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BURNOUT SYNDROME IN HOSPITAL NURSES

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ABSTRACT

Burnout is a state of mental, physical and emotional stress resulting in a chronic state of pressure or stress at work and is associated with individuals who do “people work” (Aiken and Sloane, 1997), a category into which nurses obviously fall. The number of nurses suffering from burnout has increased over the years, possibly causing negative effects on patient care, working environments and staffing shortages.

Hospitals should focus on creating a healthy work environment in which nurses feel supported by their coworkers and management. Hospitals should also make available stress management programs that address symptoms of burnout and assure safe nurse staffing patterns are in place. A decrease in nurses’ perceived burnout could potentially help to decrease the national nursing shortage and help hospitals eliminate costly expenses in recruiting nursing staff. Lower patient to nurse ratios, a better work environment created by better management, higher pay and shorter working shifts would all make the nursing field more desirable and attract more people to train in the field.

INTRODUCTION

The American psychologist, Herbert Freudenberger, first used the term “burnout” in the 1970s to describe the result of unyielding stress and high standards experienced by people working in “helping” occupations, such as nursing (IQWiG, 2013). The three main symptoms considered to be signs of Burnout Syndrome are emotional exhaustion, alienation from job-related activities and reduced work performance (Poncet et al., 2007). Nurses experiencing emotional exhaustion feel depleted, overworked and lethargic. Alienation from job-related activities has included emotional separation from work responsibilities, dissociation from coworkers and pessimistic attitudes toward the work environment (Jennings, 2008). Burnout can affect daily tasks at work, home and when caring for family. Nurses with Burnout Syndrome view responsibilities negatively, find it difficult to work and have an absence of innovation, causing an overall reduced performance with all daily responsibilities (IQWiG, 2013). Nursing has been one of the fastest growing professions for the past 20 years and is projected to keep growing 19% faster than all other occupations at least until the year 2022 (Health Guide USA, 2012). Baby boomers will contribute to this growth because of aging and retirement, leading to the need for more medical care (Health Guide USA, 2012). In the 2000 census, the United States population qualified for Medicare totaled 35.1 million. By 2030, the same population is estimated to increase to 69.7 million and by 2050 to 81.9 million (U.S Census Bureau, 2000).

The number of nurses suffering from Burnout Syndrome has risen over the years due to several factors. Burnout Syndrome in nurses has been shown to increase about 23% for each additional patient added to the nurse’s shift workload (Blakeney, 2003). Many nurses are required to work mandatory overtime and also noted that they may not have a choice when asked to work voluntary overtime (Rogers et al., 2004). In 2007, an estimated 500,000 RNs in the U.S. alone were not practicing in their profession because of challenging working conditions caused by long working hours and limited staffing (Herbst, 2007). Burnout Syndrome has affected 49% of Registered Nurses (RNs) under the age of 30 and 40% of RNs over 30 (Aiken et al., 2001). Symptoms from Burnout Syndrome have possibly caused negative effects on patient care, working environment and staffing shortages (Jennings, 2008).

The hospital nurse workforce is experiencing increased workloads due at least in part to a national nurse shortage, suspected to be caused by nurses leaving the profession because of experiencing Burnout Syndrome. Higher nurse workloads (a ratio of one nurse to eight patients at worst) have been related to Burnout Syndrome and more than 40% of hospital staff nurses score in the high range for job-related burnout, with more than one in five hospital staff nurses reporting that they intend to leave their hospital jobs within one year (Aiken et al., 2001). Research on Burnout Syndrome in hospital nurses has also indicated that stressors in the work environment are key elements of Burnout Syndrome, which consequentially are contributing to the nursing shortage by nurses voluntarily leaving their positions (Applebaum et al., 2010).

