Exploring Various Leadership Styles to Use Among Nurses Towards Challenges Faced Within the 21st Century: A Systematic Review

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Abstract

The workforce for registered nurses (RNs) are currently facing unprecedented challenges. Current challenges such as the consequences associated with patient falls and healthcare-associated infections (HAIs) have placed a social and financial burden on the U.S. healthcare system. What's more, future challenges such as the expected retirement for baby boomers and an expected shortage on the availability of medical physicians has raised many concerns for healthcare organizations on how they will deliver care in the years to come. The conclusion is that these challenges will significantly affect the well-being of the RN workforce. Hence, because of these challenges, the objective of this research was to explore various leadership styles to use among nurses towards challenges faced within the 21st century. By focusing on these challenges, the researcher provided findings around ethics and its impact on decision-making. Thereafter, the researcher highlighted common leadership styles that are used, and then proposed a new leadership theory, servant leadership, as an option for Chief Nursing Officers to use to help guide its nursing workforce going forward.

1. Introduction

Healthcare providers is the foundation of having a healthy society. However, in order to have a healthy society, governments, healthcare providers, and private corporations must not only work together to control costs, but they must also work together to ensure that quality care is provided. This level of collaboration may vary from country to country, but what can be concluded is that without nurses, the system is nonexistent. With that said, the quantity and

demographics of graduates from nursing schools has increased tremendously since entering the 21st century (Buerhaus, Skinner, & Auerbach, 2017).

As noted by Buerhaus, Skinner and Auerbach (2017), since 2011, when comparing registered nurses (RNs) at the associate level to the baccalaureate level, those with bachelor degrees have outpaced those with associate degrees. What's more, when it came down to going to graduate school, this sector also saw an increase four times over. In addition, when it came to the amount of RNs working, this number was approximated to be near 1 million, with most of the growth occurring in hospitals and nonhospital settings. As for age, since the year 2000, RNs that were over 50 years and working was recorded to have increased by 600,000. In terms of percentage of RNs employed in a hospital versus a non-hospital setting, this age group accounts for up to 30% of RNs employed in hospital settings and up to 40% employed in nonhospital settings (p. 40). Despite these positive changes for RNs, there are current challenges that needs to addressed, and there will be future challenges that will materialize within the next 20 years.

1.1 Current Challenges

In terms of current challenges, the first one is that annually an approximated 700,000 to 1,000,000 patients experience a fall within a U.S. hospital (AHRQ, 2013). Furthermore, according to McCurley (nd), 11,000 inpatients die annually from falls. In addition, when one looks at inpatient falls, the outcome is that at least 30 % of these falls result in a moderate to a more severe injury. As an illustration, it has been noted that 6% to 44% of these falls involve head injuries, which have been later diagnosed as resulting with serious fractures or internal bleeding (AHC, 2015). Apart from the physical toll on patients, another component that has been a thorn to healthcare leaders is the cost associated with falls. The average cost per patient with a fall is around $27,000 and annually, the cost is around $19 billion (McCurley, nd). Both expenditures has raised concerns because as of 2008, the Centers for Medicare & Medicaid Services (CMS) only provides reimbursement for certain types of injuries while a patient is in the hospital (AHRQ, 2013). Due to this CMS guideline, healthcare leaders are reevaluating the solutions that are in place to reduce the number of falls and more importantly, the injuries they create (Spear, 2016).

The second challenge is the intense focus on reducing healthcare-associated infections (HAIs). HAIs are known infections that patients contract when obtaining care in a healthcare setting (CDC, 2013). What can result as a significant cause of death, HAIs have always been a known challenge for healthcare institutions in the United States for decades. To illustrate, it is estimated that more than 98,000 patients die annually in U.S. hospitals and all has all been linked to HAIs (Hong et al., 2015). Furthermore, if you add up all the deaths annually that are linked to automobile fatalities, AIDS, and breast cancer, HAIs is known to be more (Marques et al., 2017). Equally important to the impact that HAIs has made socially, HAIs has also made a financial impact within the U.S. To demonstrate, McGuckin (2015) stated that HAIs in U.S. acute care hospitals has resulted with a cost of $96 to $147 billion annually, which means that this has affected one-in 20-hospital patients. In another example taken for the 2013 Centers for Disease Control (CDC) Antibiotic Resistance Threats report, it was noted

that the direct healthcare expense of antibiotic resistance was close to $20 billion annually. In spite of this, this number does not include the added estimated cost of $35 billion tied towards society, which took into account losses related to productivity (CDC, 2013). In spite of these costs, healthcare executives have not been successful in implementing strategies to change the culture to help mitigate these costs. As a result, healthcare leaders must seek out strategies to help change the culture within their respected institutions as a means to reduce HAIs.

