.12	-.03	-.28**	.35**	.09	-.29**	.12
15. Venting															—	.35**	.06	.25**	.24**	.26**	.32**
16. Positive reframing																—	.49**	.26**	.50**	.46**	.29**
17. Planning																	—	-.06	.42**	.54**	.12
18. Humor																		—	.31**	-.02	.36**
19. Acceptance																			—	.48**	.32**
20. Religion <sup>a</sup>																				—	.25**
21. Self blame																					—

\*  $p < .05$ , \*\*  $p < .01$ , <sup>a</sup> Non-parametric test was used

Table 5

*Significant Correlations Between Nurses' Workplace Stressors and Coping Strategies**(N = 126)*

Workplace Stressors	Coping Strategies	<i>r</i>
Total workplace stressors	Problem-focused coping	
	Planning	-.26**
	Emotion-focused coping	
	Use of emotional support	.18*
	Humor	.36**
	Dysfunctional coping	
	Self distraction	.28**
	Self-blame	.29**
	Behavioral disengagement	.30**
	Workload	Emotion-focused coping
Use of emotional support		.22**
Humor		.24**
Dysfunctional coping		
Venting		.39**
Self-blame		.35**

\* $p < .05$ , \*\* $p < .01$



Table 5 (Continued)

Workplace Stressors	Coping Strategies	<i>r</i>
Uncertainty treatment	Emotion-focused coping	
	Use of emotional support	.27**
	Humor	.26**
	Dysfunctional coping	
	Venting	.25**
	Self distraction	.25**
	Self-blame	.33**
Conflict with nurses	Problem-focused coping	
	Planning	-.28**
	Emotion-focused coping	
	Humor	.41**
	Dysfunctional coping	
	Self distraction	.23**
	Behavioral disengagement	.24**
Conflict with physicians	Emotion-focused coping	
	Use of emotional support	.21*
	Dysfunctional coping	
	Venting	.29**
	Self distraction	.21*
	Self-blame	.38**
	Behavioral disengagement	.22*

\* $p < .05$ , \*\* $p < .01$

Table 5 (Continued)

Workplace Stressors	Coping Strategies	<i>r</i>
Inadequate preparation	Problem-focused coping	
	Planning	-.31**
	Emotion-focused coping	
	Religion	-.25**
	Humor	.31**
	Dysfunctional coping	
	Self distraction	.27**
	Self-blame	.23**
	Behavioral disengagement	.42**
Lack of support	Problem-focused coping	
	Active coping	.20*
	Dysfunctional coping	
	Self-blame	.19*
	Behavioral disengagement	.32**
Death/dying	Problem-focused coping	
	Planning	-.22*
	Emotion-focused coping	
	Religion	-.26**
	Humor	-.26**
	Dysfunctional coping	
	Self distraction	.24**
	Self-blame	.21*
	Denial	.20*
Behavioral disengagement	.28**	

\* $p < .05$ , \*\* $p < .01$

Table 6 shows the highest ten correlations between nurses' workplace stressors and coping strategies. Most of the correlations revealed that workplace stressors correlated with emotion-focused and dysfunctional coping strategies. There was only one problem-focused coping strategy correlated with workplace stressors which was in the last rank of the table.

Table 6

*The Highest Ten Significant Correlations Between Nurses' Workplace Stressors and Coping Strategies (N = 126)*

Correlations	<i>r</i>
Inadequate preparation and behavioral disengagement	.42
Conflict with nurses and humor	.41
Workload and venting	.39
Conflict with physicians and self-blame	.38
Total workplace stressors and humor	.36
Workload and self-blame	.35
Uncertainty treatment and self-blame	.33
Lack of support and behavioral disengagement	.32
Inadequate preparation and humor	.31
Inadequate preparation and planning	.31

## *Discussion*

Discussion of the study findings is carried out in four parts. The first part is about characteristics of the subjects, the second part discusses nurses' workplace stressors, the third part discusses nurses' coping strategies, and the last part discusses the correlations between nurses' workplace stressors and coping strategies.

