



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

The Professional Quality of Life and Work Engagement of Nurse Leaders



Warly Remegio, DNP, RN, NPD-BC, NEA-BC, CCRN-CSC,
Reynaldo R. Rivera, DNP, RN, NEA-BC, FAAN,
Mary Quinn Griffin, PhD, RN, CNE, FAAN, ANEF, and
Joyce J. Fitzpatrick, PhD, MBA, RN, FAAN, FNAP

Even before the current pandemic, the nurse leader (NL) role was demanding of time, energy, and resources. These demands often cause stress, fatigue, and burnout. The focused-on outcome metrics, increased regulations, and economic downturn are challenges that NLs have continued to face. This study, undertaken before the pandemic, provides understanding of the professional quality of life and work engagement among NLs. Findings revealed that experienced NLs with doctorates have higher levels of compassion satisfaction and engagement, and have lowest levels of burnout and secondary traumatic stress. Minimizing compassion fatigue among NLs is imperative as they foster organizational cultures of compassion and engagement. Future research post-pandemic is recommended, especially as the demands have increased significantly.

Nurse leaders (NLs) play a pivotal role in shaping nursing practice and orchestrating practice environments in health care organizations. NLs envision, transform, and sustain changes to optimize quality, safety, access, affordability, and effectiveness in a patient-centered care environment. NLs establish and infuse the right culture with shared leadership to cultivate a healthy work environment that advances the professional nursing practice.¹ NLs are continuously compelled to evaluate and improve the overall patient care delivery, workforce challenges and resources, and their practice environments to facilitate the provision of safe, quality, and effective patient care. Furthermore, NLs provide the foundation to maximize quality patient care and organizational outcomes; their role is critical to the success of the organization.²

Even before the current pandemic, the growing complexity of health care provided challenges for NLs in meeting their role expectations. NLs have often been overwhelmed with the increasing workload but with less resources, while strictly adhering to new regulations.³ NLs are prone to developing job stress, burnout, and health issues.⁴

Frontline nurses, especially those with informal leadership positions, have been shown to experience stress and burnout, characteristics that were associated with lower levels of job satisfaction, diminished work

productivity, lower work engagement, and increasing turnover rates.⁵⁻⁷ Further, studies revealed that practice areas where NLs have frequent turnover affect the frontline staff's job satisfaction, engagement, and productivity.⁸⁻¹⁰

Though the professional quality of life and work engagement of frontline nurses have been well studied, less is known about NLs. Understanding these characteristics of NLs is important as a first step in the link to patient care and organizational outcomes.

KEY POINTS

- **Experienced and doctorally prepared nurse leaders have higher levels of compassion satisfaction and low levels of burnout.**
- **Nurse leaders' level of work engagement is positively correlated with compassion satisfaction and negatively correlated with burnout and secondary traumatic stress.**
- **Frontline nurse leaders have the highest levels of burnout and secondary traumatic stress compared with mid-level and senior-level nurse leaders.**

Table 1. Nurse Demographics

	n	%
<i>Sex</i>		
<i>Female</i>	128	88.9
<i>Male</i>	15	10.4
<i>Gender neutral</i>	1	0.7
<i>Education</i>		
<i>BSN</i>	27	18.8
<i>MSN</i>	73	50.7
<i>Doctoral degree (DNP, PhD, DNSc)</i>	23	16.0
<i>Other</i>	21	14.6
<i>Current leadership position</i>		
<i>Nurse executive</i>	17	11.8
<i>Nurse director</i>	42	29.2
<i>Nurse manager</i>	85	59.0
<i>Years of leadership and management experience</i>		
<i>3 months to <6 months</i>	2	1.4
<i>6 months to 2 years</i>	20	13.9
<i>3 to 5 years</i>	44	30.6
<i>6 to 10 years</i>	26	18.1
<i>11 to 15 years</i>	15	10.4
<i>16 to 20 years</i>	6	4.2
<i>More than 20 years</i>	31	21.5
<i>Hours per week</i>		
<i>30 to 40 hours</i>	15	10.4
<i>>40 hours</i>	127	88.2
<i>Missing</i>	2	1.4
<i>Magnet status</i>		
<i>Magnet</i>	90	62.5
<i>Non-Magnet</i>	29	20.1
<i>On the journey to Magnet</i>	25	17.4

