# **OCCUPATIONAL STRESS AND COPING STRATEGIES OF STAFF NURSES**

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# ABSTRACT

This research study determined the most common occupational stressors and the coping strategies of staff Nurses in secondary hospitals in Northern Philippines. The researchers utilized a quantitative approach. Among the target five secondary hospitals, administrators from only three hospitals gave their permission; hence, 119 staff Nurses from all hospital areas were involved in this research study. The developed questionnaire used to assess occupational stress was based on the tool of the American Institute of Preventive Medicine (2012); whereas, the questionnaire on coping strategies was based on the revised coping checklist (Lazarus & Folkman, 1984). The occupational stress and coping strategies guestionnaires underwent experts' panel review that yielded S-CVI scores of 0.90 and 0.97, respectively. Data were statistically analyzed using T-test and ANOVA at 0.05 level of significance through the Statistical Package for the Social Sciences (SPSS version 21.0). Prior to data gathering, this research endeavor was given Ethical Clearance with tracking number 98472 by the University Research Ethics Board (UREB). Results show that in relation to their demographic profile and with a pvalue of 0.037, job related health concern is the main occupational stressor of those employed for at least 14 years. Considering ethnicity, disagreement and indecision was identified and described as the main occupational stressor, with a p-value of 0.017. Results further reveal that with a p-value of 0.003, male nurses are more engaged in planful problem solving coping strategy. Among the coping strategies, accepting social responsibility is the only coping mechanism of no significant difference across all areas/wards that are used by Nurses, with a p-value of 0.143. Moreover, out-patient department and delivery room Nurses most commonly use confrontive and distancing coping strategies. In conclusion, the top causes of occupational stress among Nurses in secondary hospitals are time pressure, job pressure, disagreement & indecision and communications with supervisor; whereas, their top coping strategies are confrontive behavior, acceptance of social responsibility, distancing from the stressor and planful problem solving. In light of the results of this research study, the researchers recommend that the Heads of involved hospitals: (1) must regularly assess for occupational stress that their Nurses are facing so that they have bases on possible conduct of a series of stress management programs; and, (2) institute explicit measures of minimizing occupational stress affecting Nurses.

**Keywords:** occupational stress, coping, nurses, secondary hospitals, indecision, disagreement, confrontive, distancing, planful behavior, social responsibility

### INTRODUCTION

Stress is a fact that everyone encounters daily in life and it is defined to be a pressure experienced from the environment with demands that exceed the individuals' ability to cope. Pressures and situations that cause stress are known as stressors. These stressors come from external sources like during emergency situations, peer pressure, and internal sources like negative thoughts about life. These stressors' chances of forming to stress greatly depend on the perception of a person to a situation because what can be demanding and taxing for someone could be perceived as only a challenge and can even be exhilarating for another.

Occupational stress occurs when work-related factors interfere with his psychological, physiological, spiritual and social condition, wherefore the person deviates from normal functioning. Occupational stress causes multiple psychological, behavioral, physical and medical illnesses and diseases which have detrimental effects to the individual that causes high staff absenteeism and low productivity level. Additionally, stress accounts for 80% of work-related injuries and 40% of workplace turnover (International Labour Organization, 2016).

Since the emergence of nursing, the nursing profession has been viewed as stress-packed from the manual labor, suffering encountered by the nurses and patients, staffing problems, long nursing care hours and inter-personal relationships that are core to the nurses' role. Occupational stress may affect the quality of living condition of nurses leading to deterioration of health which can greatly affect the adaptation of good practices concerning nurses' caring behaviors, negatively affecting the standard of care. Furthermore, occupational stress results to diminished or total loss of compassion for co-workers and patients and heightened incidences of errors which also diminish the quality of provision of care (Teng, Hsiao & Chou, 2010).

Coping strategies are learned cognitive and behavioral pattern that effectively manage the external and internal stress.Coping strategies build resilience from the stress that are encountered by an individual everyday and offer them ways to overcome these challenges. Coping strategies can be divided into problem-focused which attempts to diminish stress by changing the stressful situation, such as seeking social support, confrontive coping, planful problemsolving, and into emotion-focused which include activities that diminish negative emotional responses, such as positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities (Bhattacharya, Parikh & Taukari 2004).

Various studies have delved deep into work-related stress and coping among health workers but the majority have been conducted in other countries; thus, the findings are not applicable to the environment, setting and situation in the Philippines due to the differences in the working condition outside the country. Furthermore, studies regarding occupational stress and coping mechanisms among local nurses in secondary hospitals targeting specific care settings of general wards are scarce in number, hence, there is very limited knowledge about their stressor (Gautam,Gautam & Farzanmehr, 2016). Hence, this research was conducted to measure the level and determine the most common occupational stress and coping mechanisms of staff nurses in secondary hospitals in Tuguegarao City.

# **Research Questions**

This research study measured the level of occupational stress and coping strategies and the factors that contribute thereto. Specifically, the following questions were answered:

- 1. What is the demographic profile of the staff nurses in terms of the following:
  - a. Age
  - b. Sex;
  - c. Marital Status
  - d. Length of employment with the current employer
  - e. Ethnic Group
  - f. Ward/Area of Assignment
- 2. What is the occupational stress level of staff nurses in terms of the following:
  - a. Disagreement and Indecision
  - b. Job Pressure
  - c. Communications and comfort with supervisor
  - d. Job related health concerns
  - e. Work overload;
  - f. Job security problem
  - g. Time pressure
  - h. Job Barrier stress
- 3. What is the coping strategy for occupational stress of staff nurses in terms of the following:
  - a. Confrontive coping
  - b. Distancing
  - c. Self-controlling
  - d. Seeking Social Support
  - e. Accepting Social Responsibility
  - f. Planful Problem Solving
- 4. Is there a significant difference on the occupational stress level and coping strategies of staff nurses when grouped according to their demographic profile?

# Hypothesis

There is no significant difference on the occupational stress level and coping strategies of staff nurses when grouped according to their demographic profile.

### Significance of the Study

This research allows for richer and deeper understanding of occupational stress and coping strategies among nurses in secondary hospitals in Tuguegarao City. This research measured the occupational stress and coping strategy level in nurses and it provided insight into challenges that nurses' commonly face in their work that contribute to their stress and the most common strategies in coping and yielded information that will expand the existing body of knowledge regarding this topic.

