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Abstract

This Masters Project surveyed nursing clinical students at a University School of Nursing in the Pacific Northwest using a recently developed tool, the Student Evaluation of Clinical Education Environment (SECEE, version 3). Use of the SECEE (version 3) helped identify differences in student perceptions of various clinical learning environments. Results of non-parametric statistics were non-significant due to the small sample size; however there appeared to be consistent preference by students for clinicals at Magnet designated facilities. Additionally, higher instructor facilitation scores were also noted among students assigned to the university main campus (n = 31, M = 45.19, SD = 9.39) compared to students assigned to the distance campus (n = 9, M = 36.89, SD = 20.63). The findings have implications for nursing education, specifically the potential benefit of student learning at Magnet designated facilities and the importance of adequate support and engagement between university faculty and students in distance learning environments.

Introduction

The complexity of the healthcare environment makes the clinical educational environment (CEE) a critical component of nursing education, where synthesis of knowledge and skills occurs. Students expect a positive CEE to include application of knowledge and skills, identification of relationships between classroom concepts and assumption of increasing responsibility for patient care planning and outcomes (McClure & Black, 2009; Polifroni, Packard, Shah & MacAvow, 1995). The optimal CEE provides a consistent, safe and welcoming working environment that permits student access to either the faculty instructor or preceptor, who helps provide support and guidance to students during their transitional experience to independent licensed nursing practice and the appropriate learning opportunities to reinforce didactic learning (Courtney-Pratt, Fitzgerald, Ford, Marsden & Marlow, 2011; Franklin, 2013; Loyce-Luhanga, Billay, Grundy, Myrick & Yonge, 2010; Smedley & Morey, 2009).

Identifying factors that affect the quality of clinical placement from the perspective of undergraduate students is lacking (Courtney-Pratt et al., 2011). Student learning in the CEE becomes ambiguous and confusing because of the various models of clinical supervision used, often interchangeably (preceptor, facilitator and the dedicated education unit) due to a lack of evaluation of the effectiveness and quality of CEE (Franklin, 2013).

Purpose

This article compares a relatively new student clinical evaluation tool, the Student Evaluation of Clinical Education Environment (SECEE), to other commonly used tools, and describes its use in program evaluation of a clinical education program of a School of Nursing (SON) in the Pacific Northwest (PNW) (Sand- Jecklin, 2009).

Clinical Education Environment

High quality CEE is critical to the development of clinical competence among student nurses (Courtney-Pratt et al., 2011; Franklin, 2013). Staff shortages may negatively impact the CEE for students. Courtney-Pratt and colleagues found that students may perceive that they are in some way a burden to staff nurses in the hospital. Students' CEE can be perceived as fractured if preceptors change frequently, leaving students feeling as though their learning experience lacks continuity and direction (Courtney-Pratt et al., 2011). The challenge for nurse educators is to identify CEE experiences that facilitate student learning and improve the transition period from student nurse to novice (licensed) nurse (McClure & Black, 2013; Newton, Billett, Jolly & Ockerby, 2009).

Stayt and Merriman (2013) described experiences in the CEE that provided student learning opportunities to practice core clinical skills in an actual patient care setting that help improve hands-on clinical skills and student confidence. Byrd, Hood and Youtsey (1997) also described opportunities for students to apply theoretical knowledge to the clinical setting while working with experienced preceptors in the CEE.

Nurse educators must seek out alternative clinical experiences for students in a variety of settings while still meeting the needs of the adult learner (Leinster, 2009). Though the diversity of CEE provides unique learning experiences for students, not all CEEs offer the same level or quality. Students' perceptions of the CEE influence their approaches to learning activities (Chan, 2002a). Nursing programs, faculty and nurse educators must then become more discriminant in their choices of CEEs in order to provide students a quality CEE experience while meeting the varied criteria imposed by licensing and credentialing agencies and health care employers (Sand-

Jecklin, 2009). Assessing student perceptions of factors that either help or hinder learning is necessary to identify and create appropriate CEEs.

Review of Evaluation Tools

The CEE evaluation tool used for this project was the Student Evaluation of Clinical Education Environment (SECEE). The tool was selected because it was tailored and tested in U.S. schools of nursing and focuses specifically on the effects of faculty, preceptor and learning opportunities on student learning outcomes. Three other CEE evaluation tools were considered for the project; however they did not evaluate student perceptions of their experiences and were therefore not used. The Clinical Learning Environment (CLE) scale's focus is on the work setting and the roles of staff and nurse managers, which does not address student perceptions of their CEE experiences (Dunn & Burnett, 1995; Sand-Jecklin, 2009). The Clinical Learning Environment and Supervision (CLES) scale focuses on the nurse manager's influence on the clinical work environment in British hospitals and its relationship to students' clinical experiences (Sand-Jecklin, 2009; Saarikoski & Leino-Kilpi, 2002). The Clinical Learning Environment Inventory (CLEI) scale measures student nurses' perceptions of the psychosocial characteristics of the CEE during their clinical placement but does not measure the influence of the nursing faculty, nurse preceptors or resource nurses in the context of the clinical setting (Chan, 2001; Sand-Jecklin, 2009).

