



Nontraditional Approach for Interprofessional Service Learning in a Doctor of Physical Therapy Program: The Farm Worker Family Health Program

Jodan D. Garcia* and Rachael Anne Frank

Department of Physical Therapy, Georgia State University, Atlanta, GA, USA

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*Correspondence:

Jodan D. Garcia
jgarcia19@gsu.edu

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Interdisciplinary service learning opportunities are recognized as valuable educational tools for health-care students, including those in physical therapy doctoral programs. However, it is unclear what components of these service learning initiatives are most successful for preparing students to collaborate as part of a health-care team and communicate with diverse patient populations. The Farm Worker Family Health Program, based on a community academic partnership model, enables health-care students from several disciplines to treat migrant workers during the annual farmworker migration. This program offers students the opportunity to provide beneficial medical attention to an underserved population, hone clinical practice techniques and critical thinking, and build interprofessional communication skills. The experience may benefit students by not only enriching their skills as novice clinicians but also deepening their sense of empathy. The present article describes how this opportunity has been incorporated into a physical therapy graduate program and explores the implications of melding immersive interdisciplinary civic engagement with physical therapy education in order to foster clinical and communication skills.

Keywords: interprofessional education, communication skills, service learning, immersion learning, physical therapists, cultural competency

BACKGROUND

Interprofessional education (IPE) has become increasingly recognized as an important part of the curriculum for students in health-care profession programs. Health-care practices have shifted away from a disease-centered approach care toward a more holistic patient-centered model. There is a growing emphasis on patient education, prevention, and health promotion within the community (Portney and Applebaum, 2006). This approach has made IPE an essential component of health profession education, as entry-level practitioners need to have the communication skills to effectively collaborate with a range of disciplines. A variety of opportunities offered through different institutions may provide invaluable learning experiences that prepare students for working with colleagues as part of a health-care team. It is important to determine what aspects of an IPE experience are most beneficial for future health-care providers, including student physical therapists. The authors' viewpoint is that students must be prepared for communicating with patients, other disciplines, and payers. Integrating immersive service learning (SL), a cross-cultural experience, and

IPE are an especially effective method of fostering collaboration among students to provide patient care while learning more about the roles of other disciplines within the health-care spectrum. Treating populations with unique cultures may help prepare students to overcome communication barriers and provide care and patient education to diverse groups of individuals. Physical therapy students at a university in Georgia have the opportunity to participate in an immersive interdisciplinary SL program treating migrant farmworkers. The purpose of the present article is to describe this program and identify aspects of that may be impactful for enhancing skills of communication, cultural competency, and interprofessional collaboration for student physical therapists.

INTERPROFESSIONAL EDUCATION, SERVICE LEARNING, AND PHYSICAL THERAPY

The World Health Organization endorses interprofessional collaboration in education and within the workforce. Interprofessional education is described as occurring when students learn from and with each other, resulting in students who are more prepared to work on a health-care team to meet patients' needs. Collaborative practice is defined as occurring when "multiple health workers from different professional backgrounds work together to deliver the highest quality of care" (World Health Organization, 2010). This model incorporates the expertise, cooperation, and communication of health-care professionals with a range of skills to facilitate optimal patient-centered care. Interprofessional education and collaborative practice (IPECP) enterprises are encouraged in the physical therapy profession. These may include professional conferences and activities incorporated into the doctor of physical therapy (DPT) curriculum (Wise et al., 2015). The American Physical Therapy Association's (APTA) current vision statement is guided by principles emphasizing the necessary autonomy to practice with direct access, and the importance of collaboration with other disciplines to provide consumer-centered care (American Physical Therapy Association, 2014). Physical therapists frequently consult with providers from professions including occupational therapy, nursing, medicine, speech therapy, and social work. In spite of the need for competent interprofessional communication, health-care providers may not fully understand the methods and skills employed by other disciplines (Gupta, 2006). Thus it seems beneficial to prepare students for working on a health-care team by developing an understanding of the specific roles and skills of different providers. The Standards and Required Elements Evaluative Criteria, used by the Commission on Accreditation in Physical Therapy Education, include a requirement for IPE to be incorporated into the DPT curriculum effective in 2018 (Commission on Accreditation in Physical Therapy Education, 2016).

The Interprofessional Education Collaborative was formed in 2009 by representatives of six health professions, and the American Council of Academic Physical Therapy was admitted as a member in 2016 (Interprofessional Education Collaborative, 2016).