This study is applicable for developing interventions in coping mechanism and organization policies to reduce the work stress among the nurses in various caring settings. From this study major occupational stress factors can be prevented and the nursing setting can be promoted. This research will also provide future researchers who will seek information and facts regarding occupational stress which can be used as a tool in formulating interventions, measures, and managements in risk reduction and prevention for other studies.

## Literature Review

# **Underpinning Theory**

Robert Karasek in 1970s introduced the study of work-related stress and the implication on health of the staff. To investigate these aspects, he proposed the Demand-Control Model (DCM). The model constitutes 2 variables: job control and psychological demands. The demands on psychological pressures at work include quantitative (time and work speed) and qualitative (contradictory demands and conflicts), and control (autonomy at work and skills).

The combination of the two variables results in 4 quadrants. These 4 DCM quadrants include, High Strain Quadrant consisting of high psychological demand and low job control and has the greatest risk due to the likelihood of unfavorable effects like depression, fatigue, and anxiety. The Passive Job Quadrant which has low psychological and low job control, it can produce the deterioration of skill and loss of interest in work. The Active Job Quadrant with high psychological demand and high job control can cause less harmful effects, because work is considered as a challenge. And last and 4th quadrant, the Low Strain Quadrant with low psychological demand and high job control, the ideal situation for workers because they are in their comfort zone and it provides a comfortable environment where they can perform their job proficiently (Karasek, 1979).

## **Occupational Nursing**

Nursing is regarded as one of the most tiring and demanding job due to the multitude of responsibilities in this profession. Nurses are responsible for providing care for patients in different settings that require different skills and expertise. It ranges from Emergency Nursing, which is most prone to burn out due to unpredictable situations, overcrowding and the constant assault from management of multiple diseases and injuries, to Palliative Nursing which also causes burn out due to secondary traumatic stress disorder from caring patients who are severely ill and dying. With the constant exposure of nurses from the wear and tear from their work, their stress level is increasing which leads to absenteeism that can affect the overall provision of holistic care to the patients. (Adzakpah, Harrison & Laar, 2017; Bamidis, Lahana, Malliarou, Niakas, Papastavrou, Rousaki, Sarafis & Tsounis, 2016). Additionally, nurses working on hospitals experience above average levels of occupational stress (Adzakpah, Harrison & Laar, 2017). Furthermore. (International Council of Nurses, 2015) discussed that the estimated loss of annual income of nurses cost by absenteeism was 64.8-66.1 billion USD in the UK, 200-250 billion USD in US, and 232 billion USD in Japan.

## Staff Nurses in Primary, Secondary and Tertiary Hospital

Primary healthcare is marked by the first level contact between individuals and families and the healthcare team and it usually cater the community it serves. Nurses provide care for mother and child which include immunization of locally endemic disease and treatment and provision of other facilities, with functions mostly limited to prevention and health promotion only. When a patient needs more intensive care, the primary health care facility will refer it to either a secondary or a tertiary hospital (Perry, Potter & Stockert, 2014).

In secondary healthcare facility, nurses manage patients that are referred by primary healthcare facilities. Secondary healthcare includes treatments for a short time for seriously ill or injured patient. It includes emergency care, childbirth and other medical health concerns (Perry, Potter & Stockert, 2014).

Tertiary healthcare facility provides specialized consultative care is given usually on referral from primary and secondary health care facilities.

### **Occupational Stress**

Occupational stress is a common problem nurses are facing which has great effect on their role as care provider and in their personal functionality. Occupational stress may lead to physical and emotional harm to a person incongruence of occupational requirement and abilities of the employee's needs. (Abdollahifard Jahromi, Maddahfar & Minaei, 2016). Multiple researches noted occupational stress to have numerous unwanted consequences. For the personal level, occupational stress is a great contributor to a number of health concerns for nurses. Examples of some health concerns that may arise because of extreme stress are headache, peptic ulcer, lower back pain and other physical health issues. (Andrade, Gonzalez, Gabani, Melanda, Mesas, & Salvagioni, 2017). In addition, the major effects of occupational stress on nurses are depression and anxiety that can reduce their efficiency. If these concerns are not addressed appropriately, occupational stress may have an unwanted effect on their performance and their relationship to their patients. (Alomani, 2016)

### **Occupational Stress of Staff Nurses**

The areas where nurses are being exposed have the greatest contribution to occupational stress. Nurse's environment may include enclosed environment, pressures, time, excessive noise, sudden changes in task, unpleasant sights and sounds and long-standing hours. Work-related stress is dependent on the area where the nurse is exposed (Bazrafshan, Davidi, Javadpour & Sahraian, 2015). Among all nurses in the hospital, Psychiatric Nurses gained the highest level of stress, succeeded by the nurses in Oncology Department, Intensive Care Unit nurses, and the Emergency Room nurses. While medical and surgical department have the least level of stress (AI Akash, Alhalaiqa, Dweik, Eid & Masa, 2017).

The major job stress aspect of nurses from Kashan, Iran Hospital were range of roles, role duality, and job environment (Moazemi, Najimi & Sharifirad, 2017). The sources where nurses of Saudi Arabia gain occupational stress include poor working conditions, work-family conflict, high turnover rate, long working hours, gender mixing, rotating shift and low patient satisfaction. Furthermore, low pay, increased workload, and inadequate financial rewards, appreciation and absence of recognition and violence or lack of cooperation from patients and/or their families all seem cause frustration, disappointment, a high level of stress, and regret (Alomani, 2016). Moreover, misunderstandings with co-workers have multiple effects on patient's respect and affirmation for professional knowledge (Bamidis, Lahana, Malliarou, Niakas, Papastavrou, Rousaki & Sarafis, 2016).

# Factors Contributing to the Occupational Stress of Nursing

### Disagreement, Indecision, and Miscommunication with Co-workers

Nursing profession requires unity among other workmates despite the differences in their way of life and the experiences that may result in conflict. Strong relationship, proper, and solid communication are factors that can lessen the risk of conflict. However, disagreement and miscommunication with co-workers are the popular issues that results to nurse's job disatisfaction, absenteeism, and turnover that have great effect in their individual characteristics, interpersonal and organizational factors. (Hiemer, 2015).

### Pressure on the job and work overload

Multiple aspects of working life contribute to stress. Aspects of the work itself can be stressful, namely work overload. Overwork is noted to be one of the causes of occupational stress in most studies. This happens more often than not among Filipino nurses, as supported by the ratio of nurses to patient in the local hospitals. The ideal ratio for nurse to patient is 1:12, but this is hardly true in many hospitals in the Philippines. Most hospitals like the Jose Reyes Memorial Medical Center have a ratio of 2:59 for male surgical ward and 2:68 for female surgical ward. (www.dbm.gov.ph, 2015) Furthermore, there were 2.3 healthcare workers per 10 000 populations which may precipitate to overwork and occupational stress for nurses in the Philippines (Healthcare Asia, 2017).

