

Residency Programs for New Graduate Nurses

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Abstract

In 2019, 27.7% of new graduate nurses have shown to leave their job within the first year of hire due to feeling overwhelmed upon entering the workforce with the responsibility of having to care for patients' lives. The purpose of this project is therefore directed towards educating senior nursing students on the purpose, structure, key factors, and benefits nurse residency programs can offer to enhance their transition into practice. A lecture presentation will be provided, along with a pre- and post- survey to assess the effectiveness of the education session in enhancing student's knowledge on nurse residency programs. The results from the session are currently pending. However, it is anticipated that the audience will gain a better understanding of the purpose of nurse residency programs in building new graduates' confidence, skills, and job satisfaction through the collaboration of class lectures, simulations, and clinical experience on the floors.

In 2016, the national average for first-year turnover for new graduate nurses was 17.1% (Ackerson & Stiles, 2018). As of 2019, the national average increased to 27.7% (Asber). This is a 10% addition in turnover throughout the last three years due to the gap between perceived expectations of new graduate nurses in school, and the reality set forth by them in practice (Abularub & Alhaijaa, 2018). New nurses are not prepared for the fast-paced healthcare environment and increasing demands of high-acuity patients (Ackerson & Stiles, 2018). Chronic stress and overload from these demands therefore leaves many new grads wanting to leave their first job.

Upon graduating and entering the workforce, senior nursing students will reach a moment in their lives when the responsibility of caring for patients' lives becomes a reality. In 2010, the IOM released the "Future of Nursing Report" emphasizing a greater need for the implementation of Nurse Residency Programs (NRPs) to aid in new graduate nurses' transition to practice (Asber, 2019). However, many nursing students possess limited knowledge on NRPs and the potential NRPs have to benefit their transition to practice. Therefore, the purpose of this review is to explore various research studies regarding NRPs, and to implement an evidence-based project to educate senior nursing students on the findings. The goal of this project is for students to gain a better understanding of how NRPs build new graduates' confidence, skills, and job satisfaction through a collaboration of class lectures, simulations, and clinical experiences. Additionally, students will gain a better understanding of how these factors can aid in enhancing retention rates and reducing turnover costs for healthcare facilities.

Literature Review

The search for evidence was conducted using the University of Cincinnati's online library database system. Specifically, two databases used for the literature search were CINAHL and

MEDLINE. Parameters set for the search were limited to the year of publication: 2015 to 2019.

Key words and key phrases used for the search included: *nurse residency programs, new graduates, nurse, transition, residency, retention, turnover, benefits, costs, outcomes, recommendations, effectiveness*. Sixteen articles were obtained from the literature search, and three themes were identified from the review: structure, benefits, & key factors to success.

Evidence

Structure of NRPs. The design and structure of NRPs varies from program to program. In terms of accreditation, not all programs are nationally recognized or approved by a regulatory agency; some programs are internally or organizationally based. Regulatory agencies responsible for establishing accreditation include Commission on Collegiate Nursing Education (CCNE) and American Nurses Credentialing Centers (ANCC) (Goode et al., 2018). The benefits of achieving national recognition and accreditation lie in the fact that these programs have a standardized structure, length, and evidence-based curriculum. Two of the most commonly known accredited programs found in literature included the University Health System Consortium/American Association of Colleges of Nursing (UHC/AACN) and Versant NRPs (Camp & Chappy, 2017; Goode et al., 2016).

In addition to accreditation, the length, content, and education methods also varied from program to program. The length of NRPs has shown to vary from as little as five weeks to as much as eighteen months (Camp & Chappy, 2017; Smith et al., 2016). As for content, this is different for every program but many focus on communication, critical thinking, leadership, stress management, prioritization, and delegation skills (Cochran, 2017). Additionally, when educating students on these skills, three main methods are used: didactic, simulation, and clinical experiences (Smith et al., 2016; Walsh, 2018). Didactic learning sessions are classroom-based

and aid in transitioning students from a general knowledge base to a specific clinical specialty. Simulations, rather, allow new nurses to practice their critical thinking and communication skills in a high-pressure simulated environment without the actual pressure. Whereas, in clinical experiences new grads provide physical, hands-on care to actual patients and they learn to organize and prioritize their time based on patient acuities (Walsh, 2018).

