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Hospital Nurse Burnout: A Continuing Problem

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HOSPITAL NURSE BURNOUT: A CONTINUING PROBLEM

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ABSTRACT

RNs are a critically important component of the U.S. healthcare system. RN burnout – the feeling of exhaustion from working long hours without rest – is a real concern, having been reported in many hospitals. We examine the background, causes and consequences of burnout among RNs in U.S. hospitals, in order to identify solutions to this problem. Findings indicate that Burnout Syndrome in RNs can be analyzed in terms of four clusters of characteristics: individual, management, organizational, and work. The consequences of burnout include increased RN turnover rates, poor job performance, and threats to patient safety. RN burnout in hospitals negatively impacts the quality of care, patient safety, and the functioning of staff workers in the healthcare industry.

INTRODUCTION

In 2014, according to the U.S. Bureau of Labor Statistics, 2.8 million RNs worked in the U.S. healthcare system, 1.708 million of which were employed in hospitals (BLS, 2017a). But only 708,300 physicians and surgeons were employed in the U.S. healthcare system during 2014 (BLS, 2017b). RNs are thus critical in providing quality healthcare to U.S. citizens. The number of employed RNs, moreover, has been on the rise: the U.S. Department of Labor forecasts that the nursing workforce will grow 16% between 2010 and 2024 (BLS, 2017c).

The supply of RNs relative to the size of the U.S. population, however, remains low. As of 2010, there were 921 RN for every 100,000 U.S. citizens. RN density varies significantly across states, as well, ranging from 1247.7 RNs per 100,000 individuals in South Dakota to 677 RNs per 100,000 population in Idaho (HRSA, 2013). According to Carayon and Gurses (2008), low levels of staffing, when combined with the aging U.S. population and changes in the healthcare environment (e.g., more emphasis on containing costs), have meant that RNs are experiencing a heavier, more demanding workload than ever before.

The result for some RNs has been burnout - a state of emotional exhaustion where the individual feels overwhelmed by work to the point of feeling fatigued, unable to face the demands of the job, and unable to engage with others. The affected individual may develop a sense of cynical detachment from work and view others, especially patients, as objects. As fatigue, exhaustion, and detachment coalesce, affected individuals often become ineffective at work of the loss of the ability to contribute meaningfully. The incidence of burnout in RNs has been shown to be as high as 70% (Lyndon, 2016).

RNs not only experience challenging work conditions involving long hours and little appreciation, but are also paid relatively poorly: RN wages average between \$3,400 to \$7,700 per month, depending on the hospital and its location (Byung-Kwang et al., 2016). These stressors have contributed to high rates of burnout among new nurses: up to 65% of those in the study samples reviewed have left their jobs as a result, which has contributed to a nursing shortage (Liu et al., 2009). This shortage is significant, and the situation is likely to become worse. There will be an estimated 1.2 million vacancies in nurse positions between 2014 and 2020. And over 55% of current RNs are 50 years or older and expect to retire within 5 to 10 years. On the demand side of the healthcare system, an aging population will exacerbate the nursing shortage: the number of hospital patients has increased in the last 10 years and is expected to increase for the next 30 years. The numbers gap between RNs and patients will likely continue to grow (Golubic et al., 2009).

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 hospitals (Freudenberger (1974). However, the leading measure of Burnout Syndrome is the Maslach Burnout Inventory (MBI) (Maslach, Jackson and Leiter, 1996), which tracks the incidence of burnout along three main dimensions: Emotional Exhaustion, Depersonalization, and Inefficacy ((Mealer et al., 2016; StatisticsSolutions, 2017). Emotional Exhaustion refers to the overwhelming exhaustion that can come from constant work under demanding conditions. Depersonalization refers to the sensation of being detached and insensate to the care and treatment of patients. When an RN becomes detached from his/her job, this could contribute to destructive feelings that lead to negative impacts on the effectiveness or quality of services provided to patients (Loera, Converso, and Viotti, 2014). The Inefficacy scale captures the impact of burnout on the person’s sense of accomplishment and achievement on the job. Maslach, Leiter and Jackson (2012) have identified Inefficacy as a situation in which one’s sense of personal achievement on the job is minimal, and note that this dimension is the most complex of the three.

The purpose of this research is to examine the causes and consequences of burnout among RNs in U.S. hospitals, in order to identify potential solutions to this problem.

