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Organizational Role Stress Indices Affecting Burnout among Nurses

By Jinky Leilanie Lu¹

Abstract

This was a cross sectional study, which aimed to determine the interaction between situational, factors, role stressors, hazard exposure and personal factors among 246 nurses consisting most of females (78.5%) from the different wards and units in the Philippine General Hospital (PGH). The dominance of female in the profession reinforce the prevailing notion that the caring professions such as nursing are relegated to women. This gives the study its gender perspective. Almost half (49.6%) of the respondents reported being ill due to work in the past year, and 56.1% missed work because of an illness. Correlation statistics using the Spearman's *rho* showed organizational role stressors was most significant in burnout among nurses in the Philippine's largest tertiary hospital. Organizational role stressors consisted of ten dimensions, namely: 1) Inter-role Distance (IRD); 2) Role Stagnation (RS); 3) Role Expectation Conflict (REC); 4) Role Erosion (RE); 5) Role Overload (RO); 6) Role Isolation (RI); 7) Personal Inadequacy (PI); 8) Self-role Distance (SRD); 9) Role Ambiguity; and 10) Resource Inadequacy (RIn). The contribution of the study is in advancing new concepts in the already existing framework of burnout, and thus, can assist nurses and hospital administration on how to control this problem.

Keywords: Burnout, Organizational Role Stressors, Hazard Exposures, Situational Factors, Nurses

Introduction

Burnout has been discussed by a many authors for a number of years. More than thirty years ago, the concept of burnout has first introduced by Herbert J. Freudenberger, Christina Maslach, and Ayala Pines (Scott, 2001). The intense interest over the topic during that time was fueled by the influx of workers entering the human service professions, which included social services, education, criminal justice and health services. These workers were particularly vulnerable to burnout due to the nature of the interpersonal interactions and the organizational factors present in the helping professions (Schaufeli, Maslach, and Marek, 1993).

Dominance of Women in the Nursing Profession

The discourse on gender and its construction and representation in the workplace can be explained using a feminist perspective. Liberal feminism posits that the traditional categorizing of men to the domain of rational thinking and reason, while women to caring and emotions leads to sexual division of labor. The content of the woman's work in the household like caring for the child and housekeeping is carried over to the economic sphere where she takes on the same caring professions in nursing, entertaining in the

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service industries, or the clerical, secretarial or menial job in the manufacturing sector (Wollstonecraft, 1792 and 1967; Rees, 1992:25). There are obvious organizational practices that segregate work status between sexes in the new industrial structure owing from traditional perception of what is a male and female job. The caring profession such as nursing has always been traditionally assigned to women as they are more adept at performing this job. There are 'masculine' work such as engineering construction, mining, manual labour which are relegated to males (Rees, 1992:25).

In Marxist feminism, the sexual division of labor is constructed by capital, which always finds the cheapest source of labor to maximize profit. Women's work and employment is situated within capitalist constructions and becomes secondary to the broader needs of labor and capital. Class becomes the key notion in understanding sexual division of labour (Seccombe, 1974). As such, Marxist feminists propose a materialist analysis of gender and class relations (Marx in Rees, 1992). Braverman took off from this Marxist perspective and theorized on the need of capitalism to maximize labor leading to monotony and marginalization in the industrial organization (Braverman, 1974). This can explain the phenomenon of burnout experienced by the women nurses in this study.

In radical feminism, the home is the site of gender inequality, which is carried over to the labor market. Patriarchy is at the heart of gender inequality and explains the limited role of the woman, or assigning to her traditional functions. In the economic sphere, patriarchy manifests in forms of gender segregation and gendered division of labor (Brown Miller, 1976).

The study site is the largest tertiary government hospital in the Philippines. It employs 1074 nurses, and 79.70% are females. The gender composition reiterates that caring professions such as nursing are dominated by females. Hence, this study was conducted to elucidate on working conditions and organizational factors that affect the phenomenon of burnout among nurses. The gender dynamics between males and females were not looked into in this study as this was a baseline study of burnout among nurses, and initial interviews showed no relative difference between male and female nurses as to the phenomenon of burnout.