The third and final challenge that has emerged as having an impact on RNs on the front line is the newly pandemic COVID-19. This disease has had an impact on a global scale, but when it comes down to which country has the most cases and fatalities, the U.S. is the leader for these categories (Labrague, 2020). Furthermore, when it comes down to treating those with this disease, the RNs who provide the care on the front line plays a critical part towards the patient's journey to a successful recovery. With this in mind, as purported by Labrague (2020), in order for RNs to effectively play their role to treat patients with COVID-19, it is vital for them to maintain their psychological and mental health. In other words, frontline RNs, specifically those who directly treat patients with COVID-19, will often witness patients who are suffering and sometimes who will die. This type of exposure on continuous bases can affect their emotional health, which in turn can lead to compassion fatigue and ultimately psychological distress (Labrague, 2020, p. 3). (Chen et al., 2020) held a similar view when the author concluded that RNs who were assigned to work in the Intensive Care Units or departments related to COVID-19 had a much greater chance of displaying higher levels of emotional exhaustion. What's more, this emotional exhaustion can in turn lead to burn out among nurses (p. 3). Hence, going forward, Chief Nursing Officers will need to identify what leadership style will be most appropriate to address the well-being of its nurses when it comes down to treating patients with COVID-19.

1.2 Future Challenges

As far as challenges that will occur within the next 20 years for RNs, the first one includes the expected retirement for baby boomers, which were born between the years 1946 to 1964. This is a concern because it is estimated that around 76 million people were born within this period, which far exceeds any generation born before this time. Granted that, it is also known that by the year 2030, this generation will be of the age of 70 years and older (Kirch & Petelle, 2017). Equally important, individuals in the U.S. that are of the age of 85 years and older will go from 6.3 million in 2015 to close to 13 million by the year 2035 (U.S. Census Bureau, 2014). To sum up this challenge, the increase of age for individuals, the complications that may arise because of their health conditions and their need for quality care and family support will create numerous challenges for RNs and healthcare institutions in the future (Buerhaus, Skinner, & Auerbach 2017, p. 41).

The second challenge that will occur for RNs within the next 20 years is the expected shortage among physicians. For example, The American Association of Medical Colleges estimates a shortage of between 40,800 and 104,900 physicians by 2030. This shortage is expected to be caused by the reduction of hours worked, the retirement of those retiring, and

the increase of demand towards the caring for the baby boomers (Association of American Medical Colleges, 2017). On another note, the Health Resources and Services Administration (HRSA) forecasts that there will be a shortage of around 24,000 primary care physicians by 2025, specifically due to the growth of the population (HRSA, 2016).

The third challenge that will occur for RNs within the next 20 years is the retirement of RNs. For instance, RNs that were part of the baby boomer generation reached 1.26 million in 2008 and after a short period in the early part of the that decade, this generation began retiring in record numbers (Auerbach, Buerhaus, & Staiger, 2014). In fact, going back to 2012, an estimated 60,000 RNs have retired each year, and by the end of 2020, more than 70,000 RNs will be planning to retire on an annual basis (Auerbach, Buerhaus, & Staiger, 2015). To shed more light on this challenge, in 2020, it is expected that roughly 660,000 RNs will be considered part of the baby boomer generation, which is about half from what they accounted for back in 2008. In addition, with 1 million RNs expected to transition to retirement between now and 2030 translates to the fact that in the coming years the skills they have gained while working will be not be able to be accounted for as they go on the next phases of their lives. This loss of RNs from the work place means that the experience that they had possessed in providing high quality care will be lost in years to come (Buerhaus, Skinner, & Auerbach, 2017, p. 42).

The final challenge that will occur for nurses within the next 20 years is the implementation of the 2010 Patient Protection and Affordable Care Act (ACA). As noted, the main goals of the ACA was to: streamline processes within health care, make insurance more available to those in need, increase the number of specialized healthcare professionals, highlight the importance of health education and the prevention of diseases, and implement a system that stresses a value base system versus a payment based on fee for service system. However, the current administration is seeking to change the ACA in several ways (Buerhaus, Skinner, & Auerbach, 2017, p. 42).

This includes changes to personal and employer mandates, Medicaid programs, health savings accounts, and competition between insurers (Antos & Capretta, 2017). The consequences for such changes could result in an increase of uninsured patients, which in turn could place financial pressures on hospitals, which could lead to a reduction in RN pay.

