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The Helpfulness and Timing of Transition Program Education

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Abstract

The purpose of this study was to examine relationships between transition program education and new graduate nurse transition. Although new graduates preferred hands-on learning, the helpfulness of workshops was associated with better transition. New graduates, many of whom were from the Millennial Generation, liked a variety of educational modalities. Access to support was better for nurse graduates who received education delivered throughout the first year of transition.

The Helpfulness and Timing of Transition Program Education

The learning curve is immense for new graduates assuming the full scope of practice of the professional nurse as they are confronted with new role responsibilities (Boychuk-Duchscher, 2008; McKenna & Green, 2004). Feeling overwhelmed is common to the new graduate's experience and may undermine competence and confidence and impede transition. Sustained difficulties in making the transition to graduate practice influence retention of one of nursing's most valuable resources. Brewer et al. (2012) reported that 26% of newly licensed registered nurses had left their first job within two years of starting it and 43% had left within three years.

In the past decade, new graduate transition program development, designed to facilitate the integration of neophytes into the workplace has escalated. Education that is planned and structured is often a key component of these programs to support new graduates during this time of unprecedented learning. Educational opportunities provided within transition programs have typically been delivered via course work and classroom sessions with basic topics, such as pain management, introduced early in the transition program and more advanced topics, such as conflict management, addressed further into the transition program (Blanzola, Lindeman, & King, 2004; Gavlak, 2007; Keller, Meekins, & Summers, 2006; Schoessler & Waldo, 2006). Other education strategies and learning opportunities have included journal assignments, professional portfolios (Forneris & Peden-McAlpine, 2009; Keller et al., 2006), problem-based learning (Celia & Gordon, 2001), specific skill development (Gavlak, 2007), simulation (Beyea, von Reyn, & Slattery, 2007), and online instruction (Kaddoura, 2010).

Despite the importance of education as a component of new graduate transition

programs, few studies have examined its relationship to the new graduate's transition. Gavlak (2007) demonstrated that providing dedicated time for specific skill practice resulted in higher levels of new graduate nurse comfort. Further, the use of simulation to provide education in a new graduate residency program enhanced confidence and competence in handling emergent situations (Beyea et al., 2007). Kaddoura (2010) demonstrated that an online course, embedded in a six-month orientation program, improved new graduates' critical thinking skills. As part of the Flying Start program in Scotland, Banks et al. (2011) found an increase in newly qualified practitioners' self-reported clinical skills development and confidence following completion of 10 web-based learning units (Lauder, Roxburgh, Atkinson, Banks, & Kane, 2011).

There is little empirical evidence regarding the optimal timing of educational delivery during the transition period. Education delivered to new graduates during their transition program typically occurs during the orientation period (Blanzola et al., 2004; Nugent, 2008). Yet, new graduates' learning needs suggest that it may be more beneficial to integrate education throughout the entire first year of transition. McKenna and Green (2004) found that intensive learning extends over the new graduate's first year in practice, shifting from a focus on learning and performing clinical tasks and skills in the first 4 to 6 months of practice to higher order processes such as critical thinking in the second half of the first year. Kowalski and Cross (2010) observed improvements in clinical competence and critical thinking skills among participants in monthly daylong educational sessions, composed of seminar and scenario content, embedded in a one-year residency program. The value of ongoing education support is consistent with Boychuk-Duchscher's (2008) Transition Stages Model which describes different foci as the new nurse graduate progresses from "doing" in the first 3 months (skills

and interventions), to “being” at 4 to 6 months (reasoning, critical thinking, conscious competency), to “knowing” at 7 to 12 months (career development).

One of the difficulties in assessing the influence of education on new graduate transition is its inclusion in new graduate transition programs in parallel with other supports such as traditional orientation or preceptorship/mentorship. The current study sought to target education as one of multiple components of new graduate transition programs offered by seven health authorities in a western Canadian province. Although each health authority has its own unique new graduate transition to practice strategy, transition program education included topics very similar to those found in the literature and incorporated a range of delivery methods. Timing of education differed across health authorities. Four health authorities provided new graduate specific educational workshops spread throughout the first year of practice while three offered it during the unit orientation period only.

