

Gratitude Practice to Decrease Stress and Burnout in Acute-Care Health Professionals

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Article

Abstract

Work stress and burnout are reported barriers to quality patient care and job satisfaction. This study aimed to evaluate the effect of participation in a 21-day gratitude journaling intervention on healthcare professionals' reported gratitude levels. A secondary aim was to determine the correlation between increased gratitude and decreased work-related stress and burnout. Gratitude increased post-intervention ($p < 0.05$) and remained elevated three months later ($p < 0.01$). Stress significantly decreased post-intervention ($p < 0.01$), and remained decreased ($p < 0.01$) at the twelve-week measure. Burnout significantly decreased post-intervention, with a 3-month effect. Higher gratitude was significantly associated with lower stress ($p < 0.01$), disengagement ($p < 0.05$), and exhaustion ($p < 0.05$). This is the first known study to evaluate the practice of gratitude for managing burnout in healthcare workers. Implications are significant considering the consequence of negative job demands on the quality of patient care and work satisfaction.

Key Words: Healthcare workers, nurses, acute-care, gratitude, work-related stress, burnout, quality care, job satisfaction, positive psychology, positive emotions, broaden and build theory, self-care, resiliency.

Work-related stress and professional burnout are frequently reported as barriers to job-satisfaction by healthcare professionals ([Dyrbye et al., 2017](#); [Howlett et al., 2015](#)). Evidence suggests job satisfaction is linked to patient safety, quality of care ([Merino-Plaza et al., 2018](#)), and employee performance ([Kuzey, 2018](#)). Well-documented culprits of work-related stress experienced by healthcare workers include time constraints, excessive workloads, multiple roles, organizational climate, and emotionally challenging work circumstances ([Dyrbye et al., 2017](#); [Rippstein-Leunberger et al., 2017](#)), which over time can lead to burnout. Burnout is defined as a "psychological syndrome emerging as a prolonged response to chronic interpersonal stressors on the job" ([Maslach & Leiter, 2016](#), p. 104). The constructs of the syndrome include overwhelming exhaustion, cynicism, and job detachment ([Maslach & Leiter, 2016](#)).

Between 2011 and 2014, the prevalence of burnout in physicians increased by 11% and statistics showed they are twice as likely as workers in other professions to experience burnout ([Dyrbye et al., 2017](#)). More recent data from a survey of more than 12, 000 physicians found 42% experience burnout, but not necessarily related to the pandemic as 79% shared that burnout existed prior to COVID-19 ([Kane, 2021](#)). Nurses experience high rates of burnout, too. Data from the National Sample Survey of Registered Nurses (RNs) from 2018 revealed nearly one-third of RNs resigned from their jobs due to burnout ([Shah et al., 2021](#)). Like physicians, current data shows an increase in prevalence with greater than 50% of RNs reporting burnout ([International Council of Nurses, 2021](#); [Kelly et al., 2021](#)). Though a well-discussed issue in healthcare, successful strategies to reduce work-related stress and burnout have so far lacked necessary attention in an era of increasing demand for quality healthcare services and a shortage in industry professionals ([AACN, 2019](#); [AAMC, 2019](#)).

job satisfaction is linked to patient safety, quality of care

Positive Psychology in Healthcare

An emerging interest in the discipline of positive psychology as a potential approach to increase overall well-being and satisfaction in healthcare workers appears to be gaining momentum ([Appel et al., 2013](#); [Cheng, et al., 2014](#); [Kim, et al., 2019](#); [Rippstein-Leuenberger, et al., 2017](#)). Specifically, studies exploring individual characteristics including resiliency, or ability to bounce back quickly, and use of positive coping skills are gaining much attention. For example, a systematic literature review to identify personal and work-related components linked to resiliency in nursing practice revealed optimistic findings. The review included a total of 38 empirical studies providing surmounting evidence that resilient nurses are more likely to adapt to stressful work environments which in turn reduces the negative effects associated with job demands ([Yu et al., 2019](#), p. 137). In addition, the literature describes resilience as a coping skill which can be learned and further developed over time ([American Psychological Association, 2020](#)).