The group's mission, similar to framework outlined by the World Health Organization, is to develop a less fragmented model of practice and optimize delivery of care and collaboration by improving IPE. The APTA supports this goal and asserts the value of educational models incorporating an interprofessional approach to treatment and research (American Physical Therapy Association, 2014). IPE has been shown to increase students' perceptions of autonomy and competency and improve perspectives on collaborative teamwork (Lefebvre et al., 2015). Many DPT programs have incorporated IPE opportunities into their curriculum; however, recent research indicates that some programs may focus on IPE within the classroom setting rather than through clinical partnerships (Wise et al., 2015). IPECP initiatives in a clinical setting can benefit students and underserved patient populations (Johnson et al., 2006, 75; Mercer et al., 2014) and may help students maintain lasting positive attitudes toward collaborative practice (Ruebling et al., 2014).

Service learning is a form of education that incorporates civic engagement with scholarship or training. Unlike charity work, there is an element of reciprocity for students and community populations involved. Evidence supports SL as an effective pedagogical tool when incorporated into higher education (Cashman and Seifer, 2008; McCallum, 2008; Nowakowski, et al., 2014; Portney and Applebaum, 2006; Puri, et al., 2013), and many DPT programs have added an SL component to their curriculum. Some outcomes for students may include greater altruism, caring, professional development, collaboration, cultural competency, musculoskeletal knowledge, interprofessional perceptions, and clinical reasoning skills (Brown and Wise, 2007; Hayward and Charrette, 2012; Wise and Yuen, 2013; Seif et al., 2014). Professors and faculty may also benefit personally and professionally from SL mentorship (Portney and Applebaum, 2006; Schaefer and Cannova, 2014). Additionally, the APTA has named altruism, caring/compassion, and social responsibility among the core values that physical therapists should embody (American Physical Therapy Association, 2014), and SL initiatives give students an opportunity to represent the core values of their profession while building valuable skills.

Interdisciplinary service learning (ISL) merges elements of SL and IPECP, offering the opportunity to provide *pro bono* care while cooperating and communicating with peers of other disciplines. Interdisciplinary service learning may encourage students to adopt a holistic, multifaceted approach to patient care and utilize all available resources. Since many schools do not directly address IPE through students' clinical internships (Wise et al., 2015), IPECP in a volunteer setting may be an alternative for this experience. Learning through service may benefit students by affording them experience treating unique and underserved patient populations, unlike those they encounter in clinical internships. Working with different patient populations also extends a chance for students to hone communication skills and overcome cultural and language barriers.

With the increasing popularity of incorporating IPECP and ISL into DPT education, researchers have investigated how interprofessional programs are developed (Kelly and Miller, 2008; McCallum, 2008) and what qualities make an ISL program successful. Some common themes of a rewarding ISL program

may include institutional commitment, collaboration, perception of meaningful service, directed student reflection; and cultivating leadership development, citizenship, and common purpose (Village, 2006; Jackson, 2012). Although there is no singular formula for a successful ISL program design, fruitful programs have beneficial reciprocity between members of the community, students, and community partners.

Without a definitive model for these educational opportunities, it is important to determine what aspects of these programs are most impactful for increasing students' collaborative skills. The authors' viewpoint is that combining immersive SL with IPE, in a cross-cultural setting, is effective for preparing students to collaborate on a health-care team and treat diverse patients. This type of opportunity merges several important themes in current health-care education and exposes students to challenges that prepare them for clinical practice. Second-year student physical therapists at a university in Georgia participate in a program that combines these elements during a trip to treat migrant farmworkers in a rural community. Experience gained from this program has shaped the authors' perspectives about why this ISL model is valuable for building communication and collaboration skills that can be applied in the clinical setting.

OVERVIEW OF THE PREPARATION AND PARTICIPATION IN THE PROGRAM

The annual Farm Worker Family Health Program (FWFHP), based on a community academic partnership model, employs a multidisciplinary approach that includes students of nursing, physical therapy, psychology, public health, and pharmacy (Layne, 2016). The program coincides with the annual migrant farmworker migration through rural Georgia and its purpose is to provide *pro bono* medical care and health screenings, patient education, and donated clothing and supplies to an underserved population of migrant farmworkers and their families. Health concerns for migrant workers include early onset of repetitive stress injuries and prolonged exposure to heat and pesticides. Data collected on the farmworkers' children indicates increased prevalence of obesity, elevated blood pressure, anemia, and growth stunting (Nichols et al., 2014). It is estimated that the average farmworker family income is between \$17,500 and 19,999, and 25% are below the national poverty line (Farmworker Justice, 2014). However, this percentage may be higher since many farmworkers send financial support to family members in their home country. Many of the farmworkers in this community do not speak English, and some are undocumented, so there is a dearth in access to regular medical treatment. A lack of English proficiency as well as health literacy has been linked to increased prevalence of poor health in diverse ethnic and racial groups (Sentell and Braun, 2012). More than 1000 migrant workers and their children receive free medical services through the FWFHP without needing to provide immigration status. Participants work to overcome language barriers in order to provide effective care and prevention in a nonthreatening and convenient setting.

