Interprofessional Peer Teaching: Physical Therapy Students Teaching Dental Students to Transfer Patients

Background
While the need for interprofessional education (IPE) has been clearly elucidated, (Interprofessional Education Collaborative, 2016), one of the major barriers is the logistical challenge of meeting curricular requirements for all involved. The organization and time required in an already full schedule are often deterrents. Ideal opportunities meet specific program curricular requirements as well as enhancing interprofessional competencies. Interprofessional competencies include developing skills to teach other health care providers about profession-specific skills and enhancing communication across the professions (Bridges, 2011; Interprofessional Education Collaborative, 2016). Active learning techniques have been advocated for adult learners to promote motivation and engagement (Knowles, 1984), while peer teaching has been found to improve confidence with communication and improve teamwork (Seenan, 2016). The use of peer teaching may be an important option for learning about and with other professions while addressing logistical constraints.

One of the most common causes of medical practitioner musculoskeletal injuries is lifting techniques (Monaghan & Proctor, 2011). While dental educational programs include ergonomic training, there is limited information available on how to assist individuals with movement dysfunction or disabilities into or out of a dental chair. Dental students need to understand how to work with their team to coordinate safe transitions for patients to, and from, the dental chair while adhering to precautions (Stevenson, 2015). Physical therapy accreditation standards include a requirement for students to design and deliver instruction in this area to other health care professionals (Geiger, 2013). The purpose of this paper is to describe the innovative active learning method that occurred at the University of Florida when the Physical Therapy and Dental professional programs partnered to provide these profession-specific curricular objectives and interprofessional competencies.

Methods
The two faculty responsible for this interactive practical experience discussed areas where overlapping curricular needs presented the win-win opportunity. The single one and a half hour event was planned one semester ahead with integration into courses for both professional programs. First year Doctor of Physical Therapy (DPT, n= 69) and Doctor of Dentistry students (DMD, n=93) participated in two groups. DPT students taught the DMD students about weight bearing precautions, safe body mechanics and how to transfer patients from wheelchairs to the dental chair in the dental operatory environment. Third year DPT students (DPT, n=66) provided supervision and feedback. DPT students had completed the techniques in the previous semester, and were briefed on the background of dental students’ training. They were required to prepare the format of the interactive experience and handouts as an assignment prior to the event. All students were provided with an online link of the wheelchair dependent transfer to the chair and received a brief orientation at the beginning of the session. Once the students were in the operatory units, the experience was completely student-led, with DPT students demonstrating and instructing the techniques followed by the dental students performing and practicing the skills with feedback.

Results
One hundred forty students (38 DMD, 53 Yr 1 DPT, 49 Yr 3 DPT) completed a de-identified survey. On a scale of 0/10= not at all important and 10/10 = very important, all students believed that learning how to perform transfers, appropriate body mechanics, and how to address needs for those with mobility deficits were very important (mean 9.2, 9.7, 9.0 respectively). After the experience, 79% of the DMD students reported being confident or very confident assisting patients with mobility needs to the dental chair, while 100% of the Yr 1
DPT students reported being confident or very confident teaching other professionals in their environments. Students felt that the experience was highly motivating (57%) or somewhat motivating (36%) and rated the experience as very good or excellent (DMD 82%, Yr 1 DPT 88%, Yr 3 81%). Open ended comments were very positive, with all students reporting increased confidence in either the transfers or with teaching. Dental students noted learning in areas related to patient education for those with mobility needs, precautions, injury prevention, body mechanics, communication and respect. DPT students noted achievement of objectives for teaching and supervision skills, interprofessional collaboration, adapting skills to other environments and the importance of teaching transfers to other professionals.

**Conclusions**
The opportunity to meet curricular objectives for both groups addressed some of the barriers to interprofessional education. The one-on-one interactive experience was motivating, valued, highly rated and increased confidence with patient transfers and teaching other health care professionals.

**Discussion**
Interprofessional skills including communication, teaching other professionals about specific roles and collaboration were introduced early in a short but feasible experience. The dental operatory environment challenged problem solving and created a realistic environment.

**Implications for Interprofessional Education**
Mutually beneficial short active peer teaching experiences are feasible and may address some of the barriers for early interprofessional education. Integrating profession-specific knowledge helps build mutual respect. Communication between those responsible for courses or curricula is critical to identify opportunities for students to learn about, with and from each other.

---

**Kim Dunleavy PT, PhD, OCS**  
**Venita Sposetti, DMD**

**REFERENCES**