Benefits of NRPs. While researching the outcomes of NRPs, among new graduate nurses, feelings of satisfaction and an increase in confidence was the most commonly reported benefit of new nurses (Camp & Chappy, 2017; Smith et al., 2016). There is also evidence that these programs strengthened the development of skills, competence, and confidence (Goode et al., 2016). While there were many reports of new graduates feeling overwhelmed, the support and confidence that NRPs provided to new grads helped them through their transition from student to full time nurse (Wildermuth et al., 2019). This information is being used to further the advancement of nursing knowledge related to the transition experiences of new graduate nurses.

With an increase in confidence and job satisfaction amongst new nurses, there is also an increase in retention for healthcare organizations and a decrease in turnover and. Lourenção (2018) stated that job satisfaction enhances work engagement which acts to shield new grads from burnout. A study done by Cochran (2017) reported that turnover rates for new nurses at one facility was 36.8% before implanting an NRP, and 6.4% after the implementing the NRP. Additionally, an experimental study done by Wolford et al. (2019) comparing turnover rates between new nurses going straight into practice and new nurses participating in an NRP, showed that first-year turnover was significantly lower for new grads in the NRP (3.5%) than those who were not in one (14%).

Research has also shown that the impact of NRPs helps to improve financial burdens placed on new healthcare facilities as a result of turnover. When reviewing the turnover rate for new nurses there is not only an extreme reduction of workers, but also a loss of expenditures put onto the healthcare system. The loss of nurses recorded in 2017 reached 25.6%, and this was just within new graduates' first year of hire (Trepanier et al., 2017). This costs the healthcare system anywhere between \$38,000 and \$59,700 per nurse, depending on the length of orientation and resources dedicated to preparing them (Trepanier et al., 2017). According to Ackerson and Stiles one facility had turnover costs of up to \$17,977,500 at the end of one year. However, after implementing an NRP, these costs were reduced to \$2,749,500, creating a savings of \$15,228,000 for the healthcare facility (2018). Therefore, implementing an NRP helps to save healthcare organizations thousands of dollars per nurse and millions of dollars per year.

Key Factors to Success. When analyzing the various factors that impact the success of NRPs, three structural aspects can be identified: accreditation, longer-length programs, and smaller preceptor-student ratios. Accreditation was found to be one of the most influential aspects of NRPs. A study done by Asber (2019) comparing retention rates between organization-based and accredited programs discovered that organization-based NRPs had lower retention rates (74-98%) than Versant NRPs (92.9% - 93.6%) or UHC/AACN NRPs (90.6-100%). Similarly, Goode et al. (2018) reported UHC/AACN and Versant NRPs to have a one-year retention rate of 95% for new grads. Additionally, Asber also compared retention rates to the length of various NRPs in his study (2019). The results of the study displayed that programs lasting 12 weeks or less had a 76.8% retention rate, programs lasting 12-24 weeks had an 86% retention rate, and programs longer than 24 weeks had a 98.6% retention rate (Asber, 2019).

Therefore, accredited programs, in addition to longer-length programs, have shown to be more influential and successful in retaining new nurses after graduation.

Similarly, shorter preceptor-student ratios have also proven to positively influence new graduates' willingness to stay at a facility. Numerous studies have reported that clinical preceptorship and mentorship experiences are the most important aspects of transitioning new grads to practice (Cochran, 2017; Walsh, 2018). A study done by Williams et al. (2018) compared turnover outcomes between new graduate nurses participating in one-to-one mentoring and those participating in group mentoring. The results of the study concluded that turnover was higher amongst new grads involved in group mentoring than those who were part of one-to-one mentoring due to "low to moderate contact with group mentor" (Williams et al., 2018). Smaller ratios therefore allow students to have more contact with their preceptors, providing a more individualized learning experience, and allowing preceptors to identify student's weaknesses so that they can challenge them and build on their clinical skills (Case, 2019).

Plan & Implementation

After analyzing and synthesizing the evidence from the articles, an education session was created to inform senior nursing students on the current findings. Educational strategies utilized for this project involved a four-item Kahoot survey and a PowerPoint presentation (See Appendix B). The project was presented on March 11th, 2020, at the University of Cincinnati - College of Nursing to senior nursing students in their capstone class. Additional members in attendance for the presentation included directors from various NRPs in the area; UC Health, Mercy Health, Cincinnati VA Medical Center, and The Christ Hospital. The education session started with the Kahoot survey to evaluate student's initial knowledge base on NRPs, followed by the PowerPoint presentation, which informed students of the research findings on

NRPS. Then, the same Kahoot survey was given again at the end of the session to assess student's knowledge on NRPs and evaluate if there was an increase in understanding of NRPs amongst the audience.