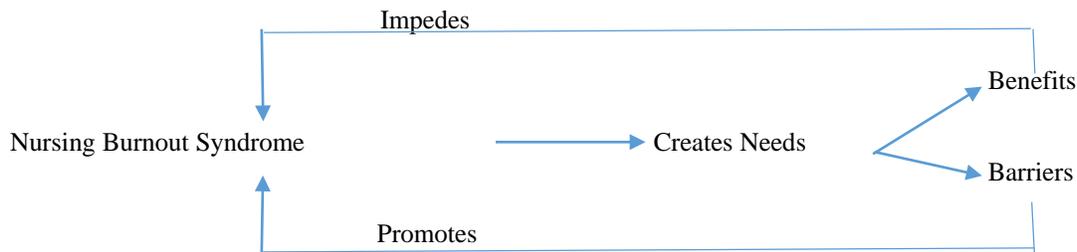
The purpose of this research was to analyze the effects of the Burnout Syndrome of hospital nurses to determine the relationship with the nursing shortage experienced nationwide.

METHODOLOGY

The working hypothesis was that a poor work environment caused by insufficient staffing of nurses and higher nurse-to-patient ratios in the hospital setting will have greater impacts on nurses suffering from Burnout Syndrome, which will negatively contribute to the staffing shortage. The second working hypothesis was that nurses suffering from Burnout Syndrome will be more costly to hospitals because of recruiting new staff due to the turnover rate.

The methodology for this study of Burnout Syndrome in Hospital Nurses was performed following the steps of a literature review supported with a semi-structured interview from an experienced RN of 12 years, M. Nance (in results see: Questions asked in semi-structured interview of Burnout Syndrome in Hospital Nurses). This interview was tape recorded and only pertinent answers were used to validate the data encountered in the literature review to offer a more comprehensive overview of Burnout Syndrome and its effects. The research method followed was conceptual framework in Figure 1 below, which illustrates the needs caused by Burnout Syndrome in Hospital Nurses. First, the research conducted recognized the needs caused by Burnout Syndrome and examines the benefits and barriers created by those needs. Second, different resolutions can be determined to define possible outcomes from the created needs. Finally, as a result of analyzing the literature, the benefits and barriers of Burnout Syndrome can be identified.

Figure 1: Conceptual Framework



The study was conducted in three stages: (1) Identifying the literature and collecting data, (2) evaluating the analyzed literature obtained and (3) categorizing the literature.

Step 1: Literature Identification and Collection

The key terms “Burnout Syndrome” and “Hospital or Nurses” and “RN or Register Nurse” were used to search for articles in online scholarly databases. Professional databases used in this study included PubMed, Medline, ProQuest, EBSCO Host, the National Center for Biotechnology Information, the National Institutes of Health and Google Scholar.

Step 2: Literature Categorization

The literature categorization was performed reviewing a total of 111 sources. The abstracts of the articles and the articles themselves were reviewed to determine the significance and applicability of the data to the current study and organized accordingly. The results were obtained from only 36 articles. The selected journal articles, web sites from various sources and the semi-structured interview, were used to demonstrate the different causes and solutions to Nursing Burnout Syndrome in Hospital Nurses.

Step 3: Literature Analysis

During the literature analysis, literature was selected for review from the year 2000 to 2014, to keep this study current. The publications selected were written in English. Primary and secondary data from the research

studies selected was included in this research. References used were reviewed and concluded to meet the inclusion criteria on Burnout Syndrome in Hospital Nurses.

RESULTS

A summary of the issues and risk factors associated with burnout in the nursing profession is provided in Table 1 (below). These issues and risk factors are then discussed in more detail.

Table 1: Issues vs Risk Factors for Burnout Syndrome in Hospital Nurses

<u>Issues</u>	<u>Risk Factors</u> Source(s)
Work Environment	<ol style="list-style-type: none"> 1. 50% of nurses approaching retirement age 1. Fewer students being accepted in nursing programs 2. Increased workloads 3. Longer working hours 4. Insufficient staffing 5. High nursing turnover rate 6. Poor management <p>New York Times (2000), AACN (2005), AACN (2009)</p>
Personal Perceptions of Nurses	<ol style="list-style-type: none"> 1. 50% of nurses felt extremely exhausted at the end of their shift 2. 44% felt discouraged and dissatisfied about their patients care 3. 40% of patients felt powerless to make changes for safe quality care 4. 26% went home and felt worried about their patients <p>Erickson and Grove (2008)</p>
High Risk Demographic Variables	<ol style="list-style-type: none"> 1. Single Workers 2. Workers with no children 3. Higher education associated with greater job responsibilities <p>Maslach (2003),Garrett (2008)</p>
Recruitment and Retainment of Nurses	<ol style="list-style-type: none"> 1. Burnout Syndrome in nurses could essentially be a high expense for hospitals, because of increased employee tardiness, absenteeism, job turnover rate, reduced job performance and difficulty in recruiting and retaining staff 2. Estimated a total cost of between \$62,100 and \$67,100 to replace a single RN 3. Factors affecting recruitment include: hospital reputation, salary, inclusion of staff in making decisions, management's respect of workers, work loadand shifts worked <p>Vahey et al. (2004), Jones (2005), Force (2005)</p>
5. Stagnant Wages	<ol style="list-style-type: none"> 1. Stagnant wages from 2000 to 2012 2. Wages only raising from \$781 to \$1097 a work week 3. Pay increases breaking down to less than ½% each year <p>Dorning (2013)</p>