2. Method

The purpose of this research was to explore various leadership styles to use among nurses towards challenges faced within the 21st century. With this in mind, according to Simon and Goes (2013), performing an exhaustive literature review is the overarching goal when conducting a research (p. 277). Moreover, Simon and Goes (2013) further argued that the literature review is an integrated critical essay that analyzes and synthesizes the most relevant and current published knowledge on the topic under investigation. For this reason, the researcher conducted a literature review, which focused on various leadership styles and how ethical decision making affects behavior.

3. Literature Review

Each of the above challenges, current and future, are formidable and will significantly affect the well-being of the RN workforce. The well-being of the RN workforce is being viewed in the context of workplace engagement and burnout. For this reason, Nonnis (2018) conducted a cross-sectional and correlational study among 614 nurses of six hospitals in South Italy and found that more than 26% of the nurses were affected by burnout and 21% where considered workaholics. The reason for carrying out this study was that burnout is one of the most studied work-related types of stress in recent decades, particularly within healthcare. According to Edelwich and Brodsky (1981), burnout is a process that leads workers to lose energy, vocational drive, and work engagement. Consequently, they start to develop low self-esteem, resulting in poorer work satisfaction and performance. Lastly, the findings from Nonnis (2018) study concluded that burnout was seen as a response to the chronic emotional effort that working excessively requires, especially when dealing with people in need (p. 78). In another cross sectional and correlational study carried out by Greco (2006), the study of 322 nurses within an acute care hospital in Ontario, Canada found that 53% of nurses reported severe levels of burnout. However, the study also found that leaderships' empowering behavior was determined to be pivotal in the way that nurses react to their work environment. This conclusion coincides with a survey design that was carried out by Strachota to investigate the reasons why nurses changed their employment status.

Strachota (2003) conducted a study in which the sample consisted of all nurses who had voluntarily terminated or changed their employment status within a 9-month period at a major Midwestern health system. The authors interviewed 84 nurses over 4 months of data collection, resulting in a 46% rate of return. The study found that managers' leadership style contributed to the retention of professional nurses. In addition to leadership style, it was cited that 60% to 70% of nurses thought unit-staffing levels were poor and this did not give them enough time to provide quality patient care, which was categorized under work environment. In addition, many nurses also believed that they were taking on more management and personnel responsibilities, which in turn limited the time they have to spend with patients (Strachota, 2003, p. 112).

This is a clear example of not being cognizant of workers' rights in the workplace concerning unsafe working conditions, which is governed by the Fair Labor Standards Act. Under this law, employers are required to adhere to outlined standards regarding minimum wage, overtime, hours worked, record keeping and child labor (Pindus, 2002).

3.1 Ethical Question

Given the myriad of challenges facing RNs, the individual ethical question presented to a Chief Nursing Officer (CNO) is, what leadership style should be selected to help guide its workforce within the 21st century?

3.2 Analysis of Ethical Behavior

Since this is an individual ethical dilemma, Gardner (2007) asked the question, what is an ethical mind? The author purported that an ethical mind broadens the respect for others into

something more abstract. In other words, a person with an ethical mind ask herself, "What kind of a person, worker, and citizen do I want to be? If all workers in my profession adopted the mindset that I have, or if everyone did what I do, what would the world be like?" Hence, to help shape the nursing workforce in the coming years, clinical leaders need to ask questions like these. See e.g. Figure 1.1 below for Gardner's' summing of an ethical mind.
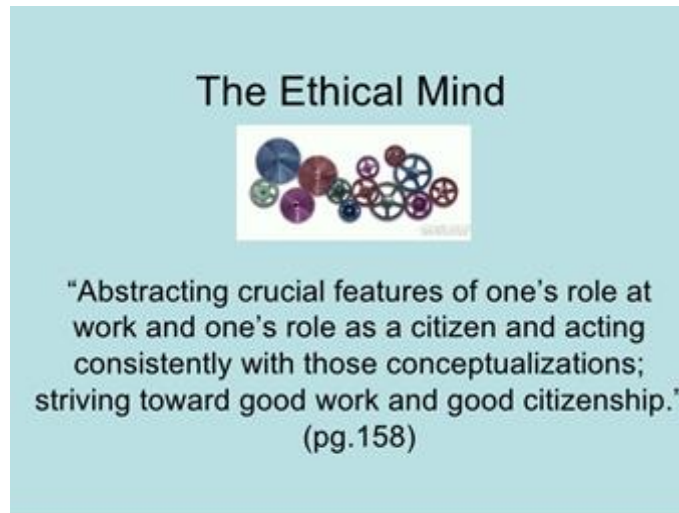

Figure 1.1. Gardner's view of an ethical mind (Gardner, 2007)