According to an Institute of Medicine report, nurses are the largest group of health care professionals providing direct patient care in hospitals, and that the quality of care for hospital patients is strongly linked to the performance of nursing staff (Hassmiller and Cozine, 2006). In line with this, creating a healthy work environment for nursing society is crucial to maintain an adequate nursing workforce (Shirey, 2007). Burnout, which is associated with stress, has become the most important factor influencing individual efficacy and satisfaction in modern day occupational settings like the nursing profession (Tankha, 2006). Poncet and colleagues in 2007 presented four domains that were associated with severe burnout in critical care nursing staff- personal characteristics, organizational factors, quality of working relations, and end-of-life related factors. Burnout and high levels of job stress are known as the cause of professional's decision to leave hospital work (Bennett, Plint and Clifford, 2005)

Over the succeeding years, the need for human service professionals in many countries has grown due to the aging population (Scott, 2001). The prevailing social and organizational conditions among the helping professions have led to an overworked, underpaid and frustrated group of workers. Human service professionals have been

characterized as a group of men and women who make huge sacrifices in the hope of meeting high demands. Yet, they often reap few rewards, and asked to do more and more with less and less.

Many researchers in various fields have studied burnout among this group, hoping to find patterns, causation, relationships and practical applications. Two of them, Christina Maslach from the University of California at Berkeley and Susan Jackson from New York University, presented burnout as a psychological syndrome with three dimensions: (a) emotional exhaustion, (b) depersonalization, and (c) diminished personal accomplishment (Maslach and Jackson, 1982, 1986). Emotional exhaustion is described as the experience of stress, which approaches, or is above a person's comfortable limits while depersonalization is the development of a cynical and negative attitude towards clients, sometimes to the point of dehumanization. On the other hand, decreased personal accomplishment is defined as a negative outlook on one's performance at work.

Other investigators have tried to look into factors associated with burnout. Lambert and Lambert (2004) examined relationships among various workplace stressors, ways of coping, demographic characteristics, and physical and mental health among Japanese hospital nurses. They found that workload and number of people living in the household were the best predictors of physical health. Meanwhile, the best predictors of mental health were likelihood to leave the job, lack of support in the workplace, and escape-avoidance coping. The study by Langballe et.al., 2006 examined the factorial validity of Maslach Burnout Inventory-General Survey (MBI-GS), which is designed to measure the three subdimensions (exhaustion, cynicism, and professional efficacy) of burnout in a wide range of occupations.

This study aims to look into the possible interaction between situational factors, role stressors, hazard exposure and personal factors on burnout, as well as to determine the effect of hazard exposure on burnout among nurses in various hospital departments. It also intends to identify the most significant factor in the development of burnout among this group and to assess its relationship to various health outcomes. This is a worthwhile endeavor in light of the personal, social and professional impact of burnout among workers, patients and managers alike.

Also, if situational factors are found to be significant, burnout may be considered a workplace issue. Hence, a framework of work-related factors affecting burnout may be elucidated. Hence we can look into possible insights on how management can promote lifestyle and self-enrichment programs that may prevent or reduce burnout. Similarly, a significant contribution by hazard exposure would mean that burnout may now be considered as an occupationally related illness, and must be considered for possible compensation.

There are four main groups of factors that are considered in this study that affect feeling and state of burnout among nurses which includes hazard exposures, personal factors, organizational role stressors and situational factors, reflecting job satisfaction.

Methodology

This was a cross sectional study using stratified sampling techniques. Stratification was based on the ward and unit assignments of the nurses. Two hundred forty-six (246) nurses from the different wards and units of the Philippine General

Hospital (PGH), were randomly selected for the study and each were given a questionnaire to be filled out.

The questionnaire assessed five main indices/scales and the sources of the scales/dimensions are:

1. Burnout- this consisted of 22 questions with a scale of 1-7 ranging from “very much unlike me” to “very much like me.” Examples of self rating are: I feel used up at the end of the workday; I feel fatigued when I get up in the morning and have to face another day on the job; I feel I treat some recipients as if they were impersonal objects. The concept of burnout was based on Maslach Burnout Inventory (MBI), which is the most-widely used measurement tool in burnout research. These included aspects on emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach and Jackson, 1982, 1986) were used.
2. Organizational Role Stress (ORS) - this consisted of 37 questions with the same scale as above. Examples include: “Do you experience conflict between your roles and functions at home and at work?; Do you feel that your role in the hospital is minimal or insignificant since many others share the duties and responsibilities given to you?; Do you feel that your superiors demand more of you than you can comfortably handle?”