Employment of RNs is expected to increase 19% from 2012 to 2022, faster than the average for any other occupation (BLS, 2014). The reasons for this expected growth include an increased focus on preventative care through the Affordable Care Act providing access to healthcare for millions of people, rising rates of chronic conditions (e.g., diabetes and obesity) and the need for medical services for the baby boomer generation as they retire, leading longer and fuller lives (BLS, 2014). However, a shortage of RNs is an escalating problem. The Bureau of Labor Statistics projected in 2002 that the U.S. would be 800,000 RNs short of the national need by the year 2020, but since 2012 the projected shortfall has increased to one million RNs by 2020 (Erickson and Grove, 2008). A factor contributing to this shortage is more than 50% of the nursing workforce is approaching retirement age (New York Times, 2000).

In addition, fewer students are being accepted into nursing programs (AACN, 2005). In the 2008-2009 school year, U.S. nursing schools turned away over 49,948 qualified applicants, due to insufficient faculty in nursing programs (AACN, 2009). Reasons for faculty shortages include retirements of faculty with 2015 expected to be the year when most retirements occur, due to the average age of staff (AACN, 2005). Also, greater compensation in clinical settings is enticing current and potential nurse educators away from teaching (Lewallen et al., 2003). Master's and doctoral programs in nursing have not produced and are not producing enough nurse educators to meet the demand for nursing programs and only 13% of registered nurses have a Master's or Doctoral degree which, combined with clinical experience, is required to teach. These qualifications and the fact that most nurses work full-time while obtaining their master's degree part-time, put nurses close to their 40s by the time they obtain their required graduate degree(s), limiting their time to teach before reaching retirement age (Siela, Twibell and Keller, 2008).

Since the economic recession in 2008, an increase has been reported in the number of retired nurses going back to work and more nurses increasing from part-time to full-time employment (Dorning, 2013). The return of older nurses into the profession and attempts to recruit and employ foreign-born nurses has lessened the shortage but not eliminated the deficiency (Auerbach, Buerhaus and Steiger, 2007).

Nurses working in hospital settings affected by the nursing shortage claim to be dissatisfied with their jobs due to increased workloads, longer working hours and staffing insufficient to provide the highest quality care to patients (Dorning, 2013). Stagnant wages from 2000 to 2012 are also a complaint for nursing staff, with mean weekly wage increasing only from \$781 to \$1097, less than a ½% annual pay increase (Dorning, 2013). Higher wages and compensation is thought to be the most successful strategy in safeguarding the negative effects of Burnout Syndrome in nurses and to positively affect the nursing shortage (Demerouti, Bakker and Leiter, 2014). According to RN, M. Nance, during a personal communication interview^a, a higher salary may alleviate symptoms from burnout by allowing for more conveniences at home, increased leisure activities and in turn allowing for some deeper recovery during free time (See Appendix A).

Forty percent of hospital nurses have Burnout Syndrome levels that exceed those of other healthcare workers, job dissatisfaction among hospital nurses is four times greater than the average for all US workers and 20% of hospital nurses reported that they intended to leave their current jobs within a year (Aiken et al., 2002). The American Nurses Association reported that the four most common responses from nurses finishing a shift were that 50% were extremely exhausted, 44% were discouraged and dissatisfied for not being able to completely provide the care they thought their patients needed, 40% thought changes were needed for safe quality care for patients and 26% went home feeling worried for their patients (Erickson and Grove, 2008).