### *Characteristics of the Subjects*

Demographic characteristics of the subjects are summarized in Table 1. The average age of the subjects was 37, the average years of experience in nursing was 13, the average years of experience in the current area of work was 7, and nearly all of them were staff nurses who did not intend to leave their nursing profession. Those findings confirmed that the majority of subjects were government employed nurses who had been working for several years and were asked for high commitment to work in the public hospitals until their retirement. Most of the subjects were female because in Indonesia, nursing is commonly considered to be women's occupation. Most of them were of Batak ethnicity, the ethnic majority in North Sumatera Province. More than half the subjects were Christians because most Bataks are Christian. Most of the subjects' level of education was diploma level, because since 1983 the lowest level of nursing education in Indonesia has been diploma (Wuryanto, 2007).

### *Nurses' Workplace Stressors*

The low level of total workplace stressors in this study reflected the low occurrence of nurses' workplace stressors in the settings. This finding was inconsistent with a previous study of public hospital nurses in Indonesia which showed that more than half (60%) of them experienced high levels of workplace

stressors (Shaulim, 2008). In fact, there were differences between the public hospital setting and instrument of this study and Shaulim's study. The samples of Shaulim's study were all nurses in a district public hospital. In this setting, nurses held responsibility to perform nursing care with limited facilities and an inadequate health care team. This situation resulted in nurses' high level workplace stressors. The low level of total workplace stressors in this study was also inconsistent with Jauhari's (2005) study. He observed that more than 80% of in-patient unit nurses in a public hospital in Medan performed non-nursing tasks that increased their workload. Probably in the five years after his study, there was a reduction in nurses' workload in the hospital. As can be observed presently, management of nurses' staffing in each unit is quietly adequate and has reduced their workload. Therefore, low workload and total workplace stressors were found in this study. The low level of total workplace stressors in this study originally resulted from the low level of all workplace stressor subscales including workload, with the exception of death/dying, which was in the moderate level. Appraisal of the stressors, perception of the stressors, and the level of distress as a result of the stressors are the factors contributing to the level of daily stressors experienced by individuals (Werner & Frost, 2000). There was no high level of workplace stressor subscales possibly due to the fact that the nurses appraised and perceived that those stressors would be stressful events for low degree of occurrence. Another fact is that nearly all of the nurses did not intend to leave their nursing profession within the next twelve months thus convincingly confirming the low level of nurses' workplace stressors.

Death/dying was the most frequently reported workplace stressor followed by workload. This finding was quite surprising, because previous studies in Thailand, South Korea, and Hawaii reported that workload was the primary workplace stressor followed by death/dying (Lambert et al., 2004). However, this finding was similar to a previous study in Japan (Lambert et al.). It suggested that nurses identified the emotional issues regarding patient's death/dying to be more overwhelming than their workload. Both hospitals in this study were tertiary hospitals and many critical and dying patients were referred to these hospitals. This may have resulted in increased death/dying issues.

#### *Nurses' Coping Strategies*

In this study, coping using religion was the most commonly used strategy. It may be explained that nurses in this setting submitted their workplace stressors to God. Since more than half of the nurses were Christians and the rest were Muslims, religious practices were regularly performed in their daily life, such as praying and reading holy books. Those continuous practices affected nurses' way of thinking and coping to be more close to God.

This finding was different from previous studies in China that found planning was the most commonly used coping strategy (Li & Lambert, 2008). Since most of the people in China are atheists, religious coping is possibly not a commonly used coping strategy. However, this study finding was consistent with a study on Swedish nurses who worked with terminally ill and dying cancer patients. They found that religiosity could have a protective function that facilitates coping, as the nurses used God as an object to turn to and to obtain shelter (Ekedahl & Wengstrom, 2009). Ekedahl and Wengstrom also found that the most frequent religious coping strategy in

their study was different forms of prayer. They also concluded that religious coping was dominated by fundamental trust using prayer as a coping strategy and that that may have supported the nurses.