BACKGROUND

Compassion satisfaction (CS) is the pleasure that an individual derives from being able to do work well. It is the positive feelings gained from helping others, whether from direct contribution to the well-being of an individual or for the betterment of society. Compassion satisfaction leads to feelings of joy, empowerment, energy, and exhilaration, as caregivers continue to see the positive impact with their patient's improved health conditions, improved functioning, personal growth, and therapeutic gains.¹¹

On the other hand, compassion fatigue (CF) is the negative aspect of doing one's job. CF has 2 dimensions: burnout (BO) and secondary traumatic stress (STS). BO is associated with very high workloads and unsupportive work environments, and is characterized by exhaustion, frustration, anger, and depression. STS is defined as the negative consequences characterized by sleep difficulties, intrusive images, and avoidance of reminders of the person's experiences, secondary to fear and work-related trauma.¹¹

Work engagement is described as the individual's commitment to the employer or organization.¹² Work engagement measures a positive work-related state of fulfillment characterized by vigor, dedication, and absorption.¹³ Vigor includes high levels of energy and mental resilience while working. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge.^{13,14} Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly, and an individual has difficulties detaching from work. According to studies, nurses' engagement correlates directly with critical safety, quality, and positive patient experience outcomes.^{12,14}

This study provides a view of NLs professional quality of life and work engagement prior to the COVID-19 pandemic.

PROCEDURE

A descriptive correlational study was conducted. Institutional review board approval was obtained, and members of the American Organization for Nursing Leadership (AONL) were invited to participate through the AONL weekly e-newsletter. An invitational e-mail was sent using the AONL Leader2Leader Community forum. The recruitment period was 4 weeks. Inclusion criteria were: individuals in a formal nursing leadership position in acute care settings, managing either a unit (nurse managers/frontline leadership and management position), service/department (nurse director/middle leadership and management position), or organization/systems (vice president or chief nursing officer or chief nursing executive/senior executive leadership and management position). NLs who managed outpatient clinics or were in their positions for <3 months were excluded.

Measures

The Professional Quality of Life Scale version 5 (ProQOL), a 30-item tool with 3 subscales, was used to measure CS, BO, and STS. The instrument uses a 5-point Likert-type scale ranging from 1 = never to 5 = very often. The instrument was found to be reliable in prior studies⁸ and in the current study.

The 9-Utrecht Work Engagement Scale (UWES), a 9-item scale that measures 3 dimensions of work engagement—vigor (3 items), dedication (3 items), and absorption (3 items)—uses a 7-point Likert scale ranging from never to always. Higher scores indicate higher levels of engagement. The instrument was found to be reliable in prior studies¹⁴ and in the current study.

Background information included the NLs' position, highest educational attainment, age, years of leadership/management experience, and work in a

Table 2. Means and Standard Deviations for ProQOL 5 and UWES

	Overall		Nurse Executive		Nurse Director		Nurse Manager	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<i>ProQOL 5</i>								
<i>Compassion satisfaction</i>	39.1	6.7	43.0	5.2	39.6	6.0	38.1	7.0
<i>Burnout</i>	24.9	6.8	19.8	6.0	24.4	5.2	26.2	7.2
<i>Secondary traumatic stress</i>	24.0	6.4	21.0	5.6	23.6	6.5	24.8	6.4
<i>UWES</i>	4.2	1.0	4.5	0.7	4.3	0.9	4.0	1.1
<i>Vigor</i>	3.8	1.3	4.9	1.0	4.0	1.0	3.5	1.2
<i>Dedication</i>	4.4	1.1	4.2	0.6	4.5	1.0	4.3	1.0
<i>Absorption</i>	4.3	0.9	4.5	0.7	4.3	0.8	4.3	1.1

Magnet®, non-Magnet, or in an organization on the journey to Magnet Excellence™.

