

Stress as Correlate to Work Performance among Nurses in a Select Government Hospital

AUDREY ROSE L. ABARQUEZ
ORCID No. 0000-0002-2418-4401
abarquez.ar@gmail.com
Liceo de Cagayan University
Cagayan de Oro City

ABSTRACT

This study aimed at determining the correlation between level of stress and work performance among nurses. This study utilized the descriptive research design. Northern Mindanao Medical Center was the research locale. Purposive sampling technique was used in the selection of forty regular nurses and their immediate supervisors as respondents. Findings showed that most of the respondents are females, aged thirty-six years old, and were married with one dependent. As to monthly salary, most earned P 17,501 to P 18,000 with most of their spouses being self-employed. The highest nurse-patient ratio was on 1:10 ratio and assigned OR/PACU. In terms of work shift, highest percentage falls on 7-3 AM. The majority of the respondents are Roman Catholics and to ethnicity, the majorities are Cebuanos. Furthermore, among the four dimensions of stress the highest mean was on the physical dimensions and lowest were social and psychological dimensions. The level of clinical work performance of the respondents as assessed by themselves and their supervisors was very good. Results also showed significant difference in the level of nursing performance as assessed by themselves and their supervisors, particularly under the behavioral factor. Data also showed interaction effects of the intervening variables such as work shift, number of dependents, and age.

Keywords - Correlates, stress, work performance, nurses

INTRODUCTION

Stress has been regarded as an occupational hazard since mid-1950. In fact, occupational stress has been cited as a significant health problem even among nurses. Work stress in nursing was first assessed in 1960 when Menzies identified four sources of stress among nurses which included patient care, decision making, taking responsibility and change. The nurses' role has been regarded as one of the stress-filled jobs based upon physical labor, human suffering, work hours, staffing, and interpersonal relationships that central to the work that nurses do. In the mid-1980's, however, nurses' work stress maybe escalating due to the increasing use of technology, continuous rises in health care cost, and turbulence within the work environment.

In the Philippines, nurses are guided by the R.A. 9173 also known as the Philippines Nursing Act of 2002 which provides more responsive nursing profession, repealing for the purpose of Republic Act No. 7164 otherwise known as "The Philippine Nursing Act of 1991." Nurses shall collaborate with other health care providers for the curative, preventive, and rehabilitative aspects of care, restoration of health, alleviation of suffering, and when recovery is not possible towards a peaceful death. (http://www.lawphil.net/statutes/repacts/ra2002/ra_9173_2002.html). However, stress among nurses might result from the combined responsibilities of work, marriage, and children. The effects of both work and non-work stress among nurses have been studied infrequently. And yet, non-work stress maybe particularly salient to nursing, a female predominant profession. Along with this, women continued to juggle multiple roles, including those related to home and family, for which the women may have sole or major responsibility such as taking care of their aged parents, children, and husband.

Nursing performance is usually assessed using standard performance evaluation tool to measure clinical competencies of nurses. This may vary from one hospital to the other but shares the same goal of identifying success-predicting factors on nurses work performance and to see this factors not bias by the nurse's profile such as the nurse's race, sex, socioeconomic status and others (Welton,R&Neives-Khouw,F, 2001). In this study, Northern Mindanao Medical Center- a tertiary public hospital, utilizes a standard tool known as the Performance Evaluation System. It is widely used among public hospitals and agencies therefore it is applicable to all regular employed personnel but limited to the contractual or job

orders. Since it is a mandated memorandum, its intention is to rate employees specially nurses on their work performance and not basing the demographic profile. Regular staff nurses have the opportunity to rate themselves according to their perception on how well they perform in the area of assignment basing on the factors and indicators provided which will then be assessed and rated finally by the supervisors. The result of the performance evaluation is crucial for formulating a performance-based incentives and promotions. In this study, the tool was utilized and was modified to suit the research scope and limitation. Chosen respondents are obtained using the purposive sampling and was limited only to the regular nurses of Northern Mindanao Medical Center provided that they met the criteria of being at least with two years' work experience in the said hospital, either male or female, has been assigned to different areas. Respondents' profile as moderator was only limited to the respondents' age, gender, civil status, number of dependents, monthly salary, work of husband/wife, nurse-patient ratio, area of assignment, work shift, religion and ethnicity.

This correlational study of stress and work performance among nurses in Northern Mindanao Medical Center provided to interest to the researcher to put this concept in to writing. Until now, not much research has been conducted on stress in relation to nursing performance in low income and developing countries like here in the Philippines. Considering that individuals in developing economic experience continuous and prolong stress, it is useful to see how these professionals like nurses cope in terms of work and stress. The nursing profession has not been openly appreciated much in the Philippines despite of positive impacts on the lives of the Filipinos and the public at large. Full blown population of nurses is remarkable and on the contrary still the country craves for quality healthcare due to being understaffed of nurses.

FRAMEWORK

This study is anchored on the theories of Rogers (1986), Neuman (1995) and King (1986) which describes the subsystems or the subunit of being whole as an individual and how it interacts with stressors and stress within, and outside the body whole as an individual and how it interacts with stressors and stress within, and outside the body system. Republic Act No. 9173 known as the Nursing Act of 2002 serves as a guide to understand the standards of how a professional nurse performs the crucial role of providing quality care to the public. The concept of House (1981) was also adopted as it explains the relationship between the two

variables. As the stress decreases the better the nurse will perform the task given to him or her. The study of House (1981), it further discusses the importance of lessening the stress by building strong work place support system thus making other dimensional stress such as physical exhaustion, social conflict, spiritual and psychological stress less experienced. These cited theories and concepts was utilized to further understand the meaning and upon explaining results of the correlations among variables.

Martha Rogers (1986) proposes the Science of Unitary Human Being Theory which composes of the so-called "critical elements". These are energy fields, open system and pattern and pandimensionality. Her theory seeks to promote symphonic interaction between human and environmental field, to strengthen the integrity of the human field and to direct and redirect patterning of human and environmental fields for the realization of maximum health potential. Furthermore, her theory describes man as a unified whole possessing his own integrity and manifesting characteristics more than different from the sum of his part and thus continuously exchanging matter and every with the environment. Therefore stress as an environmental energy affects the system of a person as this is an "open system" which means it can be subjected to changes. The result of this interaction will vary from person to person as every individual is unique. Each systems or dimension of a person have different capacity of abstraction and imagery, language and thought, and sensation and emotion which clearly defines the character difference of every individual (Baustista, 2008).