The SECEE tool was revised to reflect the students' perceptions of the interaction with faculty, agency staff and patients, and students' perceptions of support in application of newly mastered skills (Sand-Jecklin, 2009). The SECEE, used twice, was administered at the end of clinical rotations among students at a large mid-Atlantic university from January 2001 to May 2005 by its original author and later used at a single public university school of nursing in the

Midwestern United States (Sand-Jecklin, 2009; Hendricks, Wallace, Narwold, Guy & Wallace, 2013).

The SON whose clinical sites were evaluated in this project uses both a Faculty and Student Clinical Site Evaluation Inventory (CSEI) and an online student survey to evaluate CEE experiences. The CSEI captures the support of learning, effective communication, student safety, learning resources and environmental factors that affect student learning. Specific questions that measure the impact of the faculty and preceptor on the CEE environment were not assessed by the CSEI. The SECEE tool was used for this project to evaluate student perceptions of the effect of faculty, preceptors and learning opportunities relevant to their CEE experiences.

Method

The SECEE tool was used to evaluate student nurse perceptions of their CEE at a university that includes an Associate of Applied Science (AAS) and a Bachelor of Science (BS) degree program. Approximately 200 students were enrolled in the BS program, 48-64 students in the AAS program and an additional 100 students in the outreach programs.

Prior to beginning the project, the director of the SON and the university institutional review board (IRB) granted approval. All students of the AAS and BS nursing programs were invited to participate in the project mid semester through a recruitment announcement that was posted to the university Blackboard Learning Management System (LMS). Participants' rights were explained prior to accessing the online survey. Completed online survey results were submitted electronically using Survey Monkey, each survey was assigned a numerical identifier for the purpose of data entry. Receipt of completed surveys implied individual consent to participate in the project.

Demographic questions were added to assess campus (main versus distance), type of program (AAS versus BS), name and number of course, type of facility and specialty of clinical environment, type of clinical experience (traditional defined as a group of student nurses assigned to work with one clinical instructor versus the preceptor defined as one student assigned one primary clinical resource), whether the students were RN to BS students and two open ended questions to the end of the survey ("What aspects of this clinical setting helped/ promoted your learning" and "What aspects of this clinical setting hindered/ impeded your learning"). No other personal identifying information was collected.

Results

Approximately 320 students were eligible to participate in the project, of those eligible, approximately 45 (14%) students returned completed online surveys. Thirty one (68.9%) of the respondents attended the university main campus located in an urban setting in the PNW, nine (20%) were identified as distance campus (campuses outside the urban area) students and five (11.1%) did not respond to the question. Twenty-nine (64.4%) were AAS students, 16 (35.6%) were BS students, 35 (77.8%) identified their CEE as the traditional clinical experience (a group of students assigned to work with one clinical instructor), 10 (22.2%) identified their CEE as the preceptor experience (one student assigned to one primary clinical resource RN), while only two (4.4%) reported themselves as RN to BS students.

Assumptions were not met for parametric statistics, non-parametric statistics were conducted to evaluate differences in the summative subscale scores for instructor facilitated learning (IFL), preceptor facilitated learning (PFL) and learning opportunities (LOs) by clinical

site, clinical teaching method (traditional versus preceptored clinical type) and the type of degree (AAS versus BS degrees). Statistical differences were found to be non-significant.

There appeared to be a consistent preference by students for clinicals at a Magnet facility, with mean Magnet scores consistently higher (n = 8, M = 50.13, SD = 5.36) than the mean scores of the non-Magnet designated clinical sites (n = 36, M = 42.5, SD = 13.28). A Mann-Whitney U Test was conducted to compare the three SECEE subscale scores for a Magnet designated facility versus non-Magnet facility student experiences. There were no significant differences found. The magnitude of the difference in the means (IFL mean difference = 7.63, PFL mean difference = 3.88, LO mean difference = 4.47, 95% CI: -2.09 to 17.34, -3.19 to 10.94 and -0.19 to 9.13 respectively) was moderate (eta squared = 0.06). Even though non-significant, the student preference for a Magnet designated facility in the survey was consistent and will be examined in the discussion.

