Facilitating Interdisciplinary Competence: Collaboration Between Undergraduate Baccalaureate Nursing Students and Graduate Students Specializing in Communication Disorders

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The fast-paced nature of the healthcare setting, coupled with the number of allied professionals involved, demands accurate and concise written communication. It is imperative that written communication between nursing and allied professionals be clear to ensure that the highest quality of care is provided and that patient safety is maintained. The authors feel the considerations documented by nursing students after reading an interdisciplinary evaluation report have the potential to improve the level of care provided to a patient and the patient's experience of the care, as well as the student's knowledge regarding allied healthcare. Students noted that reading the report had the potential to adjust their expectations of the patient's communication abilities, cognition, or behavior and increase their awareness of the need to modify their own communication skills. If a nursing student understands the possibility of challenges in communicating with patients with communication disorders, this may carryover to future interactions, resulting in better patient care. Understanding patient concerns is critical for nurses, and this data indicates that reading a speech evaluation report provides the nurse with pertinent information.

In most healthcare settings, there are a myriad of professionals who work together to provide patient care. The fast-paced nature of the medical setting, coupled with the number of allied professionals involved, demands accurate and concise written communication. Therefore, it is imperative that written communication between allied professionals be clear to ensure that the highest quality of care is provided and that patient safety is maintained. Concern regarding a lack of education in professional training programs addressing interdisciplinary professional terminology and technical writing was the impetus for this research. Practitioners in both speech language pathology and nursing use jargon and professional terminology in written documentation, but professional training programs provide little to no education regarding language used by other healthcare professionals. Would reading a patient's evaluation report written by a Speech-Language Pathologist help a nurse communicate more effectively with or aid in the overall treatment of the patient? The investigators were interested in determining the efficacy of using interdisciplinary peer review as a means of enhancing knowledge of allied health professions. In addition, this project was designed to determine if peer review of a clinical report serves to enhance learning across disciplines serving mutual patients.

Literature Review

A framework established by the World Health Organization (WHO) defines inter-professional education (IPE) as education which "occurs when two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes" (WHO Study Group on Inter-professional Education and Collaborative Practice, 2010, 13). The Institute of Medicine (Greiner & Knebel, 2003), the American Association of Colleges of Nursing (AACN, 2008), and the American Speech-Language-Hearing Association (ASHA, n.d.) joined WHO in recommending IPE in order to improve practice collaboration, communication, and ultimately patient care. Studies have examined the utilization of inter-professional education within clinical placements (Jacobsen, Fink, Marcussen, Larsen, & Hansen, 2009; Opina-Tan, 2013; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013) and service learning experiences (Kolomer, Quinn, & Steele, 2010). Other studies involve IPE used with standardized patients (MacDonnell, Rege, Misto, Dollase, & George, 2012; Wagner, Liston, & Miller, 2011; Westberg, Adams, Thiede, Stratton, & Bumgardner, 2006), simulations (Benavides-Vaello, Stevens, & Vines, 2014), interactive workshops (Whelan et al., 2005), and case-based video tutorials (Mitchell, Groves, Mitchell, & Batkin, 2010).

In several studies, students reported that an IPE experience was beneficial (Wagner et al., 2011; Whelan et al., 2005) and that it provided valuable understanding of the logistics of inter-professional collaboration (Baxter, Med & Sheffield, 2004; Opina-Tan, 2013). Researchers have concluded that inter-professional education helped students to develop a better understanding of the roles of other healthcare professionals (Baxter et al., 2004; MacDonnell et al., 2012; Opina-Tan, 2013; Wagner et al., 2011; Whelan et al., 2005), as well as providing a better understanding of a students' own profession (Jacobsen et al., 2009). Additionally, studies show that IPE helped to improve

communication skills (MacDonnell et al., 2012; Mitchell et al., 2010), and lessened students' use of profession specific terminology (Suleman, McFarlane, Pollock, Schneider, & Leroy, 2013).

Probably because they are the most closely aligned, many studies include both medical and nursing students (Mitchell et al., 2010; Wagner et al., 2011), either just the two groups or in combination with other allied health professionals including pharmacy students (MacDonnell et al., 2012; Westberg et al., 2006), dieticians (Whelan et al., 2005), and occupational and physical therapy students (Jacobsen et al., 2009; Reeves, 2008). There are also studies which include just nursing and social work students (Kolomer et al., 2010), as well as studies of just speech language pathology students (SLPs) with student teachers (Suleman et al., 2013) or SLPs with occupational and physical therapy students (Page & Morris, 2013). However, there are only a few studies which include both nursing and speech language pathology students within a larger group of professional types (Baxter et al., 2004; Benavides-Vaello et al., 2014). This case study focuses on an IPE experience involving nursing undergraduate and graduate speech-language pathology students.