With this in mind, Hill (2005) argued that there is no easy answer to the question on why managers behave unethically, but the author highlighted five determinants towards ethical behavior. See e.g. figure 1.2 below on the determinants of ethical behavior.
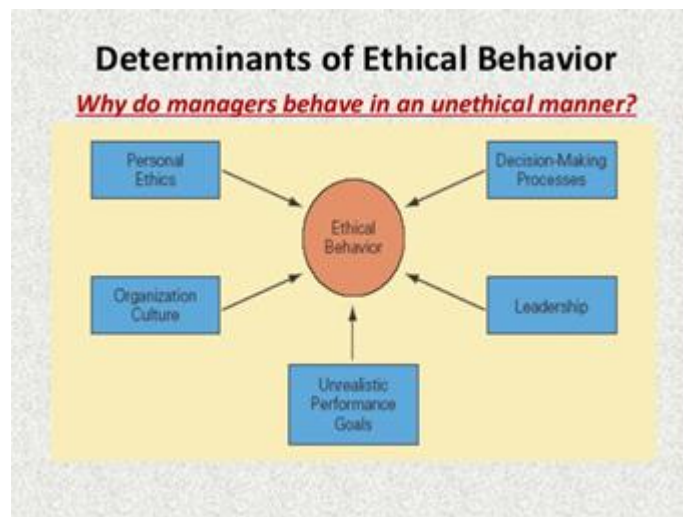

Figure 1.2. Determinants of ethical behavior (Hill, 2005)

Given the complexity around ethical behavior for individual leaders, several studies have concluded that business individuals sometimes do not realize they are behaving unethically, primarily because they simply fail to ask, is this decision or action ethical? Instead, they apply a straightforward business calculus to what they perceive to be a business decision,

forgetting that the decision may also have an important ethical dimension. Hence, the fault lies in processes that do not incorporate ethical considerations into business decision-making (Hill, 2005). According to Kreie and Cronan (1998), five factors may influence how ethical decisions are made. These factors are individual, societal, belief systems, legal, and professional. For this reason, in her classic Harvard Business Review article, The Ethical Leader's Decision Tree, Bagley (2003) proposed using the following decision tree to help business leaders navigate ethics questions, and can be applied to any action someone contemplates. See e.g. Figure 1.3 below.
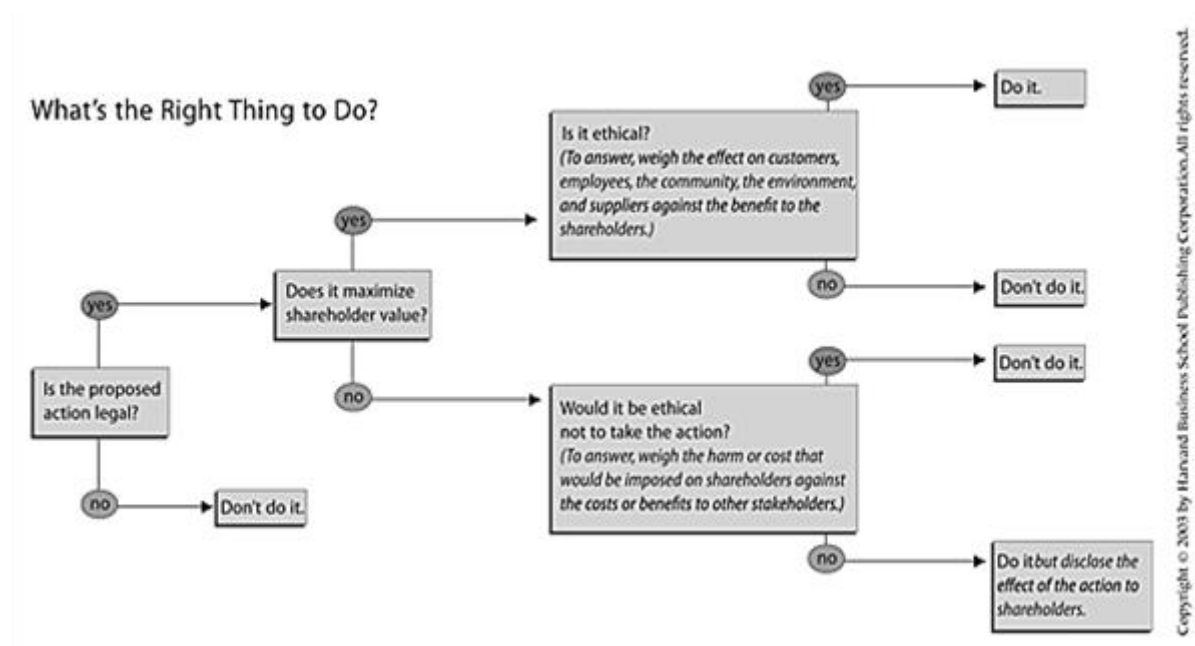

Figure 1.3. Ethical leaders decision tree (Bagley, 2003)

3.3 Definition of Healthcare Leadership

(Sfantou et al., 2017) cited that nowadays, both evidence-based medicine and nursing are widely recognized as the tools for establishing effective healthcare organizations of high productivity and quality of care. The author reported that management and leadership of healthcare professionals is critical for strengthening quality and integration of care. Based on this conclusion, (Sfantou et al., 2017) defined leadership as the relationship between the individuals who lead and those who take the choice to follow, while it refers to the behavior of directing and coordinating the activities of a team or group of people towards a common goal (p. 1).