Work overload is a major source of exhaustion that in turn, is at the root of burnout. In combination with workoverload, pressures on the job such as too much supervision, hierarchical behaviours, and strict rules can also add to burnout (Yildirim 2015). Burnout can contribute to occupational stress by its overwhelming sense of exhaustion, feelings of cynism, and detachment and lack of accomplishment.

# Time Pressure

Burnout was discovered to be common in nurses and that time pressure is one of the greatest factors contributing to nurses to experience clinical burnout. It was concluded that the area where nurses are exposed increase their stress leading them to burnout. Consequences on both the nurse's and patient's health may arise because of this. Because of the decreased time of nurses to attend to their patient's concerns and needs, this also has an impact on their emotional health and making them susceptible to emotional fatigue (Azzeghaiby, Darawad, Nawafleh, Maharmeh & Masour, 2015).

# Job Related Health Concerns and other Job Barriers

Work area has a significant role for all employees and has a great effect on psycho-physiological well- being. Staff spend much time on their job wherein unhealthy area and lack of supplies, equipment, and work facilities may fail to achieve their goals and this results to their stress (Fernandes & Nirmala, 2017).

# Ethnicity, Nursing and Occupational Stress

In sociology, ethnicity is defined as a shared cultural characteristics such as values, history, language, and customs. Having a diversity of ethnic workforce a healthcare system contributes to provision of culturally competent care in multicultural context. However, some ethnic group such as the Arabs, in an Israeli

Hospital, and African Americans in Western Countries, are still experiencing stereotyping, receiving disapproving looks refusal of patients to be treated by them, receiving both verbal and physical aggression, and hostility from the patients (Keshel & Popper-Giveon, 2016).

As a consequence, target experience detrimental effects on their behavioral, physical, psychological, economic and social life, and organizations are faced with increasing absenteeism and turnover rates as well as decreasing levels of performance and productivity (Giga, Hoel & Lewis, 2008).

### **Coping Strategies for Occupational Stress**

Coping strategies are learned or natural mechanism to the excessive demands from problems and stressful situations encountered from the environment. Coping strategies can be problem focused, involving actions to change the situation to decrease stress or emotion focused, which uses activities that decreases emotional distress. (Berman, Dwyer, Erb, Hales, Harvey, Jones, Moxham, Park, Parker, Kozier, Searl, Snyder & Stanley, 2015).

Coping strategies vary among persons depending on how they perceive stress. People cope with their stress by altering stressors, adapting to stressors, and/or avoiding the stressors. The different coping strategies used to deal with stress can be summarized as Confrontive Coping, Distancing, Self-controlling, Seeking Social Support, Accepting Social Responsibility, and Planful Problem Solving (Berman, Dwyer, Erb, Hales, Harvey, Jones, Moxham, Park, Parker, Kozier, Searl, Snyder & Stanley, 2015).

#### Confrontive Coping

The nursing profession brings about a lot of experiences to a nurse. Nurses come into contact with different patients and acts of violence from them are not new to the health care providers. These acts of violence such as verbal abuse, bullying, physical violence, and sexual harassment, may implicate the use of confrontive coping (Chang & Cho, 2016; Cho, Hong & Park, 2015).

Confrontive coping involves fierce measures to deal with stress and may even include aggressive and risk-taking attitudes and behaviors. Confrontive coping is more often used by adults with low education level compared to adults with high education level due to the nature of this strategy. Confrontive coping is also widely used by staff working in psychiatric settings (Prosen & Vitulic, 2015).

Distancing

Disrupting stressful events which includes act of avoidance or ignoring something is referred to as distancing coping. When nurses experience negative events from their work such as caring for a terminally ill patient, they try to understand their feelings to improve the way they feel by distancing themselves. The constant use of distancing may result to poor interpersonal relationship in the working area which then may lead to having psychological and physiological dysfunctions (Ayduk & Kross, 2016; Bernard, Bunting, Cagle, Miller & Unroe, 2017).

### Self-controlling

Self-control is the ability to manage and control emotions, thoughts, and behaviors. This behavior is one of the most useful coping strategies to humans. People who have greater ability to hold and control their temper and emotions tend to have greater quality of life and greater success (Baumeister, Boone & Tangney, 2018).

### Seeking Social Support

Seeking social support involves efforts to seek emotional support, tangible support, and informational support. Support from family and friends can simply make a person do better. Nursing is a stressful profession, filled with taxing activities for their 8-hour shift. To cope with the occupational stress of nurses, one coping strategy is to have support from family, friends, co-workers, and supervisors (Edelstein, Northrop & Woodhead, 2016).

### Accepting Responsibility

Accepting responsibilities includes one's acknowledgement of his or her role in a problem with the goal of putting things right. Accepting responsibility focuses on solutions and prevents someone from blaming others by accepting their role. This coping strategy means taking the consequence of one's own behavior. This serves as a moderator between stress and quality of life because sometimes, stress has negative impact on nurses leading to emotional exhaustion (Ahmad, Dardas & Payne, 2015).

#### Escape-Avoidance

Nurses have challenges in the clinical setting that make them think and dig deeper to solve the problems or hindrances to giving holistic care to patients. Most nurses suffer from stress due to the manual labor, time management, and other stressors they encounter with their daily hospital duties. Basically, nurses deal with stress by focusing on their goals systematically. They also provide knowledge, support, and help their co-workers in any aspects. Furthermore, escape-avoidance is also used by nurses to lessen or deal with their stress which involves behavioral efforts and wishful thinking to avoid the problem. Escape-voidance is most used by General Hospital Nurses compared to psychiatric nurses. General Hospital nurses tend to avoid the stressors when confronted by them and psychiatric nurses tend to face the pressure and deal with stress (Kerr, Orchard, Regan & Wazqar, 2017; Kulakarni & Srimathi, 2017; Tesfaye, 2018).