Purpose

The purpose of this study was to examine relationships between specific aspects of transition program education and the transition experience of new graduates who participated in a formal new graduate transition program. The following research questions guided the study:

1. What is the relationship between the helpfulness of different education methods used in new graduate transition programs and new graduate transition?
2. Is there a difference in transition between new graduate nurses who received their new graduate-specific education throughout the first year of transition and those who received it during the orientation period?

3. After taking into account when the new graduate nurses received their new graduate specific education, is there a relationship between new graduates' transition and their ability to access support when needed?

Method

Design

This study was part of a larger mixed methods study designed to provide a comprehensive assessment of new nurse graduate transition program best practices in selected hospitals, across seven health authorities in a western Canadian province, from the perspective of multiple stakeholder groups. The quantitative component of the study included an online survey of new graduates within a year of starting employment.

Sample

Sample recruitment began following approval from the ethics review boards of two universities and seven provincial health authorities. The sample included all new graduates (graduating class of 2010) from health authorities in a western Canadian province who were within one year of employment in an acute care setting. Representatives working in new graduate transition from each health authority identified eligible study participants. Recruitment of the sample for the survey component occurred by e-mail using mechanisms internal to each health authority and included a letter of information, invitation to participate, consent process, and a link to an online survey. The letter of introduction and consent to participate in the survey included information regarding eligibility criteria, risks, benefits, confidentiality, anonymity, consent, and investigator contact information. Participant consent was implied via survey completion.

Data Collection

The quantitative component of the project involved administration of an online survey (by the Canadian-based company, Fluid Surveys), that consisted of five sections: demographics, orientation to the employer/nursing unit, general transition, specific new graduate nurse transition program, and the Casey-Fink Graduate Nurse Experience Survey (Casey, Fink, Krugman, & Propst, 2004). Prior to administration, the survey was pilot tested with nine new graduates for clarity of instructions and items, readability, and time to completion with minor changes based on their feedback. General transition questions asked new graduates when they experienced the greatest need for support, and during their time of greatest need how often they were able to access support. Specific transition program questions asked new graduates about the helpfulness of educational resources (including written materials, classroom/theory, simulation/lab, hands-on/bedside learning, inservice classes/workshops, and website/online materials) that were being used and available to them in their transition programs. The survey, which took approximately 15 minutes to complete, was open for two weeks and extended for an additional week with at least one reminder to all eligible new graduates to complete.

The Casey-Fink survey instrument, originally developed in 1999 and revised in 2002, was used to quantify a new graduate nurse's transition experience (Goode, Lynn, Krsek, & Bednash, 2009). Used extensively for U.S. new graduates working in hospital settings, it is a 24-item, 4-point summative scale, consisting of 5 subscales -- organizing/prioritizing, communication/leadership, support, stress, and professional satisfaction (Casey et al., 2004). The total transition score was derived by summing the scores for all 24 questions of the Casey-Fink survey. The higher this score, the better the overall transition of the new graduate nurse.

In the current study, four of the multi-item transition subscales showed convergent and divergent validity; the single stress item could not be assessed. The subscales demonstrated satisfactory or nearly satisfactory Cronbach's alpha internal consistency reliability: priority setting/organizing subscale (.75), communication/leadership (.70), support subscale (.83), and professional satisfaction subscale (.69), approximating those reported in other studies.

Data Analysis

Data were analyzed using descriptive and inferential statistics. Descriptive statistics were used to summarize data about the sample. A simple linear regression examined relationships between the helpfulness of educational modalities and transition. Analysis of the timing of education occurred through an independent two-sample t-test that compared differences between new graduates who received education during orientation only and new graduates who received education over the entire first year of the new graduate transition program. Multiple linear regression was conducted to determine whether timing of education and access to support predicted transition. All statistical analyses were conducted using the open source statistical software package R. The level of significance for all analyses was set at $p < .05$.

Findings

The sample comprised 144 new graduates who participated in the formal new graduate transition program, giving an overall response rate of 25%. The majority of the new graduate program participants were 35 years or less (84%), female (92.4%), had been employed for just over a year (54.2%), had previous employment as a student or in health care (88.9%), were

employed as either permanent full time (34%) or part time (35.5%), and worked more than 48 hours over two weeks (68.8%).