Higher nurse workloads from insufficient staff are associated with Burnout Syndrome, which causes nurses to voluntarily leave their current employment, in turn contributing to the understaffing of nurses in hospital settings (Vahey et al, 2004). National Nurses United and other state nurse's associations have proposed low patient-to-nurse ratios for years; four patients to one nurse being the best ratio (ANA, 2011). As of 2011, California is the only state that has passed legislation requiring exact patient-to-nurse ratios: the California Department of Health Services set the ratios that took effect in 2004 and are as follows: six to one patient-to-nurse workload in psychiatrics, five to one patient-to-nurse in medical-surgical units, telemetry and oncology, four to one in pediatrics, three to one in labor and delivery and two to one in intensive care units (Aiken et al, 2010). According to the authors, the purpose of these recommended ratios were to reduce nurse burnout and improve quality of care for patients in hospitals. This study on the effects of the California law was performed based on a survey of more than 22,000 registered nurses in the states of California, Pennsylvania and New Jersey. Based upon Aiken et al. (2010), it has been estimated that

patient deaths in hospitals would have been decreased by 14% in New Jersey and 11% in Pennsylvania over a two-year period, which would have saved 468 lives (Aiken et al, 2010).

A 2008 survey study of over 10,000 nurses across the U.S. reported 73% of nurses stated that the staffing on their floor and shift was insufficient (ANA, 2010). Sixty percent of nurses conveyed personally knowing nurses who had left because of fears about safe staffing and 54% of nurses indicated that they themselves were considering leaving their current job. Forty three percent of those 54% said that inadequate staffing was the main reason for leaving the profession (ANA, 2010).

Work overload and poor management have produced a challenging work environment, highly linked to the Burnout Syndrome which has affected 49% of RNs under the age of 30 and 40% of RNs over 30 (Erickson and Grove, 2008). Many nurses have been required to work mandatory overtime inside and outside their departments or specialties and over 60% of RNs have claimed they do not have a choice when asked to work voluntary overtime (Tirona, 2006). Burnout usually occurs in the first five years of the nursing career causing many young nurses to leave the profession; the remaining nurses are considered to be survivors (Maslach, 2003).

Family status seemed to present a significant part in Burnout Syndrome, with burnout higher among single workers and workers with no children, compared to those nurses that are married and those with children (Maslach, 2003). Educational status also seems to have an effect, with higher levels of burnout among workers with higher levels of education; the distinction is associated with the expectations of a higher education with job responsibilities (Maslach, 2003). A survey of 3,424 employees showed a low educational level and low social status raised Burnout Syndrome for women, while differing marital status' increased the risk for men, whether it be single, married, separated, or divorced (Garrett, 2008). Burnout Syndrome has been consistent among men and women, with differences only between the aforementioned variables (Garrett, 2008).

In 2008, an estimated 465,000 RNs in the U.S. were not practicing in the nursing profession (U.S. Department of Health and Human Services, 2008). In March 2005, a survey reported that the average RN turnover rate in hospitals was 13.9%, with a vacancy rate of 16.1% (Siela, Twibell and Keller, 2008). When vacancy was high, the cost to the hospital was substantial and the effect on other resources such as workload, overtime, staff replacements was significant (Jones, 2005). Burnout Syndrome in nurses could be a high expense for hospitals, because of increased employee tardiness, absenteeism, job turnover rate, reduced job performance and difficulty in recruiting and retaining staff (Vahey et al., 2004).

Recruitment of RNs is costly for any hospital. Jones (2005) estimated a cost of between \$62,100 and \$67,100 to replace a single RN. Factors that affect recruitment include the hospital's reputation, salary, inclusion of staff in making decisions, management's respect of workers, workload and shifts worked (Force, 2005). Overlapping interests between RNs recruited and the RNs who consider staying employed has been factors that make employment fulfilling and must be attended to if a hospital is to attain and retain an adequate nursing staff (Force, 2005).

DISCUSSION

The purpose of this literature review was to examine the effects of the Burnout Syndrome of hospital nurses and to determine the relationship with the nursing shortage experienced nationwide. The results suggest that poor work environments and an increased nurse-to-patient ratio have contributed significantly to Burnout Syndrome in hospital nurses and are potentially a significant cost to hospitals recruiting new staff due to the high turnover rate caused by Burnout Syndrome.