*Correlations Between Nurses' Workplace Stressors and Coping Strategies*

The fact that workload was positively correlated with emotion-focused coping strategies (i.e. use of emotional support and humor) and dysfunctional coping strategies (i.e. venting and self-blame) was surprising. The findings were inconsistent with previous studies that found workload was positively correlated with planning as a problem-focused coping strategy (Li & Lambert, 2008). However, there were different settings between Li and Lambert's study and this present study. Li and Lambert examined the ICU nurses only. Since ICU nurses usually deal with common situations and certain standards of operational procedures for critical patients, they may make and follow their plans regarding actions to deal with those stressors. It is different when compared to the medical and surgical units which have many patients with different diseases and treatment. In this situation, planning or other problem-focused coping strategies might be difficult to carry out successfully. So, the nurses tend to use emotion-focused and dysfunctional coping strategies. In addition, as most of the subjects in this study had been working as nurses for a relatively long period (13 years, Table 1), they may have been habituated with the workload and felt exhausted with unsuccessful solutions to solve their problems, so they preferred to use emotion-focused coping and dysfunctional coping strategies instead of problem-focused coping strategy.

Uncertainty about treatment was found to be positively correlated with self distraction, use of emotional support, venting, humor, and self-blame, as was conflict with physicians which was also found to be positively correlated with self distraction, use of emotional support, behavioral disengagement, venting, and self-blame. The findings were similar to previous studies showing that nurses did not use problem-focused coping strategies and preferred using emotion-focused coping strategies (Li & Lambert, 2008). The findings may be explained in that nurses usually believe and follow every physician's instruction regarding a patient's treatment. In Indonesia, especially in the setting context, physicians are the most responsible persons to decide treatment for each patient, therefore, other health care team members including nurses have to follow the physician's decision. In addition, as the majority of the subjects had diplomas in nursing, their level of education was lower than the physician's who had graduated and had specialization certificates. So, the nurses' levels of knowledge and skills were also lower than those of the physicians.

Conflict with other nurses was found to be positively correlated with self distraction, behavioral disengagement, and humor, but was negatively correlated with planning. It may have been also related to the nurses' long experience in nursing and their current area of work. Possibly, in the early years of their work, they used problem-focused coping strategies to resolve conflict, but sometimes the conflict become worse, especially when it came from the head nurse/supervisor. Therefore, they used emotion-focused and dysfunctional coping strategies.

Inadequate preparation was found to be positively correlated with self distraction, behavioral disengagement, humor, and self blame. However it was negatively correlated with planning and religion. Again, the subjects used emotion-



focused and dysfunctional coping strategies rather than problem-focused ones when they confronted this stressor. The possible reason for using such strategies was because the average age of the subjects was 37, so they might have had little intention to continue studies or undergo training programs. This is why the planning coping strategy decreases when inadequate preparation as a workplace stressor increases. Religion coping strategy was possibly also considered inappropriate, because this stressor was not a big issue for them. However, using dysfunctional coping strategies including behavioral disengagement, self distraction, and self-blame have been found to be less helpful with effective coping outcomes (Carver et al., 1989).

Lack of support was found to be positively correlated with active coping, behavioral disengagement, and self blame. It is surprising that an active coping strategy was found to have a significant correlation only with this stressor. It might be explained that when the nurses could not share their bad experiences and get support from other nurses or their supervisor, they tried to find support from other personnel. On the other hand, the nurses also used dysfunctional coping strategies because they felt exhausted.

