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Using an Evidence-Based Practice Nurse Recognition Practice to Improve Job Satisfaction

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**Using an Evidence-Based Practice Nurse Recognition Practice
to Improve Job Satisfaction**

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**This Manuscript Partially Fulfills the Requirements for the
Doctor of Nursing Practice Program and is Approved by:**

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Abstract

Practice Problem: The project targeted low job satisfaction and high nurse turnover in a Central Florida bone marrow transplant unit, impacting patient care and costs.

PICOT: (P) For registered nurses (RNs) on the bone marrow transplant unit, (I) does implementing an evidence-based practice employee recognition program (C) compared to no employee recognition program, (O) lead to an increase in job satisfaction (T) over 10 weeks?

Evidence: The evidence supported the effectiveness of meaningful recognition programs, such as personalized verbal acknowledgment from leadership, in boosting job satisfaction among nurses.

Intervention: The intervention involved nurse managers using a weekly employee recognition program. Nurse managers provided meaningful recognition to nurses to improve job satisfaction and nurse retention, which showed improved outcomes by week 10 compared to before the intervention.

Outcome: The study revealed a significant increase in overall job satisfaction after meaningful recognition encounters ($p = .024$). Agreement on recognition for good job performance rose (Q5_postsurvey median = 5.00) compared to before (Q5_presurvey median = 3.00), highlighting the effective enhancement of nurse job satisfaction through verbal recognition interventions.

Conclusion: The project successfully enhanced nurse job satisfaction through a weekly verbal recognition program, supported by significant increases in overall job satisfaction and specific recognition perceptions post-intervention.

Using an Evidence-based Practice Nurse Recognition Practice to Improve Job Satisfaction

The Bureau of Labor Statistics (2023) Employment Projections of 2021-2031 indicate that 203,200 registered nurse (RN) job positions will need to be filled in the United States annually due to the number of RNs quitting or retiring. This national issue of poor nurse retention is climbing, and without immediate attention, the results can be catastrophic. Many contributing factors may push RNs to leave their positions or the nursing field altogether; some may be in our control, but others are not. The main focus of this project was to incorporate an intervention that was within our control and sustained by evidence-based practice. The change intervened in the current practice and enhanced it to create better outcomes. According to Hu et al. (2022), a great way to retain RNs is by increasing job satisfaction by recognizing them and their practice. The act of recognition has been shown to expand and extend the nursing workforce and lead to higher job satisfaction rates (Hu et al., 2022). The purpose of this project was to incorporate an evidence-based practice change within an acute care setting that would increase job satisfaction and in turn increase nurse retention. Specifically, this change included an employee recognition program that provided meaningful recognition weekly in the nursing department of the bone marrow transplant (BMT) unit at a major hospital in Eastern Florida.

Significance of the Practice Problem

Lack of job satisfaction resulting in decreased nurse retention rates had a major impact on patient care, patient experience, and unit culture in the acute care unit at the identified project setting. As stated by the nurse manager responsible for the bone marrow transplant unit, the primary concern identified was maintaining consistent high job satisfaction and nurse retention rates. Elevated turnover among nurses' results in increased hospital-wide labor utilization and places strain on preceptors, leading to burnout and additional labor costs across the hospital

(Dewanto & Wardhani, 2018). Expanding on this topic, a literature review was conducted by Bae (2022) regarding this entire phenomenon. The author inspected a total of nine studies that found nurse turnover to be extremely costly. The costs of turnover ranged from article to article within the review, but the total turnover costs ranged from \$57,893 to a little over 8 million dollars. There are also significant effects of nurse job dissatisfaction and its negative impact on patient outcomes and patient satisfaction (Hayes et al., 2012). However, giving positive reinforcement and empowerment to RNs has a powerful impact on job satisfaction and positive retention outcomes (Bae, 2022).

Training new nurses, whether they are recent graduates or seasoned professionals, proves costly if they leave due to job dissatisfaction, necessitating expensive temporary substitutes such as travel nurses. (Halter et al., 2017). Furthermore, nationally, there is a projected nursing shortage across the entire country lasting through the year 2030 (Juraschek et al., 2019). According to the American Association of Colleges of Nursing (2022), higher nursing staff levels are directly linked to lower infection rates, lower deaths, decreased incidents of failure to rescue, and shorter lengths of stay. If these facts are indeed true, then would it not mean the direct opposite effects would occur with a decrease in nursing staff levels? Increased death rates, increased failure to rescue, longer length of hospital stays, and higher infection rates can result from not keeping RNs satisfied and willing to stay. According to Aiken et al., (2016), this is a global issue across regions such as Belgium, England, Finland, Ireland, Spain, and Switzerland. The evidence supports the regional, national, and global importance of nurse job satisfaction and its impact on patient care, outcomes, and satisfaction.

PICOT Question

The PICOT question guiding this project is: (P) For registered nurses (RNs) on the bone marrow transplant unit, (I) does implementing an evidence-based practice employee recognition program (C) compared to no employee recognition program, (O) lead to an increase in job satisfaction (T) over 10 weeks?

The targeted population was RNs who worked in a large hospital system in Eastern Florida. RNs in acute care settings, such as a bone marrow transplant unit (oncology), were exposed to countless moments of stress and pressure to maintain life to its maximal potential. According to Yen et al. (2020), oncologic RNs experience high demands that are related to stress. This study of 30 RNs in an oncology unit examined the relationship between a nurse's workload and measured stress via blood pressure waves. The study showed a high mental, physical, and temporal demand on the RN from the moment a patient entered the doors of this facility, to the moment they stepped foot off of the property. According to Lu et al., (2005), the ever-revolving door of RN recruiting and nurse retention is a persistent issue that plagues the American healthcare system.

The evidence-based intervention for this project consisted of a strategy that increased job satisfaction and nurse retention. This evidence-based intervention was provided through an employee recognition program that provided meaningful recognition weekly with verbal recognition. According to Eddy et al. (2021), interventions such as verbal recognition show promise in increasing job satisfaction in nurses and nurse retention. Regarding the timing of the project, the implementation of the intervention began after week one. Week one consisted of two parts: educating and collecting survey data. Part one of week 1 was educating the nurse managers (NMs) on what the weekly interventions would be and how they would be presented to the unit nurses. Part 2 of week 1 consisted of the administration of the pre-test survey and the retrieval of

the data information from the surveys. In week 2, the intervention was implemented until week 9, at which point the post-test surveys were taken for data collection. Week 10 was the final week of implementation. The outcomes were improved job satisfaction rates compared to the pre-test surveys and improved nurse retention.

Evidence-Based Practice Framework & Change Theory

When conducting an EBP project, a well-known and trustworthy model that has been used to guide many DNP projects was utilized to guide the project proposal. The EBP model used for this project was the Johns Hopkins evidence-based practice (JHEBP) framework. This model consists of a three-phase approach known as the PET process (Johns Hopkins Nursing, 2023). The three processes include the practice question, evidence, and translation. Phase 1 consists of discovering the practice problem, which then turns into a practice question expressed through the PICOT question format: population, intervention, comparison, outcomes, and time. After the project's problem was identified and the PICOT was explained, there was a better understanding of the ultimate goal. Phase 2 delved into the literature search where evidence was found to support the intervention and assessed the quality and strength of the literature. Phase 3 was the translation of the quality literature that provided support for the recommended action plan for the project (Johns Hopkins Nursing, 2023).

Lewin's Change Theory

Change theories help provide a best practice guideline for change and the development of successful projects (Barrow et al., 2022). For this project, the best fit was Lewin's change theory, which has been used widely across many other nursing change projects. This theory is broken down into three stages: unfreeze, change, and refreeze (Hussain et al., 2018). This change theory was a great fit for this project implementation due to its simplicity and organized approach to

change. Unfreezing was the first step in the change, which included the understanding that RNs have a need for recognition. This also included the nurse managers' awareness of what the changes consisted of and acceptance that the changes were extremely important to RNs. With this change theory, this was accomplished by using awareness and education in the unfreezing stage. The moving stage occurred with the implementation and integration of the change. Finally, by solidifying the changes, the refreezing stage occurred. This change theory made the change more doable and less daunting for nurse managers and nurses.