Gratitude has been long recognized as a highly regarded human personality trait and the foundation for most predominant religions. Gratitude has been conceptualized as an affective trait, mood, emotion, virtue, skill, and attitude ([Allen, 2018](#)). This article will focus on gratitude as an affective trait which is defined as a “a two-step cognitive process: (a) recognizing that one has achieved a positive outcome, and (b) that this positive outcome came from an external source” ([Emmons & McCullough, 2003](#), p. 378). Therefore, someone who is grateful acknowledges blessings in life, attributing them to forces other than themselves. Given gratitude is believed to be closely connected with the perception of well-being and happiness ([Emmons & McCullough, 2003](#); [McCullough et al., 2002](#); [Nezlek et al., 2019](#)), multiple positive psychosocial outcomes including connectedness, social-support, reduction of stress, and life satisfaction have also been reported ([Armenta et al. 2016](#), p. 3). Like other positive emotions, gratitude is conceptualized to expand cognition, creativity, and success in life ([Armenta et al., 2016](#)).

positive emotions associated with feeling grateful can elevate the way humans experience daily life events, including negative job demands

Fredrickson's broaden-and-build theory of positive emotions posits the use of positive emotions broaden one's ability to expand both thoughts and actions leading to a wider variety of potential positive outcomes, not only in the moment, but also in the future ([Fredrickson, 2004](#)).

Fredrickson's theory is further validated with the more recent and well recognized concept of resiliency. Though no singular agreed upon definition for resiliency appears to exist in the context of healthcare ([Yu et al., 2019](#)), for the purpose of this article, resiliency refers to one's ability to recover quickly in difficult situations. In alignment with this definition, the broaden-and-build theory of positive emotions further connects positive meaning with adverse life events. The process is explained as being reciprocal in that the discovery of positive meaning in adverse events activates the onset of positive emotions. This in turn has the capacity to expand one's thought process, increasing the probability of finding positive meaning in future events ([Fredrickson, 2004](#)). From this perspective, positive emotions associated with feeling grateful can elevate the way humans experience daily life events, including negative job demands associated with work-related stress, burnout, and job dissatisfaction.

Literature Review

A literature search was conducted to identify studies that utilized gratitude interventions to improve well-being. CINAHL Complete, ProQuest Nursing, PubMed, Cochrane Library, and PsycInfo databases were explored using the key search terms: gratitude, happiness, positive emotions, nurses, nursing, healthcare workers, and healthcare. The search yielded limited results related to gratitude specifically in nursing; however, research on gratitude in other disciplines led to additional relevant studies.

In seminal work by Seligman and colleagues ([2005](#)), a randomized control trial of 577 adult participants were recruited to test the intervention “Three Good Things in Life”. Participants were asked to record three things that went well each day every evening over a one-week period (p. 416). Based on a one-month follow-up visit, participants who took part in the Three Good Things in Life intervention reported an increased happiness and decreased depression with sustainable results at the three- and six post implementations. In more recent years, research has identified additional evidence regarding the benefits of gratitude on general health and well-being.

Lai and O'Carroll ([2017](#)) conducted a randomized control trial in a sample of 108 reportedly healthy individuals living in the United Kingdom. The purpose of the research was to determine the impact of journaling daily gratitude for 21 consecutive days. As hypothesized, the simple act of recalling and recording one's daily blessings resulted in higher levels of gratitude and positive affect. Similarly, a qualitative approach evaluated an intervention called “Three Good Things” among a sample of physicians, neonatal nurse practitioners, RNs, and allied health professionals working for a level III neonatal intensive care unit in the USA ([Rippstein-Leuenberger et al., 2017](#)). Over the course of 14 consecutive days, participants recorded three things that went well and shared what they believed to be their role in bringing the good things about. Thematic analysis revealed that having a good day at work, having supportive relationships, and making meaningful use of self-determined