Question 1: What is the relationship between the helpfulness of different education methods of delivery and transition?

Table 1 presents the nurses' self-reports of the helpfulness of various types of educational opportunities. New graduates reported hands-on/bedside learning (58%) and inservice programs/workshops (30%) as being the most helpful during transition. A simple linear regression demonstrated a significant positive linear relationship between the total transition score and the helpfulness ranking attributed to inservice classes/workshops ($t = 1.978$, $df = 142$; $P\text{-value} = 0.0499$). The more helpful inservice programs/workshops were perceived to be, the higher the new graduates' total transition scores. Also, simple linear regression analyses revealed a significant positive linear relationship between the support sub-scale score and the helpfulness ranking attributed to written materials ($t = 2.412$, $df = 142$; $P\text{-value} = 0.0171$), simulation/lab ($t = 2.070$, $df = 142$; $P\text{-value} = 0.0402$), inservice programs/workshops ($t = 3.524$, $df = 142$; $P\text{-value} = 0.000571$) and website/online ($t = 2.407$, $df = 142$; $P\text{-value} = 0.0174$); the higher the helpfulness ranking score for each educational opportunity the higher their support sub-scale. Lastly, the data provided evidence that the higher the helpfulness ranking nurses attributed to inservice programs/workshops, the higher their professional satisfaction sub-scale score ($t = 2.640$, $df = 142$, $P\text{-value} = 0.00921$).

These analyses were repeated accounting for the potential contrast between new graduates nurses belonging to the Millennial Generation (age 35 or under) and those belonging to Generation X (age 36 or over). New graduate nurses belonging to the Millennial Generation

had consistently higher support scores compared to those belonging to Generation X in the relationship between the support score and the helpfulness ranking attributed to each of the following educational modalities: written materials, simulation/lab, inservice programs/workshops and website/online.

Question 2: Is there a difference in transition between new graduate nurses who received their new graduate specific education throughout the first year of transition and those who received it during the orientation period?

An independent two-sample t-test indicated that there was no significant difference in new graduates' total transition scores whether they had workshop/educational opportunities during the unit orientation period only or received them throughout the first year of transition ($t = -0.1237$, $df = 142$; $P\text{-value} = 0.9017$). Similar testing established that having workshop/educational opportunities during the unit orientation period rather than throughout the first year of transition had no significant affect on the organizing/prioritizing scores ($t = -2.255$, $df = 142$; $P\text{-value} = 0.7993$), communication/leadership scores ($t = -1.233$, $df = 142$; $P\text{-value} = 0.2196$), support scores ($t = 0.336$, $df = 109.667$; $P\text{-value} = 0.7372$), stress scores ($t = 0.513$, $df = 70.398$; $P\text{-value} = 0.6096$) and professional satisfaction scores ($t = 0.507$, $df = 81.725$; $P\text{-value} = 0.6137$).

Question 3: After taking into account when the new graduate nurses received their new graduate specific education, is there a relationship between new graduates' transition and their ability to access support when needed?

Table 2 reports the results of the multiple linear regression analysis in which the interaction term between the ability to access support when needed and new graduate specific

education was found to be statistically significant (P -value = 0.0496). For nurses who received the new graduate-specific education during the first year of transition, there was a significant positive linear relationship between total transition score and their ability to access support when most needed. Specifically, each 1-unit increase in the value of the predictor ability to access support when needed was found to be associated with an increase of 6.14 points in the mean value of the total transition score (95% CI: 3.93 to 8.35) (see Figure 1). There was no significant relationship for new nurse graduates who received their new graduate specific-education during their orientation.

Discussion

This is one of the first studies to examine the relationship between the educational component of new transition programs and new graduates' transition experiences. Findings showed that the helpfulness of educational opportunities enhanced transition. Even though the workshops/in-service programs were ranked second to hands-on education as the most helpful educational approach, the more helpful they were, the more they enhanced transition. The positive association with professional satisfaction suggests that the workshops countered the vacillating satisfaction that new graduates typically experience during the transition year perhaps by reinforcing the excitement and challenge of their nursing specialty or by affording peer interaction.