The items on ORS were based on the Organizational Role Stress Scale constructed by Udai Pareek in 1993, who divided role stress into ten dimensions, namely: 1) Inter-role Distance (IRD); 2) Role Stagnation (RS); 3) Role Expectation Conflict (REC); 4) Role Erosion (RE); 5) Role Overload (RO); 6) Role Isolation (RI); 7) Personal Inadequacy (PI); 8) Self-role Distance (SRD); 9) Role Ambiguity; and 10) Resource Inadequacy (RIn).

The individual questions, however, on the ten dimensions were reconstructed to suit the Filipino cultural view of organizational stressors (Lu, 2005).

3. Self-efficacy (SE)- this consisted of 10 questions with the same scale rating. Examples included: “I can always manage to solve difficult problems if I try hard enough; If someone opposes me, I can find means and ways to get what I want; I can solve most problems if I invest the necessary effort.” The General Perceived Self-Efficacy is based on the scale developed by R. Schwarzer and M. Jerusalem (1995). Self-efficacy means a positive valuation of one self relative to performance, ability, self-significance, esteem and a sense of achievement.
4. Hazard Exposure (HE) – this consisted of 15 questions pertaining to various hazards at work such as noise, poor biomechanics, poor ventilation, and exposure to infectious or blood borne diseases. Hazard exposure was measured in terms of four categories- physical, chemical, biological and ergonomic hazards. The questions on hazard exposure

are based on the author's previous study on factors affecting job stress (Lu, 2005).

5. Situational Factors (SF)- this consisted of 20 questions using the same scale rating. The scale was constructed in such a way to show the degree of job satisfaction. Examples included the way the job provides for steady employment, a feeling of accomplishment one gets from the job and opportunities for promotion. These situational factors were concepts relating to job satisfaction. Situational factors were assessed using items from the Minnesota Satisfaction Questionnaire Short Form (<http://www.psych.umn.edu/psylabs/vpr/mjldqinf.htm>).

The subjects were randomly selected according to wards. Data were encoded and analyzed using SPSS 14.0.

Results

Socio-demographic Profile

The study includes a total of 246 respondents from the different wards and units at the Philippine General Hospital (PGH), majority were female (78.5%) and married (58.9%). Most of the respondents belonged to the 21-30 age group (36.18%), indicating inclusion of younger nurses. Most of the respondents had an annual income ranging from 2,000 to 3000 USD (24.39%). Majority of the respondents have been in the nursing profession for 1-5 years (32.11%) and have been employed at PGH for the same period of time (48.37%). Nurses reported that they worked inpatient services (31.3%), outpatient services (10.2%), and intensive care units (ICU) (13.4%).

Data on Health and Illness

Almost half (49.6%) of the respondents reported being sick from work, and 56.1% said that they have missed work because of an illness. On the other hand, only 14 or 5.7% of the total respondents were hospitalized. More than half (52.8%) were currently taking medications, most of which are antibiotics (11.0%) and paracetamol (3.7%). This indicates a high rate of self-medication among the participants. Among those who missed work, most were absent for a week or less (45.1%).

The top ten symptoms among the respondents were headache (78.0%), cough and colds (72.0%), back pain (63.8%), leg cramps (46.3%), sleep disturbances (38.6%), hyperacidity (35.4%), migraine (32.5%), dizziness (31.7%), diarrhea (31.3%), and stiff neck (25.2%) as shown in Table 1.

Table 1: Frequency Distribution of Illnesses (N = 246)

Illness	Frequency	Percent	Most Common Frequency of Occurrence
Headache	192	78	Once/month
Cough and Colds	177	72	Once/month
Back pain	157	63.8	Once/day
Leg cramps	114	46.3	Once/month
Sleep Disturbances	95	38.6	Once/day

Dizziness	78	31.7	Once/month
Migraine	80	32.5	Once/month
Diarrhea	77	31.3	Once/month
Hyperacidity	87	35.4	Once/day
Stiff neck	62	25.2	Once/month
Depression	52	21.1	Once/month
Indigestion/Dyspepsia	56	22.8	Once/month
Chest Pain	51	20.7	Once/month
Constipation	44	17.9	Once/month
Allergy	48	19.5	Once/month
Blurring of Vision	31	12.6	Once/month
Difficulty Breathing	24	9.8	Once/month
Asthma	17	6.9	Once/month
Others	16	6.5	Once/month

Correlation Statistics

Table 2 shows the results of correlation analysis of factors and symptoms associated with burnout. Results show that burnout is positively correlated with organizational role stress and hazard exposure. Organizational role stress pertains to role stagnation, role inadequacy, role erosion, role expectation conflict, among others, as shown in table 3. A significant negative correlation with burnout was observed with self-efficacy, age, and situational factors, number of years working as a nurse, and sick in the last 12 months. This means that with a decrease in valuation of one self as a nurse, burnout increases. The younger nurses who have worked lesser years were also more prone to burnout probably due to role inexperience. Burnout was also associated with sickness among nurses for the last 12 months.