In comparison, Hargett (2017) stated that the importance of effective healthcare leadership is difficult to overestimate as leadership not only improves major clinical outcomes in patients, but also improves provider well-being by promoting workplace engagement and reducing burnout. Knowing this, Hargett (2017) defined "*the ability to influence*" as the foundation within the definition of healthcare leadership. Because of this conclusion, Hargett (2017) defined healthcare leadership as, "the ability to effectively and ethically influence others for the benefit of individual patients and populations" (p. 69). As seen from this definition,

healthcare leadership is not only concerned with effectively influencing others, but it also focuses on doing it in an ethical manner. The author's definition was a byproduct of the research process that resulted in the Duke Healthcare Leadership Model, as shown in e.g. Figure 1.4 below.

Figure 1.4. The Duke Healthcare Leadership Model (Hargett, 2017)

The author concluded that leadership models are extremely helpful for learners to grasp new concepts, make sense of lessons learned through their experiences, afford structure that facilitates lasting comprehension through reflection, and provide a basis for learner assessment and program evaluation (Hargett, 2017, p. 70). In addition, the author stated that this model has guided our teaching of skills and concepts that lead to improved competency in areas recognized as essential for effective, ethical healthcare leadership (p. 76).

3.4 Common Leadership Styles

As pointed out earlier, the ethical question presented to a CNO is, **what leadership style should be selected to guide its workforce within the 21st century**? As highlighted by (Sfantou et al., 2017), there are many identified styles of leadership that is available for healthcare leader to choose from - transformational, transactional, autocratic, laissez-faire, task-oriented, and relationship-oriented leadership. In brief, Transformational leadership style is characterized by creating relationships and motivation among staff members. Transformational leaders typically have the ability to inspire confidence, staff respect and they communicate loyalty through a shared vision, resulting in increased productivity, strengthen employee morale, and job satisfaction (p. 1). In transactional leadership, the leader acts as a manager of change, making exchanges with employees that lead to an improvement in production (p, 2).

An autocratic leadership style is considered ideal in emergency as the leader makes all decisions without taking into account the opinion of staff. Moreover, mistakes are not tolerated within the blame put on individuals. In contrary, the laissez-faire leadership style

involves a leader who does not make decisions, staff acts without direction or supervision but there is a hands-off approach resulting in rare changes. Task-oriented leadership style involves planning of work activities, clarification of roles within a team or a group of people, objectives set as well as the continuing monitoring and performance of processes. Lastly, relationship-oriented leadership style incorporates support, development and recognition (Sfantou et al., 2017, p. 2). Given the myriad of leadership options to choose from, one could possibly conclude that the option that would be most fitting at the onset for the CNO would be transformational.

The reason for this conclusion is that (Sfantou et al., 2017) stated, "Transformational leadership increases nursing unit organization culture and structural empowerment. This has an impact on organizational commitment for nurses and in return higher levels of job satisfaction, higher productivity, nursing retention, patient safety, and overall safety climate, and positive health outcomes. In addition, a safety climate connected to transformational leadership style is strongly linked to improved process quality, high organization culture, and positive patient outcomes (p. 14)."

Nevertheless, what was observed to be missing from the qualities of a transformational leader was the verbiage of having some form of ethical responsibility. Even though transformational leadership is known to strengthen employee morale, and job satisfaction, the ability to effectively base decision making on ethical values was not highlighted. In addition, from a qualitative study conducted by Barling (2018), the results indicated that the behaviors of a transformational leader does not positively influence team performance (p. 17). For these reasons, a new leadership theory is being proposed as an option for the CNO to select as a means **to guide its workforce within the 21st century.** This new leadership theory is called *"servant leadership"*.

3.5 Servant Leadership

For the past four decades, servant leadership has evolved as a reputable leadership theory and construct. Servant leadership offers a multidimensional leadership theory that encompasses all aspects of leadership, including ethical, relational, and outcome based dimensions. It is similar to but also different from current leadership theories and proposes a more meaningful way of leadership to ensure sustainable results for individuals, organizations, and societies.