Death/dying was found to have a positive correlation with self distraction, denial, behavioral disengagement, and self blame, but had a negative correlation with planning, humor, and religion. This is not surprising, since death/dying is an emotional issue, the subjects used emotion-focused or even dysfunctional coping strategies rather than problem focused coping strategies, even though those kinds of strategies were considered less effective if used for a long period of time. Death/dying was the most often reported workplace stressor and religion was the most frequently used coping strategy, yet the correlation between

them was negative. It means that when the stressor increased in the workplace, the religion coping strategy was used less.

The fact that the ten highest correlations found between workplace stressors and emotion-focused and dysfunctional coping strategies is surprising when compared with previous studies (Chang et al., 2006; Healy & McKay, 2000; Tyson & Pongruengphant, 2004; Welbourne et al., 2007; Xianyu & Lambert, 2006). The frequent use of emotion-focused coping strategies will not change the person–environment relationship, but they will change its meaning and the emotional reaction (Lazarus, 1991). It might help explain why the nurses in this setting appraised their total workplace stressors as low. However, the frequent use of emotion-focused coping strategies are generally associated with poor mental health and well-being outcomes, but the frequent use of problem-focused coping strategies are associated with good mental health and well-being outcomes (Lim, Bogossian, & Ahern, 2010). Therefore, the nurses should more frequently use problem-focused coping rather than emotion-focused ones when dealing with workplace stressors.

In this study, many of the coping strategies were found to be positively correlated with each other. The findings are similar to previous studies (Lambert et al., 2004; Li & Lambert, 2008). The correlations suggest that nurses used a variety of coping strategies in order to deal with workplace stressors. However, it is not surprising that behavioral disengagement and planning were found to be negatively correlated, because those coping strategies work in opposite ways.

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### *Conclusion*

A descriptive correlation study was conducted to explore the workplace stressors and coping strategies among public hospital nurses in Medan, Indonesia. One hundred and twenty six subjects were recruited by using a stratified random sampling technique from two public hospitals in Medan: Haji Adam Malik Hospital and Pirngadi Hospital. Data were collected during December 2009 and January 2010. Quantitative data were analyzed by using descriptive statistics and correlation test.

#### *Summary of the Study Results*

The average age of the subjects was 37, most of them were female, of Batak ethnicity, and more than half of them were Christians. Most of the subjects had diplomas in nursing, and were married. Almost all of the subjects were staff nurses with an average of 13 years nursing experience, and an average of 7 years of experience in the current area of work. Nearly all of them did not intend to leave their nursing profession within the next 12 months.

The majority of subjects experienced low workplace stressors. Death/dying was the most reported workplace stressor followed by workload. Religion was the most often used coping strategy. Significant correlations were found between workplace stressors and coping strategies. Nurses' workplace stressors had a

higher correlation with the use of emotion-focused and dysfunctional coping than problem-focused coping strategies.

#### *Limitation and Strength of the Study*

The researcher used self-report measures in this study and assumed that the subjects gave honest, true, valid responses and comprehended every item of the questions. However, subjects' mood while filling in the questionnaires could affect their choice of answer. Qualitative study by using in-depth interviews to explore the nurses' workplace stressors and coping strategies may be helpful to decrease the effect of using self-report measures.

In this study, the researcher used valid and reliable instruments to measure the variables. In addition, both instruments are well accepted and have been applied in several countries.

#### *Implications and Recommendations*

The findings of the study provide several implications and recommendations to nursing administration and nursing research. The nursing administrators in both hospitals should consider death/dying and workload as major stressors and find strategies to manage nurses' workload and equip the nurses with adequate knowledge and skills while dealing with a patient's death/dying. The nursing administrators also need to encourage their staff nurses to use more problem-focused coping strategies than emotion-focused and dysfunctional coping when dealing with their workplace stressors. Further investigation to develop and implement methods to help nurses cope with workplace stressors is recommended as well. A research design

by using a depth interview to explore the nurses' workplace stressors and coping strategies will also be needed.

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## **APPENDICES**



## Part 1: Demographic Data Form

Direction:

Please tick “√” or answer the appropriate choice in the space available.