Evidence Search Strategy

The evidence search strategy used for this project was a digital-only database search. The digital search engine used was provided by the University of St. Augustine's Library. The electronic databases included in the search were ProQuest, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and PubMed. The main focus of the initial database search was to find articles related to the PICOT question and the desired outcome. The keywords used in the initial search using USA's Library Tool were *nurse retention strategies* and *job satisfaction*, and the search included peer-reviewed, full-text, articles that were published between 2018-2023 and written in English, resulting in 2,444 articles. Search filters were added such as related words, equivalent subjects, and geography (i.e., USA). This narrowed the search down to 470 articles across multiple databases: ProQuest, CINAHL, and PubMed. After reading through some of the articles that appeared relevant, it was discovered that *meaningful recognition* is incorporated in the American Association of Critical Care Nursing (AACN) for Magnet Hospitals. After *meaningful recognition* was added to the advanced search, the final number was 35 articles. Additionally, another search was completed separately within Google Scholar. The keywords used in the search included *nurse retention strategies*, *job satisfaction*,

and *meaningful recognition*. The inclusion criteria were peer-reviewed articles that were published between the years of 2018 and 2023; the results yielded 295 usable articles in addition to the 35 articles found from the other database search. Although the results yielded many articles, not all were usable for this project as sufficient support of evidence.

Evidence Search Results

The final search produced 35 articles in the USA library database and 295 in the Google Scholar database. Abstract reviews of each article were conducted to verify their relevance to the project. Ultimately, out of the total articles yielded from the search, only 18 articles appeared to be pertinent with relevant and supportive information about the project's focus.

The strength and quality of the evidence were evaluated using multiple appendixes from the JHEBP Tools. To assess the evidence of the articles' *quality*, the Research Evidence Appraisal Tool and the Non-research Evidence Appraisal Tool were employed (Dang et al., 2022). The quality ratings were denoted as A or B, which signify high or good quality respectively, indicating robust, convincing, and consistent evidence found during the evidence search. In addition to the quality of evidence, each article was classified on *levels* signifying their strength. The JHEBP Tool used to appraise the strength, also known as "level", was the Hierarchy of Evidence Guide. The levels are separated as the following: Level I for experimental studies, Level II for quasi-experimental studies, Level III for nonexperimental studies, Level IV for clinical practice guidelines, and Level V for quality improvement, expert opinions, and literature reviews (Dang et al., 2022). The Summary of Primary Research Evidence is described in Appendix A. The summary includes two Level I Quality A, three Level II Quality A, three Level III Quality A, two Level IV Quality A, and eight non-research Level V Quality A articles. Additionally, Appendix B summarized four Level V Quality A articles from systematic reviews.

Themes with Practice Recommendations

The issue within the practice site was the lack of job satisfaction and nurse retention among nursing staff in an acute care hospital's adult bone marrow transplant unit. After doing a robust literature review, the evidence supported the importance of job satisfaction among RNs to increase nurse retention. Most importantly, the literature provided different strategies for combating these issues. Three main themes were consistently found throughout the literature: verbal meaningful recognition, managers empowering and supporting RNs, and positive work environments.

Verbal Meaningful Recognition

Throughout the literature review, one of the most important interventions that was found to be widely recognized and utilized within the field of nursing was employee recognition programs. Employee recognition programs include six different delivery methods: informal recognition, formal recognition, day-to-day recognition, employee appreciation, employee recognition, and *meaningful recognition*. The fifth standard out of the six American Association of Critical-Care Nurses (AACN) Healthy Work Environment standards is *Meaningful Recognition*. This well-known, nationally recognized association that participates in the magnet programs standards encourages and utilizes this specific intervention. The acknowledgment of team members' contributions within an organization is essential, emphasizing the need for tailored and significant recognition systems, especially in the context of nursing (AACN, 2005; Ali & Ahmed, 2009; Blake, 2023; Bradler et al., 2016; Combs, 2018; Eddy et al., 2021). Moreover, meaningful recognition is not just about the act but also about how it is conveyed, ensuring that it holds profound significance for the recipient. When RNs are recognized for doing their duties and are told their actions bring value to the organization, they in turn are

encouraged to advance professionally within the same organization (Eddy et al., 2021).

Meaningful recognition significantly impacts job motivation and job satisfaction. Individually customized recognition emerges as the most effective form of verbal acknowledgment (Ali & Ahmed, 2009). A profound appreciation of individuals' endeavors, offering feedback meticulously tailored to their contributions, and intricately reflecting the significance of their efforts is the ideal method of providing meaningful verbal recognition (AACN, 2005; Ali & Ahmed, 2009; Blake, 2023; Bradler et al., 2016; Combs, 2018; Eddy et al., 2021).

An employee recognition program was tested within a medical review department. Although the population focus was on non-nursing employees, it still correlates to employees in general. The focus of recognition to the employees was a non-monetary form of recognition (verbal), and the results showed that it was effective in improving job satisfaction (Combs, 2018). In contrast, monetary rewards appeared to be ranked highest by both RNs and leaders in a quasi-experimental research study, which showed the importance of verbal and public recognition as a form of meaningful recognition for RNs (Salvant et al., 2020). Providing unannounced public recognition to employees causes an increase in job performance (Bradler et al., 2016). Job satisfaction is not only based on verbal recognition but also on who the recognition comes from, specifically the managers or leadership.

Managers Empowering and Supporting Nurses

In organizations that have leadership that promotes nurses and recognizes their status, there is enhanced staff involvement which has led to an increase in nurse retention (Twigg & McCullough, 2014). The importance of managers empowering their staff is prominent in the evidence. Three key characteristics of meaningful recognition are identifying and expressing specific accomplishments, having recognition delivered by someone *professionally important*

(managers), and providing recognition in a timely manner (Moisoglou et al., 2020; Twigg & McCullough, 2014; Zwickel et al., 2016). Leadership support and empowerment promote a healthy work environment (Moisoglou et al., 2020). Strategies that support the retention of nurses and increase job satisfaction include creating positive practice environments that also facilitate quality patient care. Nurse managers directly influence the practice environment. The literature search identified that employees resign more often due to the perceived quality of the manager than the quality of the organization. Respect between management and employees correlates with greater organizational commitment and job satisfaction. Managers valuing employee contributions and promoting their well-being have also been linked to job satisfaction (Twigg & McCullough, 2014).

Positive Work Environment

Empowering, healthy, and positive work environments are directly linked to job satisfaction. Strengthening RNs through verbal communication in addition to continual investment in organizational environments will bring positive perceptions to RNs. Empowering work environments were linked to job satisfaction and positive evaluations of the quality of nursing care. Empowering working conditions plays an important role in creating supportive professional practice environments that improve nurse-assessed patient care quality (Celebi Cakiroglu et al., 2021; Cicolini et al., 2013; Kagan et al., 2021; Moisoglou et al., 2020; Vahey et al., 2004).

Practice Recommendations & Strength of Evidence

Out of the 18 articles chosen for supportive evidence, 13 directly support verbal meaningful recognition as the answer to increasing job satisfaction and nurse retention rates (AACN, 2055; Ali & Ahmed, 2009; Bae et al., 2022; Blake, 2023; Bradler et al., 2016; Combs,

2018; Eddy et al., 202; Hu et al., 2022; Kagan et al., 2021; Lu et al., 2005; Salvant et al., 2020; Twigg & McCullough, 2014; Zwickel et al., 2016). The evidence is strong and supported by two Level I Quality A, one Level II Quality A, one Level III Quality A, two Level IV Quality A, and seven non-research Level V Quality A articles that include published nationally used magnet program standards. The other five articles that do not directly speak about verbal meaningful recognition still support the intervention by discussing other areas of direct importance such as the person who delivers the verbal recognition as well as the work environment in which the message is being delivered. Six articles out of the 1 directly discuss the high value of leadership and management in providing empowerment to RNs (Hu et al., 2022; Moisoglou et al., 2020; Nurdiana et al., 2019; Twigg & McCullough, 2014, Vahey et al., 2004; Zwickel et al., 2016). Five out of the 18 articles directly discuss the importance of a healthy work environment that is linked with positive leadership and strengthening RNs mentally, spiritually, and emotionally to increase job satisfaction (Celebi Cakiroglu et al., 2021; Cicolini et al., 2013; Kagan et al., 2021; Moisoglou et al., 2020; Vahey et al., 2004). Given the evidence and its supportive recommendation, verbal meaningful recognition via an employee recognition program answers the PICOT question, “For RNs on the bone marrow transplant unit (P), does implementing an evidence-based practice employee recognition program (I) compared to no employee recognition program (C), lead to an increase in job satisfaction (O) over 10 weeks (T)?”