Servant leadership includes practices known to sustain high performing organizations such as (a) establishing a higher purpose vision and strategy; (b) developing standardized and simplified procedures; (c) cultivating customer orientation; (d) ensuring continuous growth and development; (e) sharing power and information; and (f) having a quality workforce. In addition, servant leadership showed to produce favorable individual and organizational outcomes such as enhanced corporate citizenship behavior, work engagement, organizational commitment, sales performance, and reduced turnover intention (Coetzer, Bussin, & Geldenhuys, 2017). See e.g. Figure 1.5 below for servant leadership checklist.

Figure 1.5. Servant leadership checklist (Coetzer, Bussin, & Geldenhuys, 2017)

One of the core tenets of servant leadership theory is that servant leaders instill in followers a desire to serve others, which is what healthcare is all about (Lacroix, 2017). Servant leadership can be defined as a multidimensional leadership theory that starts with a desire to serve, followed by an intent to lead and develop others, to ultimately achieve a higher purpose objective to the benefit of individuals, organizations, and societies (Coetzer, Bussin, & Geldenhuys, 2017). Greenleaf and several other scholars in his tradition have framed the implicit expectation that those who are served by servant leaders will understand their true potential, take on these practices and thus eventually become servant leaders themselves. See e.g. Figure 1.6 below for Greenleaf's overall view pertaining to servant leadership.

Figure 1.6. Greenleaf's' view of a servant leader (Greenleaf, 1998)

Although Greenleaf coined the term servant leadership, its original principles can be found in the Bible. For example, in Mark 10: 42–45 (New International Version), Jesus said: "You know that those who are regarded as rulers of the Gentiles lord it over them, and their high officials exercise authority over them. Not so with you. Instead, whoever wants to become

great among you must be your servant, and whoever wants to be first must be a slave to all. For even the Son of Man did not come to be served, but to serve, and to give His life as a ransom for many" (Coetzer, 2017). As a comparison, Lacroix (2017) conducted a quantitative study that showed that servant leaders stimulate serving behaviors among their followers. Lacroix further argued that besides fostering a serving culture and stimulating followers to prioritize service quality, the author showed that servant leaders also instill in followers a positive and attractive conception of being a leader (p. 2).

This means that followers come to view leadership responsibility as an attractive challenge instead of being deterred from fear of failure and expectations of pressure and stress. In fact, an important premise of servant leadership theory is that servant leaders are particularly likely to become attractive role models for their followers due to their unique concern for others and strong ethics. Coetzer, Bussin and Geldenhuys (2017) mixed method study came to similar conclusions in that servant leadership was positively related to work engagement, organizational citizenship behavior, innovative behavior, organizational commitment, trust, self-efficacy, job satisfaction, person-job fit, person-organizational fit, leader-member exchange, and work-life balance (p. 9).

The systematic literature review from Coetzers' study identified eight characteristics of a servant leader, namely: (1) Authenticity; (2) Humility; (3) Compassion; (4) Accountability; (5) Courage; (6) Altruism; (7) Integrity; and (8) Listening. Leap (2008) came to a similar conclusion in that the author identified altruism as one of the needed characteristics that a good leader must possess (p. 25). Coetzer described integrity in the literature as being honest, fair, having strong moral principles, behaving ethically, and creating an ethical work climate, which separates itself from being a transformational leader. The competencies of servant leadership from this study were: (1) Empowerment (2) Stewardship (3) Building relationships; and (4) Compelling vision (Coetzer, Bussin, & Geldenhuys, 2017).

Finally, although the construct of servant leadership is well conceptualized from this literature review and seems to provide favorable individual, team, and organizational results, research on the effective implementation is still in need. Furthermore, the application of servant leadership remains a challenge for researchers and managers as the roles and functions of a servant leader are not yet clarified meaningfully in current literature. Hence, researchers as well as practitioners calls for more clarity on ways to apply servant leadership effectively within the organizational context (Coetzer, 2017, p. 2).

4. Conclusion

As noted by Buerhaus, Skinner and Auerbach (2017), even though the challenges that RNs are facing can be considered unsettling, they offer them new opportunities to shape health care processes, and increase nurses' impact across healthcare systems. Therefore, embracing these opportunities created by these challenges will require hospital leadership to change the culture for RNs, which could include supervisors that are on the front line, those who are within management ranks, and those who are part of the executive team. In fact, this new outlook for RNs is that they will need to look at their roles as being leaders who are shaping tomorrow (Buerhaus, Skinner, & Auerbach, 2017).