RESULTS

There were 144 NLs included in the study; 89% were women, the majority were nurse managers, and most had more than 3 years of management/leadership experience. Interestingly, one-fifth of the NLs had more than 20 years' experience. Overall, 62.5% of the NLs worked in a Magnet hospital. (See [Table 1](#) for background information on the NLs.)

Compassion Satisfaction and Fatigue Among NLs

Overall, the NLs had average levels of CS, BO, and STS. (See [Table 2](#) for the means and standard deviations.)

There were no significant differences in compassion satisfaction or compassion fatigue when comparing nurse managers and nurse directors. Based on educational level, there was a significant difference for compassion satisfaction and burnout, but not for secondary traumatic stress. For compassion satisfaction, nurses with a bachelor's degree were significantly different from those with master's and doctoral degrees in nursing, but were not different for nurses with other degrees, such as MBA and MPH. Nurses with master's

and doctoral degrees had higher levels of compassion satisfaction than nurses with a bachelor's degree. For burnout, nurses with a bachelor's degree were statistically different compared with nurses with a doctoral degree; NLs with doctoral degrees had lower levels of burnout compared with nurses with bachelor's degrees. (See [Table 3](#) for means and standard deviations.)

When NLs were compared based on 4 groups of years of experience: 6 months to 2 years, 3 to 5 years, 6 to 10 years, and more than 20 years. For compassion satisfaction, nurses with more than 20 years of experience were significantly different from nurses with 6 months to 2 years and 3 to 5 years of experience. Nurses with more than 20 years had higher CS compared with nurses with 6 months to 2 years and nurses with 3 to 5 years of experience. Nurses with more than 20 years of experience had lower levels of BO compared with nurses with less experience. (See [Table 4](#) for means and standard deviation.)

Work Engagement Among NLs

Results indicated that overall, NLs are engaged in their work, with the lowest level of engagement being vigor. (See [Table 2](#) for means and standard deviations.)

NLs with a master's degree had significantly higher levels of engagement compared with bachelor's prepared NLs. Also NLs with more than 20 years'

Table 3. Means and Standard Deviations for Compassion Satisfaction, Burnout, and Secondary Traumatic Stress by Education

	Compassion Satisfaction		Burnout		Secondary Traumatic Stress	
	Mean	SD	Mean	SD	Mean	SD
<i>Baccalaureate degree in nursing</i>	35.3	7.4	28.0	7.5	25.3	7.1
<i>Master of science in nursing</i>	40.5	6.2	24.4	6.3	23.9	6.3
<i>Doctorate degree (DNP, PhD, DNSc)</i>	40.2	6.0	21.9	6.7	22.6	6.6
<i>Other, please specify</i>	38.6	7.0	26.0	6.1	24.5	5.9

Table 4. Means and Standard Deviations for Compassion Satisfaction, Burnout, and Secondary Traumatic Stress by Years of Experience

	Compassion Satisfaction		Burnout		Secondary Traumatic Stress	
	Mean	SD	Mean	SD	Mean	SD
<i>Six months to 2 years</i>	37.2	7.0	27.0	8.8	27.3	8.4
<i>3 to 5 years</i>	37.3	7.1	27.5	6.0	26.8	6.0
<i>6 to 10 years</i>	38.9	6.7	25.1	5.3	22.9	4.4
<i>More than 20 years</i>	43.1	5.6	20.0	5.8	20.7	5.5

Table 5. Pearson Correlations for the UWES and ProQOL

	Compassion Satisfaction	Burnout	Secondary Traumatic Stress
<i>Vigor</i>	0.75 ^a	-0.74 ^a	-0.46 ^a
<i>Dedication</i>	0.87 ^a	-0.74 ^a	-0.46 ^a
<i>Absorption</i>	0.54 ^a	-0.31 ^a	-0.08

^a*p* < 0.01.

experience had higher levels of engagement compared with nurses with 6 months to 2 years and 3 to 5 years of experience.