time were all perceived factors that lead to positive emotions and foundational for stress resiliency. Another study which utilized a mixed-methods, two group pre/post intervention design, happiness and gratitude in nurses was explored (Appel et al., 2013). The intervention group received a book “*Three Good Things; Happiness Every Day, No Matter What*” and were instructed to journal and share with family members three things that went well each day for a period of four weeks. Participants within the control group received a similar book with no pressure to read and no instructions for daily gratitude journaling. Though statistical testing did not result in significant differences between groups, the act of daily recording three good things was perceived to be a useful resource in improving both life and job satisfaction. Collectively, these interventional studies demonstrate the benefits associated with incorporating a simple and inexpensive gratitude intervention into daily practice.

Theoretically, gratitude is one of the most widely experienced positive emotions appearing to “broaden people’s modes of thinking as they consider a wide array of actions that might benefit other” which over time build stronger social bonds and friendships (Fredrickson, 2004, p. 492). The experience of feeling grateful is believed to help buffer undesirable thoughts and may refute the negative relationship between stress and various attributes of well-being, including self-esteem (Cheng et al., 2014; Nazlek et al., 2019). For example, when a person feels gratitude based on the generosity of another, the person feeling gratitude may also feel valued which appears to have an indirect positive effect on self-esteem (Allen, 2018). Hence, gratitude appears to go beyond an emotional response; however, the relationship is not yet fully understood.

Grateful people report higher levels of psychological well-being (McCullough et al., 2002). Given that feeling gratitude broadens thinking modes, a grateful disposition may also build resiliency. In a systematic review, Yu and colleagues (2019) sought to identify personal and work-related influences in nurse resiliency. Results indicate that job resources, including well-being, reduce burnout, specifically less emotional exhaustion, and improved work engagement. Therefore, an elevation in gratitude should improve psychological well-being and resiliency and ultimately positively impact the quality of care a nurse provides to their patients. Given the limited focus on positive emotions and the relationship to resiliency in nurses, additional research is critical. The collective literature present a compelling preliminary body of evidence regarding the many benefits associated with gratitude. The integration of gratitude practice by healthcare professionals may be advantageous.

Purpose

The purpose of this study was to evaluate the impact of participation in a 21-day gratitude journaling intervention on level of reported gratitude. A secondary aim was to determine correlation between gratitude, perceived work-related stress, and burnout.

Methods

Design and Setting

A prospective pre/post study with follow-up 3 months post-intervention was used to explore the association between levels of gratitude on work-related stress and burnout in healthcare professionals. Led by a multidisciplinary team of organizational leaders, the study was conducted in two public acute-care, non-teaching facilities in the Central Florida region from May through October of 2019.

Recruitment and Sample

Study participants were recruited during unit-specific meetings, flyers, and the employee-based website. To ensure protection of participants, the study was reviewed by an independent institutional review board. Inclusion criteria included: employment at one of the two participating facilities and direct interaction with patients, though not necessarily clinical (e.g., physicians, nurses, laboratory, housekeeping, nutritional services). Participants could work fulltime, parttime, or PRN. Exclusion criteria included volunteers and employees who did not directly interact with patients.

Approximately 1100 healthcare employees were approached or had knowledge of the ability to participate in the study. Consent for participation was paperclipped and placed as the first page of the survey packet. A total of 405 employees responded to the invitation completing the baseline assessment giving an initial low participation rate of 37%. Post-intervention participation included 108 subjects resulting in a 27% participation rate and the 3-month follow-up visit yielded a total of 45 respondents for a completion participation rate of 11%. The final group of 45 is called the “completer group.” See [Table 1](#) for sample characteristics.