With the nursing profession expected to grow until the year 2022, but having close to one million projected shortages of RNs to fill these positions, this is not a very promising thought for those spending a night in the hospital (BLS, 2014). Nurses' experiences of Burnout Syndrome are emotional exhaustion, depersonalization and reduced personal accomplishment, which can directly affect the product of their work, meaning direct care of patients (Bakker, Le Blanc and Schaufeli, 2005). These symptoms of burnout contribute to the national nursing shortage, creating a vicious cycle of Burnout Syndrome and nursing shortages (Demerouti et al., 2000). Stress originating from the physical and social work environment, role ambiguity and management have been significantly associated with increased levels of nurses' emotional exhaustion (Stordeur, D'hoore and Vandenberghe, 2001). Other

significant predictors do include age, job status, educational level and workload of patient-to-nurse ratios (Garrosa et al., 2008). Higher work satisfaction and lower anticipated turnover will help relieve the nursing shortage (Shader et al., 2001). The semi-structured interview with the RN^a supported the findings in this review, especially the causes of Burnout Syndrome in hospital nurses, the effects of an excessive workload and the negative effects on nurses.

Hospitals should focus on creating a healthy work environment in which nurses feel supported by their coworkers and management. Reduction of Burnout Syndrome will attract more people to the nursing field, filling the shortages in hospitals and in nursing education, allowing for more nurses to graduate into the field. When Burnout Syndrome is decreased, nurses will have a renewed passion and devotion to their job, eliminating the nationwide nursing shortage, allowing hospitals to save money and increasing the overall quality of patient care.

CONCLUSION

This study suggests that lower patient to nurse ratios, a better work environment created by better management, higher pay and shorter working shifts, would all contribute to lowering burnout among current nurses, potentially making the profession of nursing more desirable and attract more people to train in the field. Ultimately, implementing these findings will reduce the national shortage of nurses caused at least in part by burnout, saving hospitals money in recruiting new and retaining existing nursing staff

^aPersonal Communication, M. Nance, RN, March 28, 2014.

REFERENCES

- Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J.A., Busse, R., Clarke, H., Giovannetti, P., Hunt, J., Rafferty, A.M. and Shamian, J. (2001), "Nurses' Reports on Hospital Care in Five Countries," *Health Affairs*, 20 (3), 43-53.
- Aiken, L.H., Clarke S.P., Sloane D., Sochalski J. and Silber J.H. (2002), "Hospital Nurse Staffing and Patient Mortality, Nurse Burnout and Job Satisfaction," *The Journal of the American Medical Association*, 288 (16), 1987-1993.
- Aiken, L.H. and Sloan, D. (1997), "Effects of Organizational Innovations on AIDS Care on Burnout among Hospital Nurses," *Work and Occupations*, 24 (4), 455-477.
- Aiken, L.H., Sloane, D.M., Cimiotti, J.P., Clarke, S.P., Flynn, L., Seago, J., Flynn, L., Seago, J.A., Spetz, J. and Smith, H.L. (2010), "Implications of the California Nurse Staffing Mandate for Other States," *Health Services Research*, 45 (4), 905-910.
- American Association of Colleges of Nursing [AACN] (2005), *Faculty Shortages in Baccalaureate and Graduate Programs: Scope of the Problem and Strategies for Expanding the Supply*. Retrieved February, 4, 2014, from www.aacn.nche.edu/publications/WhitePapers/FacultyShortages.htm.
- American Association of Colleges of Nursing [AACN] (2009), *Fact Sheet: Nursing Faculty Shortage*. Retrieved February 4, 2014, from <http://www.aacn.nche.edu/Media/FactSheets/FacultyShortage.htm>
- Applebaum, D., Fowler, S., Fiedler, N., Osinubi, O. and Robson, M. (2010) "The Impact of Environmental Factors on Nursing Stress, Job Satisfaction and Turnover Intention," *Journal of Nursing Administration*, 40 (7-8), 323-328.
- Auerbach, D.I., Buerhaus, P.I. and Steiger, D.O. (2007), "Better Late than Never: Workforce Supply Implications of Later Entry into Nursing," *Health Affairs*, 26 (1), 178-185.
- American Nurses Association [ANA] (2010), *Safe Nursing Staffing Poll Results*. Retrieved February 13, 2014, from <http://www.safestaffingsaveslives.org/WhatisANADoing/PollResults.aspx>
- American Nurses Association [ANA] (2011), *Federal Legislation: Registered Nurse Safe Staffing Act*. Retrieved February 18, 2014, from <http://www.safestaffingsaveslives.org/WhatisANADoing/FederalLegislation.aspx>