Setting, Stakeholders, and Systems Change

Setting and Systems Change

The setting in which this project took place was a 36-bed bone marrow transplant unit in Florida that contained around 60 RNs on staff. The patient population had many different diseases and cancers such as leukemias, lymphomas, aplastic anemia, immune deficiency

disorders, and some solid tumor cancers. During exit interviews, RNs expressed their concerns related to recognition of their efforts in working in such a challenging specialty. The nurse manager (NM) expressed concern that losing two RNs monthly since early 2023 troubled the unit financially and culturally. The consistent loss of nurses each month drove costs up and morale down within the BMT unit.

Job dissatisfaction and nurse retention rates affected RNs on the BMT unit (microsystems level), multiple oncology units throughout the hospital (mesosystem level), as well as the entire hospital on a macro level. This entire hospital struggled with nurse retention and high turnover. A major part of the hospital's mission was to help people create a life of whole health by healing their bodies, strengthening their minds, and lifting their spirits. The hospital had an established nurse retention committee (NRC) dedicated to analyzing the intricacies of why nurse retention was a challenge and exploring effective strategies to address the issue. Upon presenting the project to the committee members, they enthusiastically embraced the intervention and wholeheartedly endorsed the plan, offering their complete support. A clinical microsystem in healthcare is a tight-knit team of professionals who collaborate regularly or as necessary to deliver care to distinct patient populations (Likosky, 2014). This project focused on the micro-system level but can be utilized in the future on a meso-system and macro-system level if clinical and statistical significance was found.

Stakeholders

The key stakeholders in this project were the NM, the assistant nurse managers (ANMs), the DNP student who took the role of the project manager (PM), and the bedside RNs. The NM's role was to unfreeze the current situation and to ensure that the entire unit was involved in the new change, including the ANMs and the bedside RNs. The ANMs' role was to carry out the

project intervention introduced by the project manager. The PM identified strategies to retain RNs and increase job satisfaction through EBP throughout the project and supported the interventions on a day-to-day basis. All stakeholders collaborated to make the intervention impactful and the outcomes clinically and statistically significant.

SWOT Analysis

A comprehensive SWOT analysis was conducted to evaluate the BMT unit's internal strengths and weaknesses as well as opportunities and threats (see Table 1). The unit's *strengths* were its dedicated leaders who deeply invested in their nursing staff, the diligent RNs, the specialized team, and the supportive members of the NRC. On the downside, there were *weaknesses* such as some ANMs' hesitations and lack of trust that the interventions would be effective. *Opportunities* that came from this include the support of the NRC, enhanced unit culture, and increased job satisfaction rates that could have encouraged new hire applications. Additionally, the project implementation could potentially benefit multiple units' hospital-wide. The primary *threats* observed were that the NMs and ANMs may have perceived these initiatives as mere tasks, rather than genuine interventions aimed at enhancing job satisfaction, increasing unit morale, and positively impacting other aspects of their work lives. Other threats included the NM's poor management reputation which could have led to reduced nurse retention rates and decreased new-hire RNs.

Implementation Plan with Timeline and Budget

SMART Objectives

The goal of this project was to increase job satisfaction and nurse retention rates in the BMT unit. Based on EBP articles, clinical practice guidelines, and expert opinions, the intervention was implementing an employee recognition program that provided meaningful recognition to the bedside nursing staff. Five primary objectives helped guide the implementation of the project: (a) the first objective was for 80% of BMT RNs to complete the presurvey within one week of receiving the survey. This objective would help measure the participation of RNs on the unit and provide the baseline information needed as reference for improvement, no change, or decline in job satisfaction rates; (b) The second objective was that all six ANMs would complete one verbal meaningful recognition encounter by Sunday of every week over the course of eight weeks; (c) The third objective was for 80% of RNs to complete the post-survey within one week of receiving the survey; (d) the fourth objective was that the post-survey job satisfaction rates would increase by 50%. These objectives were made possible due to the project implementation plan being thoroughly enforced and executed.

Implementation Plan

Prior to implementation, the project was reviewed and approved by the EPRC at the University of St. Augustine for Health Science and by the site facility. The EBP model employed in this project was the Johns Hopkins evidence-based practice (JHEBP) framework, characterized by a three-phase approach known as the PET process, encompassing practice question, evidence, and translation (Johns Hopkins Nursing, 2023). The Lewin's Change Theory was the guideline for the implementation of this project change. This theory is broken down into three stages: unfreeze, change, and refreeze (Hussain et al., 2018). The purpose of this model is

that change is a process where people move from the familiar (current state) to the unfamiliar (desired state) and then the new state becomes the new normal (refreezing) (Levasseur, 2001). RNs tend to resist change unless they perceive it as essential for improving their work environment or patient care (Cakiroglu & Seren, 2019). This is why this specific change theory was well-suited for this project; it emphasized raising awareness for the need for the practice change, which was an approach the RNs embraced.

Stage 1: Unfreeze

In the unfreezing stage, one of the initial steps in the process was acknowledging the necessity for change and identifying the specific aspects that require modification. This stage involved preparing the participants to encourage the release of old behaviors and attitudes (Hussain et al., 2018). The key stakeholders such as the NM and ANM were responsible for creating awareness on building a sense of urgency for change. The NM was involved in the first stage of unfreezing the current situation. The NM did this with the help of the PM (DNP student) who collaborated with the construction and implementation of the intervention.

Stage 2: Change

During the moving phase, the PM used EBP strategies and methods to retain nurses and increase job satisfaction. The PM and NM held a discussion with ANMs, the key stakeholders responsible for the daily intervention implementation. They received an in-person session using a PowerPoint presentation, supplemented by verbal explanations, discussions, and clarifications (see Appendix D). Both the NM and PM provided support during the session whilst answering questions or concerns, which created an environment suitable for growth, acceptance, and readiness for change. The PM sent periodic emails to the NM to ensure regular check-ins and reminded her to get the ANMs ready for the intervention implementation. The PM maintained

consistent interprofessional collaboration, assistance, and support for all stakeholders throughout the implementation period in an effort to guarantee successful outcomes.

The moving stage involved altering the existing situation through the implementation of the project intervention. Essentially, it signified the period when the new process was fully operational, emphasizing a recognition program centered around meaningful verbal acknowledgment. During the 8 weeks of intervention implementation, all six ANMs verbally recognized at least one nurse per week for the 8 weeks immediately after the pre-surveys were completed. Pre-surveys were completed by 32 out of 60-unit RNs within one week, with discussions during the first week's shifts; both pre- and post-surveys utilized the Job Satisfaction Survey (JSS) by Paul Spector (1994). This survey has been verified for its reliability and validity by Butura et al. (2016) using Cronbach's alpha coefficient. The tool is considered to be internally consistent if α is equal to or bigger than 0.7. Butura et al., 2016 found the overall job satisfaction index was 0.78. The results showed evidence of the tool's validity, reliability, and sensitivity. Additionally, the JSS website provided a bibliography that included a plethora of published articles from those who utilized the survey (Spector, 2023).

ANMs administered pre-surveys during pre-shift huddles and emphasized PM collaboration for satisfaction improvement without detailed explanations. Midweek meetings between the PM, NM, and ANMs helped assess recognition encounters, with ANMs submitting weekly surveys on meaningful recognition. The post-survey followed the same approach during pre-shift huddles in week 9. Weeks 10 and 11 involved data collection.

Stage 3: Refreeze

In the refreeze stage, the goal was for the change to become permanent if the intervention demonstrated success by meeting the desired outcomes, especially the improvement of job

satisfaction. By introducing a recognition program featuring weekly, meaningful acknowledgment and observing improvements in both job satisfaction and nurse retention rates, the intervention should become a standard practice for the BMT unit. This phase involves potential integration into the organization's culture, policies, or practices during the dissemination period. Subsequently, the retention committee will assess whether extending this intervention process hospital-wide is warranted. Refer to Appendix C for a visual representation of the project schedule.

Budget

The budget for implementation included one hour for training ANMs for implementation and 10 minutes/week for 8 weeks per ANM for intervention implementation and documentation. Other expenses were minimal, as the project made use of existing staff and resources (pens, paper, and printer) within regular working hours (refer to Table 2).

Results

The project spanned a total of 10 weeks. Data collection occurred in both the initial and the final weeks of the timeline. The meaningful recognition program commenced in week 2 and concluded in week 9, affording a complete 8-week period for intervention implementation. Pre-intervention job satisfaction surveys were conducted before the program began, followed by post-intervention surveys upon its completion.