In addition to Roger's work, Neuman (1995) proposes the System Model Theory. Neuman (1995) System Model theory further explains the relationship of a person to stress. She considers the person as an open system composed of a basic structure of energy sources. This source includes physiological, psychological, sociocultural, developmental and spiritual. The basic structures or the central core of a person is surrounded by two concentric boundaries or rings called lines of resistance. These lines represent internal factors that aids the person defend against a stressor. The lines of resistance are further surrounded by two lines of defense. The first line of defense is the person's state of equilibrium or the state of adaptation developed and maintained over time and which is considered normal for the person. The second line of defense is flexible, dynamic and can readily and rapidly change over a short period of time. Man's reaction to stress is dependent on the integrity of lines and defenses (Bautista, 2008).

Neuman (1986) classified stress as intrapersonal (occurs within the individual), interpersonal (between one or more individual), Extrapersonal (outside the

individual or so-called environment). Reconstitution defined my Neuman as the man's reaction to adapt the stressor. In nurses multiple work role, reconstitution has something to do in the nurses wellness to perform certain task (Baustista, 2008).

King's (1986) Goal Attainment Theory proposed that the nurse interacts in the system simultaneously as a person at three different levels namely: a.) Personal, b.) interpersonal and c.) social framework. These levels are dependent and at the same time co-exist to influence the overall nursing performance of quality health care. Personal defined by King (1986) as how the nursing views and integrates self, based from personal goals and beliefs. Interpersonal according to King means how the nurse interrelates with co-workers or patients particularly in the nurse-patient relationship. Social – means how the nurse interacts with co-workers, supervisors, subordinate, and client environment in general (Baustista, 2008).

In this study, a modified PES was utilized to suit the study PES rating which is divided into two categories; 1.) Performance which includes activities of nurses associated with patient care in the assigned area with specific targets of quantity and quality to be rated according to the rate of accomplishment of the task such as following the twelve rights of giving medications and etc. 2.) Behavioral Factors such as: a.) courtesy which will be rated according to shown kindness in manner or action when dealing patients and co-workers, b.) human relation –rate depends on how a nurse properly assist, answers queries, and has good social/interpersonal relation with the members of the team and patients, c.) integrity- rate depends on how honest and sincere a nurse works in the area, d.) stress tolerance- rate depends on the ability to stay compost/ calm despite of the pressure of work in the area, e.) initiative/resourcefulness-rate depends on the nurses' ability to easily originate/ formulate new ideas, and methods to cope in a difficult situation, f.) compliance to office rules and regulations.(Memorandum Circular No.12, s. 1999, NMMC).

OBJECTIVES OF THE STUDY

The study aimed to : (1) describe the respondents profile according to: Age; Gender; Civil Status; Number of Dependents; Monthly Salary; Work of husband/wife; Nurse-Patient Ratio; Area of Assignment; Work Shift; Religion; and Ethnicity, (2) determine the level of stress of the respondents in term of: Social Dimension; Physical Dimension; Psychological Dimension; and Spiritual

Dimension, (3) identify the level of work performance of the respondents as assessed by themselves and their supervisors along with the following indicators: Work Performance and Behavioral Factors like Courtesy, Human relation, Integrity, Stress tolerance, Initiative and resourcefulness and Compliance to office rules and regulation, (4) determine a significant difference in the level of work performance of the respondents as assessed by themselves and supervisor, (5) determine the significant relationship between the respondents' level of stress and the level of work performance, and (6) measure the interaction effect of the following intervening variables to the relationship between level of stress and work performance like: age, gender, civil status, number of dependents, monthly salary, and work of husband/wife, nurse-patient ratio, area of assignment, work shift, religion and ethnicity.

METHODOLOGY

The descriptive research design was utilized to describe the level of stress as correlated to work performance among nurse in Northern Mindanao Medical Center. The respondents were composed of forty (40) nursing staff. They were chosen through the purposive sampling technique. The criteria of selection were: a) at 2 years of work experience; b) assigned in different areas of the hospital; and c) either male or female. The other group of respondents comprised of ten (10) nursing supervisors who rated and evaluated the nursing staff in terms of work performance, and behavioral factors.

The research instrument used was the modified questionnaire which was divided into three parts:

Part I dealt with the respondents' profile which included the respondents' age; gender; civil status; number of dependents; monthly salary; work of husband/wife (if married); nurse-patient ratio; area of assignment; work shift; religion; ethnicity. Part II dealt with the respondents' level of stress which was modified from "Professional Life Stress Scale" by David Fontana (2011) adapted from *Managing Stress*, The British Psychological Society and Routledge Ltd., (1989); and "Burnout Risk Survey" by Pfifferling (2009). This part was rated by the respondents with scale from 1 to 5 in which 5 is described as "very high; 4 as "high"; 3 as "moderate"; 2 as "low"; and 1 as "not at all" Part III focused on the level of nursing performance which was adapted from the Performance Evaluation System (PES) form of Northern Mindanao Medical Center, Memorandum Circular No.12, s.1999. In this part the respondents' will rate

themselves and later by their respective supervisors in the assigned area. The scale of ranges from 1 to 5 in which 5 is the highest and described as “outstanding”; 4 as “very satisfactory”; 3 as “satisfactory”; 2 as “unsatisfactory”; and 1 as “poor”. The modified research questionnaire was tested for reliability which yielded a Cronbach Alpha Coefficient of 0.87492, indicating that the questionnaire is highly reliable.

A written letter was submitted to the Chief of Hospital and to the Chief Nurse of Northern Mindanao Medical Center to secure permission to conduct the study in the institution to be duly endorsed by the Research Adviser, and Dean, School of Graduate Studies of Liceo de Cagayan University. After permission was given, the researcher distributed the pilot tested researcher-made questionnaire to the two groups of respondents. The questionnaire was accompanied with a cover letter addressed to the respondents and respective supervisors stating the purpose of the study. They were assured of the, anonymity or confidentiality of their responses.

The statistical tools used in the analysis and interpretations of data are as follows: Frequencies and Percentage Distribution. These were used for the respondent’s profile such as the age, gender, civil status, number of dependents, monthly income, work of husband/wife (if married), nurse-patient ratio, area of assignment, and work shift, religion, and ethnicity. Weighted mean. This was used for the item analysis of level of stress and work performance by the respondents.

The null hypotheses were tested through the T-test, F-test, Pearson Correlation Coefficient, and Multiple Regression Analysis

RESULTS AND DISCUSSION

Objective 1. To determine the respondents’ profile according to age, gender, civil status, number of dependent’s monthly salary, work of husband/wife, nurse-patient ratio, and area of assignment work shift, religion, and ethnicity.