### Planful Problem-Solving

Problems in the clinical area may arise at any time. Problems come up in many forms: it may be on patient, co-workers, or in the work environment. These problems can bring stress to nurses allowing them to develop coping strategies. Nurses seek or choose positive forms of coping like planful problem solving or build appropriate plans that might be used for the problems that may arise in the clinical setting. Planful problem solving involves deliberate problem-focused efforts to change the situation to solve the problem nurses may draw on past experiences or search for something that may come up with different solutions to the problem. Identifying factors of stress and coping strategies may help nurses and other health care providers to gain a clearer understanding of the condition of patients and thus, institute effective care (Abdollahi, Ismail, Talib & Yaacob 2014; Ahmad & Nazly, 2015)

## Positive Reappraisal

Positive reappraisal involves efforts to make positive vibes by focusing on personal growth and it often involves religious dimension. Positive reappraisal is often used by adults and caregivers to deal with the stressors they encounter in their job. Healthcare providers frequently encounter negative situations and this strategy enables them to look on the positive side despite the negative reality. Positive reappraisal was also reported to help adults to enhance mental health (Nowlan, Rapee & Wuthrich, 2017).

# Research Simulacrum

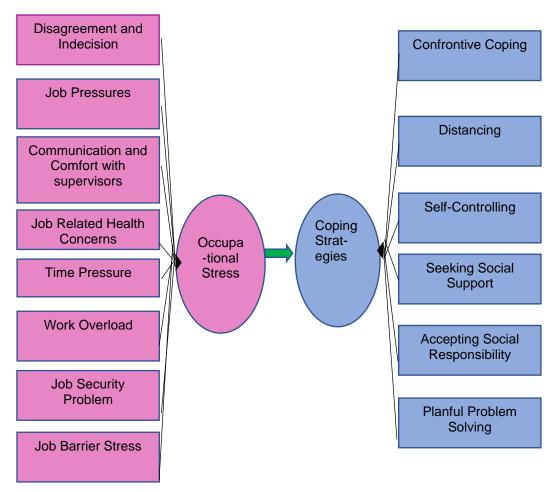


Figure 1: Research Simulacrum

The simulacrum above represents the concept of the study. The diagram illustrates the stressors such as Disagreement and Indecision, Job Pressure, Communications and Comfort with Supervisor, Job related Health Concerns, Work Overload, Job Security Problem, Time Pressure, and Job Barrier Stress cause occupational stress of staff nurses. The occupational stress of staff nurses brings about coping strategies to diminish and build resilience to the stress. The coping strategies include: confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, and planful problem solving.

## METHODS

### **Research Design**

The researchers used a descriptive quantitative study on the occupational stress level of nurses in secondary hospitals and their coping strategies.

### Locale of the Study

This study was conducted in five secondary hospitals in Tuguegarao City, Cagayan. Out of which only 3 gave their approval to conduct the study. The 3 hospitals that gave the approval are: (1) Dr. Domingo S. De Leon General Hospital; (2) Dr. Ronald P. Guzman Medical Center; and (3) Holy Infant Hospital.

#### Participants of the Study

This research study utilized total enumeration of all staff nurses in the secondary hospitals in Tuguegarao City in identifying its target. The study involved all staff nurses in 3 the secondary hospitals mentioned above. From the 119 staff nurses identified, only 107 participated in the research.

#### Instrumentation

The researchers developed a questionnaire to assess the occupational stress level of the secondary hospital nurses based on the American Institute of Preventive Medicine (2012) particularly on the area of research on occupational stress. The questionnaire has 8 domains specifically Disagreement & Indecision, Pressure on the Job, Communications & Comfort with Supervisor, Job related Health Concerns, Work Overload Stress, Problem of Job Security, Time Pressure, and Job Barrier Stress. Each dimension has 5 different questions tapping different domains of occupational stress which can be graded from 1 to 5 where 1 is "Never" and 5 is "Constantly". The participant can obtain a minimum score of 8 and a maximum score of 200. The mean was used to interpret the level of occupational stress the level of coping strategies based on the Ways of Coping Checklist Revised (Lazarus & Folkman, 1984).

The researchers conducted a Content Validity Index (CVI) measurement with the guidance of the Experts Panel. The CVI yielded a valid score of 0.90 for the questionnaire on occupational stress of staff nurses and a valid score of 0.97 for the questionnaire on the coping strategies of staff nurses relevant to their occupational stressors.

# Data Gathering Procedure

The researchers sought permission from the Academic Dean of the School of Education, Arts, Sciences and Health, the, Associate Dean of Health and Allied Sciences, the VP for Academics, and the University Research Ethics Board. A letter was also written to the chief of each hospital to inform them about the purpose of the study and that made data gathering possible. The researchers used questionnaires to gather data. The researchers allotted particular time in doing the data gathering on each hospital. The researchers floated their questionnaires to be answered by the participants.

# Data Analysis

The researchers statistically analyzed the data through frequency, mean, Ttest, and ANOVA. Furthermore, mean scores of the occupational stress level were analyzed based on the following:

Mean Score	Descriptive Statistics
4.50-5.00	<b>Extremely High Occupational Stress</b> <b>Level.</b> Staff nurses constantly have disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, job related health concern, work overload stress; problem of job security, time pressure, and job barrier in all of situations they encounter in their work.
3.50-4.49	Very High Occupational Stress Level. Staff nurses usually have disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, job related health concern, work overload stress, problem of job security, time pressure, and job barrier in all of situations they encounter in their work.
2.50-3.49	<b>High Occupational Stress Level.</b> Staff nurses occasionally have disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, job related health concern, work overload stress, problem of job security, time pressure, and job barrier in all of situations they encounter in their work.

1.50-2.49	Moderately High Occupational Stress Level. Staff nurses rarely have disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, job related health concern, work overload stress, problem of job security, time pressure, and job barrier in all of situations they encounter in their work.
1.00- 1.49	Low occupational Stress level. Staff nurses never had disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, Job related health concern, work overload stress, problem of job security, time pressure, Job barrier in most of situations they encounter in their work.

The mean of scores of the coping strategies were analyzed based on the following:

Mean Score	Descriptive Statistics
4.50-5.00	<b>Extremely High Coping Strategy Level.</b> Staff nurses constantly used coping strategies such as seeking social support, confrontive coping positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities in all of situations they encounter in their work.
3.50-4.49	Very High Coping Strategy Level. Staff nurses usually used coping strategies such as seeking social support, confrontive coping positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities in all of situations they encounter in their work.
2.50-3.49	<b>High Coping Strategy Level.</b> Staff nurses occasionally used coping strategies such as seeking social support, confrontive coping positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities in all of situations they encounter in their work.