Before each shift, the project manager (PM) held unit energizer meetings to distribute blank job satisfaction surveys, emphasizing their importance for the PM's doctoral project aimed at enhancing nurse job satisfaction. Nurses were instructed to include their name and age at the top of each survey to facilitate alignment between pre- and post-surveys. Confidentiality was emphasized, with the assurance that only the PM would have access to the actual surveys,

ensuring anonymity throughout the project. Nurses agreed to participate, and data collection occurred via a locked box accessible only to the PM. Upon completion of both pre and post-surveys, nurses deposited them into the locked box, which the PM checked multiple times each collection week. The process of collecting, storing, and analyzing the surveys was meticulously documented as part of the data collection protocol. The PM manually computed and recorded results from both sets of surveys in a comprehensive Microsoft Word document, which also included Appendices G and H detailing the data collection tools. Throughout the project, the PM upheld confidentiality and integrity without any breaches in nurse survey scores or anonymity. Face validity was ensured through expert consultation, and all agreed that the data collection tools were effective. Key areas of data collection for analysis included age, years of nursing experience, degree level, and certifications. The information that was gathered from the nurse manager included years of nursing experience, degree level, and certifications (See Appendix F and G).

Statistical Analysis

A two-tailed independent samples t-test was conducted to examine overall job satisfaction following meaningful recognition encounters (project intervention). The Shapiro-Wilk test results revealed a violation of the normality assumption. Consequently, the two-tailed Wilcoxon Signed Rank Test was employed as the non-parametric alternative. Significance ($p = .024$) was observed in the results of the two-tailed Wilcoxon signed rank test at an alpha level of .05, with $V = 113.50$, $z = -2.25$, and $p = .024$ (Intellectus Statistics, 2023). This suggests that the disparities between pre_survey and post_survey are unlikely to be attributed to chance. The observed differences between the two survey points were likely responsible for the change rather than random chance. Notably, the median of pre_survey (Mdn = 139.00) was significantly lower

than that of post_survey (Mdn = 141.00) (Intellectus Statistics, 2023). Figure 1 illustrates a boxplot depicting the ranked values of pre_survey and post_survey.

A second two-tailed paired samples t-test was performed to investigate if the mean difference between Q5_presurvey and Q5_postsurvey was significantly different from 0. The comparison between pre and post surveys with a focus on question number 5 was conducted initially using the Shapiro- Wilk test. Question 5 inquired about the level of recognition received for doing a good job, utilizing a numerical scale ranging from 1 to 6. Respondents were asked to rate their agreement level with the statement, "When I do a good job, I receive the recognition for it that I should receive." The scale interpretations were as follows: 1 indicates a strong disagreement, 2 suggests a moderate disagreement, 3 reflects a slight disagreement, 4 denotes a slight agreement, 5 signifies a moderate agreement, and 6 indicates a strong agreement. The Shapiro-Wilk test revealed a violation of the normality assumption, necessitating the use of the two-tailed Wilcoxon Signed Rank Test. A two-tailed Wilcoxon signed rank test was employed to assess the significance of differences between Q5_presurvey and Q5_postsurvey. The results showed that significance ($p = .007$) was found in the two-tailed Wilcoxon signed rank test with an alpha level of .05, yielding $V = 30.00$, $z = -2.68$, and $p = .007$. The median of Q5_presurvey (Mdn = 3.00) was lower than that of Q5_postsurvey (Mdn = 5.00) (Intellectus Statistics, 2023). A score of 3 indicated that the nurses slightly disagreed with the statement before the intervention was implemented, and a score of 5 indicated that the nurses moderately agreed with the statement after the intervention was implemented: "When I do a good job, I receive the recognition for it that I should receive." Figure 2 presents a boxplot of the ranked values of Q5_presurvey and Q5_postsurvey.

Descriptive Statistics

Descriptive statistics revealed the distribution of frequencies and percentages across various categories. The category with the highest frequency of certification was "none" (n = 31, 96.88%), meaning the majority of nurses were not certified as OCN or BMTCN. Likewise, the most prevalent degree level was BSN (n = 20, 62.50%). The remaining percentage of degree levels were ASN. On average, participants' ages were 27.66 years (SD = 5.26), while their years of experience averaged 2.91 (SD = 2.54). Refer to Table 3 for a visual interpretation of the results. (Intellectus Statistics, 2023).

Clinical significance was determined through a combination of statistical analysis and interpretation of findings in the context of real-world applications and practical importance (Sylvia & Terharr, 2024). The project demonstrated clinical significance, further supporting the positive impact of verbal recognition on job satisfaction. After completing the statistical analysis, we confirmed that the PICOT goal was met. The scores in the post-intervention survey exceed those in the pre-intervention survey.

Impact

The implementation of an evidence-based practice employee recognition program for registered nurses (RNs) on the bone marrow transplant unit has yielded significant positive outcomes, impacting job satisfaction among the nursing staff. The project successfully addressed the practice problem by recognizing the importance of employee satisfaction and its impact on overall performance and patient outcomes. By implementing an EBP recognition program tailored to the specific needs and preferences of RNs on the BMT unit, which centered around meaningful verbal recognition, the project improved job satisfaction levels among the nursing staff. The introduction of the employee recognition program brought about a notable shift in practice within the unit. By acknowledging and rewarding the contributions of RNs, the program

has fostered a culture of appreciation and recognition, thereby enhancing morale and job satisfaction. This shift in practice not only benefits individual nurses but also contributes to a more positive and supportive work environment, ultimately enhancing patient care delivery and patient satisfaction.

Looking ahead, the positive outcomes of the project have several future implications. For example, sustaining the momentum of improved job satisfaction will be essential for maintaining staff morale and retention. A continued investment in employee recognition programs and initiatives for ensuring long-term sustainability is required. Moving forward, further refinement and expansion of the employee recognition program may be warranted. This could involve soliciting feedback from RNs to identify areas for improvement and incorporating additional incentives or rewards to enhance effectiveness. To maintain the sustainability of the intervention, it will be important to integrate the employee recognition program into the unit's ongoing practices and procedures. This may involve assigning dedicated resources (ANMs, charge nurses, and NM), establishing clear guidelines for implementation, and fostering a culture of continuous improvement.

Continuous evaluation of the effectiveness of the employee recognition program will be essential to gauge its impact over time. This includes monitoring key metrics such as job satisfaction levels, staff turnover rates, and patient outcomes to assess the program's effectiveness and identify areas for further improvement. While the project has demonstrated positive outcomes, it is important to acknowledge the limitations such as resource constraints, varying individual perceptions of recognition, and external factors that influence job satisfaction. External factors that affect job satisfaction encompass various aspects, such as the quality of the work environment, encompassing safety, cleanliness, and comfort. Additionally, factors such as

salary and benefits, including compensation, bonuses, and health insurance, play a crucial role. Moreover, opportunities for career growth within the organization are also significant factors influencing job satisfaction. Although this project does not have control over these limitations and external factors, it does have control over the aspect of verbally recognizing nurses with positive reinforcement. By recognizing and valuing the contributions of nursing staff, the program has not only improved morale but also fostered a culture of excellence and commitment to patient care.

Dissemination

Following the completion of the project implementation and evaluation, the outcomes of the evidence-based practice (EBP) project and the significance of the intervention in enhancing job satisfaction rates among RNs in the Bone Marrow Transplant (BMT) unit were shared. The ideal outcome of increased job satisfaction was achieved through the implementation of this EBP using an employee recognition program that emphasized meaningful recognition.

Within the organization, the results were presented through a PowerPoint presentation during a meeting with stakeholders. The PowerPoint presentation displayed the job satisfaction scores before and after the intervention. It included statistics on the percentage of participating nurses, as well as their levels of satisfaction, ambivalence, and dissatisfaction with their job. Specifically, it covered responses to question number 5 *When I do a good job, I receive the recognition I deserve*, both before and after the intervention was implemented. To extend the dissemination of the findings beyond the organization, various methods were employed. This included a plan to deliver an oral presentation at the USAHS, publish the results on the institutional repository SOAR@USA, and submit a manuscript for consideration to a peer-reviewed journal. *Cancer Nursing Practice* (2023) is a reputable monthly nursing journal focused

on oncology nursing practices. The readership of this journal constitutes an ideal audience for sharing the project results, given the relevance of the EBP project to RNs specializing in cancer care. Clinicians reading this journal are likely to have a direct influence on implementing similar changes within their respective healthcare institutions.