Higher IFL scores were also noted among students assigned to the university main campus (n = 31, M = 45.19, SD = 9.39) compared to students assigned to the distance campus (n = 9, M = 36.89, SD = 20.63). Though non-significant, this finding will also be discussed further in the discussion.

The two qualitative questions included "What aspects of this clinical setting helped/promoted your learning?" and "What aspects of this clinical setting hindered/impeded your learning?" Helpful aspects were clustered into the following themes: faculty and staff availability; helpfulness; willingness to help; encouragement and support; welcoming atmosphere; positive attitude; staff and faculty competence and confidence; positive role modeling; "hands-on" experience; diversity of patients, positive team dynamics and

collaboration; manageable workload; "real" (relevant) examples that link theory to practice. Hindrances to student learning were clustered into the following themes: excessive workload; low census; "not a lot of hands-on"; incivility; negative attitude; lack of engagement; delayed, or vague feedback; overcrowding in CEE; unanticipated policy changes interfering with skills practice; lack of confidence and trust; lack of resources (no computer or supply access codes).

Discussion

Clinical students in this survey gave the Instructor Facilitated Learning (IFL) subscale scores for university faculty consistently higher but non-significant ratings at Magnet facilities than at non-Magnet facilities. Although there is a paucity of literature about student CEE experiences in Magnet facilities, it is possible that environmental factors may be present in Magnet designated facilities result in increased student satisfaction. The environment in Magnet designated facilities promotes professional relationships which could result in improved collaboration between agency staff RNs and university faculty, Hess, DesRoches, Donelan, Norman and Buerhaus (2011) compared staff registered nurse (RN) perceptions of their profession, workplace environment, and professional relationships within the framework of those working in Magnet, in-process and non-Magnet facilities. RNs working in Magnet designated facilities rated their opportunities for influencing workplace organizations including patient care and the opportunities for participating in shared governance higher than those in non-Magnet facilities (Hess et al., 2011). Professional relationships were also evaluated within the context of Magnet designation; nurses working in Magnet facilities rated their relationships with new RNs higher than those working in non-Magnet facilities (Hess et al., 2011). One might conclude that nurses working at Magnet designated facilities use their sense of autonomy and influence on the

workplace, and their professional relationships to positively influence student learning opportuities.

Higher IFL scores among students assigned to the university main campus in contrast to students assigned to the distance campuses, although non-significant, suggest higher satisfaction for students of instructors who are face-to-face with students on the main campus. The higher IFL scores could be related to the possibility that students are face to face with instructors teaching the theory portion of instruction or that theory-clinical course activities could be aligned better at the main campus. Yonge, Ferguson and Myrick (2006) described the perception among students and preceptors in the rural setting that engagement and connectivity were available more frequently to students and preceptors in the urban setting, including more contact with clinical faculty and increased frequency of clinical site visits. Both students and preceptors in the rural setting expressed interest in and the need for more frequent contact with faculty which was believed to improve preceptors' role as teachers and improved academic support to students (Yonge et al., 2006).

Implications

Implications for schools of nursing include ensuring student nurses are provided the opportunity to rotate through both Magnet and non-Magnet designated clinical facilities to experience the diversity of learning experiences unique to each practice setting. The finding of the consistently lower IFL scores for distance students, although non-significant, suggests possibly less (outreach) faculty engagement in distance learning experiences in a rural health CEE. It may be related to a reduced number and variety of clinical experiences with which to engage. Higher mean subscale scores among students at the main campus suggest that perhaps

improving connection and support by (main campus) instructors may aid student learning experiences in the rural setting. This finding deserves further research.

Recommendations

Based on findings, this SON may want to consider refining the CSEI tool to include the addition of the faculty influence on student learning outcomes. Undergraduate student nurses could be provided the opportunity to experience the CEE at both Magnet and non-Magnet designated facilities. Additionally, connection and support for preceptors and students assigned to rural clinical sites could be expanded.

Future Research could include use of the SECEE tool with a larger sample of undergraduate students, including graduate students. Clinical student perceptions of the Magnet experience are a research gap that could be explored further. Student learning experiences in the rural (distance) setting could also be compared between the PNW and similar rural sites across North America.

Conclusions

Identifying helpful nursing program clinical evaluation tools helps assess students' perceptions of the interaction with faculty, agency staff and patients and students' perceptions of support in application of newly mastered skills. Program evaluation can reveal factors such as Magnet designated hospitals and instructor facilitation in distance programs that could have an impact on student learning.

Limitations

Limitations were based on the convenience sample of student nurses that had access to the university Blackboard learning management system and their willingness to participate in the

study. Despite the use of online recruitment of undergraduate students, a small sample size of only 45 (14%) students returned completed online surveys. The small sample size limits the ability to adequately evaluate and apply the results of this project to the target SON Clinical Program.

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