1.50-2.49	<b>Moderately High Coping Strategy Level.</b> Staff nurses rarely used coping strategies such as, seeking social support, confrontive coping positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities in all of situations they encounter in their work.
1.00- 1.49	Low Coping Strategy Level. Staff nurses never used coping strategies such as, seeking social support, confrontive coping positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities in all of situations they encounter in their work.

## Ethical Considerations

Prior to conducting the research investigation, permission from the University was sought through the SEASH Academic Dean, Associate Dean of Health and Allied Sciences, VP for Academics, and the University Research Board of Ethics.

Participation in this research study was voluntary. The researchers guaranteed the participants that anonymity of their identity and confidentiality of information would be protected. All records of the participants' profile would be disposed- off properly at the conclusion of the study and data from this research would be kept under lock and key and reported only as a collective combined total. No one except the researchers would know the participants' answers to the questionnaire. The researchers will also emphasize that the participants could still withdraw participation even amidst the research investigation.

### RESULTS

This descriptive study presents the occupational stress level and coping strategy used and its relation to selected demographic variables which will form as basis for the improvement in the formulation of institutional policies and guidelines and developing interventions and coping mechanisms to lessen staff nurses' stress. This portion of the study will answer the research questions stated through quantitative results.

**Table 1.** Demographic Profiles of the Nurses

Sex	Frequency	Percentage		

Male	39	36.40
Female	68	63.60
Total	107	100%
Age Range	Frequency	Percentage
30 years old and Below	79	73.80
31 – 40	25	23.40
41 – 50	2	1.90
51 – 60	1	0.90
Total	107	100%
Marital Status	Frequency	Percentage
Single	69	64.50
Married	38	35.50
Total	107	100%
Ward/ Area of Assignment	Frequency	Percentage
OPD	13	12.10
ER	16	15.00
MS	16	15.00
OR	9	8.40
DR	11	10.30
ICU	3	2.80
Private	21	19.60
NICU	11	10.50
PACU	6	5.60
PICU	1	0.90
Total	107	100%
Length of Employment	Frequency	Percentage
0 – 1	26	24.30
2-4	64	59.80
5 – 7	13	12.10
8 – 10	1	0.90
11 – 13	2	1.90
14 and above	1	0.90
Total	107	100%
Ethnic Group	Frequency	Percentage

Total	107	100%
Mixed Ethnicity	3	2.80
Itneg	2	1.90
Igorot	2	1.90
Itawit	18	16.80
llocano	56	52.30
Ibanag	24	22.40
Bicolano	2	1.90

Table 1 presents that at the time of data gathering, the demographic profile on sex shows that 63.60% of females are currently employed in secondary hospitals. 73.80% of the participants belong to the age range of 30 years and below which is a variable that could influence their occupational stress and coping strategy based on their experiences that come as they age. Considering their marital status, 64.50 % of the staff nurses that participated in the research study are single. Additionally, the bulk of the staff nurses that participated are assigned in the Emergency Room and Medical – Surgical Ward with 16 participants from each area. Furthermore, 64 staff nurses are employed for 2 - 4 years which makes up the majority of the participants and only 2 participants are employed for 8 - 10years and 14 years and above. Even more, 52.30 % or more than half of the participants are llocanos while Bicolano, Igorot, and Isneg make up only 1.90 % each of the participants' ethnicity.

Occupational Stressors	Mean	Description	Rank
Disagreement and Indecision	2.71	High	3.5
		Occupational	
		Stress Level	
Job Pressure	2.79	High	2
		Occupational	
		Stress Level	
Communication and comfort	2.71	High	3.5
with supervisor		Occupational	
		Stress Level	
Job related health concerns	2.62	High	6
		Occupational	
		Stress Level	
Work overload	2.66	High	5
		Occupational	
		Stress Level	
Job security problem	2.58	High	8
		Occupational	

 Table 2. Occupational Stressors of Staff Nurses

		Stress Level	
Time pressure	2.99	High	1
		Occupational	
		Stress Level	
Job Barrier stress	2.61	High	7
		Occupational	
		Stress Level	

Table 2 presents that the occupational stressors of staff nurses indicate that these stressors cause a high occupational stress level to staff nurse wherein they occasionally have disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, Job related health concern, work overload stress, problem of job security, time pressure, job barrier in all of situations they encounter in their work. The most common cause of their stress is time pressure followed by job pressure and the least is job security problem.

Coping Strategies	Mean	Description	Rank
Confrontive coping	3.85	Very High Coping Strategy Level	1
Distancing	3.78	Very High Coping Strategy Level	3
Self-controlling	3.70	Very High Coping Strategy Level	5
Seeking Social Support	3.66	Very High Coping Strategy Level	6
Accepting Social Responsibility	3.81	Very High Coping Strategy Level	2
Planful Problem Solving	3.72	Very High Coping Strategy Level	4

 Table 3. Coping Strategies for Occupational Stress among Staff Nurses

Table 3 presents that staff nurses constantly use coping strategies to reduce their occupational stress. Majority of the staff nurses use confrontive coping as their coping strategy while the least used coping strategy for staff nurses is seeking social support. Staff nurses prefer to face the risk to reduce their stress rather than expressing their feelings to their family and friends.

 Table 4a. Significant Difference on the Occupational Stress of Staff Nurses

 when grouped according to Age

Occupational Stressors	df	F - value	p - value
Disagreement and Indecision	3	0.577	0.632
_			
Job Pressure	3	0.464	0.708
Communications and comfort	3	2.353	0.077
with supervisor			
Job related health concerns	3	1.414	0.243
Work overload	3	1.492	0.221
Job security problem	3	1.677	0.176
Time pressure	3	2.318	0.080
Job Barrier stress	3	1.361	0.259

Table 4a shows that with p-values greater than 0.05, the occupational stress level of staff nurses, when grouped according to age, has no significant difference.

 Table 4b. Significant Difference on the Occupational Stress of Staff Nurses

 when grouped according to Sex

Occupational Stressors	df	F - value	p - value
Disagreement and Indecision	105	- 0.007	0.994
Job Pressure	105	- 0.397	0.692
Communications and comfort	105	-0.432	0.667
with supervisor			
Job related health concerns	105	-1.567	0.120
Work overload	105	-1.650	0.517
Job security problem	105	-1.898	0.060
Time pressure	105	0.076	0.939
Job Barrier stress	105	-1.964	0.052

Table 4b presents that with p-values of greater than 0.05, the occupational stress level of staff nurses, when grouped according to their sex, has no significant difference.