Conclusion

This project's endeavor was to improve job satisfaction rates on a BMT unit in central Florida through the identification and implementation of an EBP intervention. As demonstrated by Hu et al. (2022), recognizing and valuing RNs can significantly enhance job satisfaction and, consequently, contribute to a more resilient and enduring nursing workforce. Leveraging a comprehensive literature review, the project identified the JHEPBM framework to guide the intervention plan and embraced Lewin's Change Theory as a best practice guideline for effective change management and project development. The existing evidence underscores the positive impact of verbal meaningful recognition on job satisfaction, which prompted a rigorous investigation to address the PICOT question.

The proposed EBP change involved implementing a weekly employee recognition program with a focus on meaningful recognition. This initiative strategically integrated evidence, frameworks, and change theory to enhance job satisfaction, and it established a robust model for future healthcare endeavors. The intervention aimed to create an environment that recognizes the contributions of RNs, ultimately addressing the pressing issue of nurse retention.

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Table 1
SWOT Analysis

<p>Strengths (internal factors)</p> <ol style="list-style-type: none"> 1. Dedicated leaders who are deeply invested in their nursing staff and willing to implement change 2. Diligent and intelligent nurses 3. Specialized and well-renowned team known for excellence and growth 4. Hospital Nurse Retention Committee 	<p>Weaknesses</p> <ol style="list-style-type: none"> 1. Assistant Nurse Managers hesitancies towards student planned implementation 2. Lack of any other effective interventions that address nurse turnover 3. Lack of nurse involvement in pre and post surveys
<p>Opportunities</p> <ol style="list-style-type: none"> 1. Nurse Retention Committee support 2. Unit culture enhanced 3. Increase job satisfaction rates and new hire applications 	<p>Threats</p> <ol style="list-style-type: none"> 1. Negative nursing staff perception of initiatives causing worsening job satisfaction 2. Negative nurse staff feelings/ beliefs of a non-supportive organization causing higher decrease nurse retention rates 3. Bad unit reputation causing decreased new hired nurses desire to work

Table 2
Project Budget for Implementation of Meaningful Recognition Program

Expenses	Revenue	
Indirect- Included in regular operating costs	est. \$	
Salary x 1 hour for training ANMs	\$45/hr. x 6 staff	Organization \$45/hr. x 6 staff \$7.5 x 6 staff for 8 weeks.
Salary x10 mins/week x8 weeks for 6 ANMs intervention implementation		
Overhead	\$0	
Supplies – pens, printer, paper	\$25	BMT unit nurse manager \$25
Estimate Total Expenses	\$385	Estimate Total Revenue \$385
Net Balance		\$0

Note: All budget entries are estimates. Expenses are based on means. Revenue estimates do not include potential cost avoidance due to realized outcomes. All costs associated to salary and benefits, patient care supplies, and overhead are fixed indirect expenses not associated with this project. Project costs are nominal for printing and laminating, under \$100.

Table 3

Descriptive Analysis from Intellectus Statistics

Frequency Table for Nominal Variables

Variable	<i>n</i>	%
certification		
none	31	96.88
OCN	1	3.12
Missing	0	0.00
degree_level		
BSN	20	62.50
MSN	3	9.38
ASN	9	28.12
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Appendix A
Summary of Primary Research Evidence

Citation	Design, Level & Grade	Sample	Intervention & Comparison	Theoretical Foundation	Outcome Definition	Usefulness Results
Bradler, C. et al., 2016	Level I Quality A Randomized controlled field experiment	300 employees	Workers unexpectedly received recognition after two hours of work. Testing the casual effect of recognition on employee performance. Tools used: Unannounced thank-you cards from the employer Card 1: for all employees Card 2: to 3 persons who are performing the best Card 3: to the one person best out of everyone working the best	Reciprocity of employee, Conditional altruism of employee, Conformity preferences of employee	Recognition to all workers increases performance by about 0.8 correct entries per minute, which amounts to an increase of 5.2% (or 0.27 standard deviations).	In a controlled workplace context, it is shown that unannounced provision of public recognition to employees causes a statistically and economically significant increase in performance. Recognition might be a cost-effective tool to stimulate workers' efforts.
Ali & Ahmed, 2009	Level I Quality A	80 employees of UNILEVER companies	A quantitative study with Nine Dimensions questionnaire as the measuring instrument: 1. Work content 2. Payment 3. Promotion 4. Recognition 5. Working conditions 6. Benefits 7. Personal 8. Leadership or supervision 9. General	N/A	A significant correlation exists between recognition and work motivation and satisfaction ($r = 0.92, p < 0.01$) Work content correlates significantly with work motivation and satisfaction ($r = 0.66, p < 0.01$). Payment and work motivation and satisfaction ($r = 0.86, p < 0.01$)	The evidence supports that recognition is significant in work motivation and satisfaction. This implies that if the recognition according to employees were to change, there would be a change in work motivation and satisfaction. The findings also support the view that a "one size fits all" approach to reward and recognition will not be sufficient to motivate people who are

					A significant relationship between promotion and Work motivation and satisfaction ($r = 0.74, p < 0.01$).	inherently different, due to their personality characteristics, but also due to cultural characteristics. This means that personally tailored recognition is the most beneficial form of verbal recognition.
Salvant et al., 2020	Level II quasi-experimental research Quality A	46 RN/Support staff and 10 nurse leaders from a level one trauma center	<p>A survey was used to determine the importance of meaningful recognition based on age and role.</p> <p>The six categories of recognition included: opportunities for growth, written acknowledgment, private verbal feedback, public acknowledgment, scheduled adjustment, and monetary rewards.</p> <p>The 5-point Likert Scale was used: 0 (never)- 5 (very often)</p>	N/A	<p><35 years of age millennials: n=29</p> <p>>35 years Gen X boomers: n=27</p> <p>Majority of RN/SS were 26-35 yrs. (43.5%) and 50% had <3 yrs. experience.</p> <p>Half of the leaders were 36-45 yrs. ($p=.01$ vs RN/SS)</p>	<p>Overall, Monetary reward ranked highest in both RN's and leaders.</p> <p>The Gen X boomers rated significantly higher in written/public recognition.</p> <p>It was the age that showed a difference in the preferred form of meaningful recognition.</p>
Hu et al., 2022	Level III Quality A	A total of 500 nurses were recruited from five comprehensive tertiary hospitals	Questionnaire included items about sociodemographic information as well as the Adult Dispositional Hope Scale, Nursing Career Identity Scale, Job Satisfaction Index Scale, and Nurse Turnover Intention Scale	N/A	<p>Hope ($r=-0.227, p<0.001$) and career identity ($r=-0.342, p<0.001$) were negatively correlated with turnover intention.</p> <p>Job satisfaction played a completely mediating role on the associations of hope and career identity with turnover intention ($\beta_1=-0.09, \beta_2=-0.33$).</p>	<p>Job satisfaction mediated the associations of career identity and hope with turnover intention.</p> <p>Effective measures can be taken to enhance nurses' hope and career identity in order to improve their job satisfaction and thereby reduce their turnover intention.</p> <p>Providing nurses with more support, helping them find a spiritual</p>

						foundation, and holding mindful activities that stimulate positive emotions are helpful.
Vahey et al., 2004	Level III Quality B Nonexperimental quantitative study	820 nurses 621 patients with AIDS	RNs completed a self-administered questionnaire that contained items related to personal characteristics, including burnout, and unit and hospital characteristics, including attributes of the nurse work environment The patient interview provided information on the patient's satisfaction with nursing care, process of care measures, and personal information such as medical history and preferences about care.	Quality Health Outcomes Model: This model posits that the effects of healthcare interventions are mediated by characteristics of the organizations in which care takes place.	Staffing Adequacy, 0.96; Administrative Support, 0.88; and Nurse-Physician Relations, 0.87. Out of the 40 hospital units: 12 of the hospital units had good nurse work environments, 16 had mixed nurse work environments, and 12 had poor nurse work environments. The average satisfaction with nursing care score in the patient sample was 63	The identified modifiable features of nurses' work environments, staffing adequacy, administrative support for nursing practice, and better relations between nurses and physicians, account for both nurses' emotional exhaustion and patient dissatisfaction.
Kagan et al., 2021	Level V Quality A Cross sectional study	1040 nurses working in hospitals across the country	structured self-administered questionnaire measuring: (a) personal initiative, (b) nursing work environment, (c) job satisfaction.	N/A	ER area of practice associated with five-fold (OR = 4.97; 95% CI 1.52-16.25) for high job satisfaction pediatric area of practice associated with three-fold higher odds (OR = 2.85; 95% CI 1.17-6.91) for high job satisfaction Both in comparison with work in oncology.	Contributions to job satisfaction: High personal initiative Positive perceptions of the nursing work environment Needs: Invest more efforts in strengthening organizational climate by increasing encouragement to nurses
Eddy et al., 2021	Level V Quality A Integrative review – High quality	N/A	Defined and explained the critical attributes of meaningful recognition from evidence-based literature: Discussion of specific accomplishments related to goals, delivery of	N/A	Informal recognition, formal recognition, day-to-day recognition, employee appreciation, employee recognition, and meaningful recognition	Meaningful recognition impacts nurses, patients, and the entire organization. It is the fifth standard in the AACN Standards for Establishing and Sustaining Healthy Work Environments