The findings suggest that education is viewed as a form of support within the context of new graduate transition programs, and new nurses like a range of opportunities. The more helpful new graduates found written materials, simulation/lab, in-service programs/workshops and website/online, the more they felt supported. This applied to both Millennial and

Generation X new graduates, but Millennials consistently had higher support scores associated with the helpfulness rankings. This reflects that Millennial new graduates benefit more than Generation X new graduates from a broad scope of educational support that can occur either with or without people. Consistent with Millennial learners, written materials and website/online education supported their valuing of personalized learning, their technological savvy, and their desire for control (Broom, 2010), while simulation/lab, inservice programs/workshops met their desire for participation in communities of learning.

Hands-on practice was the most helpful of all educational modalities but did not significantly affect overall transition or its subscale scores. This may reflect the emerging nature of transition as highlighted in Boychuk-Duchscher's (2008) Transition Stages Model for new nurse graduates. Hands-on doing may represent only a small part of the new graduate's transition with being and knowing making more significant contributions that are better supported by other educational approaches. Reinforcing the importance of support in education, Clark and Springer (2011) found in a qualitative descriptive study that new graduates in an acute care residency program desired education in areas unrelated to hands-on care such as dealing with incivility and bullying, communication, and teamwork.

Although the timing of the education was not significantly related to transition it was found to be important in terms of access to support. New graduates in formal transition programs with workshop/education opportunities beyond the typical orientation period were more readily able to access support when needed. This may be related to ongoing contact with a clinical educator, peer, or new graduate coordinator and echoes findings by Olson (2009) who

suggested that Millennials place a greater importance on relationships within transition programs than on the length or the content of the curriculum.

A limitation of this study is the lack of a comparison group making it difficult to conclude the true effect of the educational components on transition. Only new graduates who participated in a transition program were able to respond to questions related to the educational components. The low response rate of new graduate nurses completing the online survey may have influenced representativeness of the targeted population and generalizability of the findings as well as have reduced the statistical power to detect differences in timing of educational opportunities. Survey administration in the summer months, institutional restrictions on e-mail reminders, and no built in incentives were other limitations that might have affected response rates.

Conclusions and Implications

Helpful workshops were associated with new graduate transition. Their relationship to support and professional satisfaction suggests that helpfulness went beyond content alone. Education that is helpful begins to shape new graduates' positive feelings about their profession that can have long-term consequences for retention. Organizations should rigorously evaluate the helpfulness of new graduate education opportunities. For example, both Millennial and Generation X new graduates found a range of educational approaches helpful but what made specific modalities helpful bears further study. Nurse managers can support new graduates by giving priority to their participation in educational sessions and not allowing situational variables on the unit to compromise attendance. Education delivery during the first year of new graduate transition provides support that may mean short-term costs to

the institution but must be weighed against long- term gains. Boychuk-Duchscher's (2008)

Transition Stages Model could be used to study changing educational support needs of the new graduate during the transition year. Much time goes into the development of the educational offerings but the quality can have considerable influence on returns on investment. Enhancing the quality of these types of educational offerings benefits new graduate transition and, ultimately, new graduate retention.

References

- Banks, P., Roxburgh, M., Kane, H., Lauder, W., Jones, M., Kydd, A., & Atkinson, J. (2011). Flying start NHS: Easing the transition from student to registered health professional. *Journal of Clinical Nursing, 20*, 3567-3576.
- Beyea, S. C., von Reyn, L. K., & Slattery, M. J. (2007). A nurse residency program for competency development using human patient simulation. *Journal for Nurses in Staff Development, 23*(2), 77-82.
- Blanzola, C., Lindeman, R., & King, M. L. (2004). Nurse internship pathway to clinical comfort, confidence, and competency. *Journal for Nurses in Staff Development, 20*(1), 27-37.
- Boychuk-Duchscher, J. B. (2008). A process of becoming: The stages of new nursing graduate professional role transition. *The Journal of Continuing Education in Nursing, 39*(10), 441-452.
- Brewer, C. S., Kovner, C. T., Greene, W., Tukov-Shuser, M., & Djukic, M. (2012). Predictors of actual turnover in a national sample of newly licensed registered nurses employed in hospitals. *Journal of Advanced Nursing, 68*(3), 521-538.
- Broom, C. (2010). Entice, engage, endure: Adapting evidence-based retention strategies to a new generation of nurses. *Journal of Healthcare Leadership, 2*, 49-60.
- Casey, K., Fink, R., Krugman, M., & Propst, J. (2004). The graduate nurse experience. *The Journal of Nursing Administration, 34*(6), 303-311.
- Celia, L. M., & Gordon, P. R. (2001). Using problem-based learning to promote critical thinking in an orientation program for novice nurses. *Journal for Nurses in Staff Development, 17*(1), 12-19.