Table 1. Respondent's Profile According Age, Gender, and Civil status, Number of Dependents, Monthly Salary, and Work of Husband/Wife, Nurse-Patient Ratio, and Area of Assignment Work Shift, Religion, and Ethnicity

Age	Frequency	Percent
26-30	4	10.0
31-35	5	12.5
36-40	17	42.5
41-45	12	30.0
46-48	2	5.0
Total	40	100.0
Gender	Frequency	Percent
Male	8	20.0
Female	32	80.0
Total	40	100.0
Civil Status	Frequency	Percent
Single	7	17.5
Married	32	80.0
Widow	1	2.5
Total	40	100.0
Total number of dependents	Frequency	Percent
None	5	12.5
1	9	22.5
2	7	17.5
3	8	20.0
4	7	17.5
5	3	7.5
6	1	2.5
Total	40	100.0
Monthly Salary	Frequency	Percent
P 17,000	14	35.0
P 17,001-17,500	9	22.5
P 17,501-18,000	15	37.5
P 20,000-23,000	2	5.0
Total	40	100.0

Work of husband/wife	Frequency	Percent
Self-Employed	5	12.5
Engineer	1	2.5
Private Employee	2	5.0
Seaman	2	5.0
Businessman	5	12.5
Soldier	1	2.5
Nurse	1	2.5
OFW	1	2.
Teacher	1	2.5
Clinical Instructor	1	2.5
Phlebotomist	1	2.5
None	12	30.0
N/A	7	17.5
Total	40	100.0
Nurse-patient ratio	Frequency	Percent
1:1	7	17.5
1:2	1	2.5
1:3	4	10.0
1:5	1	2.5
1:6	1	2.5
1:8	1	2.5
1:10	9	22.5
1:15	1	2.5
1:20	2	5.0
1:30	4	10.0
1:40	5	12.5
1:50	3	7.5
1:60	1	2.5
Total	40	100.0
Area of Assignment	Frequency	Percent
ICCU	3	7.5
Medical Ward	2	5.0
Orthogyne Ward	2	5.0

OB Ward	2	1.0
General Ward	2	5.0
OR/PACU	10	25.0
Suite RM/IS/ENT Ward	1	2.5
ER	6	15.0
PEDIA	2	5.0
D.R/NICU	8	20.0
Surgical Ward	2	5.0
Total	40	100.0
Work Shift	Frequency	Percent
7-3 (AM)Shift	21	52.5
3-11 (PM) Shift	12	30.0
11-7 (NIGHT) Shift	7	17.5
Total	40	100.0
Religion	Frequency	Percent
Roman Catholic	33	82.5
Jehovah's Witnesses	1	2.5
IFI	2	5.0
Protestant	2	5.0
Born Again Christian	2	5.0
Total	40	100.0
Ethnicity	Frequency	Percent
Cebuano	29	72.5
Surigaonon	2	5.0
Cagay-anon	7	17.5
Bisaya/ Visayan	2	5.0
Total	40	100.0

Table 1 shows the distribution of the respondents' profile. In terms of age, most of the respondents (17 or 42.5%) are ages 36-40 years old, and a few (2 or 5%) are 46-48 years old. The data revealed that most of the respondents are 36-40 years old. This indicated that most of the respondents are in the stage of adulthood wherein they already mastered the process of how perceiving stress has an advantage and to go on with the systematic approach of providing care guided with standards of practice. As cited in the related studies, Santos et al. (2003) has

already identified that this certain age has scores for stress and strains less badly than in younger cohorts. Additionally, Gottlie et al. (1997) also found out that at this age, nurses are between the demands of child care and elder care.

As to gender, females dominated the samples (32 or 80%), while the males were only composed of 8 or 20%. This shows that nursing profession is a female dominated occupation. Nursing Research studies in foreign and local settings had almost 75% to 80% of the sample sizes are females and the remaining percent accounts for the male gender. A Good example was the study of Lu (2008), wherein out of 246 respondents, 78.5% were female nurses.

In terms of civil status, the majority (32 or 80%) are married, and very few (1 or 2.5%) is a widow. This indicates that most of the respondents have varied responsibilities of work, and family life. In the study of 101 female nurses it was found out that work interfered with the family more than family interfered work (Gottlie et al., 1997).

With regards to the total number of dependents, 9 or 22.5% are having one dependent, and a very few (1 or 2.5%) have six dependents. The date revealed that the respondents belong to small family size.

As to monthly salary, 15 or 37.5% earning P 17,501 to 18,000, and a few (2 or 5.0%) earn P 20,000-23,000. This shoes that the respondents are well paid in terms of their work and could essentially provide the financial and basic needs of their family.

In terms of the spouses, 5 or 12.5% are self-employed, and a very few (1 or 2.5%) in other types of works. About 16 or 40% consisted of combined professional works. About 12 or 30% do not have work at all. This indicated that the spouses of the respondents are gainfully employed outside the home. Not applicable or N/A composed of 7 or 17.5% since there are seven single respondent nurses in the study.

With regards to nurse-patient ratio, 9 or 22.5% were on 1:10 ratio, 7 or 17.5% are having 1:1, 5 or 12.5% are having 1:40, 4 or 10% for 1:3; another 4 or 10% for 1:30; and a very few (1 or 2.5%) are having the ratio of 1:5 to 1:8 and another 1 or 2.5% is having 1:60. This indicated that the number of nurses to patient ratio varied from 1:1 to 1:60. The implication is that nurses with low nurse-patient ratio now could have less stress. On the other hand, the areas which were experience as high nurse-patient ratio were

commonly at OB ward, Pedia Ward, Medical ward, and orthopedic ward. As to area of assignment, most of the respondents (10 or 25.0%) are assigned in OR/PACU, and very few (1 or 2.5%) on suite room/ isolation/ EENT ward.

This indicates that most nurses are segregated to the special areas of the hospitals such as OR/PACU and very few to the less patient population area such as the EENT/Isolation/Suite Room.

In terms of work shift, the majority (21 or 52.5%) worked in 7-3 AM shift, and a few (7 or 17.5%) in night shift. The findings suggest that the well skilled regular nurses are placed on morning shift rather grand rounds, additional doctors' order, patient admissions and discharges, clinics, and surgical operations.

With regards to religion, the majority (33 or 82.5%) are Roman Catholic while the rest are non-catholics which included Jenovah's Witness (1 or 2.5%); IFI (2 or 5%); Protestant (2 or 5%); and Born Again Christian (2 or 5%). The data implied that the nurse-respondents are all Christians.