Measurements

Gratitude Questionnaire-Six Item Form (GQ-6). To assess the primary aim of this study, trait gratitude was measured using 6-items scored on a 7-point Likert Scale with higher scores indicating greater gratitude. Total possible scores range from 6 to 42. Cronbach’s alpha coefficients for the 6-item totals have ranged from 0.76 to 0.84 (McCullough et al., 2001). The Cronbach alpha was 0.80 for this study.

Perceived Stress Scale- 4 Item. To evaluate the secondary aim of this study, stress was measured using the 4-item Perceived Stress Scale (PSS), a brief tool derived from the PSS-14. The scale consists of 4 items scored on a 5-point Likert scale with higher scores indicating greater stress. Scores range from 4 to 20. Cronbach's alpha coefficients were 0.69 in another study, including hospital employees ([Andreou et al., 2011](#)) and 0.69 in this study. It should be noted that while the PSS-4 is the least effective of the Perceived Stress Scale tools; though use has proven feasible when a brief questionnaire is warranted ([Cohen et al., 1983](#)).

Oldenburg Burnout Inventory. To assess the secondary aim of this study, burnout was measured using the 16-item Oldenburg Burnout Inventory. The instrument covers two areas: exhaustion (physical, cognitive, and affective aspects) and work disengagement (negative attitudes towards work) and is scored on a 5-point Likert scale with higher scores indicating higher burnout. Possible scores range from 16 to 80. Cronbach's alpha coefficients were 0.81 ([Khan & Yusoff, 2016](#)) and 0.83 in this study with 0.70 and 0.76 for the subscales, disengagement and exhaustion respectively.

Demographic and Clinical Characteristics. The fourth instrument was a 5-item investigator-developed form to collect the following demographic information: age, gender, experience, service line, and role description.

Procedure

Data Collection. Participants were invited to download a free smartphone application to record three things that went well each day, for 21 consecutive days (the Three Good Things app for iPhone users and Gratitude 365 for Android devices). Alternatively, participants could choose pen and paper, eliminating needing a smartphone and/or cellular data. Participants were asked to complete the combined 31-item anonymous survey administered by paper before initiating the gratitude intervention, approximately 21 days later, and then again three months post-launch date of the gratitude intervention. The research team did not have access to the content recorded on personal devices or journals recorded using pen and paper. Participants were asked to create an anonymous personal identifier that presumably only they would know and not forget over the survey administration: mother's first name, state they were born in, eye color, and dominant hand.

Data Analysis

Data analysis was performed using SPSS 25 software (IBM SPSS Statistics for Windows, version 23.0, IBM Corp., Armonk, NY, USA). We used descriptive statistics including frequency and percent to describe the sample population, and a Mann-Whitney U test to examine the difference between two categories of demographic variables, RN and employees working in the ICU. We reported mean scores and standard deviations for each measure of the three surveys. Effect size also was reported between baseline and each subsequent survey, and Wilcoxon Signed Ranks Test was applied to examine the differences. Finally, a stepwise linear regression was applied to examine the association between the gratitude with PSS and burnout. Significant P values were determined at the 0.05 level.

Results

Table 1. Characteristics of Participants

	Initial Group N=405		Post-Intervention Group N= 108		Completer Group N=45	
	Frequency	%	Frequency	%	Frequency	%
Age (years)						
Under 20	3	0.7	0	0	0	0
20-39	180	44.4	43	39.4	15	33.3
40-49	96	23.7	28	25.7	10	22.2
50-59	85	21.0	29	19.3	14	31.1
60 and over	35	8.6	7	6.4	5	11.1

Sex						
Female	329	81.2	90	82.6	38	84.4
Male	67	16.5	17	15.6	6	13.3
Years of current role						
Less than 1	35	8.6	10	9.2	1	2.2
1 to < 2	40	9.9	8	7.4	5	11.1
2 to < 5	95	23.5	24	22.0	6	13.3
5 to <10	72	17.8	22	20.2	6	13.3
10 or more	160	39.5	44	40.1	26	57.8
Role Description						
Non-RN	194	47.9	48	44.0	21	46.7
RN	201	49.6	60	55.1	22	48.9
Service Lines						
ICU	58	14.3	7	6.4	9	20.0
Non-ICU	331	81.7	100	91.7	32	71.1