			recognition by a professionally important person, and completed in a timely manner			
Celebi Cakiroglu et al., 2021	Level III Quality A Qualitative Study	18 nurses using snowball sampling Front line nurses with bachelor's degree and at least 1 year of experience	Semi-structured interview asking: 1. What do you think about the phenomenon of change? 2. What is your general approach to change? 3. How do you react to change? 4. What affects your attitude towards change? 5. Can you tell us about the strategies your managers use in the change process?	Three main themes: 'general approaches and initial responses to change', 'factors affecting attitudes toward change' and 'strategic mistakes made by managers during the change process'	The responses of nurses towards changes varied on two linear opposite extremes: resistance, indifference, questioning and acceptance.	Road map should be drawn for change Evaluation of nurses' feelings should be evaluated Acknowledge and resolve any resistance Educate and explain change thoroughly Clear communication Nurses should be actively involved
Combs, 2018	Level V- Quality A Expert opinion	56 staff members of the Medical Review department	Employee Recognition Program Non-monetary forms of recognition	Lewin's Change Theory	Significant differences were noted in the total Satisfaction score (t = 2.39, p = 0.02) and the Contingent Rewards (t = 2.21, p = 0.04) and Communication (t = 2.59, p = 0.02) subscale scores of the JSS. These results suggest that the implementation of the ERP was effective at improving job satisfaction within the Medical Review department.	The correlation between employee recognition and improving productivity is evident.
Blake, 2023	Level IV Quality A	N/A	Meaningful Recognition in addressing staffing shortages	N/A	Informal recognition, formal recognition, day-to-day recognition, employee appreciation, employee	Meaningful recognition is a recognition targeted toward a specific action and is a

	Clinical Practice Guidelines				recognition, and meaningful recognition	simple tool to assist with long-term retention of employees.
Zwickel et al., 2016	Level V Quality A Expert opinion	N/A	the Nursing Executive Center (NEC), a division of The Advisory Board Company, analyzed responses from a 2014 engagement survey database of more than 343,000 employees at 575 healthcare organizations.	N/A	Only 50% of nurses agree with the statement “My organization recognizes employees for excellent work” 3 key characteristics of meaningful recognition: Specific accomplishments, delivered by someone professionally important, and is in a timely manner.	Strategies for addressing a top opportunity for improving nurse engagement is ensuring nurses feel meaningfully recognized for their professional impact.
AACN, 2005	Level IV Quality A Clinical Practice Guidelines	N/A	Six essential standards: 1. Skilled Communication 2. True Collaboration 3. Effective Decision Making 4. Appropriate Staffing 5. Meaningful Recognition 6. Authentic Leadership	N/A	1. Nurses must be as proficient in communication skills as they are in clinical skills. 2. Nurses must be relentless in pursuing and fostering true collaboration. 3. Making Nurses must be valued and committed partners in making policy, directing and evaluating clinical care, and leading organizational operations. 4. Staffing must ensure the effective match between patient needs and nurse competencies. 5. Nurses must be recognized and must recognize others for	AACN's groundbreaking research established six fundamental standards necessary to establish and maintain a conducive work environment. These standards serve as a research-backed blueprint for organizations, enabling them to cultivate workplaces where nurses and professionals in various healthcare fields can perform at their best. This approach guarantees optimal patient results and enhances professional satisfaction.

					<p>the value each brings to the work of the organization.</p> <p>6. Nurse leaders must fully embrace the imperative of a healthy work environment, authentically live it, and engage others in its achievement.</p>	
Moisoglou et al., 2020	Level II Quality A Cross sectional study	430 nurses from 5 public general hospitals of a regional health authority	<p>The Practice Environment Scale of the Nursing Work Index (PES-NWI) was used to assess nurses' work environment.</p> <p>31 item questionnaire that was divided into 5 subscales: nurses' participation in hospital affairs, nursing foundations for quality of care, nurse manager ability-leadership-support of nurses, staffing and resource adequacy, and collegial nurse-physician relations.</p>	Nurses work environment is recognized as a crucial variable for the provision of healthcare services and patient safety	<p>1. physician relations (Mean = 2.74, SD = 0.47) as the most favorable characteristic of their work environment</p> <p>2. leadership and support of nurses (Mean = 2.60, SD = 0.59) as the next most favorable.</p>	Leadership support to nurses is highly favorable in the enhancement of a healthy work environment.
Nurdiana et al., 2019	Level II Quality A Cross sectional study	99 head nurses working in general hospitals	<p>The research instrument consisted of four questionnaires.</p> <p>Questionnaire A: demographics of head nurses.</p> <p>Questionnaire B: knowledge of nurse retention.</p> <p>Questionnaire C: effectiveness of retention strategies developed from the "Nursing</p>	Factors that influence strategies for increasing nurse retention	<p>There is a significant relationship between retention strategy and organizational structure, leadership support, planning function, staffing function, and controlling function ($p = 0.002$---0.044, $\alpha < 0.05$).</p> <p>The most dominant factors that influenced retention were leadership support</p>	Nurse retention strategies employed by the head nurse help achieve success in improving nurse retention and job satisfaction internationally.

			Administrator Survey Recruitment and Retention in Nursing'' questionnaire. Questionnaire D: factors affecting retention strategies		(p = 0.032, OR = 2.817, 95% CI) and staffing function (p = 0.042; OR = 2.714, 95% CI).	
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Legend: OR- Odds ratio, CI- Confidence interval, RN- Registered Nurse, SS- Support Staff, NEC-Nurse Executive Center, ERP-Employee Recognition Program, JSS-Job satisfaction survey, AACN- American Association of Critical-Care Nurses

Appendix B
Summary of Systematic Reviews (SR)

Citation	Quality Grade	Question	Search Strategy	Inclusion/Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/Implications
Bae, S. 2022	Level V-Literature Review Quality A	To examine and synthesize the noneconomic and economic impacts of nurse turnover in acute hospitals.	The Preferred Reporting Items for Systematic Reviews and Meta-Analyses checklist was utilized in the current review. Article search was conducted in June 2021. Research articles published since January 2000 were included. Eight databases (e.g., CINAHL, PubMed, PsycINFO, and Web of Science) were used.	The following eligibility criteria were applied for inclusion: Articles that (1) were nonexperimental quantitative studies, (2) examined the impact of actual nurse turnover in acute hospitals, (3) were a peer-reviewed original research article, and (4) were written in English or Korean.	Among 9,041 searched articles, 16 were included in the review. Seven studies investigated the association of nurse turnover with processes and outcomes	Workgroup processes, nurse staffing, nurse outcomes, and patient outcomes partially support the negative impact of turnover.	<ol style="list-style-type: none"> 1. Nurse turnover is extremely costly 2. To prevent the adverse noneconomic and economic impacts of nurse turnover and retain nurses, healthcare organizations, nurse managers, and hospital staff nurses need to develop and implement prevention strategies and policies to address nurse turnover. 3. Efforts to address nurse turnover can increase hospital competency to improve the quality of nursing care services and patient safety.
Lu et al., 2005	Level V Quality A	What are identifiable factors that contribute to job satisfaction and nurse retention to combat high turnover	Online databases: CINAHL (1982–2004), Medline (1966–2004), PsycINFO (1974–2004) and British Nursing Index (1985–2004). Some databases in Chinese such as China Medical Academic Conference (1985–	Keywords: Job satisfaction, Nurse shortage, Nurse retention, Nurse turnover, Intention to quit	Initial search identified 1189 published research papers from all the databases searched. One thousand and eighty-eight papers were deemed not relevant and 47 papers were of poor quality.	Job satisfaction of nurses is an important in the global nursing workforce. job satisfaction is based off of physical working conditions, relationships with fellow workers and managers, pay, promotion, job	Job satisfaction is linked to feelings of appreciation, quality communication, praise and recognition.