1. Name of unit :
2. Age : ..... years old
3. Gender  (1) Male  (2) Female
4. Religion  (1) Islam  (2) Christianity  
 (4) Buddhism  (5) Hindu
5. Ethnic  (1) Batak  (2) Javanese  
 (3) Malay  (4) Others .....
6. Level of education  (1) Diploma  (2) Bachelor  
 (3) Master
7. Marital status  (1) Single  (2) Married  
 (3) Widow  (4) Divorced  
 (5) Separate
8. Current position  (1) Staff Nurse  
 (2) Clinical Instructor
9. Years of experience  
in nursing : ..... years
10. Years of experience in  
the current area of work : ..... years
11. The likelihood of leaving nursing profession  
within the next 12 months  (1) Yes  (2) No



Part 2: *The Nursing Stress Scale*

Direction:

Below is a list of situations that commonly occur on a hospital unit. For each item indicate by means of a check (✓) how often on your present unit you have found the situations to be stressful. Your responses are strictly confidential.

No	Item	Never (1)	Occasionally (2)	Frequently (3)	Very Frequently (4)
1.	Criticism by a physician				
2.	Performing procedures that patients experience as painful				
3.	Feeling helpless in the case of a patient who fails to improve				
4.	Conflict with a supervisor				
5.	Listening or talking to a patient about his/her approaching death				
6.	Lack of an opportunity to talk openly with other unit personnel about problems on the unit				
7.	The death of a patient				
8.	Conflict with a physician				
9.	Fear of making a mistake in treating a patient				
10.	Lack of an opportunity to share experiences and feelings with other personnel on the unit				
11.	The death of a patient with whom you developed a close relationship				
12.	Physician not being present when patient dies				
13.	Disagreement concerning the treatment of a patient				
14.	Feeling inadequately prepared to help with the emotional needs of a patient's family				
15.	Lack of an opportunity to express to other personnel on the unit my negative feelings toward patients				
16.	Inadequate information from a physician regarding the medical condition of a patient				

No	Item	Never (1)	Occasionally (2)	Frequently (3)	Very Frequently (4)
17.	Being asked a question by a patient for which I do not have a satisfactory answer				
18.	Making a decision concerning a patient when the physician is unavailable				
19.	Floating to other units that are short-staffed				
20.	Watching a patient suffer				
21.	Difficulty in working with a particular nurse (or nurses) outside the unit				
22.	Feeling inadequately prepared to help with the emotional needs of a patient				
23.	Criticism by a supervisor				
24.	Unpredictable staffing and scheduling				
25.	A physician ordering what appears to be inappropriate treatment for a patient				
26.	Too many non-nursing task required, such as clerical work				
27.	Not enough time to provide emotional support to patient				
28.	Difficulty in working with a particular nurse (or nurses) on the unit				
29.	Not enough time to complete all of my nursing task				
30.	A physician not being present in a medical emergency				
31.	Not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment				
32.	Uncertainty regarding the operation and functioning of specialized equipment				
33.	Not enough staff to adequately cover the unit				

Part 3: *The Brief COPE*

Direction:

These items deal with ways you have been coping with the stress in your life. There are many ways to try to deal with problems. These items ask what you have been doing to cope with this one. Obviously, different people deal with things in different ways, but I am interested in how you have tried to deal with it. Each item says something about a particular way of coping.

I want to know to what extent you have been doing what the item says: *how much or how frequently*. Do not answer on the basis of whether it seems to be working or not – just whether or not you are doing it. Use these response choices. Try to rate each item (by means of a check [√]) separately in your mind from the others. Make your answers as true FOR YOU as you can.