Note: Response as “prefer not to answer” or no response are treated as missing values

Basic descriptive statistics for the Initial Group (N=405), post-intervention group (N=108), and participants who remained in the study through final data collection three months later, the Completer Group (N=45) are displayed in [Table 1](#). The largest age-category for all groups was 20-39 (33.3%, 39.4%, 44.4%). Participants were mostly female (84.4%, 82.6%, 81.2%). The majority of participants in both groups reported being in their current role for 10 or more years (39.5%, 40.1%, 57.8%). Approximately half the total participants reported RN as their role (49.6%, 55.1%, 48.9%) and described working in a non-ICU service line most frequently (81.7%, 91.7%, 71.1%). There were several missing responses related to service line in the final, 3-month follow up measurement in addition to an increase in number of employees working in an ICU service line in comparison to the post-intervention group. This inconsistency correlates with an up-training initiative that took place during the time of the study.

Table 2. Comparison of gratitude, PSS, and burnout for pre- and post-intervention and 3-month follow-up

Gratitude Mean (SD)			PSS Mean (SD)			Disengagement Mean (SD)			Exhaustion Mean (SD)		
Pre-	Post-	FU	Pre-	Post-	FU	Pre-	Post-	FU	Pre-	Post-	FU

RN	Yes	37.41(4.48)	38.87(2.74)	39.91(2.81)	5.82(3.10)	3.68(1.91)	4.09(2.27)	17.55(4.07)	15.07(2.37)	15.31(3.53)	21.64(2.89)**	18.12(2.17)**	19.68(2.21)*
	No	38.55(4.36)	39.39(3.45)	40.12(2.83)	5.46(3.26)	3.65(2.45)	3.77(2.60)	14.92(3.81)	13.06(3.42)	14.18(4.23)	18.00(3.18)	16.02(2.53)	17.18(2.96)
ICU	Yes	36.20(7.73)	38.21(2.26)	40.00(1.89)	7.10(2.73)	3.93(0.73)	4.40(1.96)	17.40(3.06)	14.45(1.63)	14.40(3.13)	22.10(1.85)*	17.76(1.87)	20.50(1.96)*
	No	38.27(4.28)	39.40(3.22)	39.90(2.85)	5.24(3.14)	3.67(2.40)	3.88(2.53)	16.07(4.31)	13.96(3.40)	14.91(4.14)	19.32(3.62)	16.75(2.62)	17.83(2.84)

*p<0.05; **p<0.01

Table 2 depicts the Mann-Whitney U test result of graduate, comparison of PSS, and burnout for pre- and post-intervention and 3-month follow-up between RN to non-RN, and ICU staff to non-ICU staff. RNs experience significantly higher exhaustion than non-RN and those working in ICU shows higher exhaustion at pre-intervention and 3 months follow-up comparing to their counterparts.

Table 3. Correlation for Initial Group at baseline measure (N=45)

Variables	Gratitude	PSS	Disengagement	Exhaustion
Gratitude	1			
PSS	-.287**	1		
Disengagement	-.214**	.335**	1	
Exhaustion	-.185**	.473**	.603**	1

*p<0.05; **p<0.01

Data in Table 3 demonstrates that participants who reported significantly higher levels of work-related also reported lower levels of burnout. The data also shows significantly higher levels of burnout are correlated with lower levels of gratitude.