- Clark, C. M., & Springer, P. J. (2011). Nurse residents' first-hand accounts on transition to practice. *Nursing Outlook*. Advance online publication.
- Gavlak, S. (2007). Centralized orientation: Retaining graduate nurses. *Journal for Nurses in Staff Development*, 23(1), 26-30.
- Goode, C. J., Lynn, M. R., Krsek, C., & Bednash, G. D. (2009). Nurse residency programs: An essential requirement for nursing. *Nursing Economic\$, 27(3)*, 142-159.
- Kaddoura, M. A. (2010). Effect of the essentials of critical care orientation (ECCO) program on the development of nurses' critical thinking skills. *The Journal of Continuing Education in Nursing*, 41(9), 424-432.
- Keller, J. L., Meekins, K., & Summers, B. L. (2006). Pearls and pitfalls of a new graduate academic residency program. *Journal of Nursing Administration*, 36(12), 589-598.
- Kowalski, S., & Cross, C. L. (2010). Preliminary outcomes of a local residency programme for new graduate registered nurses. *Journal of Nursing Management*, 18(1), 96-104.
- Lauder, W., Roxburgh, M., Atkinson, J., Banks, P., & Kane, H. (2011). The quality of on-line communication in a national learning programme for newly qualified nurses, midwives and allied health professionals. *Nurse Education in Practice*, 11(3), 206-210.
- McKenna, L. G., & Green, C. (2004). Experiences and learning during a graduate nurse program: An examination using a focus group approach. *Nurse Education in Practice*, 4(4), 258-263.
- Nugent, E. (2008). Implementing changes in educational strategies based on orientation experiences of the new graduate. *Journal for Nurses in Staff Development*, 24(5), 13-18.
- Olson, M. E. (2009). The "Millennials": First year in practice. *Nursing Outlook*, 57(1), 10-17.

Schoessler, M., & Waldo, M. (2006). The first 18 months in practice: A developmental transition model for the newly graduated nurse. *Journal for Nurses in Staff Development*, 22(2), 47-54.

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Figure 1.

Relationship between the new graduate nurses' total transition score and their ability to access support when needed, conditional on when the nurses received their NG specific education – during the orientation period or during the first year of transition.

Table 1.

New Graduates' Self-Report of Helpfulness of Educational Opportunities

Type of Educational Opportunities	Very Helpful	Helpful/ Moderately Helpful	Not Very Helpful	N/A
Written Materials	18.8	62.5	11.8	6.9
Classroom/Theory	13.9	63.2	6.2	16.7
Simulation/Lab	13.2	34.0	2.8	50.0
Hands-on/Bedside Learning	57.6	23.6	1.4	17.4
Inservice Programs/Workshops	29.9	59.0	0.7	10.4
Website/Online Materials	13.2	54.9	9.0	22.9

Table 2.

Multiple Linear Regression Model Relating the Total Transition Score to the Predictors “Ability to Access Support When Needed” and “New Graduate Specific Education”.

Term	Coefficient	Standard Error	T Value	P-Value	95% CI
<i>Ability to Access Support When Needed</i>	2.225	1.633	1.362	0.1753	(-1.004, 5.453)
<i>Dummy Variable for NG-Specific Education During Orientation Period</i>	-8.902	4.310	-2.066	0.0407	(-17.423, -0.381)
<i>Interaction between Ability to Access Support when Needed and NG Specific Education</i>	3.919	1.979	1.980	0.0496	(0.006, 7.832)
<i>(Constant)</i>	69.831	3.501	19.949	<2e-16	(62.910, 76.752)
= 17.00%					
Residual standard error: 7.479 on 139 degrees of freedom					
F-statistic: 10.7 on 3 and 139 DF, p-value: = 2.266e-06					