According to Bohmer (2013), leaders need to have the ability to foresee challenges before they arise, they need to stimulate others to see the focal point of opportunities, and they need to create scenarios that will to help produce win-win outcomes. Nonetheless, perhaps the most salient point for RNs moving forward is that they will need to see themselves not only as caregivers but also as leaders who will have to be flexible enough to address the numerous challenges that they will have to face in the coming years, which is what servant leadership exemplifies. In closing, the well-being for nurses is at risk. In fact, studies have shown that working excessively directly leads to the concept of nurses' being burnout, which affects their psychophysical well-being and professional vocations (Nonnis, 2018). In addition, although legislations have been passed to address the challenges within the nursing workforce, nursing leadership must still hold themselves accountable to guide the nursing workforce. As a result, servant leadership is a viable leadership style that can be used to instill in followers a positive, ethical, and attractive conception of being a leader, and this is what will be needed to make an impact to improve the well-being of nurses' for the 21st century.

References

Agency for Healthcare Research and Quality (AHRQ). (2013). Preventing falls in hospitals: A toolkit for improving quality of care. Retrieved from https://www.ahrq.gov/sites/default/files/publications/files/fallpxtoolkit.pdf

AHC. (2015). Video monitoring reduces falls as well as cutting costs for hospitals. AHC Media. Retrieved from https://www.ahcmedia.com/articles/135769-video-monitoring-reduces-falls-as-well-as-cutting-costs-for-hospitals

Antos, J., & Capretta, J. (2017). Republicans should take the time necessary to improve the American Health Care Act. Retrieved from https://www.healthaffairs.org/do/10.1377/hblog20170310.059127/full/

Association of American Medical Colleges. (2017). 2017 update. The Complexities of physician supply and demand: Projections from 2015 to 2030. Final report. Retrieved from http://www.dcallc.com/media/aamc_projections_update_2017.pdf

Auerbach, D. I., Buerhaus, P. I., & Staiger, D. O. (2015). Will the RN workforce weather the retirement of the baby boomers? *Medical Care, 53*(10), 850–856. https://doi.org/10.1377/hlthaff.2014.012874BTjETcwM-PieS0FGeEB0SzkshnbvxbwgmtK1u CRug4K-l-xlKJTgY

Auerbach, D. I., Buerhaus, P. I., & Staiger, D. O. (2014). Registered nurses are delaying retirement, a shift that has contributed to recent growth in the nurse workforce. *Health Affairs*, *33*(8), 1474–1480. Retrieved from https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2014.0128

Bagley, C. E. (2003). The Ethical Leader's Decision Tree. *Harvard Business Review*, 18-19.

Barling, J., Akers, A., & Beiko, D. (2018). The impact of positive and negative intraoperative surgeons' leadership behaviors on surgical team performance. *The American Journal of*

Surgery, 215(1), 14-18. https://doi.org/10.1016/j.amjsurg.2017.07.006

Bohmer, R. M. J. (2013). Leading clinicians and clinicians leading. *New England Journal of Medicine, 368*(16), 1468–1470. https://doi.org/10.1056/NEJMp1301814

Buerhaus, P. I., Skinner, L. E., Auerbach, D. I., & Staiger, D. O. (2017). Four challenges facing the nursing workforce in the united states. *Journal of Nursing Regulation, 8*(2), 40-46. https://doi.org/10.1016/S2155-8256(17)30097-2

Centers for Disease Control and Prevention (CDC). (2013). ANTIBIOTIC RESISTANCE THREATS in the United States, 2013. Retrieved from https://www.cdc.gov/drugresistance/pdf/ar-threats-2013-508.pdf

Chen, R., Sun, C., Chen, J., Jen, H., Kang, L. X., Kao, C., & Chou, K. (2020). A Large-Scale Survey on Trauma, Burnout, and Posttraumatic Growth among Nurses during the COVID-19 Pandemic. *International Journal of Mental Health Nursing.* Retrieved from https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/inm.12796

Coetzer, M. F., Bussin, M., & Geldenhuys, M. (2017). The functions of a servant leader. *Administrative Science, 7*(1), 1-32. https://doi.org/10.3390/admsci7010005

Edelwich J., & Brodsky, A. (1981). *Burnout: Stages of disillusionment in the helping professions*. New York: Human Sciences Press

Gardner, H. (2007). The ethical mind. A conversation with psychologist Howard Gardner. *Harvard Business Review, 85*(3), 51-56.

Greco, P., Laschinger, H., & Wong, C. (2006). Leader empowering behaviors, staff nurse empowerment and work engagement/burnout. *Nursing Research, 19*(4), 41-56. https://doi.org/10.12927/cjnl.2006.18599

Greenleaf, R. K. (1998). *The Power of Servant-Leadership*; Berrett-Koehler Publishers: San Francisco, CA.