As to ethnicity, the majority (29 or 72.5%) are Cebuanos; 7 or 17.5% are Cagay-anons; 2 or 5% are Surigaonons; and another 2 or 5% are Bisayans. The data revealed that the nurse-respondents come from Mindanao and Visayas.

Objective 2. To determine the level of stress of the respondents in terms of social dimension, physical dimension, psychological dimension, and spiritual dimension.

Table 2. Level of Stress of the Respondents in Terms of Social Dimension

Social Dimension	Weighted Mean	Standard Deviation	Verbal Description
Making excuses like better to work alone	1.82	0.93	Low
Can't speak all problems to contemporaries	2.28	1.04	Low
Can't totally voice out concerns, suggestions, new ideas to supervisors even if permitted	2.18	0.87	Low
Never ask help form others	1.80	0.85	Not at all
Withdrawing self from others	1.70	0.88	Not at all
Hesitant to join group work	1.75	0.93	Not at all
Reluctant to meet people and attempt new experience	1.67	0.83	Not at all
Can't easily establish warmth towards others	1.63	0.93	Not at all
Overall	1.85	0.73	Low

Table 2 presents the level of stress of the respondents in terms of social dimension. The overall mean (1.85) is verbally described as low. As presented,

the highest mean (2.28) falls on item on “Can’t speak about all problems to contemporaries” verbally described as low. On the other hand, the lowest mean (1.63) falls in item on “Can’t easily establish warmth towards others” verbally described as not at all.

The data with the highest mean revealed that these nurses cannot express their problems to their peers. This could possibly be due to lack of time associating with other nurses or they belong to the different areas of assignment. In the workplace are consistently identified as a source of stress. Conversely, having well-established source of social support (i.e., receiving support from co-workers, and supervisors) may actually reduce the effect of other workplace stressors (House 1981). People experiencing stress may have difficulty upon communicating with others in work environment as well creating barriers and emotional distance towards friends, family and even co-workers (Maslach, 2003)

On the other hand, the data with the lowest mean indicated that the nurses have no problem of establishing warmth with others. This condition was supported by the study of House (1981) and Baarling et al., (2005) that the more stronger is social the support in the workplace, the lesser social related stress is experienced

Generally, the social stress level among nurses of NMMC is described as “low” with the weighted mean of 1.85 and a standard deviation of 0.73. This implies that nurses in NMMC experiences a low level of social stress as evidenced by low level of interpersonal problems since they can easily establish warmth towards others.

Table 3. Level of Stress of the Respondents in Terms of Physical Dimension

Physical Dimension	Weighted Mean	Standard Deviation	Verbal Description
Feeling tired and weak	2.15	0.74	Low
Poor appetite	1.73	0.96	Not at all
Indigestion and bowel incontinence	1.73	0.78	Not at all
Difficulty of getting sleep at night	1.85	0.95	Low
High blood pressure	1.60	0.87	Not at all
Headache	2.58	1.13	Low
Chest pain	1.87	0.85	Low
Backache	2.53	1.01	Low
overall	2	0.51	Low

Table 3 shows the level of stress of the respondents in terms of physical dimension. The overall mean (2.0) is verbally described as low. As shown, the highest mean (2.58) falls in item on “Headache”, verbally described as low. On the other hand, the lowest mean (1.60) falls in item on “High blood pressure” verbally described as not at all. The data on the highest mean revealed that the nurses experience headache though it was described as low. Headache was defined as the sign of stress which is caused by increasing physical demands from work. This implies that the nurses experienced low level of physical stress which could be due that the presence of strong social support which led to the reduction of other work related stress as evidenced by low physical symptoms of stress.

The data with the lowest mean indicate that majority of the nurses never experienced hypertension as symptom of physical exhaustion or stress. Hypertension in this study was defined as the increase of blood pressure to 140/180mmhg which is probably caused by physical demands of work and other factors.

Table 4. Level of Stress of the Respondents in Terms of Psychological Dimension

Psychological Dimension	Weighted Mean	Standard Deviation	Verbal Description
Moody and unpredictable	1.70	0.82	Not at all
Easily affected on feedback from other	2.20	0.85	Low
Feeling trapped or cornered by work	1.90	0.81	Low
Feeling unsatisfied at the end of the work	1.83	0.90	Low
Feeling less optimistic in fulfilling job	1.62	0.87	Not at all
Feeling inadequately valued for the shown abilities and commitment at work	1.83	0.87	Low
Feeling bored at work	1.87	0.91	Low
Feeling short of doing task	1.95	0.93	Low
Overall	1.86	0.71	Low

Table 4 presents the level of stress of the respondents in terms of psychological dimension. The overall mean (1.86) is verbally described as low. As presented, the highest mean (2.20) falls on item on “Easily affected on feedback from others” verbally described as low. On the other hand, the lowest mean (1.62) falls in item on “Feeling less optimistic in fulfilling job” verbally described as not at all.

The data on the highest mean revealed that the nurses are not easily affected on feedback from others as they described it as “low”. This indicated that the nurses have already established a strong emotional attitude in dealing with feedbacks from other people. The data in the lowest mean indicated that the nurses are not pessimistic in fulfilling job.

Table 5. Level of Stress of Respondents in Terms of Spiritual Dimension

Spiritual Dimension	Weighted Mean	Standard Deviation	Verbal Description
Morbid fear of death	2.80	1.26	Moderate
Lack of time for praying/going to church	1.85	0.98	Low
Having sense of “inner” emptiness	1.75	0.81	Not at all
Lack of sense of peace	1.72	0.75	Not at all
Being hopeless that praying is the solution of one’s problem	1.92	1.07	Low
Conviction that you just can’t do anything right	1.80	0.85	Not at all
Always seeks (hoards) for spiritual counseling from spiritual advisers(i.e, priest, pastors, etc.)	1.75	0.95	Not at all
Doubt one’s own religion	1.48	0.88	Not at all
Overall	1.88	0.65	low

Table 5 shows the level of stress of the respondents in terms of spiritual dimension. The overall mean (1.88) is verbally described as low. As shown, the highest mean (2.80) falls in item on “Morbid fear of death” verbally described as moderate. On the other hand, the lowest mean (1.48) falls on item “Doubt one’s own religion” verbally described as not at all.

The data in the highest mean revealed that level of morbid fear of death suggest strong spirituality. The study of Wong (2003) revealed that strong spirituality is beneficial in the work place especially in term of morale and productivity making a nurse to work well and right. The data in the lowest mean indicate that these nurses never doubt one’s own religion and spiritual aspect in general.

Objective 3. Identify the level of work performance of the respondents assessed by themselves and their supervisors along with the following indicators: work performance and behavioral factors.