Table 2: Correlation of Factors and Symptoms Associated with Burnout

Factor/Symptom	Spearman rho	Significance
Organizational Role Stress	.428	.000
Self-efficacy	-.068	.390
Hazard Exposure	.301	.000
Situational Factors	-.066	.399
Age	-.085	.305
# Years as a Nurse	-.041	.619
Sick in the last 12 mos.	-.115	.141
Migraine	-.235	.002
Dizziness	-.144	.060
Sleep Disorder	-.162	.034
Cough and colds	-.169	.027
Diarrhea	-.091	.240

Hazard exposures pertain to exposures to occupational hazards such as physical

(heat, cold, radiation), chemicals (laboratory chemicals for instance), biological (viruses, pathogens from contaminated cotton and injection needles), and ergonomic (prolong standing, excessive twisting and carrying of patients). On the other hand, the 'Organizational Role Stress' items were a summation of ten dimensions as shown in Table 3.

Table 3: Ten Dimensions of Organizational Role Stress and Items in the Questionnaire for each Dimension

Dimensions of Organizational Role Stress	Items in the Questionnaire
Inter-Role Distance (IRD)	<ol style="list-style-type: none"> 1. Do you experience conflict between your roles and functions at home and at work? 2. If yes, what is the degree of conflict? (please check, 1 being the least conflict and 7 with the greatest conflict) 3. Does your job hinder or impair your relationship with others (family, friends, etc.)?
Role Stagnation (RS)	<ol style="list-style-type: none"> 1. Do you feel that there is no room for career advancement in your profession? 2. Does your job provide you with avenues for professional growth and expansion? 3. Do you wish for greater responsibilities and opportunities at work?
Role Expectation Conflict (REC)	<ol style="list-style-type: none"> 1. Do doctor's expectations of your role as nurse conflict with those of your colleagues or superiors? 2. Do the various and sometimes conflicting demands of your job make you feel stressed out? 3. Do the demands of your family and friends interfere with your ability to fulfill the expectations of your superiors?
Role Erosion (RE)	<ol style="list-style-type: none"> 1. Do you feel that your worth or value as a nurse is decreased when patients harass you? 2. Do you feel deprived of certain responsibilities at work? 3. Do you have feelings of insecurity and self-doubt regarding your abilities as a nurse?
Role Overload (RO)	<ol style="list-style-type: none"> 1. Do you feel that your superiors demand more of you than you can comfortably handle? 2. Are you having difficulty with the greater responsibilities and longer working hours resulting from lack of hospital personnel? 3. Do you feel that doctors demand too much from nurses? 4. Do you wish for less work and more free time for yourself?

Role Isolation (RI)	<ol style="list-style-type: none"> 1. Does your job provide ample opportunities for meaningful interaction with your co-workers? 2. Are your roles and responsibilities as a nurse closely linked with those of other hospital staff (doctors, technicians, etc.)? 3. Does your job make you feel isolated from your colleagues?
Personal Inadequacy (PI)	<ol style="list-style-type: none"> 1. Do you feel inadequate in your knowledge and skills as a nurse? 2. Do you think yourself effective and efficient at your job? 3. Do you think you could be better at your job if only you had more training and preparation?
Self-Role Distance (SRD)	<ol style="list-style-type: none"> 1. Do the necessities of your job sometimes conflict with you personal beliefs and values? 2. Have you refused to perform certain duties because they go against your beliefs?
Role Ambiguity (RA)	<ol style="list-style-type: none"> 1. Are you sometimes clueless as to what is expected of you as a nurse? 2. Do you often get confused as to the scope and limitations of your responsibilities at work? 3. Does the hospital give adequate feedback regarding your performance on the job? 4. Does your workplace encourage constructive criticism?
Resource Inadequacy (RIn)	<ol style="list-style-type: none"> 1. Does the hospital have adequate resources to enable you to properly perform your duties? 2. Do you often have to improvise and give out of your own pocket to fill in the lack of materials and resources at the hospital? 3. Do you think you could do much better at your job if only there were adequate hospital resources?