- 1 = I have not been doing this at all  
 2 = I have been doing this a little bit  
 3 = I have been doing this a medium amount  
 4 = I have been doing this a lot

No	Item	1	2	3	4
1.	I have been turning to work or other activities to take my mind off things.				
2.	I have been concentrating my efforts on doing something about the situation I am in.				
3.	I have been saying to myself "this isn't real."				
4.	I have been getting emotional support from others.				
5.	I have been giving up trying to deal with it				
6.	I have been taking action to try to make the situation better.				
7.	I have been refusing to believe that it has happened.				
8.	I have been saying things to let my unpleasant feelings escape.				

No	Item	1	2	3	4
9.	I have been getting help and advice from other people.				
10.	I have been trying to see it in a different light, to make it seem more positive.				
11.	I have been criticizing myself.				
12.	I have been trying to come up with a strategy about what to do.				
13.	I have been getting comfort and understanding from someone.				
14.	I have been giving up the attempt to cope.				
15.	I have been looking for something good in what is happening.				
16.	I have been making jokes about it.				
17.	I have been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.				
18.	I have been accepting the reality of the fact that it has happened.				
19.	I have been expressing my negative feelings.				
20.	I have been trying to find comfort in my religion or spiritual beliefs.				
21.	I have been trying to get advice or help from other people about what to do.				
22.	I have been learning to live with it.				
23.	I have been thinking hard about what steps to take.				
24.	I have been blaming myself for things that happened.				
25.	I have been praying or meditating.				
26.	I have been making fun of the situation.				

## APPENDIX B

### FREQUENCY AND PERCENTAGE OF SUBJECTS' ANSWER IN EACH ITEM OF THE NURSING STRESS SCALE AND THE BRIEF COPE

Table 7

*Frequency and Percentage of Subjects' Answer in Each Item of the Nursing Stress*

*Scale (N=126)*

No	Item	Never (1)		Occasionally (2)		Frequently (3)		Very Frequently (4)	
		n	%	n	%	n	%	n	%
1.	Criticism by a physician	54	42.9	64	50.8	5	4.0	3	2.4
2.	Performing procedures that patients experience as painful	23	18.3	61	48.4	39	31	3	2.4
3.	Feeling helpless in the case of a patient who fails to improve	65	51.6	37	29.4	24	19	0	0
4.	Conflict with a supervisor	67	53.2	49	38.9	6	4.8	4	3.2
5.	Listening or talking to a patient about his/her approaching death	49	38.9	57	45.2	19	15.1	1	0.8
6.	Lack of an opportunity to talk openly with other unit personnel about problems on the unit	46	36.5	60	47.6	15	11.9	5	4.0
7.	The death of a patient	38	30.2	54	42.9	29	23	5	4
8.	Conflict with a physician	62	49.2	55	43.7	7	5.6	2	1.6
9.	Fear of making a mistake in treating a patient	40	31.7	47	37.3	24	19.0	15	11.9
10.	Lack of an opportunity to share experiences and feelings with other personnel on the unit	62	49.2	52	41.3	9	7.1	3	2.4
11.	The death of a patient with whom you developed a close relationship	33	26.2	63	50	24	19	6	4.8
12.	Physician not being present when patient dies	23	18.3	48	38.1	42	33.3	13	10.3

Table 7 (Continued)