Evaluation

The Kahoot was used to assess the effectiveness of the education session in enhancing student's knowledge on nurse residency programs. Answers to each question at the beginning of the session were totaled and compared to the number of responses for each question at the end of the educational session (Table 1 – See Appendix B). The results revealed that the education session was effective towards increasing students' perceived benefits of NRPs, increasing students' interests and willingness to join an NRP, and increasing their knowledge on the structure of NRPs. Before the presentation, the majority of the audience, 37 of 59 students (63%), believed NRPs to be very beneficial, 19 of 59 students (32%) believed them to be somewhat beneficial, and three students (5%) believed “not so much.” After the education session, 51 of 61 students (84%) reported NRPs to be beneficial, 6 students (10%) reported them to be somewhat beneficial, and 4 students (6%) reported “not so much.” This was an overall increase of 21% for perceived benefits of NRPs amongst students who see NRPs as very beneficial.

With survey statement number two, 88% of students (52 students) liked the idea of an NRP and 12% (seven students) did not. However, after the presentation, post-survey results showed 98% of the audience (60 students) reported “true” and only 2% (1 student) reported “false” to the statement. This was an overall increase in 10% of students who agreed to liking the idea of an NRP. Looking at pre-survey results from survey statement number three, the majority of the audience (53%) fully agreed that having an NRP would make them more likely to seek

employment at a facility with an NRP, 32% somewhat agreed, 10% somewhat disagreed, and 5% fully disagreed. However, post-survey results showed 82% of students fully agreed to this statement, 10% somewhat agreed, 7% somewhat disagreed, and only 1% fully disagreed. This was a 29% increase in the number of students who would be more likely to join a job at a facility with an NRP. The greatest differences, however, between pre- and post-survey results was exhibited with survey item number four: “I understand the set-up of the average NRP.” Less than half of the audience (49%) reported “true” to this statement, whereas the majority of students (51%) reported “false.” Yet, after the education session, 95% of students reported “true” and only 5% reported “false.” Overall, this was a 44% increase in the number of students who gained a better understanding of the structure of NRPs.

Recommendations

The current evidence presented therefore supports the recommendation for the implementation of NRPs in hospitals; as exhibited by their ability to increase confidence and retention amongst first year nurses and reduce turnover costs for health organizations. With this being said, evidence also revealed the lack of standardization amongst these programs in relation to their overall design and set up. Only accredited programs had a standardized length, content, and curriculum established for transitioning new grads to practice, and these programs exhibited higher retention rates. Additionally, longer-length programs and programs with shorter preceptor-student ratios also achieved higher retention rates for new grads. Therefore, this stresses the need for all NRPs to establish accreditation through a national regulatory agency, in addition to extending the length of their programs (24 weeks+), and altering their clinical ratios (1:1), in order to become more successful and reduce turnover.

Although there are various sources and evidence to support the recommendation for the implementation of NRPs, further research is needed to assess the evaluation process for selecting preceptors and mentors for clinicals, since there is no standardized procedure set in place for this. Similarly, another topic that has not been addressed is the correlation between participation in NRPs and clinical outcomes. Future research initiates need to address this concern and evaluate if participation in NRPs influences patients' quality of care, health status, and recovery, in addition to its impact on the occurrence of adverse events, such as pressure ulcers, infections, or falls (Letourneau & Fater, 2015; Wolford et al., 2019).

One thing that could have been done differently for this project was changing our target audience. Instead of presenting to a class of senior nursing students, it might have been more beneficial to present to a junior class of nursing students. The education session was presented at the halfway point in the school year, many senior nursing students would have most likely accepted job offers, or completed job interviews, by this time. As a result, this project may not have had any effect towards influencing students' willingness to apply to a job with an NRP. Therefore, presenting to a group of juniors, who have not yet started their job search, would likely have been more beneficial.