 Table 4c. Significant Difference on the Occupational Stress of Staff Nurses

 when grouped according to Marital Status

Occupational Stressors	df	F - value	p - value
Disagreement and Indecision	105	0.018	0.986
Job Pressure	105	-0.338	0.736
Communications and comfort	105	-0.106	0.916

with supervisor			
Job related health concerns	105	-0.431	0.668
Work overload	105	-1.112	0.268
Job security problem	105	-0.677	0.500
Time pressure	105	-1.688	0.094
Job Barrier stress	105	0.214	0.831
*Significant at 0.05 level			

Table 4c presents that with p-values of greater than 0.05, the occupational stress level of staff nurses, when grouped according to marital status, has no significant difference.

 Table 4d. Significant Difference on the Occupational Stress of Staff Nurses

 when grouped according to Ward Assignment

Occupational Stressors	df	F - value	p - value
Disagreement and Indecision	9	1.654	0.111
_			
Job Pressure	9	1.421	0.190
Communications and comfort	9	1.660	0.109
with supervisor			
Job related health concerns	9	1.042	0.413
Work overload	9	1.829	0.073
Job security problem	9	1.902	0.060
Time pressure	9	0.594	0.799
Job Barrier stress	9	1.771	0.083

Table 4d presents that with p-values of greater than 0.05, the occupational stress level of staff nurses, when grouped according to area, has no significant difference.

 Table 4e. Significant Difference on the Occupational Stress of Staff Nurses

 when grouped according to Length of Employment

Occupational Stressors	df	F - value	p - value
Disagreement and Indecision	5	0.523	0.759
Job Pressure	5	1.039	0.399
Communications and comfort	5	1.365	0.244
with supervisor			
Job related health concerns	5	2.478	0.037 *
Work overload	5	1.561	0.178
Job security problem	5	1.401	0.230
Time pressure	5	2.253	0.057
Job Barrier stress	5	0.938	0.460

# \*Significant at 0.05 level

Table 4e shows that with a p-value of 0.037, the occupational stress level of nurses relevant to job related health concerns, when grouped according to length of employment, has a significant difference.

 Table 4e1. Least Significant Difference on Job Related Health Concern

 Stress of Staff Nurses when grouped according to Length of Employment

Years	Mean	df	F- value	p- value
0 – 1	2.35			
2 – 4	2.64			
5 – 7	3.12	5	2.478	0.037
8 – 10	3.00	Ŭ	2.170	0.007
11 – 13	1.70*			
14 years and above	3.40*			

Table 4e1 presents that staff nurses employed for 11-13 years are least stressed on job related health concerns; however, those who are 14 years and above in service are most stressed on the same concern.

 Table 4f. Significant Difference on the Occupational Stress of Staff Nurses

 when grouped according to Ethnicity

Occupational Stressors	df	F - value	p - value
Disagreement and Indecision	6	2.727	0.017*
Job Pressure	6	0.652	0.688
Communications and comfort	6	0.563	0.759
with supervisor			
Job related health concerns	6	3.048	0.009*
Work overload	6	1.837	0.099
Job security problem	6	1.870	0.093
Time pressure	6	0.789	0.580
Job Barrier stress	6	2.786	0.551

Table 4f presents that with p-values less than 0.05, disagreement and indecision as well as job-related health concerns, when grouped according to ethnicity, are the most common causes of occupational stress among nurses.

 Table 4f1. Least Significant Difference on Disagreement and Indecision

 Stress of Staff Nurses when grouped according to Ethnicity

Ethnicity	Mean	df	F- value	p - value
Bicolano	2.30*	6	0.652	0.017
Ibanag	2.69	0	0.002	0.017

llocano	2.76
Itawit	2.64
Igorot	2.40
ltneg	2.20*
Mixed Ethnicity	3.20*

Table 4f1 presents that along disagreement and indecision, nurses with mixed ethnicity are mostly stressed; whereas, Itneg Nurses experience the least stress.

 Table 4f2.
 Least Significant Difference on Job Related Health Concern

 Stress of Staff Nurses when grouped according to Ethnicity

Ethnicity	Mean	df	F- value	p - value
Bicolano	1.80*			
Ibanag	3.05*			
llocano	260			
Itawit	2.26	6	2.727	0.009
Igorot	1.90*			
Itneg	2.40			
Mixed Ethnicity	3.07			

Table 4f2 shows that when grouped according to ethnicity, Blcolano, Igorot and Ibanag staff nurses are least stressed on their job.

 Table 5a. Significant Difference on the Coping Strategies of Staff Nurses

 when grouped according to Age

Coping Strategies	df	F - value	p - value
Confrontive Coping	3	1.527	0.212
Distancing	3	1.450	0.233
Self-Controlling	3	1.556	0.205
Seeking Social Support	З	1.430	0.238
Accepting Social	3	1.466	0.706
Responsibility			
Planful Problem Solving	3	1.647	0.183

Table 5a presents that with p-values greater than 0.05, the coping strategies of staff nurses when grouped according to age has no significant difference.

 Table 5b. Significant Difference on the Coping Strategies of Staff Nurses

 when grouped according to Sex

Coping Strategies df F - value p - value
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Confrontive Coping	105	1.994	0.05
Distancing	105	1.908	0.054
Self-Controlling	105	1.683	0.095
Seeking Social Support	105	1.992	0.05
Accepting Social Responsibility	105	0.202	0.840
Planful Problem Solving	105	1.879	0.003*

Table 5b presents that with p-values greater than 0.05, the coping strategies of staff nurses when grouped according to sex, has no significant difference.

 Table 5c. Significant Difference on the Coping Strategies of Staff Nurses

 when grouped according to Marital Status

Coping Strategies	df	F - value	p - value
Confrontive Coping	105	-1.952	0.054
Distancing	105	-2.172	0.052
Self-Controlling	105	-1.877	0.063
Seeking Social Support	105	-1.361	0.177
Accepting Social Responsibility	105	-1.736	0.085
Planful Problem Solving	105	-1.272	0.206

Table 5c presents that with p-values greater than 0.05, the coping strategies of staff nurses when grouped according to marital status has no significant difference.

 Table 5d. Significant Difference on the Coping Strategies of Staff Nurses

 when grouped according to Ward/Area of Assignment

Coping Strategies	df	F - value	p - value
Confrontive Coping	9	2.988	0.003*
Distancing	9	2.463	0.014*
Self-Controlling	9	2.990	0.003*
Seeking Social Support	9	2.312	0.021*
Accepting Social Responsibility	9	1.546	0.143
Planful Problem Solving	9	2.064	0.040*

Table 5d shows that with a p-value of 0.143, staff nurses cope significantly different in accepting social responsibility.