- Bakker, A.B., Le Blanc, P.M. and Schaufeli, W.B. (2005), "Burnout Contagion among Intensive Care Nurses," *Journal Advanced Nursing*, 51 (1), 276-287.
- Bureau of Labor Statistics [BLS] (2014), "Registered Nurses," *U.S. Department of Labor, Occupational Outlook Handbook, 2014 Edition*. Retrieved March 8, 2014, from <http://www.bls.gov/ooh/healthcare/registered-nurses.htm>
- Blakeney, B.A. (2003), "Hospital Teamwork in Action," presentation at the 6th Annual Meeting of the Society of Hospital Medicine.
- Demerouti, E., Bakker, A.B. and Leiter, M. (201), "Burnout and Job Performance: The Moderating Role of Selection, Optimization and Compensation Strategies," *Journal of Occupational Health Psychology*, 19 (1), 96-107.
- Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B. (2000), "A Model of Burnout and Life Satisfaction amongst Nurses," *Journal of Advanced Nursing*, 32 (2), 454-464.
- Dorning, J. (2013), "Nursing: A Profile of the Profession," *The Department for Professional Employees, AFL-CIO (DPE)*. Retrieved March 5, 2014, from <http://dpeaflcio.org/programs-publications/issue-fact-sheets/nursing-a-profile-of-the-profession/>
- Erickson, R.J. and Grove, W.J.C. (2008), "Why Emotions Matter: Age, Agitation and Burnout among Registered Nurses," *Online Journal of Issues in Nursing*, 13 (1). Retrieved January 18, 2014, from <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAEriodicals/OJIN/TableofContents/vol13/2008/No1Jan08/ArticlePreviousTopic/WhyEmotionsMatterAgeAgitationandBurnoutAmongRegisteredNurses.html>
- Force, M.V., (2005), "The Relationship between Effective Nurse Managers and Nursing Retention," *Journal of Nursing Administration*, 35 (7-8), 336-341.
- Garrett, C. (2008), "The Effect of Nurse Staffing Patterns on Medical Errors and Nurse Burnout," *Association of periOperative Registered Nurses Journal*, 87 (6), 1191-1204.
- Garrosa, E., Moreno-Jiménez, B., Liang, Y. and González, J.L. (2008), "The Relationship between Socio-Demographic Variables, Job Stressors, Burnout and Hardy Personality in Nurses: An Exploratory Study," *International Journal of Nursing Studies*, 45 (1), 418-427.
- Health Guide USA (2012), *Registered Nurse Job Outlook*. Retrieved March 2, 2014, from http://www.healthguideusa.org/careers/registered_nurse_job_outlook.htm
- Herbst, M. (2007), "A Critical Shortage of Nurses," *Business Week*. Retrieved January 18, 2014, from <http://www.businessweek.com/stories/2007-08-28/a-critical-shortage-of-nursesbusinessweek-business-news-stock-market-and-financial-advice>
- Institute for Quality and Efficiency in Health Care [IQWiG] (2013), *What Is Burnout Syndrome?* Retrieved February 22, 2014, from <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0050545/>
- Jennings, B.M. (2008), "Work Stress and Burnout among Nurses: Role of the Work Environment and Working Conditions." In R.G. Hughes (Ed.), *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville, MD: Agency for Healthcare Research and Quality.
- Jones, C.B. (2005), "The Cost of Nurse Turnover: Part 2," *Journal of Nursing Administration*, 35 (1), 41-49.
- Lewallen, L.P., Crane, P.B., Letvak, S., Jones, E. and Hu, J. (2003), "An Innovative Strategy to Enhance New Faculty Success," *Nursing Education Perspectives*, 24 (5), 257-260.
- Maslach, C., (2003), *Burnout: The Cost of Caring*. Cambridge, MA: Malor Books.
- New York Times (2000), *Nursing Shortage Projected*, December 13. Retrieved February 2, 2014, from