On the other hand, seven out of ten Organizational Role Stressor (ORS) dimensions have been found to be positively correlated with burnout, with Role Expectation Conflict (REC) and Role Overload (RO) being the most significant (Table 4). This means that when an individual nurse works overtime, and has multiple functions, she is predisposed to burnout. Moreover, when a nurse has a vague understanding of her functions and job description, she is also predisposed to burnout.

Table 4: Correlation between Burnout and ORS Dimensions

ORS Dimension	Spearman rho	Significance
Inter-Role Distance (IRD)	.230	.017
Role Expectation Conflict (REC)	.361	.001
Role Erosion (RE)	.144	.138

Role Overload (RO)	.490	.001
Role Isolation (RI)	.269	.005
Personal Inadequacy (PI)	.186	.054
Resource Inadequacy (RIn)	.271	.004

D. Multiple Linear Regression and Analysis

Table 5 shows the multiple linear regressions of factors associated with burnout. Organizational stress contributed significantly at 0.1 level to burnout. However, there is no significant association seen with situational factors (SF). Other significant factors (at 0.1 level) influencing burnout occurrence among nurses are SE and HE, SE and RS, SF and HE, SF and RS, migraine, and illness in the past 12 months.

Table 5. Multiple Regression of Factors Associated with Burnout

Factor	R squared	Beta
Organizational Role Stress **	.199	.232
Situational Factors	.007	-.053
Hazard Exposure	.089	.212
Self-efficacy	.002	.032
SE x HE**	.101	.218
SE x SF	.018	-.081
SE x RS**	.199	.232
SF x HE**	.101	.218
SF x RS**	.192	.232
SF x HE x SE	.019	-.083
RS x SE x HE	.188	.238
RS x SF x HE	.181	.239
Illness in the past 12 months**	.011	-.151
Migraine**	.043	-.324
Age*	.004	.007

*significant at .05 level

**significant at .01 level

Analysis of Variance

One-way Analysis of Variance (ANOVA) was performed between burnout and different ward assignment to determine its possible differences. Table 6 presents significant difference between groups (inpatient, outpatient and ICU).

Table 6: Analysis of Variance between Burnout and Ward Assignments

	Sum of Squares	F	Significance
Between Groups	592.07	1.143	.301
Within Groups	998.00		

After performing Chi-square Test for independence of burnout with demographic factors, it was shown that age, status, number of years as a nurse, and ward assignments are significantly associated with development of burnout among nurses (Table7).

Table 7: Chi-square Test for Independence for Burnout vs. Demographic Factors (alpha = .05)

Factor	Pearson Square	Chi-df	Significance	Decision
Age	1368.44	1204	Yes	Associated
Years	1516.28	1591	Yes	Associated
Status	125.31	132	Yes	Associated
Ward Ass.	2047	2070	Yes	Associated

Table 8 shows the ANOVA Test of independence for burnout with different stress factors. Organizational role stress and hazards between groups are associated.

Table 8: ANOVA Test of Independence for Burnout vs. Stress Factors (alpha=.05)

Factors	Sum of Squares	F	Significance	Decision
ORS Between	97.61	2.03	Yes	Associated
Within	76.95			
Hazards Between	59.7	1.608	Yes	Associated
Within	99.54			
Situation Between	61.7	0.988	No	Not Associated
Within	158.81			

Discussion

Burnout has been the subject of various investigations aiming to elucidate and disentangle the complex relationships and interactions that moderate and influence it. Burnout has been found to be associated with decreased job performance and low career satisfaction, and has a special significance in health care, where staff experience psychological–emotional and physical stress (Ozyurt, Hayran and Sur, 2006). In this study, there is a significant correlation existing between burnout and self-efficacy, hazard exposure and organizational role stress, along with age and illness. Acting together, some of the measured indices also exerted significant predictive capacities, which indicate that there is an interaction among these factors as they influence the development of burnout.