Table 7. Level of Work Performance of the Respondents as Assessed by Themselves

Work Performance	Weighted Mean	Standard Deviation	Verbal Description
Attends round, endorsement and assess patient	3.90	0.74	Very Satisfied/High
Give medication to patient following the 12 rights of administration: Right Education	3.90	0.81	Very Satisfied/High
Right patient	4.03	0.83	Very Satisfied/High
Right drug	4.03	0.83	Very Satisfied/High
Right dose	4.05	0.85	Very Satisfied/High
Right route	4.05	0.85	Very Satisfied/High
Right timing	4.00	0.82	Very Satisfied/High
Right drug to drug interaction	4.03	0.83	Very Satisfied/High
Right drug to food interaction	3.95	0.90	Very Satisfied/High
Right Approach	3.95	0.90	Very Satisfied/High
Right Assessment	4.05	0.70	Very Satisfied/High
Right Evaluation	4.03	0.77	Very Satisfied/High
Right Documentation	4.00	0.91	Very Satisfied/High
Properly accepts endorsement from other department	4.13	0.72	Very Satisfied/High
Conduct watchers & patient's lecture and grand rounds	3.07	1.14	Satisfactory/Moderate
Check/ review patients medical records	3.90	0.93	Very Satisfied/High
Evaluates performance of co-nurses	3.45	0.78	Very Satisfied/High
Teacher/guides nursing students & trainees in nursing care and treatment	3.08	0.94	Satisfactory/Moderate
Attends to complicated cases	3.75	0.74	Very Satisfied/High
Performs bedside care (i.e. bed bath, changing dressing, bed making)	3.43	0.87	Very Satisfied/High
Properly carries out the doctors order	3.82	0.75	Very Satisfied/High

Participates in outreach activities (i.e. bloodletting, oplan tuli, medical mission)	3.20	0.80	Satisfactory/Moderate
Properly endorses patient to the next shift.	3.85	0.95	Very Satisfied/High
Overall	3.64	0.61	Very Satisfied/High

Table 7 presents the level of nursing performance in terms of work performance as assessed by them. The overall mean (3.64) verbally describes as “very satisfactory” or high. As presented, the highest mean (4.13) falls on the item “Properly accepts endorsement from other department” closely followed by (4.05) items on “Right Dose”; “Right Route”; and “Right Approach”, verbally described as very satisfactory, respectively. On the other hand, the lowest mean (3.07) falls on item on “Conduct watchers and patient’s lecture and grand rounds verbally described as satisfactory.

The data in the highest mean revealed that nurses rated themselves as very satisfactory upon executing rights of giving medication particularly on performing right dose of medicine, right route upon administration, and right assessment. This shows that nurses are confident in performing their assigned task. According to the study of Hackman et al (1980) having good control, autonomy, and decision latitude among workers like nurses in the work place will surely create good performance.

The data in the lowest mean indicate that despite of very satisfactory rating upon performing work activities, there are activities that had been rated as satisfactory and one of which is conducting watchers/ patients lecture and grand round. However, the respondent’s area of assignment has been taken into consideration since most of the respondents come from the operating room, delivery room, and NICU. Nursing attendants is sometimes designated to perform the watchers’ lectures on patients’ rights, and rules and obligations of watchers in the hospital.

Table 8. Level of Work Performance of the Respondents in Terms of Work Performance as Assessed by their Supervisors

Work Performance	Weighted Mean	Standard Deviation	Verbal Description
Attends rounds, endorsement and assess patient	4.03	0.53	Very Satisfactory/High
Give medication to patient following the 12 rights of administration: Right education	4.03	0.36	Very Satisfactory/High
Right patient	4.10	0.44	Very Satisfactory/High
Right drug	4.10	0.44	Very Satisfactory/High

Right does	4.15	0.43	Very Satisfactory/High
Right route	4.18	0.50	Very Satisfactory/High
Right timing	4.15	0.48	Very Satisfactory/High
Right drug to drug interaction	4.15	0.48	Very Satisfactory/High
Right drug to food interaction	4.15	0.43	Very Satisfactory/High
Right Approach	4.10	0.44	Very Satisfactory/High
Right Assessment	4.13	0.40	Very Satisfactory/High
Right Evaluation	4.17	0.45	Very Satisfactory/High
Right Documentation	4.20	0.46	Very Satisfactory/High
Properly accepts endorsement from other department	4.07	0.57	Very Satisfactory/High
Conduct watchers & patient's lecture and grand rounds	3.00	1.22	Satisfactory/Moderate
Check / review patients medical records	3.98	0.62	Very Satisfactory/High
Evaluates performance of co-nurses	3.58	0.50	Very Satisfactory/High
Teaches/guides nursing students & trainees in nursing care and treatment	3.78	0.62	Satisfactory/Moderate
Attends to complicated cases	7.95	0.68	Very Satisfactory/High
Performs bedside care (i.e. bed bath, changing dressing, bed making)	3.40	0.96	Satisfactory/Moderate
Properly carries out the doctors order	3.98	0.53	Very Satisfactory/ Moderate
Participates in outreach activities (i.e. bloodletting, oplan tuli, medical mission)	2.48	1.30	Unsatisfactory/low
Properly endorses patient to the next shift.	3.93	0.57	Very Satisfactory/High
overall	3.90	0.30	Very Satisfactory/High

Table 8 shows the level of nursing performance in terms of work performance as assessed by their supervisors. The overall mean (3.90) verbally described as very satisfactory or high. As shown, the highest mean (4.20) falls in item on "Right Documentation" verbally described as very satisfactory. On the other hand, the lowest mean (2.48) falls in items on "Participate in outreach program" verbally describes as unsatisfactory. The data on the highest mean revealed that the supervisors rated the staff nurses as very satisfactory upon performing proper documentation after giving medication. Documentation of performed tasks by the nurses is crucially reviewed by the supervisors. This is so because it provides the total evaluation on how nurses perform the nursing care towards patient and the effectiveness after performing the care by utilizing professionally the nursing

process.

However, the lowest rating falls on “participate in outreach program”. This is so because the discretion of the nurses’ immediate supervisors on the nurses who are recommended to the outreach programs. The work on rotational shifts was considered a limiting factor. Attending the outreach program is sometimes not mandatory-which enables the nurses to decide whether they will participate or not.