RESULTS

Studies Utilizing the MBI

The Maslach Burnout Inventory, as noted earlier, highlights the dimensions of Emotional Exhaustion, Depersonalization, and Inefficacy. This research indicates that Emotional Exhaustion is the most easily noticeable among many nurses (Maslach, Leiter and Jackson, 2012). Most of the individuals reporting being burned out link it to exhaustion, brought on by emotional stress, including distress and frustration (Spooner-Lane and Patton, 2007; Maslach and Leiter, 2008).

Tunc and Kutanis (2009) reported that RNs who had experienced Depersonalization claimed that it might be caused by excessive job demands that led them to disengage from their work. Depersonalization also occurs in RNs who have experienced emotion exhaustion, and has contributed to the occurrence of job dissatisfaction.

One study (Poghosyan et al., 2010) using the MBI was conducted in 2010 across six countries: the U.S., Japan, Germany, the United Kingdom, Canada, and New Zealand. Its purpose was to examine the impact of Burnout Syndrome among RNs in hospitals on the quality of care provided in diverse countries. The research sample consisted of 54,846 RNs. The researchers showed that the highest rate of RN Burnout was in Japan at 79.9%, while the lowest burnout rate was 9.4% in New Zealand. Germany had the second-highest burnout rate at 30%. The burnout rate reported in the U.S. sample was 18.8%, while the rates for Canada and the United Kingdom were, respectively, 14.4% and 12.8%. Most of the RNs in the research sample stated that Burnout Syndrome affected their ability to take good care of patients, thereby increasing the risks to patient safety.

Other Studies Examining Burnout Syndrome

This research now turns to other studies that focus on how clusters of characteristics at four levels (individual, management, organizational, and work) influence the incidence of burnout. (See Table 1)

Table 1: Causes of Burnout Syndrome among Nurses

<u>References</u>	<u>Causes of RNs burnout and risk factors</u>
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(Erickson & Grove, 2007)	<p>Individual characteristics: Age</p> <ul style="list-style-type: none"> • There were 43.6% RNs < 30 years suffered from burnout syndrome. • 37.5%. RNs > 30 years had burned out. • 46% RNs under 30 were less likely to cover up their emotional feelings. • 52%, RNs over 30 more likely to cover their feelings. • RNs younger than 30 have had a high levels of burnout syndrome and less likely to hide their true emotions.
(Old & Clarke, 2010)	<p>Management characteristics: Mandated overtime:</p> <ul style="list-style-type: none"> • Out of 5532 RNs 1487 mandated to work unpaid overtime, and 4045 worked paid voluntary over 35 hours a week.
(Sharma et al, 2014)	<p>Organizational characteristics: Workload</p> <ul style="list-style-type: none"> • 80% RNs complained no time to rest. • 42% RNs had a severe stress. • 45% RNs tired from their job.
(AACN, 2011) (Winer, 2014)	<p>Organizational characteristics: Patient to nurse ratio</p> <ul style="list-style-type: none"> • 7% decrease in patient mortality rates for every additional RNs. • Out of 232,342 patients there were 4535 patients died within 30 days from admission with over 8:1 but with 4:1 there were 635 survived patients. • An estimation of 1 million in RNs shortage by 2020.
(McHugh et al, 2011)	<p>Work characteristics: Work environment</p> <ul style="list-style-type: none"> • 37% of RNs worked in non- nursing positions. • 34% of RNs burned out as a result of poor work environment. • 24% RNs in hospitals not satisfied with their occupations.

Gilles, Burnand, and Peytremann-Bridevaus (2014) note that RN burnout can be traced to some individual characteristics such as age, gender, and self-fulfilment. Erickson and Grove (2007) found that the rate of burnout among RNs below the age of 30 was 43.6%, while the rate of burnout among RNs over 30 was 37.5%. However, the authors found that the RNs under 30 were less likely than those over 30 to hide their true emotions.

Management characteristics influencing RN burnout include the lack of proper clinical supervision, failure to offer resources, and mandated overtime (Bakker and Heuven, 2006). Olds and Clarke (2010) found that exhaustion linked to extended work hours led to burnout. Of 5,532 RNs included in this study, 4,045 worked over 35 hours per week as paid volunteers, while the remaining 1,487 RNs had mandated, unpaid, overtime.

Organizational characteristics that cause RN burnout include an excessive workload, staff shortages, and a low nurse to patient ratio (Awa, Plaumann, and Walter, 2010). According to Sharma et al. (2014), roughly 80% of the RNs sampled complained that they had no time for rest due to a heavy workload. 42% of the RNs in this sample said they suffered from severe stress, and 45% of the RNs are tired of their jobs. In sum, the RNs in this study identified increases in workload, the nursing shortage, time constraints, poor management, and lack of team support as key factors leading to burnout.