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
			2004) and China Academic Journal (1985–2004)			security, responsibility, the recognition from managers and hours of work.	
Twigg & McCullough, 2014	Level V Quality A Literature Review	What strategies support retention of nurses by creation and enhancement of positive practice environments in the clinical setting	Online databases search February 2012: CINAHL plus, Medline, and ProQuest	The keywords “nurse* AND practice AND environment” were used in the first instance. Additional keywords “retention strategies” were also searched. Articles in languages other than English were excluded. Lake’s Practice Environment Scale of the Nursing Work Index provided a framework from which to assess the strategies.	Thirty-nine papers reported strategies for creating a positive practice environment. Only two articles reported on a pre-test post-test evaluation of the proposed strategy. Strategies included: empowering work environment, shared governance structure, autonomy, professional development, leadership support, adequate numbers and skill mix and collegial relationships within the healthcare team.	Creating positive practice environments enhances nurse retention and facilitates quality patient care. Managers and administrators should assess and manage their practice environments using a validated tool to guide and evaluate interventions.	Nurse managers directly influence practice environment. Research has identified that employees resign more often due to the perceived quality of the manager than the quality of the organization. Respect between management and employees are correlated with greater organizational commitment Valuing employee contributions and wellbeing has also been linked to job satisfaction.
Cicolini et al., 2013	Level V Quality A Systematic Review	What is the relationship between structural empowerment, psychological empowerment	Online-databases: MEDLINE (through PubMed), CINAHL (through EBSCOhost) and SCOPUS (through EBSCOhost).	English language Study included nurses (not student nurses, educators, managers, or assistant managers in nursing)	12 studies remained for data extraction Data extracted from selected studies included:	Key findings revealed that the relationship between structural empowerment and both work satisfaction and	Empowering work environments were linked to job satisfaction and positive evaluations of the quality of nursing care. Empowering working conditions play an important

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
		and nurses' job satisfaction	<p>Articles published between 1998 and 2012</p> <p>MeSH headings and free text terms were combined to research the specific topic: workplace empowerment, nurse*, structural empowerment, psychological empowerment, job satisfaction and work satisfaction.</p>	<p>Impact of empowerment and job satisfaction</p> <p>Quantitative or qualitative research design</p> <p>Peer reviewed</p>	<p>author, year, journal, research question presented (aim of the study), sample, response rate, independent variable, dependent variable, measures, reliability and validity of the instrument used, analysis and main results.</p>	<p>perceived nurses' care quality was mediated by the professional practice environment characteristics.</p> <p>High levels of structural empowerment, low work stress and low levels of incivility and burnout, predicted job satisfaction</p>	<p>role in creating supportive professional practice environments that improve nurse assessed patient care quality.</p>

Legend: CINAHL- Cumulative Index to Nursing and Allied Health Literature

Appendix C Project Schedule

Activity	NUR7801							NUR7802							NUR 7803							
	Week 1	Week 2	Week 4	Week 6	Week 8	Week 10	Week 12	Week 1	Week 2	Week 4	Week 6	Week 8	Week 10	Week 12	Week 1	Week 2	Week 4	Week 6	Week 8	Week 10	Week 12	
Meet with preceptor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Visit clinical site	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Establish working relationship with stakeholders and present PowerPoint presentation	X	X	X	X	X	X	X															
Development of project proposal	X	X	X	X	X	X	X															
Shadow preceptor to further develop understanding of unit functions, project setting, and leadership skills	X	X	X	X	X	X																
Identify practice problem and clinical need of project setting	X	X	X																			
Discuss project intervention and implementation tactics with nurse manager	X	X	X	X																		
Develop project timeline and budget for EBP change implementation						X																

Data collection and analysis													X									
Discuss findings with BMT nurse staff and plan for post project continuation													X	X								
Evaluate EBP change implementation															X	X						
Analyze statistical and clinical significance of																	X	X				
Disseminate results																		X	X	X		

Appendix D

PowerPoint Presentation for Assistant Nurse Managers

MEANINGFUL RECOGNITION

(P) FOR REGISTERED NURSES ON THE BONE MARROW TRANSPLANT UNIT, (I) DOES IMPLEMENTING AN EVIDENCE-BASED PRACTICE EMPLOYEE RECOGNITION PROGRAM (C) COMPARED TO NO EMPLOYEE RECOGNITION PROGRAM, (O) LEAD TO AN INCREASE IN JOB SATISFACTION (T) OVER 10 WEEKS?

GOAL: INCREASE JOB SATISFACTION (WILL ALSO AID IN NURSE RETENTION & IMPROVED GLINT SCORES)

- ANM Role for 8-weeks:
 - Weekly recognition of a minimum of 1 registered nurse
 - 2-3 minute individual IN PERSON (face to face) conversation with an RN that is not under their direct line
 - Express areas they have seen positive growth, development, and or progress in nursing skills
 - Examples: dressing changes, precepting skills, new graduate nurses (overall), better management of incidental overtime, increase in helpfulness, increase in inclusivity, positivity in the workplace, communication with providers, going above and beyond with a patient, and overall hard work
 - Anything you notice they are doing that is positive or meaningful that can be recognized
 - NO CRITIQUING ONLY POSITIVE WORDS & AFFIRMATION
 - Maintain consistency: we want everything to be very consistent throughout, not making one nurse more important than the other.

WEEKLY REQUIREMENTS

- 1) Post-recognition Microsoft form: Do this once completed with RN recognition
 - This is a **simple** questionnaire asking the following:
 - Who did you speak with?
 - What was recognized? (basic sharing of findings)
 - **This should only take a minute to complete**
 - **I want to make this as simple as possible for everyone involved** ☺
 - Must be filled out by the end of the week (Sundays by midnight)
 - Will send a calendar invite (when would you prefer to be reminded?)
- 2) A sheet with a list of all the nurses and the weeks (1-8) will be provided in the ANM office
 - This will help keep the organization of who has and has not been recognized
 - The idea is to check off who you recognized that week so there are no double recognitions
- 3) Will review updates and have weekly check-ins during ANM meetings on Wednesdays

Appendix E

Job Satisfaction Survey Permission- Conditions for Using This Assessment

Dear Hali:

You have my permission to use the original JSS in your research. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms, in the Paul's No Cost Assessments section of my website: <https://paulspecter.com>. I allow free use for noncommercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, All rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

The JSS-2 is an improved commercial version for which there is a fee as explained here: <https://paulspecter.com/assessments/job-satisfaction-survey-2/>.

For additional assessment resources including an archive of measures developed by others, check out the assessment section of my website for organizational measures <https://paulspecter.com/assessments/> and my companion site for general and mental health measures: <https://www.stevenericspector.com/mental-health-assessment-archive/>

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, PhD

paul@paulspecter.com

Website: <https://paulspecter.com/>

For more on my Job Satisfaction book: <https://paulspecter.com/books/job-satisfaction/>

Appendix F

Data Collection for Job Satisfaction Survey (JSS) Scores

Participants (anonymous)	Age -gather during post surveys	Years of Experience	Certifications: (OCN, BMTCN)	Degree level: (ASN, BSN, MSN)	Pre intervention survey results	Post intervention survey results
RN 1	28	8	no	BSN	125 A	126A
RN 2	44	1	no	BSN	171 S	172S
RN 3	28	6	no	MSN	107 D	117A
RN 4	23	<1	no	BSN	108 D	115A
RN 5	26	3	OCN	MSN	137 A	141A
RN 6	24	2	no	ASN	165 S	170 S
RN 7	30	1	no	BSN	165 S	178S
RN8	32	3	no	BSN	154 S	160S
RN 9	25	<1	no	BSN	139 A	87 D
RN 10	29	4	no	BSN	100 D	121A
RN 11	28	5	no	BSN	177 S	180 S
RN 12	22	<1	no	ASN	142 A	130 A
RN 13	23	<1	no	BSN	103 D	126 A
RN 14	22	<1	no	BSN	140 A	142A
RN 15	26	4	no	BSN	138 A	145 S
RN 16	22	<1	no	BSN	140 A	150S
RN 17	25	2	no	ASN	162 S	164 S
RN 18	22	<1	no	ASN	107 D	110 A