Walvoord, 2006, pointed out that it is important to identify predictors of burnout, recognize who is suffering, and eventually apply methods to prevent burnout and stress in the workplace. She further explained that, known factors contributing to burnout development are staff shortages, compassion fatigue, work environment, and job satisfaction, while gender, age, lower academic status, qualifications, training, and number of years in the field are indicators of who is suffering. These factors can be categorized as either personal factors or organizational factors, which can be targeted in

coming up with programs to reduce burnout. Other researchers have looked into the work-related aspects of burnout. Cherniss in 1980 conducted interviews with public human services professionals and found that mistrust, organizational conflict, rigid role structure, isolating work practices, and entrenched patterns of uncommunicative social interaction are a source of burnout among workers. Other identified sources of burnout include employment insecurity and casualties of the work-force, issues with management and the system and difficulties with the nature of work. Burnout can also be caused by poor interpersonal factors such as problems with doctors, aggressive and criminal consumers, undervaluing consumers and nurses, physical and emotional constraints of the workplace, nurse-nurse relationships, and horizontal violence (Taylor & Barling, 2004). Dealing with difficult or demanding patients (Jenkins and Elliott, 2004) can also be a threatening situation (Sherman, 2004). These were part of the organizational factors in this study found to be significantly associated with burnout. This is particularly important in the PGH and Philippine setting due to the continued exodus of nurses to greener pastures abroad, resulting in the shortage of qualified nurses.

A number of personal factors have also been associated with burnout. These include perfectionism, over-involvement with patients, self-esteem, sense of mastery and purpose in life (Sherman, 2004), low education level, low work experience, low status, economic hardships, difficulty in childcare and doing house chores, and personal and family health problems (Demir, Ulusoy, et.al., 2003). These personal factors were categorized in this study under the factor, self efficacy. In this study as low self efficacy was associated with burnout. This means that a person who has poor valuation of herself, and one who has inadequate training and poor perception of skills may more likely to encounter burnout compared with someone who has positive self-efficacy.

In this study, it was found that levels of burnout varied among nursing departments. Schraub and Marx in 2004 also reported a higher level of burnout among oncologists report as compared to AIDS medical or palliative care staff. Imai et al. in 2004, on the other hand, found a higher prevalence of burnout among community psychiatric nurses than public health nurses engaged in other services. In this study, burnout was most significant among nurses in intensive care units, followed by the inpatient department, then outpatient. A study of ICU nurses, Mealer, et.al., (2007) showed they are suffering from a demanding work environment and exposed to traumatic situations and stressful events, leading to post-traumatic stress disorder (PTSD) symptoms compared with other general nurses. This shows that burnout is associated with the stressfulness of the work situation.

In this study as low self efficacy was associated with burnout. This means that a person who has poor valuation of herself, and one who has inadequate training and poor perception of skills, may more likely to encounter burnout compared with someone who has positive self efficacy.

Specific symptoms such as migraine, dizziness, sleeping disorder, cough and colds, and diarrhea have been correlated with burnout in this study. This is also shown in the findings of Gopal and colleagues (2005) where most residents experienced high emotional exhaustion, high depersonalization and a positive depression screen. In addition, Özgencil et al. (2004) found that burnout was associated with increased prevalence of depression among ICU nurses.

Also, series of hierarchical regression analyses in a study provided significant evidence for the crossover of burnout (exhaustion and cynicism) and work engagement (vigor and dedication) among partners (Bakker, Demerouti and Schaufeli, 2005) showing that burnout is related to workload, degree of involvement with patients, lack of social support and role conflict (Coyle, et.al., 2005). Similar findings on role conflict were found in this study. Role conflict arises when there are conflicting demands among nurses arising from differing instructions of doctors or supervisors.

In the light of the adverse outcomes associated with burnout, many investigators have identified ways and techniques to alleviate this syndrome among nurses and other human service professionals. Hsieh, et al. in 2004 described a quality called hardiness, which they described as an inherent personality trait that buffers the health related effects of stress. Meanwhile, Cohen-Katz et al. in 2004 proposed a stress-reduction program called Mindfulness-based Stress Reduction that emphasizes self-care, compassion, and healing makes and is a promising intervention for helping nurses manage stress and reduce burnout.

This study adds some new information on the sources of burnout; hence, it is worth attention. It shows that the phenomenon is determined not by individual events but rather by their interaction. In addition, it takes into account not only previously analyzed causes of burnout, such as work overload, or role conflict, but also causes that have not been discussed in this context yet, such as role erosion, inter-role distance and others.