Table 9. Level of Work Performance of the Respondents in Terms of Behavioral Factors as Assessed by Themselves

Behavioral Factors	Weighted Mean	Standard Deviation	Verbal Description
Courtesy (shows kindness in manner of action when dealing patients and co-workers)	3.93	0.86	Very Satisfactory/ High
Human relations (properly assist, answer queries, and has a good social/interpersonal relation with the members of the team and patients)	3.90	0.81	Very Satisfactory/ High
Integrity (do honest and sincere work in the area)	3.95	0.85	Very Satisfactory/ High
Stress tolerance (has good ability to stay compost/ calm despite of the pressure of work in the area)	3.75	0.78	Very Satisfactory/ High
Initiative/ Resourcefulness (can easily originate/formulate new ideas, methods to cope in a difficult situation)	3.87	0.76	Very Satisfactory/ High
Compliance to office rules and regulations (follows policies imposed by the hospital administration such as: Proper decorum)	3.62	0.67	Very Satisfactory/ High
Submits documents/requirements on time (chart records, evaluation forms (PES))	3.60	0.71	Very Satisfactory/ High
Overall	3.80	0.66	Very Satisfactory/ High

Table 9 presents the level of nursing performance in terms of behavioral factors as assessed by the respondents’ themselves. The overall mean (3.80) verbally described as very satisfactory or high. As presented, the highest mean (3.95) falls in item on “integrity” which was verbally described as very satisfactory. On the other hand, the lowest mean (3.60) falls in item 6B on “Submits documents/

requirements on time” which was also verbally described as very satisfactory or high. The date on the highest mean revealed that nurses manifested honesty and sincerity in the area. Part of being a registered nurse is a very high expectation on how a nurse performs his or her obligations.

Table 10. Level of Work Performance of the Respondents in Terms of Behavioral Factors as Assessed by their Supervisors

Behavioral Factors	Weighted Mean	Standard Deviation	Verbal Description
Courtesy (shows kindness in manner or action when dealing patients and co-workers)	4.12	0.52	Very Satisfactory
Human relations (properly assist, answers queries, and has a good social/interpersonal relation with the members of the team and patients)	4.15	0.58	Very Satisfactory
Integrity (do honest and sincere work in the area)	4.15	0.53	Very Satisfactory
Stress tolerance (has good ability to stay composed/calm despite of the pressure of work in the area)	3.97	0.53	Very Satisfactory
Initiative/ Resourcefulness (can easily originate/formulate new ideas, methods to cope in a difficult situation)	4.18	0.64	Very Satisfactory
Compliance to office rules and regulations (follows policies imposed by the hospital administration such as: A. Proper decorum	4.05	0.50	Very Satisfactory
B. Submits documentations/requirements on time (chart records, evaluation forms (PES))	3.87	0.69	Very Satisfactory
overall	4.07	0.41	Very Satisfactory

Table 10 shows the level of nursing performance in terms of behavioral factors as assessed by their supervisors. The overall mean (4.07) verbally described as very satisfactory.

As shown, the highest mean (4.18) falls in item on “Initiative/Resourcefulness”

means nurses can easily originate/formulate new ideas, methods to cope in a difficult situation verbally describe as very satisfactory. On the other hand, the lowest mean (3.87) falls on item on “Submits documents/requirements on time such chart records, evaluation forms (PES)” verbally described as very satisfactory.

The data revealed that supervisors rated their staff nurses as “very satisfactory in behavioral aspect. The highest mean falls on “initiative and resourcefulness” of the staff. This revealed that the supervisors enhanced the skills if the nursing staff by letting them manipulate available resources and respond to the needs of the patients in the work place. However, the lowest mean falls on “submits document/requirements on time”. This means that the supervisors really observed that the nurses have problems on punctuality in the submission of needed documents on time.

Objective 4. To determine the significant difference in the level of work performance of the respondents assessed by themselves and their supervisors.

Table 12. Test of Significant Difference in the Level of Work Performance of the Respondents as Assessed by Themselves and their Supervisors

Work Performance	Weighted Mean	Qualitative Description	t-Test Results
Assessed by their Supervisors	3.90	Very Satisfactory/ High	T Calculated value = 0.54 Probability Level (Level of Significance) = .593 Degrees of Freedom: 39 T Critical (Table) Value = 1.684 Conclusion: t Calculated Value is < t Critical (Table) Value Interpretation: Not Significant Ho: Accept
Assessed by themselves	3.64	Very Satisfactory/ High	
Overall	3.87	Very Satisfactory/ High	

Table 12 presents the test of significant difference in the level of nursing performance of the respondents in terms of work performance as assessed by themselves and their supervisors. The t calculated value (0.54) supported by probability level / level of significance (0.593) is lower than the t critical (table) value of (1.684). The data revealed that there is no significant difference in the level of nursing performance of the respondents in term of work performance as assessed by themselves and their supervisors. Therefore, the null hypothesis was accepted. The findings implied that both groups of respondents had similar

assessment as “very satisfactory” or high in term of work performance. It also showed that the staff nurses performed well in their assigned areas and were appreciated by the supervisors. This mutual relationship creates harmony within the workplace and making each member well-being as a team well preserved and skills are enhanced (Barliz et al., 2005).

Table 13. Test of Significant Difference in the Level of Work Performance of the Respondents in Terms of Behavioral Factors as Assessed by Themselves and their Supervisors

Behavioral Factors	Weighted Mean	Qualitative Description	t-Test Results
Assessed by themselves	3.80	Very Satisfactory/ High	T Calculated Value = 2.23 Probability Level (Level of Significance) = .32 Degrees of Freedom: 39 T Critical (Table)Value = 1.684 Conclusion: t Calculated Value is > t Critical (Table) Value Interpretation: Significant Ho: Reject
Assessed by their supervisors	4.07	Very Satisfactory/ High	
Overall	3.93	Very Satisfactory/ High	

Table 13 shows the test of significant difference in the level of nursing performance of the respondents in terms of behavioral factors as assessed by themselves and their supervisors. The t calculate value (2.23) supported by probability level / level of significance (0.032) is higher than the t critical (table) value of 1.684. The data revealed that there is a significant difference in the level of nursing performance of the respondents in terms of behavioral factors as assessed by themselves and their supervisors. Result showed that the null hypothesis was rejected. The finding implies that supervisors have difficulty in predicting their staff's behavior thus creating significant difference upon assessment by both parties.

Objective 5. To determine the significant relationship between the respondent's level of stress and the level of work performance?