In conclusion, NRPs present many benefits to newly graduated nursing students. NRPs allow a newly graduated nurse to develop confidence in the skill set for their new role on a new unit. This confidence goes hand in hand with greater job satisfaction and increasing retention rates for the hospital. Better retention rates also influence the turnover cost when hiring new grads. Our evidence, in showing the benefits of NRPs, also correlates with our effectiveness in educating senior nursing students of the various aspects of NRPs, based on the results from the Kahoot survey. While more research needs to be completed regarding the effectiveness of NRPs,

it is clear that within our project we were able to show the benefits of building confidence and skill set, increasing retention rates, and decreasing turnover costs. These benefits are all due to the effectiveness of NRPs in transitioning new graduate nurses to independent practice.

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Appendix A

Mason's personal statement:

Being involved in a project such as this Capstone project, it is very obvious to me that it is about so much more than just the project itself. When we gathered information about this topic we not only learned about the topic itself but also how to find the information. That is a skill that many people fail to have because of the availability of quick knowledge today. Due to things like google and our smartphones, people tend to read things they see first, and take it as facts. This can cause issues (and it does) in a society where social media and the connectedness of people allows for the rapid spread of information. Using only what we see quickly or first can cause a chain reaction of bad information. So with this project we really learned to sort through some of that bad information to find sources that we deemed to be competent. Things that went into our decisions include things like the level of the article in terms of its design, whether that be quasi-experimental, or a simple interview. We learned to also keep the data relevantly new as we live in a very rapidly changing world and profession. Through this Capstone project, I was able to better hone these skills and hopefully can use them to increase my abilities as a practicing RN.

Rachel's personal statement:

Before this project I was not very familiar with nurse residency programs. This project has allowed me to explore what a nurse residency program is and how it benefits a new nurse who may still be hesitant when it comes to performing skills and having the inherent confidence most nurses most possessed to be the advocate for their patients. I have been able to reflect on my own nursing skills and feelings toward graduation, going out and joining the workforce and I feel more prepared and more confident in asking for help which most new nurses are still afraid to do. Being in a residency program or not, nursing is a collaborative workforce, and all strive toward the same goal which is patient care and safety.

Ryan's personal statement:

Through my experience the use of nursing residency programs has become more acclimated into standard practice. Many programs are implementing them with their own specific styles to formulate them to fit the units they are designed for. This project has progressed my knowledge in the individualistic nature each has and what to look for in each. They also provide a higher retention rate when utilizing residency programs. The factors that they provide to new nurses is exponentially beneficial. There are many residency programs with different styles which are shown to be developing more and more since they are a new idea being implemented around. Didactic, simulation, and preceptorship are mixed together in residency programs to provide the best preparation and being the foundations of many programs. This project has propelled me to understand what I need to know to make sure I am the most prepared I can be to take my nursing skills into the clinical setting. The skills provided by this project allows me to view different hospitals residency programs and seeing the utilization of evidence-based practice at each institution to see if it would be a good fit for me.

Allyson's personal statement:

Being involved in this capstone project has allowed me to gain a better insight on how fast the medical world has evolved and will continue to evolve in the years to come. Based on our project's theme, I have learned that nurse residency programs have only been around for a few years and they are therefore a relatively new advancement to the nursing community. Many healthcare organizations hadn't even considered establishing them until the IOM called for their implementation in 2010. Yet, even though there are many NRPs established in today's society, they are not all effective in transitioning students to practice because there is no standardized procedure set in place for these programs. For reasons such as this, I realize how important it is

to stay informed on the latest news and research in the healthcare field so that we can continue to adopt new processes, procedures, and techniques to improve the efficiency of our healthcare system, including the NRPs that are present, and to help care for the patients we serve.

Appendix B

PowerPoint: <https://docs.google.com/presentation/d/1kWWRhECmLjW3rdPxAUTUSywD-ltrEIqfhKuoZUEJmg/edit?usp=sharing>

Kahoot: <https://play.kahoot.it/v2/lobby?quizId=4ba83aed-2bca-4773-bddb-1f6ee7d4082f>

Table 1. Kahoot Results			
Question	Answer	Pre-survey Results	Post-survey Results
1. How beneficial do you believe nurse residency programs to be?	Very much	37	51
	Somewhat	19	6
	Not so much	3	4
	Not at all	0	0
2. As a new nurse, I like the idea of a nurse residency program.	True	52	60
	False	7	1
3. Having a nurse residency program would make me more likely to seek employment at that facility.	Fully agree	31	50
	Somewhat agree	19	6
	Somewhat disagree	6	4
	Fully disagree	3	1
4. I understand the set-up of the average nurse residency program.	True	29	58
	False	30	3
Total of Participants:		59	61