Weiner (2014) noted a strong relationship between a high patient-to-nurse ratio (i.e., over 8:1) and preventive medical errors, which led to Burnout Syndrome. For example, for every RN added to staff, Weiner found that there was a 7% decrease in mortality. The mortality rate was highest among those patients who had the least access to RNs.

Work characteristics that caused Burnout Syndrome among RNs included the work environment and team relationships. McHugh et al. (2011) report that in their study 24% of the RNs were dissatisfied with their occupation, 34% of the RNs suffered from Burnout Syndrome, and 37% of the RNs eventually decided to work in non-nursing positions due to the poor and stressful work environment.

Consequences of RN Burnout

Research shows that RN burnout is associated with a poor level of patient care, patient dissatisfaction, an increased number of medical errors, higher infection rates, and higher mortality rates (Kanste, Kyngäs, and Nikkilä, 2007).

Olds and Clarke (2010) reported that 9.6% of RNs in their sample had a contaminated needle stick or serious injury, 15.1% provided the wrong treatment or dose to their patients, 19.8% had caused injuries to their patients from falls, 32.8% had experienced work-related harms, and 35.2% got infections.

According to Konwinski (2014) the RN turnover rate within the first year of work ranged from 35% to 61%. The author also demonstrated that there was a direct relationship between turnover rates and workload increases, bullying within the work environment, emotional exhaustion, loss of job control, a poor work environment, and lack of engagement.

In another study (Schaufeli, Leiter, and Maslach, 2009), 54% of RNs intended to leave their job because of reasons linked to Burnout Syndrome. Such turnover has a strong negative impact on the quality of healthcare. For example, the study by Hunt (2009) showed that RN turnover resulted in a decreased quality of care, an increase in the incidence of medical errors, more lost patients, and higher costs. In one hospital reviewed by Hunt there was an estimated financial loss of \$300,000 for every percentage increase in nurse turnover annually.

The study by McHugh et al. (2011) showed that patient outcomes have been negatively affected by RN burnout in several ways: mortality rates in the hospitals studied increased by 19.4%, there was a 6.5% increase in patient readmission rates, and 36% of RNs missed essential changes with their patient's situation and/or failed to report important patient information when changing their shifts.

Stimpfel, Sloane, and Akien (2012) assessed the association between the patient-to-nurse ratio and burnout. They reported that nurses with large numbers of patients, such as more than 8 per RN, have less time to communicate with patients, which in turn delayed needed care and led to medical errors.

Cimiotti et al. (2011) discovered that hospital-acquired infections were associated with RN burnout. Their study, involving a sample of 7,075 RNs in 160 hospitals, showed that the rates of surgical site infections and urinary tract infections were positively related to the incidence of RN Burnout. For example, the hospitals with the highest burnout rates had the highest infection rates: a 10% increase in the burnout rate was associated with increases of 1 urinary tract infection and 2 surgical site infections for every 1,000 patients. Fennessey (2016) noted that RNs suffering from burnout felt less motivated to work and tend to be less careful with patients, which resulted in more medical errors and decreased their work efficiency.

DISCUSSION

The aim of this study was to examine the causes and consequences of RN burnout in U.S. hospitals, in order to identify solutions to this problem. The results of the literature review suggest that burnout has led to the development of mental and physical difficulties in RNs, such as low self-esteem, rejection, anxiety, and depression. The literature review also suggests that Burnout Syndrome among RNs is present all over the world.

Among the identified factors which attributed to RN Burnout, the results indicate that the working environment, shift work, and workloads – all of which are controlled by hospital management – were biased against nurses. Hospital management, often non-clinical in nature, decided the number of nurses to employ, what nurses would work off-time shifts such as the night shift, and the working conditions for RNs. This lack of autonomy has contributed to the profession's burnout rates (Van Bogaert et al., 2013).

This research also points out that burnout affects not only RN job performance, but also mental and physical health. Some of the consequences of burnout among the RNs included in the reviewed studies included severe headaches, sleeping complications, high blood pressure, and cardiovascular illness. These health issues, caused in part by high patient-to-nurse ratios (i.e., above 8:1), have contributed in turn to higher medical error rates and a lower quality of patient care.

CONCLUSION

Burnout among RNs in hospitals has become a worldwide phenomenon that negatively impacts the quality of care, the safety of patients, and the working staff. Solving the burnout problem continues to be difficult. This study's focus on the causes and consequences of RN Burnout represents a contribution in the continuing search for more complete solutions.