 Table 5d1. Least Significant Difference on Confrontive Coping of Staff

 Nurses when grouped according to Ward/Area of Assignment

Ethnicity	Mean	df	F- value	p - value
OPD	4.28*			
ER	4.11			
MS	3.79			
OR	3.89			
DR	4.20*	9	2.980	0.003
ICU	2.73	Ŭ	2.000	0.000
Private	3.70			
NICU	3.49			
PACU	3.97			
PICU	1.00*			

Table 5d1, shows that as compared to other wards/areas in the hospital, OPD staff nurses usually manifest extremely high confrontive coping. Delivery Room nurses follow OPD nurses by using confrontive coping to a very high extent. On the other hand, the staff nurses in PICU use the same strategy to a low extent only.

 Table 5d2.
 Least Significant Difference on Distancing of Staff Nurses when grouped according to Ward/Area of Assignment

Ethnicity	Mean	df	F- value	p - value
OPD	4.23*			
ER	3.83			
MS	3.64			
OR	3.89			
DR	4.05*	9	2.463	0.014
ICU	2.73	Ŭ	2.400	0.014
Private	3.79			
NICU	3.47			
PACU	3.83	]		
PICU	1.00*			

Table 5d2 shows that as compared to other wards/areas in the hospital, OPD nurses use distancing as a coping strategy to a very high extent; whereas, PICU staff nurses use such strategy to a low extent only.

 Table 6. Occupational Stress Level of Staff Nurses when grouped according to their Sex

Paramete	er	Sex	Frequency	Percentage
Extremely	High	Male	0	0
Occupational	Stress	Female	0	0
Level				
Very High Occu	pational	Male	6	6

Stress Level	Female	2	2
High Occupational	Male	22	21
Stress Level	Female	40	37
Moderately High	Male	10	9
Occupational Stress	Female	24	22
Level			
Low Occupational Stress	Male	1	1
Level	Female	2	2
	Total	107	100%

Table 6 shows that 8% of the staff nurses experienced very high occupational stress level, from which, 6% are males and 2% are females. Furthermore, 37% of the participants from females and 21% of the participants from males experienced high level of occupational stress. On the other hand, only 1% of the participants are males and 2% of the participants are females who experienced low occupational stress level.

 Table 7. Coping Strategy Level of Staff Nurses when grouped according to their Sex

Parameter	Sex	Frequency	Percentage
Extremely High Coping	Male	2	2
Strategy Level	Female	9	8
Very High Coping	Male	22	21
Strategy Level	Female	43	40
High Coping Strategy	Male	11	10
Level	Female	14	13
Moderately High Coping	Male	3	3
Strategy Level	Female	0	0
Low Coping Strategy	Male	1	1
Level	Female	2	2
	Total	107	100%

Table 7 shows that 10% of the staff nurses experienced extremely high coping strategy level, from which, 2% are males and 8% are females. Furthermore, 40% of the participants are females and 21% of the participants are males who experienced high level of occupational stress. On the other hand, only 1% of the participants are males and 2% of the participants are females who experienced low occupational stress level.

# DISCUSSION

The research focused on the occupational stress level and coping strategies of staff nurses, and the most common stressors and coping mechanism,

in secondary hospitals in Tuguegarao City. In this study, the level of occupational stress and coping strategies when grouped according to age, sex, marital status, ethnicity, length of employment, and ward/area of assignment was measured and served as an evaluation of the stressors that contribute to work-related stress of staff nurses and their coping strategies which may be used by Health Institutions in formulating institutional policies and coping interventions that will lessen the stress level of staff nurses.

In relation to socio-demographic profile, among the 107 respondents, 63.60% were female and 73.80 % belong to the age group of 30 years and below. Similar with the study by (Gulavani, Mohite & Shinde, 2014), most of the participants were younger than 30 years old and 86% are female. In terms of marital status, single nurses make the bulk of the participants as opposed by (Gulavani, Mohite & Shinde, 2014) wherein 57% of their participants were married. This may be attributed to the Philippines being a conservative country and increase in educational attainment may prolong the time before marriage (Blanc, Bongaarts & Mensch, 2017). In addition, majority of the participants were assigned in the Emergency Room and Medical – Surgical Ward due to higher number of patients admitted in these areas.

Further, more than half of the participants are employed for 2 - 4 years and only one from 8 - 10 years and one from 14 years and above. This may indicate a high turnover rate, a manifestation of occupational stress in nurses, in addition to absenteeism and low levels of productivity (Teng, Hsiao & Chou, 2010).

Ilocano is the dominant ethnicity of the participants compared to Ibanag and Itawes which are all endemic to Cagayan Valley, for the reason that, Ilocano culture dominates during intermarriage between the three ethnic groups as the Ibanags and Itawes subscribe to them. Additionally, Ilocano overrides the 2 because their language can be easily learned by the Ibanags and Itawes on the contrary, their Ilocano spouses perceive such dialects to be totally different from theirs. Such languages, customs, values, and beliefs which collectively identify an individual's ethnicity can be passed to their children and to their children's children and so forth (Tamayao, 2001).

The result shows that occupational stress of staff nurses in secondary hospitals was high due to daily exposure to stressful situations. In terms of cause of stress, time pressure represents the highest stressor in contributing to the occupational stress of nurses and is followed by pressure on the job. This finding is consistent with the study carried out by (Kane, 2009), It was found out that most important causes of stress were overtime, jobs were not finished on time, and insufficient pay. Furthermore, although job security problem is still perceived by the participants as "High" in regard to occupational stressors, it is the least factor considered by the participants to contribute to their occupational stress level.

In this study, when grouped according to socio-demographic profile, occupational stress level shows no significant difference in terms of age, sex, marital status, and ward or area of assignment. On the other hand, there is a significant difference on the occupational stress level particularly on job health concerns when grouped according to length of employment. The study shows that those who are employed for 14 years and above have the highest job health concerns which are attributed to the hazardous cumulative effect of exposure to physical dangers, long term night shift work, and other work-related health concerns (Devore, Pierre-Paul, Ramin, Schernhammer & Wang, 2015). This is in contrast with the study of (Ding, Qu, Wang & Yu, 2014) which presented that length of employment has the opposite relationship between length of employment and occupational stress due to the rewards and benefits received such as increase in salary and bonus, which may not be applicable in the local hospitals that participated in this research study.