Table 14. Test of Significant Relationship between the Respondent’s Level of Stress and the Level of Work Performance

Level of Stress	Nursing Performance							
	Work Performance				Behavioral Factors			
	CORR.	PROB.	CORR.	PROB.	CORR.	PROB.	CORR.	PROB.
Social Dimension	-.2948	.065	.1548	.340	-.0922	.571	.2060	.202
Physical Dimension	-.1716	.290	.0965	.553	0.395	.809	-.1385	.394
Psychological Dimension	-.0530	.745	.0310	.849	-.0092	.955	.0534	.744
Spiritual Dimension	-.0676	.678	.1106	.497	.0279	.864	.1759	.278

Table 14 presents the test of significant relationship between the respondents’ level of stress and the level of nursing performance. It can be gleaned from the table that the two indicators of the nursing performance, such as working performance and behavioral factors exhibited negligible relationships as supported by their respective correlation coefficients when they were correlated to the level of stress. The data revealed that there is no significant relationship between the level of stress and the level of nursing performance. Therefore, the null hypothesis was accepted.

Objective 6: To measure the interaction effects of the intervening variables to the relationship between the level of stress and work performance.

Table 15. Test of interaction effects of the intervening variables to the relationship between the levels of stress and work performance

Variables which have interaction effects					
Intervening Variables	Regression Coefficient	F Value	Prob.	Interpretation	Ho
Work Shift	.500113 (r2 = .25022)	14.301	.0006	Significant	Reject

Number of Dependents	.474148 ($r^2 = .37223$)	9.890	.0033	Significant	Reject
Age	.381860 ($r^2 = .46802$)	6.482	.0153	Significant	Reject
Variables which have no interaction effects					
Intervening Variables	Partial Correlation Coefficient	F Value	Prob.	Interpretation	Ho
Gender	.017899	.011	.9163	Not Significant	Accept
Civil Status	.055708	.109	.7433	Not Significant	Accept
Monthly Salary	.014307	.007	.9330	Not Significant	Accept
Work of Husband/ Wife	.110832	.435	.5137	Not Significant	Accept
Nurse – Patient Ratio	.094066	.312	.5797	Not Significant	Accept
Area of Assignment	.111910	.444	.5096	Not Significant	Accept
Religion	.226999	1.901	.1767	Not Significant	Accept
ethnicity	.182560	1.207	.2795	Not Significant	Accept

Table 15 shows the interaction effects of the intervening variables to the relationship between the level of stress and nursing performance.

The data disclosed that the significant intervening variables are work shift ($F=14.30$); number of dependents ($F=9.890$), and age ($F=6.482$). The result indicated that the null hypothesis was rejected for these intervening variables. The finding implied that work shift has significant effect to work performance. Working rotating shifts or permanent night work results in a disruption of physiological circadian rhythms as well as disrupted social activities and has been identified as a work-related stressor as it may affect mental, physical, social health

(Ettner&Grzywacz, 2001).

On the other hand, the other intervening variables, such as gender, civil status, and monthly salary, work of husband / wife, nurse-patient ratio, area of assignment, religion and ethnicity revealed significant interaction effect. The result implied that these intervening variables have nothing to do with increase and decrease on the level of stress and work performance, this also suggests further research with a wider population to show possible interaction effects on the independent and dependent variables.

CONCLUSIONS

In conclusion, despite of the increase and decrease of the level of stress in the physical, social, psychological, and spiritual dimensions of a person there was no correlation with the level of nurses work performance. Therefore nurses' performance has nothing to do with the level of stress among nurses. Meanwhile, work shift, number of dependents, and age have significant interaction effect to the level of stress and the work performance. Therefore, these significant variables can manage stress in the work place. In addition, the increase of physical demand in the work place could further result to physical exhaustion and even associated with illness as well. Assessment difference on the rating done by respondents and the supervisors are expected as they are individually unique as a person, and functions different roles in the clinical setting.

RECOMMENDATIONS

1. A regular stress management program among nurses in Northern Mindanao Medical Center will be done and regularly implemented, in order to sustain the level of stress experienced by them.
2. Stress assessment and management will not limit to the regular nurses but also to the job orders/contractual.
3. The nursing staff must improve the following low level of work performance:
 - 3.1. Participate in outreach activities; and
 - 3.2. Punctual submission of documents and requirements
4. Future researches on a similar topic are recommended in the private hospital and academic institution of nursing.

LITERATURE CITED

- Aiken LH, Clarke SP, Sloane DM, et al.
2002 Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction. *J Am Med Assoc*; 288(16):1978-93.
- Andal, E.M,
2006 *California Journal of Health Promotion*, Vol. 4 Issue 4, 88-95.
- Bakker AB, Le Blanc PM, Schaufeli WB.
2005 Burnout Contagion among Intensive Care Nurses. *J AdvNurs*. 2005;51(3):276-87.
- Bandura, A.
1986 *Social Learning Theory*. New York: General Learning Press
- Barling, J. et. al.,
2005 *Handbook of Work Stress*, Sage Publication Inc.
- Barrett L, Y, et al.
2002 *Oncology/Haematology Nurses: A Study of Job Satisfaction, Burnout, and Intention to Leave the Speciality*. *Aust Health Rev*. 2002; 25(3):109-121.
- Bautista et al..
2008 *Models of Nursing*. Printing Press, MNL 2008
- Blair. E.
2004 Role Clarity, Work Overload and Organizational Support: Multilevel evidence of the Importance of Support. *Work Stress*. ; 14(1):65-73.
- Circular Memorandum
1999 NMMC Memorandum Circular No. 12, Series of 1999 "Performance Evaluation System"
- David Fontana
2011 *Professional Life Stress Scale*, adapted from *Managing Stress*, The British Psychological Society and Routledge Ltd.,

Davie JK, Urden LD, et al.

1989 Critical care nursing Diagnosis and Management. St Louis, MO: Mosby; 1994. pp. 75-84.

Djik

1998 Sources of Work Stress: Hand Book for Stress. Sage Publication CA.

El.

2004 Nurses' perception of Their Work Environment, Health, and Well-being: A Qualitative Perspective. *AAOHN J*; 52(1):16-22.

Freudenberger H.

1997 Staff Burnout. *J Soc Issues*. 1974; 5:59-165

Geiger-Brown J, Trinkoff AM, Nielsen K, Lirtmunlikaporn S, Brady B, Vasquez Hoffman AJ,

2003 Scott LD Role Stress and Career Satisfaction among Registered Nurses by Work Shift Patterns. *J Nurs Adm*. 33(6):337-342.

Gotlie et al.

1997 Stress in Nursing. A. P, Australia p29

Gray-Toft, P.; Anderson, J.G.

1983 A hospital Staff Support Program: Design and Evaluation. *International Journal of Nursing Studies*. 20(3): 137-147

Halm M, Peterson M, Kandels M, et. al.,

2005 Hospital Nurse staffing and Patient Mortality, Emotional Exhaustion, and Job Dissatisfaction. *Clinical Nurse Spec*.; 19(5):241-51.