REFERENCES

American Association of College of Nursing [AACN] (2011), "Nursing Shortage." Accessed from <http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage>

Awa, Wendy L., Martina Plaumann and Ulla Walter (2010), "Burnout Prevention: A Review of Intervention Programs," Patient Education and Counseling, 78 (2), 184-190.

Bakker, Arnold B. and Ellen Heuven (2006), "Emotional Dissonance, Burnout, and In-Role Performance Among Nurses and Police Officers," International Journal of Stress Management, 13 (4), 423-440.

Bureau of Labor Statistics [BLS] (2017a), "Registered Nurses," Occupational Outlook Handbook, 2016-2017 Edition, U.S. Department of Labor, Washington, DC. Accessed 10-1-17 from <http://www.bls.gov/ooh/healthcare/registered-nurses.htm#tab-3>

Bureau of Labor Statistics [BLS] (2017b), "Physicians and Surgeons," Occupational Outlook Handbook, 2016-2017 Edition, U.S. Department of Labor, Washington, DC. Accessed 9/17/17 from <http://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm>

Bureau of Labor Statistics [BLS] (2017c), "Registered Nurses," Occupational Outlook Handbook, 2016-2017 Edition, U.S. Department of Labor, Washington, DC. 2017. Accessed 9/17/17 from <http://www.bls.gov/ooh/healthcare/registered-nurses.htm#tab-1>

Byung-Kwang, Yoo, Minchul Kim, Tzu-Chun Lin, Tomoko Sasaki, Debbie Ward and Joanne Spetz (2016), "The Effect of Prior Healthcare Employment on the Wages of Registered Nurses," BMC Health Services Research, 16 (1), 412.

Carayon, Pascale and Ayse P. Gurses (2008), "Nursing Workload and Patient Safety-A Human Factors Engineering Perspective," in Ronda G. Hughes (Editor), Patient Safety and Quality: An Evidence-Based Handbook for Nurses, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, AHRQ Publication No. 08-0043.

Cimiotti, Jeannie P., Linda H. Aiken, Douglas M. Sloane, and Evan S. Wu (2012), "Nurse Staffing, Burnout, and Health Care-Associated Infection," American Journal of Infection Control, 40 (6), 486-490.

Erickson, Rebecca, and Wendy J. C. Grove (2007), "Why Emotions Matter: Age, Agitation, and Burnout among Registered Nurses." Online Journal of Issues in Nursing. Accessed from <https://www.questia.com/library/journal/1P3-1692234171/why-emotions-matter-age-agitation-and-burnout-among>

Fennessey, Anita G. (2016), "The Relationship of Burnout, Work Environment, and Knowledge to Self-Reported Performance of Physical Assessment by Registered Nurses," MEDSURG Nursing, 25 (5), 346-350.

Freudenberger, Herbert J. (1974), "Staff Burnout," Journal of Social Issues, 30, 159-166.

Gilles, Ingrid, Bernard Burnand and Isabelle Peytremann-Bridevaux (2014), "Factors Associated with Healthcare Professionals' Intent to Stay in Hospital: A Comparison Across Five Occupational Categories," International Journal for Quality in Health Care, 26 (2), 158-166.

Golubic, Rajna, Milan Milosevic, Bpjana Knezevic and Jadranka Mustajbegovic (2009), "Work-related stress, Education and Work Ability among Hospital Nurses," Journal of Advanced Nursing, 65 (10), 2056-2066.