The contribution of the study is seen in advancing new concepts in the already existing framework of burnout, and thus, can assist the nurses and the hospital administration on how to control such phenomenon. In reality, factors such as age, self efficacy, organizational stress factors, and situational analysis all interact in varying degrees in the attribution of burnout. Solutions therefore should be multi-dimensional and involves the individual, organizational factors and work conditions.

Importance of Study to Philippine Context

This study on burnout among nurses in the largest tertiary hospital in the Philippines is significant since the country has been experiencing inadequate staffing of nurses in its health care setting. The Philippine General Hospital employs 1,074 nurses, 856 of whom are females. The administrative department of nurses is directly under the Office of the Director of the hospital. The roles of human resource of the nursing department are largely ward assignments, job orientation, job rotation, and recruitment. Nurses are allowed to be part of the in-house trade union which has rather been quite for the past years. Management views human capital as vital in the functioning of the hospital, but has focused more on the ability of the nursing department to keep constant supply of nurses to the various departments due to fast turnover.

Today, there is a total of 368,589 licensed nurses (February 2005) in the country and produces an average of 13,000 new nurses every year. However, the Philippines exports more nurses than what the actual number of graduates who pass the board examinations. In 2001 the Philippine Overseas Employment Administration (POEA) said that 13,536 Filipino nurses went overseas. In 2002, 11,911 nurses went abroad to work as nurses against a smaller number of nursing students, 4,228, who passed the board examinations. The annual outflow of Filipino nurses is now three times more than the

annual production of licensed nurses. In fact, about 10 percent of the Philippines' 2,500 hospitals have closed down in the past three years because of the loss of doctors and nurses who seek better employment opportunities abroad (www.pna.org).

The country also supplies 25 percent of all overseas nurses worldwide. Next to India, the Philippines is already the largest source of doctors in hospitals abroad. The preferred country of destination is the United States because of the possibility of acquiring US citizenship and all its privileges. But 57 percent of Filipino nurses abroad are in Saudi Arabia; only 14 percent are in the United States; followed by 12 percent are in the United Kingdom (www.poea.gov.ph).

A key issue for the exodus of nurses is the salary. The average pay of nurses in the cities is still USD169 a month. In the rural areas, the average pay ranges from USD75 to 95 a month. The Philippines will never be able to compete with the salaries offered to nurses in the developed countries (www.nih.upm.edu.ph).

The nursing profession has witnessed tremendous changes in the past few years. In a developing country such as the Philippines, there is a need to retain nurses. Although, it would be difficult to compete with employment opportunities offered abroad for Philippine nurses, it is still possible to retain some of them, or at least, enable them to work longer in the country prior to leaving. As such, the work environment must be more conducive for work among nurses. This study on burnout has shown that organizational role stressors are major contributors to burnout, and thus, hospital administrators should be able to address key issues in organizational role stressors. In this study, there are several dimensions of organizational role stressors such as inter-role distance which covers work-home conflict, e.g. work in the hospital interfering with the demands at home (Penson et al, 2000). Role stagnation refers to lack of career development, or lack of non-monetary incentives (Barak, et.al, 2001). Role expectation conflict refers to disparity in actual job performance and expectations of superiors and colleagues (Maunz & Steyrer, 2001). Role overload is performing several functions at the same time, or having to deal with many patients at one time (Maslach and Jackson, 1986). Role isolation can result from role overload since an employee who has much work may not be able to interact significantly with colleagues and significant others (Bakker 2005). Personal inadequacy may emanate from lack of training to cope with job, or a subjective feeling about one's self doubt and insecurities (Lopez, 2005). Self-role distance refers to the demands of the job that may conflict with one's personal beliefs, e.g. blood transfusion is not permitted by certain religious beliefs (Bogat et al, 2005). Role ambiguity may ensue from lack of orientation on one's scope of responsibilities (Edwards et al, 2000). Lastly, resource inadequacy pertains to unavailability of monetary and non monetary incentives at work (Piko, 2005).

Conclusion

The study showed that there is a significant correlation existing between burnout and self-efficacy, hazard exposure and organizational role stress, along with age and illness. In addition, organizational role stress and age have been found to be independent and most significant predictors of burnout. Acting together, some of the measured indices also exerted significant predictive capacities, which indicate that there is an interaction among these factors as they influence the development of burnout. These

point out the interactions present among these factors as they exert their effect on burnout. The dominance of female in the profession reinforces the prevailing notion that the caring professions such as nursing are relegated to women. This gives the study its gender perspective.

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