Hargett, C. W., Doty, J. P., Hauck, J. N., Cook, S. H., Tsipis , N. E., & Webb, A. (2017). Developing a model for effective leadership in healthcare: a concept mapping approach. *Journal of Healthcare Leadership, 9*, 69-78. https://doi.org/10.2147/JHL.S141664

Health Resources and Services Administration (HRSA). (2016). National and regional projections of supply and demand for primary care practitioners: 2013-2025. Retrieved from http://bhw.hrsa.gov/healthworkforce/index.html

Hill, C. (2005). *Global business today*. New York: McGraw Hill.

Hong, T. S., Bush, E. C., Hauenstein, M. F., Lafontant, A., Li, C., Wanderer, J. P., & Ehrenfeld, J. M. (2015). A hand hygiene compliance check system: Brief communication on a system to improve hand hygiene compliance in hospitals and reduce infection. *Journal of Medical Systems, 39*(6), 1-4. https://doi.org/10.1007/s10916-015-0253-z

Kirch, D. G., & Petelle, K. (2017). Addressing the physician shortage: The Peril of Ignoring

Demography. *Journal of the American Medical Association, 317*(19), 1945–1946. https://doi.org/10.1001/jama.2017.2714

Kreie, J., & Cronan, T. P. (1998). 'How men and women view ethics', Association for Computing Machinery. *Communications of the ACM, 41*(9), 70–77. https://doi.org/10.1145/285070.285084

Labrague, L. J., & De los Santos, J. (2020). Fear of COVID-19, psychological distress, work satisfaction and turnover intention among front line nurses. *Journal of Nursing Management.* https://doi.org/10.1111/jonm.13168

Lacroix, M., & Verdorfer, A. P. (2017). Can servant leaders fuel the leadership fire? The relationship between servant leadership and followers' leadership avoidance. *Administrative Science, 7*(1), 1-11. Retrieved from http://www.mdpi.com/2076-3387/7/1/6/htm

Leap, T. (2008). When bad people rise to the top. *MIT Sloan Management Review, 49*(2), 23-27.

Marques, R., Gregorio, J., Pinheiro, F., Povoa, P., Miguel, M., & Luis, V. (2017). How can information systems provide support to nurses hand hygiene performance? Using gamification and indoor location to improve hand hygiene awareness and reduce hospital infections. *BMC Medical Informatics and Decision Making, 17.* https://doi.org/10.1186/s12911-017-0410-z

McCurley, J. (nd). A new approach to fall prevention in inpatient care. St. David's Healthcare. http://tdshshealthcaresafetyconference.com/Documents/8-20_1120-A%20New%20Approach%20to%20Fall%20Prevention-McCurley.pdf

Nonnis, M., Massidda, D., Cuccu, S., & Cortese, C. G. (2018). The impact of workaholism on nurses' burnout and disillusion. *The Open Psychology Journal, 11*, 77-88. https://doi.org/10.2174/1874350101811010077

Pindus, M. N., Tilley, J., & Weinstein, S. (2002). Skill shortages and mismatches in nursing related health care employment. The Urban Institute. Retrieved from http://webarchive.urban.org/publications/410485.html

Sfantou, D. F., Laliotis, A., Patelarou, A. E., Sifaki- Pistolla, D., Matalliotakis, M., & Patelarou, E. (2017). Importance of leadership style towards quality of care measures in healthcare settings: A systematic review. *Healthcare, 5*(4), 1-17. https://doi.org/10.3390/healthcare5040073

Simon, M., & Goes, J. (2013). *Dissertation and Scholarly Research: A Practical Guide to Start and Complete Your Dissertation, Thesis, or Formal Research Project. Dissertation Success* (13th ed).

Spear, N. (2016). Using video monitoring to reduce patient falls. Healthcare Facilities Today. Retrieved from http://www.healthcarefacilitiestoday.com/posts/Using-video-monitoring-to-reduce-patient-falls--12476

Strachota, E., Normandin, P., O'Brien, N., Clary, M., & Krukow, B. (2003). Reasons registered nurses leave or change employment status. *The Journal of Nursing Administration, 33*(2), 111-117. Retrieved from https://journals.lww.com/jonajournal/Fulltext/2003/02000/Factors_Influencing_Satisfaction_and_Anticipated.8.aspx?casa_token=T2s1V7N2iS0AAAAA:kov-NRAf1H1f18PqJ7oYhWDgbJHVKwQ6FvRYUHi9-L23jntko62AjxcoSXSuG3za_3M2uX4OF8a62mXBRJyEPOQ

U.S. Census Bureau. (2014). 2014 national population projections. Retrieved from https://www.census.gov/population/projections/data/ national/2014/downloadablefiles.html

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