Furthermore, occupational stress level when grouped by ethnicity, in terms of stressors, disagreement and indecision and job-related health concerns show significant difference. Ethnicity is defined as a shared cultural characteristics, such as values, history, language and customs (Keshel &Popper-Giveon, 2016). Under the stressor disagreement and indecision, participants with mixed ethnicity have the highest occupational stress level, while Itneg has the lowest occupational stress level in terms of disagreement and indecision followed by Bicolano.

The result of this study, Bicolano followed by Itneg as an ethnic group minority, is inconsistent with the findings of (Bhui, Dhillon,Shaw, Smith, Stansfeld & Wadsworth, 2005), which suggest that ethnic group with different cultural origin of that of the dominant ethnic group experiences racial discrimination because of ethnicity and gender, has a strong influence over stress from work. In addition to this, nurses with different ethnicity in the clinical field may experience psychological distress. The conflicting results may be due to the unique cultural characteristic traits of participants belonging to Bicolano and Itneg that led to the conclusion (Morales, 2014).

Additionally, when grouped according to ethnicity, the occupational stress level specifically the job-related health concerns of Ibanags gained the highest mean. This is attributed from the perception of the Ibanags on unhealthy working conditions, existence of physical dangers, hostile threats from co-workers, discouraged sick leaves, and heavy physical tasks. The ethnic groups with the lowest occupational stress level under job related health concerns are Bicolano and Igorot, respectively.

This research shows that the coping strategy level of staff nurses in terms of Confrontive Coping, Distancing, Self-Controlling, Seeking Social Support, Accepting Responsibility, and Planful Problem Solving is "Very High" and is usually used by them. Confrontive coping has the highest coping strategy followed by accepting responsibilities and seeking social support as the least. Confrontive coping is commonly used by nurses because of the exposure to violence from patients and hostile environment. Furthermore, confrontive coping is used by the nurses to confront the problem directly when they come face to face with stressors (Kulakarni & Shrimati 2017). Additionally, staff nurses in secondary hospitals of Tuguegarao City usually accept the mistake that they commit and accept accountability of the situation. Moreover, staff nurses usually use emotional, physical, and informational support when they encounter stressors but in lesser degree compared to other coping strategies.

The level of coping strategy shows no significant difference when grouped according to age, marital status, length of employment and ethnicity but shows significant difference when grouped according to sex, and ward / area of assignment. Male and female staff nurses differ in planful problem solving strategy when dealing with occupational stress.

In terms of the level of coping strategy when grouped according to ward or area of assignment, the Out-Patient Department (OPD) gained the highest level of coping strategy specifically Confrontive Coping, Distancing, Self-Controlling, Seeking Social Support, and Planful Problem Solving. Resilience is proportionally related with coping to occupational stress in hospital setting. Work- life balance is important in the maintenance of a nurses' resilience, hence, if a nurse has control over his job and has less psychological demands, the nurse has the capacity to perform appropriately (Karasek, 1970;, Kim & Shin, 2017). OPD nurses have lesser workload compared to nurses from the different wards, less rigid policies and rules, and lighter work. Furthermore, OPDs are closed during evening shift which can help the nurses' deal with other problems outside the hospital setting which can help them build resilience which contributes to the high coping strategy level of staff nurses in the OPD (Akhavan, Sandmark & Yuwanich, 2016).

Furthermore, the staff nurses from the Delivery Room (DR) have also high level of coping strategy particularly confrontive coping and distancing. The staff nurses from the DR usually utilize direct solutions to the problems and may even include risk taking behaviors.

In addition, the Pediatric Intensive Care Unit (PICU) uses the least coping strategy in terms of confrontive coping, distancing, self-controlling, seeking social support, and planful problem solving compared to other wards or areas of assignment followed by Intensive Care Unit (ICU). Working in the PICU and ICU is complex and is also emotionally, physically and cognitively draining because of the constant monitoring and interventions needed for critically ill patients (Bakker, Kompanje, Nijkamp, Schaufeli & Van Mol 2018). The PICU and ICU are at greatest risk due to high psychological demand and low job control which may cause adverse effect such as fatigue, depression, and anxiety to the staff nurses (Karasek, 1970).

### Implication to Nursing

Nurses make the majority of the health care team and a registered nurse will be the most involved in the day-to-day care of patients. The occupational stress levels of staff nurses in secondary hospitals are "High" despite the Very High-level use of coping strategies. It is therefore necessary for Health Care Institutions and Nursing Organizations to institute explicit measures of minimizing occupational stress affecting nurses and must regularly assess for occupational stress so that they have bases on possible conduct of a series of stress management programs because despite of exhausting their personal and professional ability to reduce their stress as manifested by Very High-Level use of Coping Strategy, the occupational stress level of staff nurses is still high.

# CONCLUSIONS

In conclusion, the occupational stress level of staff nurses in Tuguegarao City is high. They occasionally have disagreement and indecision, pressure on the job, miscommunication and discomfort with supervisor, job related health concern, work overload stress, problem of job security, time pressure, and Job barrier in all of situations they encounter in their work. Time pressure is the most common stressor. On the other hand, the use of coping strategy of the nurses is "Very High", except for PICU which has low level of coping. The staff nurses usually use coping strategies such as seeking social support, confrontive coping, positive reppraisal, distancing, escape or avoidance, self controlling, and accepting responsibilities in all of situations they encounter in their work with confrontive coping as the most common coping strategy.

When grouped according to socio-demographic profile, in terms of age, sex, marital status, and ward or area of assignment showed no significant difference while the length of employment and ethnicity showed significant difference for Occupational stress. In terms of coping strategy, there is no significant difference when grouped according to age, marital status, length of employment, and ethnicity but shows significant difference when grouped according to sex and ward / area of assignment.

# RECOMMENDATIONS

In light of the results of this research study, the researchers recommend the following to be implemented for reduction of occupational stress of staff nurses:

1. This research study must be conducted in all hospitals within the region including primary and tertiary hospitals to further assess the extent of occupational stress level and coping strategy of staff nurses.

- 2. Healthcare facility must conduct a regular basis assessment regarding the occupational stress level and coping strategies of staff nurses.
- 3. The different wards/areas of assignment must have a regular seminar regarding Occupational Stress and Coping Strategy.
- 4. The hospitals must implement their institution measures to reduce stress.
- 5. The different hospitals' research committees must also conduct this research within their institution.

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