Table 4. Group means of graduate, PSS, and burnout for pre- and post-intervention and 3-month follow-up (N=45)

	Baseline Mean (SD) ^a N=405	Pre- Mean (SD)	Post- Mean (SD)	Effect Size (Pre- to Post-) <i>d</i>	FUP Mean (SD)	Effect Size (Pre-to FU) <i>d</i>
Gratitude	37.43(5.50)	37.87(4.39)	39.13(3.06)*	0.34	39.88(2.63)**	0.48
PSS	5.58(2.82)	5.58(3.14)	3.67(2.15)**	-0.77	3.96(2.40)**	-0.62
Disengagement	17.08(3.58)	16.27(4.08)	14.07(3.05)*	-0.70	14.80(3.86)**	-0.50
Exhaustion	18.90(3.93)	19.87(3.49)	17.07(2.53)**	-0.97	18.44(2.85)**	-0.54

Baseline for initial group b. Three-month follow-up; *p<0.05; **p<0.01

Table 4 presents the mean scores and standard deviations for gratitude, PSS, and burnout at pre-, post-intervention, and three months follow-up. The effect size is reported between pre- to post-intervention, and pre-intervention to follow-up. Wilcoxon Signed Ranks Test reveals that gratitude scores were significantly increased at both post-intervention and 3-month follow-up with small to medium effect size, based on Cohen (1988) (p.25) definition of effect sizes as "small, *d* = 0.2," "medium,

$d = 0.5$," and "large, $d = 0.8$ ". PSS scores were significantly decreased after intervention with medium to large effect size, and the effect continued during 3-month follow-up. Burnout scores were also reduced significantly after intervention and at 3-month follow-up. The mean score of disengagement decreased from 16.27 for pre-intervention to 14.07 and 14.80 for immediate after-intervention and 3-month after intervention respectively, with medium to large effect size. The significant reduction of exhaustion score was significant after intervention and reached a greater than large effect size of 0.97. The effect size decreased to medium (0.54) at the 3-month follow-up. [Table 4](#) also shows baseline mean scores for 405 sample that was initially enrolled in the study. After comparison, no significant difference was found at the baseline/pre-intervention between the 405 initial sample and the 45 participants who completed the study.

Table 5. Linear Regression

Dependent variable	Independent variable	Unstandardized Coefficient (B)	Standardized Coefficient Beta	t	p
PSS	Gratitude	-0.100	-0.434	-3.008	0.004
Disengagement	Gratitude	-0.316	-0.338	-2.329	0.025
Exhaustion	Gratitude	-0.29	-0.262	-2.048	0.047
	RN	3.408	0.490	3.832	<0.001

Finally, linear regressions were conducted to determine whether the gratitude was associated with PSS and burnout ([Table 5](#)). Higher gratitude is significantly associated to lower PSS, disengagement, and exhaustion. However, being an RN increases the exhaustion compared to non-RN participants.

Discussion

The primary aim of this study was to evaluate the impact of participation in a 21-day gratitude journaling intervention on the level of reported gratitude in healthcare professionals working in an acute care setting. This is the first known study to explore the correlation of gratitude with work-related stress and burnout in healthcare team members, a secondary aim. Though most participants in the present study were RNs, the intervention attracted a wide variety of other clinical and non-clinical healthcare professionals. Findings from our research reinforce previous evidence supporting various benefits linked to journaling positive daily life events for professionals working in healthcare ([Appel et al., 2013](#); [Cheng et al., 2014](#); & [Rippstein-Leuenberger et al., 2017](#)).

Other studies have offered evidence for the many benefits of gratitude including: reduced stress and depression ([Cheng et al., 2014](#)), stress resiliency ([Kim et al., 2019](#)), well-being ([Nezleck et al., 2018](#)), improve self-care ([Rippstein-Leuenberger et al., 2017](#)), and even improvements in relationship based person-centered care ([Fournier & Sheehaun, 2015](#)). This study adds additional evidence that gratitude practice can reduce stress, but also addresses a correlation in reducing burnout.