No	Item	Never (1)		Occasionally (2)		Frequently (3)		Very Frequently (4)	
		n	%	n	%	n	%	n	%
13.	Disagreement concerning the treatment of a patient	40	31.7	63	50.0	20	15.9	3	2.4
14.	Feeling inadequately prepared to help with the emotional needs of a patient's family	50	39.7	56	44.4	18	14.3	2	1.6
15.	Lack of an opportunity to express to other personnel on the unit my negative feelings toward patients	59	46.8	56	44.4	9	7.1	2	1.6
16.	Inadequate information from a physician regarding the medical condition of a patient	40	31.7	49	38.9	31	24.6	6	4.8
17.	Being asked a question by a patient for which I do not have a satisfactory answer	64	50.8	54	42.9	7	5.6	1	0.8
18.	Making a decision concerning a patient when the physician is unavailable	27	21.4	53	42.1	37	29.4	9	7.1
19.	Floating to other units that are short-staffed	89	70.6	24	19.0	10	7.9	3	2.4
20.	Watching a patient suffer	27	21.4	37	29.4	41	32.5	21	16.7
21.	Difficulty in working with a particular nurse (or nurses) outside the unit	47	37.3	56	44.4	21	16.7	2	1.6
22.	Feeling inadequately prepared to help with the emotional needs of a patient	62	49.2	44	34.9	18	14.3	2	1.6
23.	Criticism by a supervisor	40	31.7	68	54.0	16	12.7	2	1.6
24.	Unpredictable staffing and scheduling	71	56.3	35	27.8	10	7.9	10	7.9
25.	A physician ordering what appears to be inappropriate treatment for a patient	37	29.4	70	55.6	15	11.9	4	3.2
26.	Too many non-nursing task required, such as clerical work	26	20.6	55	43.7	31	24.6	14	11.1
27.	Not enough time to provide emotional support to patient	49	38.9	54	42.9	22	17.5	1	0.8
28.	Difficulty in working with a particular nurse (or nurses) on the unit	55	43.7	66	52.4	4	3.2	1	0.8

Table 7 (Continued)

No	Item	Never (1)		Occasionally (2)		Frequently (3)		Very Frequently (4)	
		n	%	n	%	n	%	n	%
29.	Not enough time to complete all of my nursing task	49	38.9	54	42.9	17	13.5	6	4.8
30.	A physician not being present in a medical emergency	16	12.7	62	49.2	42	33.3	6	4.8
31.	Not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment	71	56.3	46	36.5	6	4.8	3	2.4
32.	Uncertainty regarding the operation and functioning of specialized equipment	50	39.7	52	41.3	20	15.9	4	3.2
33.	Not enough staff to adequately cover the unit	31	24.6	51	40.5	31	24.6	13	10.3

Table 8

*Frequency and Percentage of Subjects' Answer in Each Item of the Brief COPE**(N=126)*

No	Item	1		2		3		4	
		n	%	n	%	n	%	n	%
1.	I have been turning to work or other activities to take my mind off things.	38	30.2	48	38.1	30	23.8	10	7.9
2.	I have been concentrating my efforts on doing something about the situation I am in.	10	7.9	34	27.0	36	28.6	46	36.5
3.	I have been saying to myself "this isn't real."	46	36.5	56	44.4	14	11.1	10	7.9
4.	I have been getting emotional support from others.	37	29.4	52	41.3	32	25.4	5	4.0
5.	I have been giving up trying to deal with it	74	58.7	44	34.9	7	5.6	1	0.8
6.	I have been taking action to try to make the situation better.	5	4.0	21	16.7	61	48.4	39	31.0
7.	I have been refusing to believe that it has happened.	42	33.3	65	51.6	17	13.5	2	1.6

Table 8 (Continued)