Further analyses was done to determine relationships between compassion satisfaction and fatigue to NLs' level of engagement. There was a significant strong positive correlation between compassion satisfaction and vigor and dedication, and a moderate negative correlation with absorption. There was a significant strong negative correlation with burnout and vigor and dedication, and a moderate negative correlation with absorption. There was a significant moderate negative correlation with secondary traumatic stress and vigor and dedication, and no significant correlation with absorption. Specifically, as levels of work engagement increase, levels of CS and levels of BO and STS decrease. (See *Table 5* for Pearson *r* correlations.)

DISCUSSION

The study findings suggest that NLs, overall, have average to high levels of compassion satisfaction. Interestingly, NLs on the senior executive position had the highest CS mean scores followed by nurse directors then nurse managers. Nurse executives have the lowest BO and STS when compared with the nurse manager and nurse director groups. This is consistent with a previous study that examined the levels of CS, BO, and STS among nurse managers and nurse director groups.¹⁰

Furthermore, educational attainment was strongly related to levels of compassion satisfaction, burnout, and secondary traumatic stress. NLs with graduate degrees in nursing had higher levels of compassion satisfaction and lower levels of burnout and secondary traumatic stress. These findings are consistent with prior studies among clinical nurses.⁸ Nurses with either a bachelor's or master's degree in nursing have higher CS and lower levels of BO and STS compared with nurses with associate degrees.⁸ On a similar trend, NLs with more than 20 years of experience in leadership and management have higher CS and lower BO and STS compared with NLs with less than 5 years of experience. These findings amplify the value of higher

levels of nursing education and rigor of leadership experience in developing compassion satisfaction among NLs. Health care organizations must continue to invest in providing support for educational advancement and continued professional growth among NLs. Additional informal leadership orientation trainings and support among new frontline managers may avoid burnout and lessen their attrition rates. Mentorship programs, leadership and mindfulness trainings may optimize their growth and facilitate a smooth transition to nurse leader role. The implementation of these evidence-based strategies may increase the levels of engagement and lessen the physiological and emotional stress among new NLs.¹⁰

The study supports the claim that engagement is an antipode to burnout and stress, and it is a catalyst to compassion satisfaction. In this study, NLs with high CS had higher levels of engagement. They are more positive, energetic, and dedicated to their work. By contrast, NLs with higher levels of burnout and stress have lower levels of engagement, potentially affecting their productivity and performance as NLs. Therefore, engagement strategies of employees especially among NLs, who create a culture of engagement and resilience, must be given priority in order to improve patient care and organizational outcomes.

IMPLICATIONS FOR FUTURE RESEARCH

The study provided an understanding on the professional quality of life and work engagement of NLs in acute care setting prior to the COVID-19 pandemic. Although this is important, the study needs to be replicated with NLs in other practice settings including long-term care, short-term rehabilitation centers, and NLs in academic environment. These practice areas have unique challenges that warrant closer attention to improve the culture of their practice environment. And, most importantly, the study needs to be replicated during the current health care crisis. It is also important to explore the stress and coping strategies NLs have employed to mitigate the levels of burnout and STS during this unprecedented time, in addition to identifying helpful competencies, tools, and resources to successfully overcome the challenges of the pandemic.

LIMITATIONS

This study was limited to a sample that reflected a small number of members of a national professional organization. The ProQOL and the UWES were administered as self-report surveys, and thus the results are reflective of respondents' self-perceptions of the variables.

CONCLUSION

Addressing NLs' professional quality of life is important to cultivate a culture of engagement and compassionate care. NLs drive employees' satisfaction, engagement, and retention and in facilitating the provision of safe and compassionate care. Health care organizations must continue to invest in implementing evidence-based strategies such as providing opportunities for educational advancement and professional development to promote NLs' compassion satisfaction and engagement.