Workplace stress has become the new normal, and now more than ever before. The Coronavirus pandemic has added the need for additional staffing and changes in clinical practice due to social distancing policy. Despite the current global health crisis, high-stress situations are not necessarily perceived as negative by healthcare workers, particularly if they possess the necessary positive coping skills to manage stress ([Jordan et al., 2016](#)). According to one study, a sample of 120 U.S. nurses, 92% of nurses rated their stress levels as "moderate" to "very high" ([Jordan et al., 2016](#)). Of those, 71% reported dealing with work-related stress "well" or "very well." Results from this study add further support as participants who reported significantly higher levels of work-related stress before participating in the 21-day gratitude intervention consequently reported lower levels of burnout. The experience of work-related stress appears to be more normal than not, especially in acute-care environments. It is likely such individuals have adapted to the stress through successful coping skills.

According to the Transactional Model of Stress and Coping, there are two distinct coping responses, problem-focused and emotion-focused, used in managing stress ([Lazarus & Folkman, 1984](#)). Problem-focused coping techniques include strategies that reduce environmental demands in practical ways such as asking for support or improving time

Findings from our research reinforce previous evidence supporting various benefits linked to journaling positive daily life events for professionals working in healthcare

management. Techniques for emotion-focused coping aim to reduce emotional reactivity to stress, including internal strategies such as journaling, reframing, and praying. Previous studies have suggested that problem-focused coping techniques are superior to emotion-oriented coping. For example, Howlett et al. (2015) examined the correlation between burnout and individual coping styles of 306 Emergency Room nurses. Conclusions indicate problem-focused coping strategies predict decreased burnout whereas emotion-focused techniques increase risk for burnout; however, emotion-focused coping include a wide array of internal strategies ranging from unhealthy options such as substance use to more positive options including meditation and prayer (Lazarus & Folkman, 1984). Participants in this study were asked to journal three good things about their day, a positive emotion-focused coping strategy. Overall, our research provides support for the use of healthy emotion-focused coping strategies in the management of stress.

Other results from our study support previous research regarding risk for burnout in healthcare professionals working in Intensive Care Units. A systematic review of personal and work-related components associated with stress resiliency in nurses found burnout identified as a negative risk factor (Yu et al., 2019). RNs in our study experience significantly higher levels of exhaustion than healthcare professionals in other roles and those working in an Intensive Care Unit, regardless of role, had significantly increased risk for exhaustion.

In some scenarios, the practice of gratitude may be less beneficial. While gratitude appears to be a core value in both Western and Eastern culture, individuals from Eastern Asia may be less open in their expression of gratitude (Layous et al., 2013) due to associated negative emotions such as feelings of discomfort, guilt, and indebtedness (Boehm et al., 2011). Armenta and colleagues (2018) address another important consideration in that gratitude may decrease overall well-being in specific individuals, for example those suffering with depression or cancer (p. 5). Additionally, an older study by Sheldon and Lyubomirsky (2006) evaluated if counting one's blessings would help to visualize their "best possible selves". The act of visualization had a more positive affect than feeling blessed. The authors concluded counting one's blessings was more challenging and less enjoyable than thinking about who they would like to be in the future. Similarly, another dated study showed greater well-being in one group of students who thought about their blessings only once per week versus the comparison group who counted blessings three times per week (Lyubomirsky et al., 2005). An offered explanation was counting blessings less often makes the act more meaningful (Allen, 2018).