No	Item	1		2		3		4	
		n	%	n	%	n	%	n	%
8.	I have been saying things to let my unpleasant feelings escape.	6	4.8	34	27.0	60	47.6	26	20.6
9.	I have been getting help and advice from other people.	6	4.8	43	34.1	58	46.0	19	15.1
10.	I have been trying to see it in a different light, to make it seem more positive.	5	4.0	42	33.3	48	38.1	31	24.6
11.	I have been criticizing myself.	8	6.3	63	50.0	37	29.4	18	14.1
12.	I have been trying to come up with a strategy about what to do.	7	5.6	27	21.4	61	48.4	31	24.6
13.	I have been getting comfort and understanding from someone.	17	13.5	47	37.3	44	34.9	18	14.3
14.	I have been giving up the attempt to cope.	52	41.3	43	34.1	24	19.0	7	5.6
15.	I have been looking for something good in what is happening.	4	3.2	23	18.3	62	49.2	37	29.4
16.	I have been making jokes about it.	23	18.3	58	46.0	37	29.4	8	6.3
17.	I have been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	14	11.1	55	43.7	40	31.7	17	13.5
18.	I have been accepting the reality of the fact that it has happened.	7	5.6	48	38.1	43	34.1	28	22.2
19.	I have been expressing my negative feelings.	36	28.6	64	50.8	19	15.1	7	5.6
20.	I have been trying to find comfort in my religion or spiritual beliefs.	2	1.6	9	7.1	35	27.8	80	63.5
21.	I have been trying to get advice or help from other people about what to do.	4	3.2	26	20.6	62	49.2	34	27.0
22.	I have been learning to live with it.	16	12.7	34	27.0	62	49.2	14	11.1
23.	I have been thinking hard about what steps to take.	3	2.4	41	32.5	52	41.3	30	23.8
24.	I have been blaming myself for things that happened.	42	33.3	55	43.7	23	18.3	6	4.8
25.	I have been praying or meditating.	3	2.4	8	6.3	38	30.2	77	61.1
26.	I have been making fun of the situation.	82	65.1	26	20.6	12	9.5	6	4.8



## APPENDIX C

### LETTER OF PERMISSION FOR USING INSTRUMENTS

1. Letter of permission for using the Nursing Stress Scale from James G. Anderson

**RE: Out of Office AutoReply: Permission on using the NSS instrument**

From: "Anderson, James G" <janders1@purdue.edu> [View Contact](#) Wednesday, July 8, 2009 1:07:23 AM  
 To: achmad fathi <achmad\_fathi@yahoo.com>

 2 Files [Download All](#)  
 Copy of nursing stress scale pdf.pdf (8873KB); NURSTRSC.pdf (11KB)

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You have our permission to use the attached Nursing Stress Scale for your research. best wishes.

James G. Anderson, Ph.D.  
 Professor of Medical Sociology  
 Purdue University

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**From:** achmad fathi [mailto:achmad\_fathi@yahoo.com]  
**Sent:** Wednesday, June 24, 2009 2:42 PM  
**To:** Anderson, James G  
**Subject:** Re: Out of Office AutoReply: Permission on using the NSS instrument

2. Letter of permission for using the Brief COPE from Charles S. Carver

**Re: Permission on using the Brief Cope instrument**

From: Charles S. Carver <ccarver@miami.edu> [View Contact](#) Thursday, June 25, 2009 10:03:08 AM  
 To: achmad fathi <achmad\_fathi@yahoo.com>

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You are welcome to use the measure, which you can find at website below.

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Charles S. Carver  
 Department of Psychology  
 University of Miami  
 Coral Gables, FL 33124-0751

<http://www.psy.miami.edu/faculty/ccarver/>

**APPENDIX D**  
**LIST OF EXPERTS**

Three experts examined the cultural applicability/appropriateness for the Nursing Stress Scale and the Brief COPE, they were:

1. Setiawan, MNS, Ph.D  
Nursing Lecturer, University of Sumatera Utara, Medan, Indonesia.
  
2. Dewi Elizadiani Suza, MNS  
Nursing Lecturer, University of Sumatera Utara, Medan, Indonesia.
  
3. Liberta Lumban Toruan, M.Kep  
Nursing Administrator, Adam Malik Hospital, Medan, Indonesia.

**VITAE**

**Name** Achmad Fathi

**Student ID** 5110420095

**Educational Attainment**

<b>Degree</b>	<b>Name of Institution</b>	<b>Year of Graduation</b>
Bachelor of Nursing	University of Sumatera Utara	2004

**Scholarship Awards during Enrolment**

**2008-2010** Directorate of Higher Education, Ministry of National Education, Indonesia

**Work – Position and Address**

**Work position** Lecturer at Nursing Faculty, University of Sumatera Utara

**Address** Jalan Prof. Maas No. 5, Kompleks USU, Medan, 20155,  
Indonesia