<http://www.nytimes.com/2000/12/13/nyregion/nursing-shortage-projected.html>

Poncet, M.C., Toullic, P., Papazian, L., Kentish-Barnes, N., Timsit, J.F., Pochard, F., Chevret, S., Schlemmer, B. and Azoulay, E. (2007). "Burnout Syndrome in Critical Care Nursing Staff," *American Journal of Respiratory and Critical Care Medicine*, 175 (200), 698-699.

Rogers, A.E., Hwang, W.T., Scott, L.D., Aiken, L.H. and Dinges, D.F. (2004), "The Working Hours of Hospital Staff Nurses and Patient Safety," *Health Affairs*, 23 (4), 202-212.

Shader, K., Broome, M.E., Broome, C.D., West, M.E. and Nash, M., (2001), "Factors Influencing Satisfaction and Anticipated Turnover for Nurses in an Academic Medical Center," *The Journal of Nursing Administration*, 31 (4), 210-216.

Siela, D., Twibell, K.R. and Keller, V. (2008), "The Shortage of Nurses and Nursing Faculty: What Critical Care Nurses Can Do?" *American Association of Critical-Care Nurses*, 19 (1), 66-67.

Stordeur, S, D'hoore, W. and Vandenberghe, C. (2001), "Leadership, Organizational Stress and Emotional Exhaustion among Hospital Nursing Staff," *Journal of Advanced Nursing*, 35 (4), 533-542.

Tirona, W. (2006), "Statement of the New York Nurses Association Submitted to the New York State Assembly Committee on Health and Committee on Labor," *New York Nurses Association*. Retrieved January 25, 2014, from http://www.nysna.org/advocacy/testimonies/shortage_and_ot.htm

U.S. Census Bureau (2000), *Projections of the Total Population by Five-Year Age Groups and Sex with Special Age Categories: Middle Series, 1999–2100*. Retrieved April 8, 2014, from <http://content.healthaffairs.org/content/23/2/282.2.full>

U.S. Department of Health and Human Services (2008), *Initial Findings from the 2008 National Sample Survey of Registered Nurses*. Retrieved February 18, 2014, from <http://dpeaflcio.org/programs-publications/issue-factsheets/nursing-a-profile-of-the-profession/#sthash.zrSB7cBe.dpuf>

Vahey, D.C., Aiken, L.H., Sloane, D.M., Clarke, S.P. and Vargus, D. (2004), "Nurse Burnout and Patient Satisfaction," *Medical Care*, 42 (2), 1157-1166.

Questions asked in semi structured interview of Burnout Syndrome in Hospital Nurses^a

1. How long have you been a nurse?
2. How many hospitals have you worked in?
3. What is the longest hourly shift you have worked and the greatest number of consecutive days?
4. What is the average nurse to patient ratio for you at current hospital?
5. Do you experience any signs of Burnout Syndrome? ¹ If not, skip to question 7.
6. Did you experience these symptoms more at one hospital opposed to another? If so, what do you believe the reasons?
7. Were your reasons for leaving past hospitals because of Burnout Syndrome, pay wages, personal reasons, etc.?
8. Were there any nurse staffing shortages at any of the hospitals?
9. Have you ever thought of a career change?
10. Have you ever left the nursing professions? If so, for how long and did you return? If not, skip to question 12.
11. What were your reasons for returning?
12. What is the highest level of education you have?
13. Do you plan on achieving a higher degree in nursing? If not, skip to question 15.
14. What are your plans with a higher degree? Management, Nurse Practitioner, Education, etc.?
15. Do you feel the salary in your field is adequate or too low?
16. Do you think a higher salary would help with any Burnout symptoms you may experience? Why or why not?

¹Burnout Syndrome - the result of unyielding stress from high standards experienced by people in "helping" occupations, especially nurses. The three main symptoms include: emotional exhaustion, alienation from job and related activities and reduced work performance.

^aM. Nance, RN, on March 28, 2014