Nursing Implications

- Self-care activities, including the practice of gratitude, correlate with psychological well-being in nurses and other healthcare professionals.
- Learning self-care activities before entering the well-documented stressful environment in healthcare may reduce the risk for burnout and nursing attrition.
- Although research surrounding gratitude specifically in the discipline of nursing is limited, literature regarding gratitude in the general population infers feeling grateful leads to improved better job performance, work satisfaction, and stronger positive relationships with coworkers (Allen, 2018).
- Healthcare organizations should incorporate workplace gratitude activities to maximize the holistic well-being of their employees.
 - A few easy and inexpensive ideas outside of the intervention used in this study include pre-meeting gratitude devotions, gratitude huddles, and hand-written note thanking a colleague for something nice they did.
 - There are countless other ways to incorporate gratitude into daily practices, the method is not as important as routinely engaging in the activity.
- Last, the act of recording a few good things, as simple as it is, was not carried out by a very high percentage of participants in our sample. This raises a question around nurses' commitment to take part in self-care initiatives.
 - Creating ways to engage nurses to care for themselves requires continued critical thought and attention.

Limitations & Future Research

Findings from this research should be interpreted with the following five limitations in mind. First, there was a high dropout rate as the initial pre-intervention sample decreased from 405 to 45 participants, limiting external validity. Though high attrition, after comparison no significant differences in the demographic characteristics were found between the pre-intervention group of 405 and the 45 participants in the final study sample. Nonetheless, future recruitment efforts should be mindful to fully emphasize the "why" behind the study to increase engagement and participation throughout the length of the investigation. Second, a convenience sample was used. Third, same group pre/post testing was chosen for design. Sampling method and design were selected based on feasibility. Future studies should consider use of equivalent groups through random assignment for tighter control and thus, firmer conclusions. Though careful steps were implemented to

maintain anonymity, a fourth limitation of response bias may have occurred by those feeling their identity might be known. A final limitation was poor Alpha Cronbach on the PTSS-4 item. The PTSS-10 item instrument has produced higher validity in other studies and should therefore be considered given the minimal inclusion of six additional questions.

Conclusion

This study highlights the benefits associated with implementing a brief and simple gratitude intervention in the acute healthcare setting. The intentional practice of gratitude was associated with perception of decreased work-related stress and burnout in healthcare professionals. Future healthcare studies should evaluate the effect of this intervention to validate our findings. Professionals in healthcare continue to experience high levels of work-related stress and as result will continue to at elevated risk for burnout without practical and effective strategies that promote self-care and build resiliency.

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Michele Johnson earned a Bachelor of Science in Nursing in 1998 from Florida State University and a Master of Science in Nursing from Walden University in 2016. She is certified in Six Sigma and has been an active member of the both the American and Florida Organization of Nurse Executives since 2010. Michele has held various clinical, leadership, and executive nursing roles over the past 24 years. In her latest role as Chief Nursing Officer, she is accountable for creating high quality, reliable systems.

Michele Lebron, Chief Nursing Officer

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Michele Lebron earned her Master of Science in Nursing as a Clinical Nurse Specialist and her undergraduate degree from the University of Central Florida in 2009. In 2020 she also earned a Master's in Leadership and Management from Western Governors University. She is a Critical Care certified nurse and a member of the American Association of Critical-Care Nurses since 2008. Michele is a Chief Nursing Officer but has spent most of her nursing career in Cardiovascular Intensive Care.

Tammy Land, Patient Experience Manager

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Tammy Land is a graduate from Troy State University with an Associates of Nursing degree in 1982 and graduated from Chamberlain University with a Bachelor of Science in Nursing in 2015. She has worked with Advent Health for 40 years. She has served most of her career in the Cardiovascular service line, with 28 years devoted to Nursing leadership. She received

her PCCN certification in 2002 and has been a member of AACN for 20 years. Tammy's current role as the Regional Patient Experience Manager has allowed her to share her passion in reducing work-related stress for the frontline teams so that they could provide the highest level of quality care.

Laura Armendariz, Director of Patient Experience

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Laura Armendariz is a graduate of Florida State University with a Bachelor of Science in Human Science. She spent ten years with Walt Disney World leading teams in Parks and Resorts before making a career change to healthcare. She worked with UF Health Cancer Center and Orlando Health Heart Institute developing experience strategies before joining AdventHealth where she was working as the Director of Patient Experience at the time the study was conducted.

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