Methods

Diagnostic Reports Assessment

First semester nursing students in a BSN program were asked to rate diagnostic reports written by speech-language pathology graduate students in terms of content, professionalism, and usefulness in treatment. The aim of the assignment was to allow students to experience collaboration within an inter-professional framework; it included students in their second semester of graduate training in speech-language pathology and undergraduate nursing students in the class Nursing 3110, *Theoretical Concepts of Professional Nursing Practice*. NURS 3110 was chosen because of the congruence of concepts between the nursing and speech-language disciplines, such as communication with health care professionals, health promotion, communication with patients and families (oral and written), and critical thinking. First semester students were chosen with consideration of a potentially significant difference in the knowledge base of a first semester nursing student and one that is further along in the program. Faculty felt that an important skill for beginning students was exposure to advanced reporting, as congruent with what is encountered in clinical practice. The choice to allow this potential dissonance was to stimulate students' critical thinking ability to increase understanding of complex concepts. Faculty from both departments met to discuss diagnosis types

that students from both groups would typically treat in a real-world setting. The five diagnosis categories were as follows: (a) autism, (b) developmental delay, (c) aphasia, (d) traumatic brain injury, and (e) cognitive communication deficit.

Nursing students were randomly assigned a diagnosis type and asked to write a 10-page research paper (title page, abstract, five pages of content, and peer-reviewed journal references). Additionally, students were provided a sample speech-language diagnostic report (average length of five pages) that matched their assigned disorder. The purpose of the paper and diagnostic report was to help students understand the importance of conducting a systematic review of professional literature, synthesize theory and clinical practice concepts, and organize these concepts to create a relevant professional paper on a health promotion topic. The professional paper was also designed to develop professional writing skills utilizing feedback from faculty and the peer review process. The professional paper classroom instruction was presented incrementally, beginning with information on conducting the literature review, paraphrasing of relevant resources, adherence to APA format, and assimilation of the components into a professional paper.

Clinical faculty members in speech-language pathology were invited to introduce the activity during a weekly meeting of Nursing 3110. At that time, the de-identified evaluation reports were randomly disseminated to each student, along with a copy of a rubric (see Figure 1) to guide their review. Since there were 70 students and five different report types, there were approximately 12 students assigned to each type of report. The sample diagnostic reports were written by graduate students and clinical faculty, and they covered the above-mentioned diagnoses across the lifespan. Nursing students were asked to read the provided report and complete the rubric, anonymously rating the report for its professionalism, content, clarity, and usefulness in treating a common patient. The reports and rubrics were returned two weeks later to the NURS 3110 course instructor.

Rubric

The rubric used by nursing students to evaluate the diagnostic reports was composed of seven questions, some multiple choice and others open-ended. Questions were designed to elicit impressions of nursing students as to the usefulness and comprehension of speech pathology reports. A total of 70 students completed the rubric and returned it to the course instructor. Percentages were calculated by dividing the number of respondents who selected that particular item by the total number of respondents (n= 70). All respondents

Figure 1
Rubric for Evaluation of CMDS Diagnostic Reports

1. As a nurse, to what degree would this report help you in the treatment of this patient?

Not helpful   Somewhat helpful   Very helpful

2. If you answered "Not helpful" in question number 1, please explain why:

_____Unfamiliarity with professional terminology
_____Inadequate case history
_____Inability to interpret summary/description of test results
_____Other_____

3. Based on information in the report, what could you now take into consideration when communication with this patient?   _____
   _____

4. What questions do you have for the person who wrote the diagnostic report?
   _____

   _____

5. How helpful was this report in understanding the disorder you researched?

Not helpful   Somewhat helpful   Very helpful

6. If you were reading this report about your child or spouse (no medical background), how helpful do you think it would be in understanding their communication abilities?

Not helpful   Somewhat helpful   Very helpful

7. How would you rate this report on professional tone and content?

Not professional   Somewhat professional   Very professional

answered all questions. The same rubric was used for all diagnosis- type reports; no between-group comparisons of the report diagnosis topic areas were conducted.