- Health Resources and Services Administration [HRSA] (2013), "The U.S. Nursing Workforce: Trends in Supply and Education." Accessed 9/17/17 from <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/nursingworkforcetrendsoct2013.pdf>
- Kanste, Outi, Helvi Kyngäs and Juhani Nikkilä (2007), "The Relationship between Multidimensional Leadership and Burnout Among Nursing Staff," Journal of Nursing Management, 15 (7), 731-739.
- Konwinski, Theresa (2014), "Graduate Registered Nurse Transition to Practice," The Ohio State University. Accessed 10/5/17 from https://kb.osu.edu/dspace/bitstream/handle/1811/60448/1/2014_Konwinski_DNP_Final_project.pdf
- Liu, Yi, Li-Min Wu, Pi-Ling Chou, Mei-Shin Chen, Li-Chien Yang and Hsin-Tien Hsu (2009), "The Influence of Work-Related Fatigue, Work Conditions, and Personal Characteristics on Intent to Leave Among New Nurses," Journal of Nursing Scholarship, 48 (1), 66-73.
- Loera, Barbara, Danirla Converso and Sara Viotti (2014), "Evaluating the Psychometric Properties of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) among Italian Nurses: How Many Factors Must a Researcher Consider?" Plos ONE, 9 (12), 1-18.
- Lyndon, Audrey (2016), "Burnout among Health Professionals and Its Effect on Patient Safety," Agency of Healthcare Research and Quality. Accessed 9/19/17 from <https://psnet.ahrq.gov/perspectives/perspective/190/burnout-among-health-professionals-and-its-effect-on-patient-safety>
- Maslach, Christina, Susan F. Jackson and Michael P. Leiter (1996), MBI: The Maslach Burnout Inventory Manual, American Psychologists Press, Palo Alto, CA.
- Maslach, Christina and Michael P. Leiter (2008), "Early Predictors of Job Burnout and Engagement," Journal of Applied Psychology, 93 (3), 498-512.
- Maslach, Christina, Michael P. Leiter and Susan E. Jackson (2012), "Making a Significant Difference with Burnout Interventions: Researcher and Practitioner Collaboration," Journal of Organizational Behavior, 33 (2), 296-300.
- McHugh, Matthew D., Ann Kutney-Lee, Jeannie P. Cimiotti, Douglas M. Sloane and Linda H. Aiken (2011), "Nurses' Widespread Job Dissatisfaction, Burnout, and Frustration with Health Benefits Signal Problems for Patient Care," Health Affairs, 30 (2), 202-210.
- Mealer, Meredith, Moss, Marc., Good, Vicki, Gozal, David, Kleinpell, Ruth and Sessler, Curtis (2016), "What is Burnout Syndrome (BOS)?" American Journal of Respiratory and Critical Care Medicine, 194, P1-P2, accessed 10/2/17 from <https://www.thoracic.org/patients/patient-resources/resources/burnout-syndrome.pdf>
- Olds, Danielle M. and Sean P. Clarke (2010), "The Effect of Work Hours on Adverse Events and Errors in Health Care," Journal of Safety Research, 41 (2), 153-162.
- Poghosyan, Lusine, Sean P. Clarke, Mary Finlayson and Linda H. Aiken (2010), "Nurse Burnout and Quality of Care: Cross-National Investigation in Six Countries," Research in Nursing & Health, 33 (4), 288-298.
- Schaufeli, Wilmar B., Michael P. Leiter and Christina Maslach (2009), "Burnout: 35 Years of Research and Practice," Career Development International, 14 (3), 204-220.
- Sharma, Paul, Anuradha Davey, Sanjeev Davey, Arvind Shukla, Kajal Shrivastava, and Rahul Bansal (2014), "Occupational Stress Among Staff Nurses: Controlling the Risk to Health," Indian Journal of Occupational & Environmental Medicine, 18 (2), 52-56.
- Spooner-Lane, Rebecca S. and Wendy A. Patton (2007), "Determinants of Burnout among Public Hospital Nurses," Australian Journal of Advanced Nursing, 25 (1), 8-16.

StatisticsSolutions (2017), "Maslach Burnout Inventory (MBI)," downloaded 10/2/17 from <https://www.statisticssolutions.com/maslach-burnout-inventory-mbi/>

Stimpfel, Amy Witkowski, Douglas M. Sloane and Linda H. Aiken (2012), "The Longer the Shifts for Hospital Nurses, the Higher the Levels of Burnout and Patient Dissatisfaction," Health Affairs, 31 (11), 2501-2509.

Tunc, Tulin and Rana Ozen Kutanis (2009), "Role Conflict, Role Ambiguity, and Burnout in Nurses and Physicians at a University Hospital in Turkey," Nursing & Health Science, 11(4), 410-416.

Van Bogaert, Peter, Sean P. Clarke, Riet Willems and Miele Mondelaers (2013), "Nurse Practice Environment, Workload, Burnout, Job Outcomes, and Quality of Care in Psychiatric Hospitals: A Structural Equation Model Approach," Journal of Advanced Nursing, 69 (7), 1515-1524.

Weiner, Evan (2014), "The Effects of Mandated Nurse-To-Patient Ratios on Reducing Preventable Medical Error and Hospital Costs," Law School Student Scholarship, paper 604. Accessed 10/5/17 from http://scholarship.shu.edu/cgi/viewcontent.cgi?article=1604&context=student_scholarship