REFERENCES

1. Duffield C, Roche A, Blay N, Stasa H. Nursing unit managers, staff retention and the work environment. *J Clin Nurs*. 2011;20(1/2):23-33.
2. Warshawsky N, Wiggins A, Rayens M. The influence of the practice environment on nurse managers' job satisfaction and intent to leave. *J Nurs Adm*. 2016;46(10):501-507.
3. Aiken L, Sloane D, Bruyneel L, Van den Heede K, Sermeus W. Nurses' reports of work conditions and hospital quality of care in 12 countries in Europe. *Int J Nurs Stud*. 2013;50:143-153.
4. Thieman L. Selfcare for healthcare: the best way to care for our patients is to care for ourselves. *Nurse Leader*. 2018;16(6):393-397.
5. Al-Majid S, Carlson N, Kiyohara M, Faith M, Rakovski C. Assessing the degree of compassion satisfaction and compassion fatigue among critical care, oncology, and charge nurses. *J Nurs Adm*. 2018;48(6):310-315.
6. Ray S, Wong C, White D, Heaslip K. Compassion satisfaction, compassion fatigue, work life conditions and burnout among professional frontline mental healthcare professionals. *Traumatology*. 2013;19(4):255-267.
7. Shanafelt T, Hasan O, Dyrbye L, et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc*. 2015;90(12):1600-1613.
8. Sacco T, Ciurzynski M, Harvey M, Ingersoll G. Compassion satisfaction and compassion fatigue among critical care nurses. *Crit Care Nurs*. 2015;35(4):32-44.
9. Zhang Y, Zhang H, Xiao -R, Li W, Wang Y. Determinants of compassion satisfaction, compassion fatigue and burnout in nursing: a correlative meta-analysis. *Medicine*. 2018;97(26):86-110.
10. Kelly L, Lefton C, Fischer S. Nurse leader burnout, satisfaction, and work life balance. *J Nurs Adm*. 2019;49(9):404-410.
11. Stamm BH. *The Concise ProQOL Manual*. Pocatello, ID: ProQOL.org; 2010.
12. Dempsey C, Reilley B. Nursing engagement: what are the contributing factors for successes? *Online J Issues Nurs*. 2016;21(1):1-8.
13. Schaufelli W, Bakker A, Salanova M. The measurement of work engagement with a short questionnaire: a cross sectional study. *Educ Psychol Meas*. 2006;66(4):701-716.
14. Zhang Y, Han W, Qin W, et al. Extent of compassion satisfaction, compassion fatigue and burnout in nursing: a meta-analysis. *J Nurs Manag*. 2018;26(7):810-819.

Warly Remegio, DNP, RN, NPD-BC, NEA-BC, CCRN-CSC, is program director of nursing professional development, Center for Professional Nursing Practice, at NewYork-Presbyterian Hospital, in New York, New York. He can be reached at war9011@nyp.org. Reynaldo R. Rivera, DNP, RN, NEA-BC, FAAN, is director for research and innovations, Center for Professional Nursing Practice, at NewYork-Presbyterian, Mary Quinn Griffin, PhD, RN, CNE, FAAN, ANEF, is assistant provost of outcome assessment and accreditation and professor of nursing at Frances Payne Bolton School of Nursing, Case Western Reserve University, in Cleveland, Ohio. Joyce J. Fitzpatrick, PhD, MBA, RN, FAAN, FNAP, is the Elizabeth Brooks Ford Professor of Nursing & Inaugural Director of Marian K. Shaughnessy Nurse Leadership Academy, at Frances Payne Bolton School of Nursing, Case Western Reserve University.

Note: The authors have reported that they have no conflicts to disclose.

1541-4612/2021/\$ See front matter
Copyright 2020 by Elsevier Inc.
All rights reserved.
<https://doi.org/10.1016/j.mnl.2020.08.001>