Results

1. As a nurse, to what degree would this report help you in the treatment of this patient? *Not Helpful (3%), Somewhat Helpful (24%), Very Helpful (73%)*

2. If you answered "not helpful" in question number 1, please explain why: *3% of respondents answered "Not Helpful." The reasons stated are as follows: unfamiliarity with professional terminology (n = 7), inadequate case history (n=0), inability to interpret summary/description of test results (n = 5), other (too wordy, unfamiliar with testing protocols) (n = 2).*

3. Based on information in the report, what could you now take into consideration when

communicating with this patient? *Trends in responses were categorized as (a) the need to modify their communication with the patient, i.e. provide repetition of information, use gestures; (b) the need to adjust their expectations of the patient's communication, cognition or behavior; and (c) the need to be more patient with patients with communication deficits.*

4. What questions do you have for the person that wrote the diagnostic report? *Trends in responses included (a) what kind of treatment will be prescribed for this patient and did it work? (b) information was difficult to understand/more clarification needed; (c) what caused the problem?*

5. How helpful was this report in understanding the disorder you researched? *Not Helpful (17%), Somewhat Helpful (54%), Very Helpful = 30%*

6. If you were reading this report about your child or spouse (no medical background), how helpful do you think it would be in understanding their communication abilities? *Not Helpful (8%), Somewhat Helpful (47%), Very Helpful (41%)*

7. How would you rate this report on professional tone and content? *Not professional (0%), somewhat professional (10%), very professional= 90%*

Discussion

Careful analysis of the data revealed several trends. Overall, the majority of the nursing students indicated that reading a diagnostic report written by the SLP would be "very helpful" (73%) or "somewhat helpful" (24%) in the treatment of a common patient. The small percentage of students (3%) who responded reading the SLP report was "not helpful" cited unfamiliarity with terminology/testing procedures or the inability to interpret the summary description of test results. All respondents stated changes they would consider making when communicating with their patient after reading the report. The authors feel the considerations documented by the students have the potential to significantly improve the level of care provided to the patient and the patient's experience of the care. Students noted that they might adjust their expectations of the patient's communication abilities, cognition, or behavior and that the report increased their awareness of the need to modify their own communication skills. If a nursing student understands the possibility of challenges in communicating with patients with communication disorders, this may carry over to future interactions, resulting in better patient care.

Understanding patient concerns is critical for nurses, and this data indicates that reading a speech-language evaluation report would provide the nurse with pertinent information. However, they will likely not know specific communication strategies unless further educated. This would merit education by allied professionals in the academic setting or job site.

It was helpful to know that many of the nursing students found information in the report was sometimes difficult to understand and that they would need "clarification" from the SLP in order to understand specific terminology or procedures. This gave the authors hope that professionals in training would feel comfortable approaching a co-worker or allied professional and asking for that clarification.

The majority of students also noted it was very or somewhat helpful (84%) to gain a better understanding of the specific disorder they were assigned to research. This indicates that this activity enhanced their comprehension of disorders outside of their individual research. When asked to put themselves in the place of a caregiver for one with a communication disorder, most (88%) indicated that the report would be at least "somewhat helpful." Forty-one percent indicated it was "very helpful" which indicates either the need for increased clarity on the part of the speech pathologist and/or increased education for nursing students. Ninety percent of respondents rated the report they were assigned as "very professional." This was very encouraging to the authors, and provides validation for our emphasis on technical writing and using peer-review as a means of improving students' writing abilities.

Conclusions

Based on this data, faculty in both the College of Nursing and the Department of Communication Disorders felt that this exercise was well-suited for introducing students to several facets of interdisciplinary learning such as scope of practice, professional terminology, and the overlap between the disciplines. It seems that there is most likely a need for practical instruction in communication strategies for nursing students. This may be in the form of instruction, role-playing activities, and/or handouts. Nursing students need to have the relevance of this activity explained in advance and a correlation made between the similarity of their lack of knowledge with the professional terminology and that of patients and family members interpreting the same information. This activity also strengthens inter-professional collaboration opportunities to advance research, dialogue among faculty members, shared resources and expertise, and partnerships for grant procurement. This activity is an appropriate and effective way to introduce

students to the concept and practice of inter-professional collaboration that does not require students to be in the same place at the same time with coordinating class schedules.

Future work that will add validity and improve clinical practice with patients includes providing more exposure and interaction between cohorts of nursing and speech-language students, providing nursing students opportunities to shadow patients in speech-language clinics as a community health clinical rotation, and conducting collaborative simulation exercises as a partnership. The activity could be enhanced by improving and expanding the rubric, performing psychometrics on the rubric between group comparisons of diagnosis reports, and recruiting from senior-level nursing students.

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