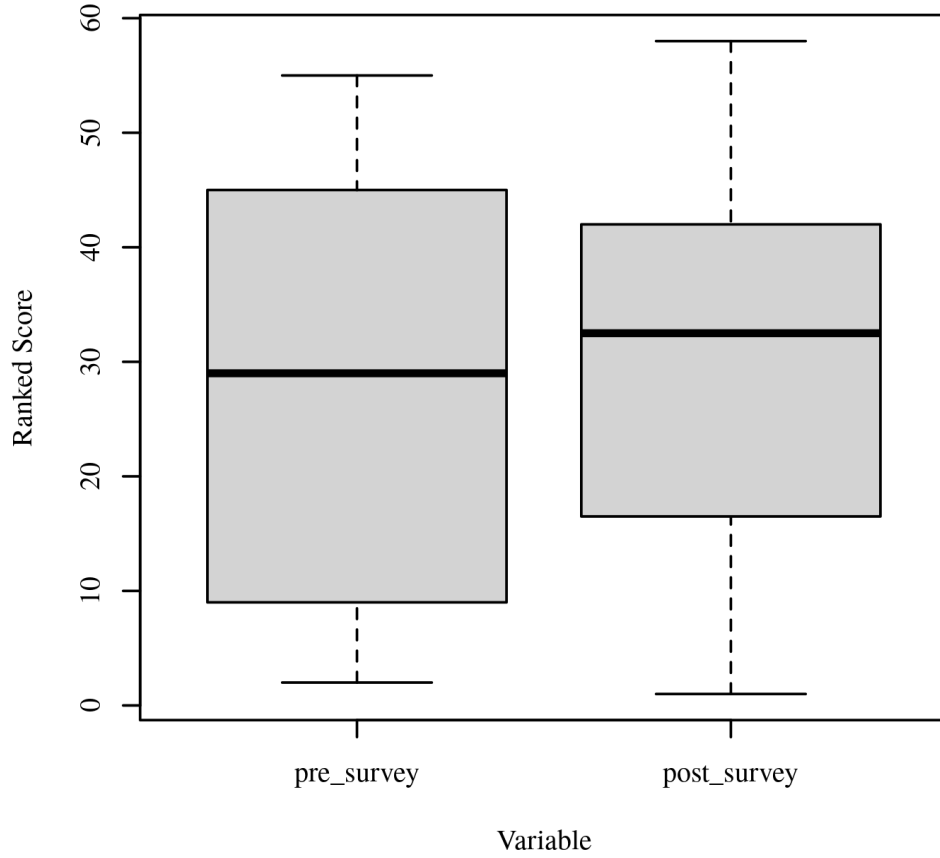
RN 19	22	<1	no	ASN	121A	131A
RN 20	36	12	no	MSN	144 A	150 S
RN 21	24	2	no	BSN	164 S	179 S
RN 22	23	<1	no	BSN	137 A	145S
RN 23	30	5	no	BSN	105 D	109 A
RN 24	36	<1	no	ASN	161 S	125A
RN 25	28	5	OCN	BSN	171 S	173 S
RN 26	29	4	no	BSN	105 D	110 A
RN 27	30	<1	no	ASN	143 A	138 A
RN 28	27	2	no	BSN	138 A	150 S
RN 29	30	2	no	ASN	107 D	118A
RN 30	28	4	no	ASN	165 S	153 S
RN 31	23	<1	no	BSN	146 S	150 S
RN 32	30	6	no	BSN	137 A	141A

Appendix G: Data Collection for Question #5 from JSS- Recognition Scores

Participants (anonymous)	Age	Years of experience	Certifications: (OCN, BMTCN)	Degree level: (ASN, BSN, MSN)	Pre intervention survey results	Post intervention survey results
RN 1	28	8	no	BSN	3 D	2 D
RN 2	44	1	no	BSN	3 D	5 S
RN 3	28	6	no	MSN	3 D	5 S
RN 4	23	<1	no	BSN	3 D	3 D
RN 5	26	3	OCN	MSN	3 D	4 S
RN 6	24	2	no	ASN	5 S	6S
RN 7	30	1	no	BSN	5 S	5 S
RN 8	32	3	no	BSN	3 D	3 D
RN 9	25	<1	no	BSN	6 S	2 D
RN 10	29	4	no	BSN	1 D	2 D
RN 11	28	5	no	BSN	6 S	6 S
RN 12	22	<1	no	ASN	5 S	5 S
RN 13	23	<1	no	BSN	2 D	4 S
RN 14	22	<1	no	BSN	3 D	4 S
RN 15	26	4	no	BSN	3 D	5S
RN 16	22	<1	no	BSN	2 D	4 S

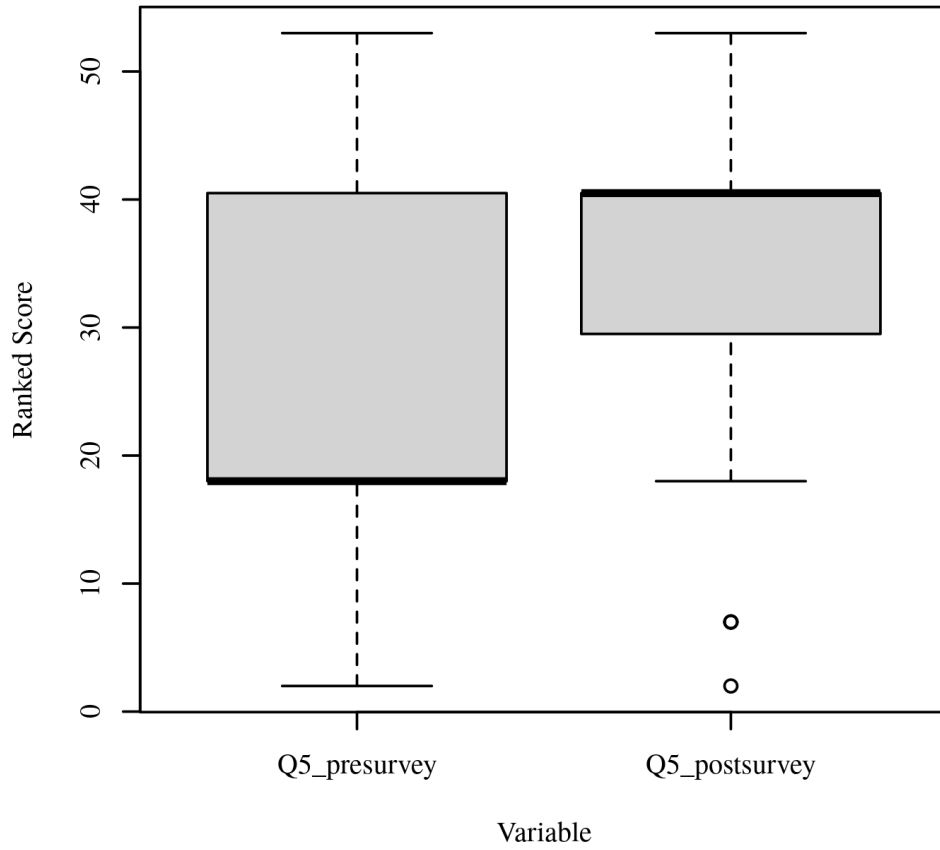
RN 17	25	2	no	ASN	6 S	6 S
RN 18	22	<1	no	ASN	5 S	5 S
RN 19	22	<1	no	ASN	1 D	1 D
RN 20	36	12	no	MSN	5 S	5 S
RN 21	24	2	no	BSN	3 D	5 S
RN 22	23	<1	no	BSN	3 D	5 S
RN 23	30	5	no	BSN	3 D	4 S
RN 24	36	<1	no	ASN	6 S	6 S
RN 25	28	5	OCN	BSN	5 S	6 S
RN 26	29	4	no	BSN	3 D	4 S
RN 27	30	<1	no	ASN	3 D	4 S
RN 28	27	2	no	BSN	5 S	6 S
RN 29	30	2	no	ASN	2 D	4 S
RN 30	28	4	no	ASN	3 D	2 D
RN 31	23	<1	no	BSN	6 S	6 S
RN 32	30	6	no	BSN	4 S	5 S

Figure 1: Ranked values of pre_survey and post_survey



(Intellectus Statistics, 2023)

Figure 2: Ranked values of Q5_presurvey and Q5_postsurvey



(Intellectus Statistics, 2023)