

An Interprofessional Education Pilot Study for Nursing and Speech-Language Pathology Students

Abstract

Background: Despite the complexity of patient care and promise of interprofessional collaboration in health professional educational programs, interprofessional education and practice implementation challenges exist. **Materials and Methods:** A pilot study with a nonequivalent comparison before/after design was conducted to examine undergraduate students' and graduate students' knowledge of the role of nurses and speech-language pathologists (SLPs) while working with patients diagnosed with dysphagia. All students received pre- and post-tests assessing their knowledge of the respective profession. **Results:** A repeated measure of analysis of variance using pre- and post-tests by group design revealed a strong and statistically significant main effect from pre- to post-testing, [$F(1, 19) = 17.42, p = 0.001$, and partial $\eta^2 = 0.48$]. **Conclusions:** The results indicated that students received higher scores on post-tests. This study reinforces the importance of collaboration of healthcare professionals during their professional coursework.

Keywords: Education, interprofessional relations, nursing, speech-language pathology, students

Introduction

The World Health Organization^[1] (WHO) recognizes the need for collaboration among healthcare professionals in both education and clinical practice. Interprofessional collaboration involves individuals from two or more professions coming together to learn from and with each other to improve patients' health outcomes. Interprofessional education is an ideal vehicle for introducing new content areas to pre-professional students; for example, "in the 2009–2010 academic year, 2726 nursing and medical students participated in one or more interprofessional educational courses related to quality improvement or patient safety."^[2] The aim of this preliminary study was to increase the knowledge of students regarding the roles and responsibilities of nurses and speech-language pathologists (SLPs) in the assessment and intervention of dysphagia.

Materials and Methods

In 2015, 14 graduate students of a Master's program in SLP and 7 undergraduate students of a nursing program at a private university volunteered for this study. Students were recruited at the beginning

of a class session. The class professor described the study and distributed the study materials to all students who expressed a willingness to participate. The students were asked to complete a consent form and an anonymous pretest assessment measure before the didactic lecture. The instructors created pre- and post-test measures with 10 questions related to the roles of nurses and SLPs in the assessment and intervention of dysphagia. The students completed the same survey questions and were given a course evaluation form at the end of their participation in the study. The evaluation form included questions about the instructor and the method of delivery of the material during the lecture. The nursing faculty member provided a 1-hour didactic lecture to graduate students of SLP; the lecture included information regarding the nurses' roles and responsibilities in assessing and screening dysphagia based on the scope of professional nursing practice.

The SLP faculty member provided a 1-hour lecture to undergraduate students of nursing; the lecture highlighted important information for nursing students about making referrals to SLP and the importance of collaboration in dysphagia intervention. Following each

Akhtar E. Ghassemi¹,
Renee Fabus²

¹College of Nursing and Public Health, Department of Mental Health, Family, and Community Systems, Adelphi University, New York, USA, ²Department of Communication Sciences and Disorders, Adelphi University, New York, USA

Address for correspondence:
Dr. Akhtar E. Ghassemi,,
College of Nursing and Public Health, Adelphi University,
Garden City, New York, USA.
E-mail: aghassemi11@gmail.com

Access this article online

Website: www.ijnmrjournal.net

DOI: 10.4103/ijnmr.IJNMR_4_17

Quick Response Code:



How to cite this article: Ghassemi AE, Fabus R. An interprofessional education pilot study for nursing and speech-language pathology students. *Iranian J Nursing Midwifery Res* 2017;22:497-8.

Received: January, 2017. **Accepted:** May, 2017.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

respective lecture, there was a question and answer session. The students were then instructed to complete the anonymous post-test measure and the course evaluation form.

Ethical considerations

Institutional review board of the university approved the study, and the students completed an informed consent form prior to participating in the study.

Results

Descriptive data are summarized in Table 1. Both groups of students scored relatively high on the post-test measures. A repeated-measure analysis of variance (ANOVA) using a PrePost (pre- and post-tests) by groups (graduate, undergraduate) design, as shown in Table 2, revealed a strong and statistically significant main effect from pre- to post-testing [$F(1, 19) = 17.42, p = 0.001$, and partial $\eta^2 = 0.478$]. As shown in Table 2, the interaction of group membership and interprofessional teaching indicated a moderate and statistically significant effect, [$F(1, 19) = 6.91, p = 0.0178$, partial $\eta^2 = 0.267$]. Further probing of interaction effect by simple main effects found that undergraduate students showed a statistically significant mean gain of 15.7 units from pretest to post-test ($p = 0.001$). Graduate students had statistically nonsignificant ($p = 0.196$) mean gains of only 3.57 units. In other words, while all students showed gains, undergraduate students showed improvement in the post-test measure compared to the graduate SLP students. The nursing students reported gaining greater confidence in working with individuals from

other professional programs during the interprofessional simulation scenarios in a pilot course.^[3]

Discussion

This study investigated the roles of nurses and SLPs in the assessment and intervention of dysphagia. Because both groups of students scored higher in their post-tests, the lecture and discussion sessions likely increased their knowledge regarding the importance of interprofessional collaboration. Interestingly, SLP graduate students' scores in the interprofessional education pretest were relatively higher than that of undergraduate nursing students. The findings might be related to the fact that first-year SLP graduate students had more knowledge of dysphagia compared to the second-year undergraduate nursing students.

Admittedly, the study has several limitations. First, the identified relations between the variables are correlational and not causal. Second, the small sample of college students from a single mid-size university represents a limitation in interpreting the results. Third, the circumstantial nature of the students' first exposure to an IPE session questions, its salience, usefulness, and power.

Conclusion

IPE is not a major focus in university programs training future professionals. This is unfortunate as students who have participated in IPE (for example, those in this study) say it leads to an increased knowledge of other disciplines and creates opportunities to consult with members of different professions.^[4]

Acknowledgement

The authors would like to thank their students who participated in the study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. World Health Organization [Internet]. Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organization; 2010. Available from: http://www.who.int/hrh/resources/framework_action/en/. [Last accessed on 2016 Nov 02].
2. Dacey M, Murphy J, Anderson DC, McCloskey WW. An interprofessional service-learning course: Uniting students across educational levels and promoting person centered care. *J Nurs Educ* 2010;48:696-9.
3. Baessler M, Best M, Sexton M. Beyond program objectives. *J Contin Educ Nurs* 2016;47:248-9.
4. Geller Z, Rhyne R, Hansbarger L, Borrego M, VanLeit B, Scaletti J. Interdisciplinary health professional education in rural New Mexico: A 10 year experience. *Learn Health Social Care* 2002;1:33-46.

Table 1: Mean and standard deviation of pretest and post-test scores for nursing and SLP students

Test type	Group	Mean (SD)	n
Pretest	SLP	46.43 (6.33)	14
	Nursing	37.14 (13.80)	7
	Total	43.33 (10.17)	21
Posttest	SLP	50.00 (9.61)	14
	Nursing	52.86 (5.16)	7
	Total	51.00 (8.31)	21

Table 2: Analysis of variance of differences in test scores as a function of pre- vs. post-testing and graduate vs. undergraduate group membership; tests of within-subjects contrasts

Source	Type III sum of squares	df	Mean squares	F	p	Partial η^2
PrePost	867.9	1	487.62	17.42	0.001	0.487
PrePost* Group	344.0	1	344.00	6.91	0.017	0.267
Error (PrePost)	946.4	19	49.81			

Note: Prepost: Prepost tests; n=21 (14 SLP, 7 nursing); * =Interaction of interprofessional teaching by group membership