Hillhouse JJ, Alder CM.

1997 Investigation Stress Effect Patterns in Hospital Staff Nurses: Results of a Cluster Analysis. *SocSci med*.; 5(12):1781-8.

House JS.

1981 Work Stress and Social Support., MA: Addison-Wesley

Iskra-Golec I, Folkard S, Marek T, et. al.,
1996 Health, Well-Being and Burnout of ICU Nurses on 12- and 8-h Shifts.
Work Stress; 10(3):251-6.

Jennings BM.
1994 Stressors of Critical Care Nursing. In: Thelan LA

Judkins SK, Ingram M.
2002 Decreasing Stress among Nurse Managers: A Long-Term Solution. J
Cont Ed Nurs. 2002; 33(6):259-64.

Keidel GC.
2002 Burnout and Compassion Fatigue among Hospice Caregivers. Am J
HospPalliat Med. 2002; 19(3):200-205.

Laschinger HK, Almost J, Purdy N, et al.
2004 Predictors of Nurse Managers' Health in Canadian Restructured Health
Settings. Nursing Leadership; 17(4):88-105.

Laschinger HK, Finegan J, Shamian J.
2001 Promoting Nurses' Health: Effect of empowerment on the Job Strain
and Work Satisfaction. NursEcon. 2001; 19(2):42-52.

Lawton, I Parker, et. al.,
1998 Stress and Demographic. Plj.NY Health

Lazarus RS, Folkman S.
1984 Stress Appraisal and Coping. New York: Springer.

Lee V, Henderson MC.
1996 Occupational Stress and Organizational Commitment in nurse
Administrators. J Nurse Adm. 26(5):21-8 National Institute for
occupational Safety and Health

Leveck ML, Jones CB.
1996 The Nursing Practice Environment, Staff Retention, and Quality of

Care. Res Nurs Health. ; 19:331-43.

Lindborg G, Davidhizer R.

1993 Is There a Difference in Nurse Burnout on the Day or Night Shift?
Health care Superv; 11(3):47-52.

Lu,

2008 *Journal of International Studies*, Vol. 9#3.

Lyckholm L, Shanafelt Td, Ambrose HS, Ching HM.

2006 Time management and avoiding burnout. In: Nursing(ed). 2006
ASCO Education Book. Alexandria, VA: American Society of Clinical
Oncology: 633-635.

Marshall RE, Zahorodny W, Passannante MR.

1998 Burnout among Neonatologists and Pediatricians. *Neonate Intensive
Care*; 11(4):16-18.

Maslach C, Jackson SE.

1981 Maslach Burnout Inventory. Palo Alto, CA: Consulting Psychologists
Press; 1981.

Maslach C, Jackson SE, LeiterMP

1996 Maslach Burnout Inventory. 3rd ed. Palo Alto, CA: Consulting
Psychologists Press.

Maslach C, Leiter MP.

The Truth about Burnout: How organizations Cause Personal Stress and
What to DO about it. San Francisco, CA: Jossey-Bass; 1997

Maslach, C., W. Schaufeli, and M. Leiter,

2003 "Job Burnout," *Annual Review of Psychology*

MenziesIEP

1960 Nurses under stress. *InternatlNursRev*. 7:9-16.

Near Jp, Rice RW, Hunt RG.

1989 The Relationship between Work and Nonworking Domains: a review

of Empirical Research. *Acad Manage Rev.*; 5:415-29.

Papadatou D.

2000 A Proposed Model of Health Professionals' Grieving Process. *Omega.* 2000; 41(1):59-77.

Payne N.

2001 Occupational Stressors and Coping as Determinants of Burnout in Female Hospice Nurses. *J Adv Nurse.*; 33(3):396-405.

Penson RT, Dignan FL, Canellos GP, Picard CL, Lynch TJ Jr.

2000 Burnout: Caring for the Caregivers. *Oncologist.* 5 (5):425-434.

Pfifferling JH.

2009 Burnout Risk Appraisal.

Poncet MC, Toullic P, Papazian L, et al

2007 Burnout Syndrome in Critical Care Nursing Staff. *Am J Respir Crit Care Med.*; 175(7):698-704.

Reuggers AE, Hwang WT, Scott LD, Aiken LH, Dinges DF.

The Working Hours of Hospital Staff Nurses and Patient Safety. *Health aff.* 200; 23():202-212.

Rowe MM, Sherlock H.

2005 Stress and Verbal abuse in Nursing; Do Burned out Nurses Eat Their Young Nurse Manage.; 13:242-8.

Santos SR, Cox K.

2000 Workplace Adjustment and Intergenerational difference between mature, boomers, and Xers. *Nurs Econ.* 18 (1):7-13.

Santos SR, Simon SD, Carroll CA, et. al.

2003 Baby Boomer Nurses Bearing the Burden of Care. A Four-Site Study of Stress, Strain, and Coping for Inpatient Registered Nurses. *J Nurse Adm.* 2003;33(4):243-50.

Saunders JM, Valente SM.

1994 Nurses' Grief. *Cancer Nurs*; 17(4):318-325.

Selye H.

1956 The stress of Life. New York: McGraw Hill.

Stone PW, Mooney-Kane C, Larson EL, et al.

2007 Nurse Working Conditions and Patient Safety Outcomes. *Med Care*; 45(6):571-578.

Sulky, L. Smith, C.

2005 Work stress. USA: Wadsworth

Taylor B, Barling J.

2004 Identifying Sources and effects of career Fatigue and Burnout for Mental Health Nurses: A Qualitative Approach. *Internatl J Mental Health Nurs*. 13:117-25.

Vachon M.

2002 Staff Stress and Burnout. In: Berger AM, Portenoy RK,

Vahley DC, Aiken LH, Sloane DM, et al.

1994 Nurse Burnout and Patient Satisfaction. *Med Care*.42 (Suppl 2): II-57-66.

Weinberg a, Creed F.

2000 Stress and Psychiatric Disorder in Healthcare Professionals and Hospital Staff. *Lancet*; 355(Feb 12):533

Weissman DE, (eds).

2000 Principles and Practice of Palliative Care and Supportive Oncology. 2nd ed. Philadelphia, PA: Lippincott Williams & Wilkins

Welton,R&Neives-Khouw,F,

2001 Success Predicting Factors and Work Performance. mhLEduc Press. NY

INTERNET SOURCES

<http://www.ncbi.nlm.nih.gov/pubmed>

<http://www.answers.com/topic/nursing>

<http://thenursingprofession.blogspot.com/stress>

<http://www.guidelines.gov?213/Performance;/stress>