Although provision of care is the primary aim of this project, additional goals are for students to hone their clinical and

interprofessional skills. The program reinforces the importance of consulting with colleagues to optimize care and embracing a multicultural learning environment in order to become competent clinicians, capable of working with diverse populations. Interprofessional teams may allow for an auspicious opportunity for members of various disciplines to address health disparities, health literacy among underserved individuals, and cultural competence while learning from each other (Lie et al., 2012). The program teaches students to collaborate with patients, families, and other clinicians to determine a realistic and patient-centered plan of care. Students, clinicians, and educators from several universities and community partners work cohesively during the program, demonstrating the potential of interprofessional collaboration to have lasting positive impact.

A group of 12 second-year student volunteers are annually selected from their cohort to engage in this week-long experience. Previous FWFHP student participants present information about their personal experience with the program, and the call for student volunteers occurs about 7 months in advance. Selection is based on willingness to participate and academic performance. Prior to the trip, FWFHP student participants organize crowd-funding *via* public awareness and social media to raise money for supplies to donate to the migrant workers and their families. In 2015, students raised the funds to donate over 200 pairs of rubber boots, pillows, hygiene kits, and slightly used clothing to the workers. Students have described the experience of giving the supplies to the workers as one of the highlights of the trip. Students also prepare patient education and exercise packets that are translated into Spanish and gather other supplies to be used at treatment tents in the fields.

Students are motivated to volunteer because the FWFHP is a unique learning opportunity and students will represent the DPT program's aim to provide service to the greater community. The mission of the DPT program focuses on alleviating impairments and limitations, promoting wellness and preventative care, and demonstrating behavior, such as cultural competence and interdisciplinary team collaboration. The program emphasizes advocating for the health and wellness needs of society and preparing future PTs to embrace multicultural learning environments. Initially, the trip was not associated with credit hours but is presently offered as a two-credit-hour option for meeting the DPT program's SL requirement. Alternatives for students who do not participate include a trip to Nicaragua through Comunidad Connect or student-directed volunteerism, though the FWFHP trip is singular in its emphasis on both IPECP and SL. An IPE elective is also offered for students who are interested in furthering their interprofessional competency within the classroom setting. Farm Worker Family Health Program volunteers complete coursework prerequisites, actively engage in fundraising for supplies and donations, and undergo preparation that includes cultural orientation and an introduction to basic Spanish for medical examinations. In-class preparation includes cultural competence and interdisciplinary practice units within a professional practice course in the DPT curriculum. This course focuses on ethical practices, collaborating with patients and colleagues of diverse backgrounds, and how to handle various challenging or delicate situations in a professional manner. Additional training occurs through a full

day of orientation, a detailed FWFHP handbook provided by an academic partner, and meetings with faculty mentors prior to the trip.

Participants travel to rural Georgia to provide medical screening and therapeutic interventions to migrant workers in their camps and screening for the workers' children at a local elementary school. Students experience the hands-on application of material learned in their coursework through musculoskeletal examinations, medical screening, patient education, and other interventions. Medical screening enables students to recognize the limitations of their expertise and communicate with the appropriate provider for cases beyond the scope of physical therapy. Students make referrals to nurse practitioners and other clinicians, providing an opportunity to utilize interprofessional communication and collaboration. During the trip, student physical therapists work alongside students of several disciplines and regularly consult with translators, educators, and other volunteers.

Student participants treat approximately 1000 farmworkers, but are only able to see each patient once. This signifies students must work quickly and effectively to overcome language barriers and offer skilled care. Patient communication is essential to provide education and promote self-efficacy with prevention and wellness. Students work together, communicating with patients through distributing exercise pamphlets translated into Spanish, screening educational films, and working with translators. Utilizing multiple modes to communicate health information and providing simple, culturally conscious material for patient education may be useful methods of working to overcome health literacy barriers (Ruffin, 2011). The need to overcome barriers in an immersion learning setting encourages students to develop both patient and interprofessional communication and challenges them to think critically and creatively.

When not treating patients, students attend presentations and use case studies to engage in clinical problem solving strategies with peers. Group activities and personal reflection are intended to build an understanding of the unique skill sets, roles, and scope of different health-care providers as well as the needs and challenges of different patients. Topics of the guided reflections and discussions include lack of health-care access, communication challenges and strategies for overcoming language barriers, experiences or patient cases that have changed their perception of their profession, and the living and health conditions of the workers and their families. Case studies might include topics, such as repetitive stress or low back pain, with students from each discipline describing their plan of care. Students also attend presentations about public health issues facing migrant farmworkers and have the opportunity to attend a guided tour of the living and working conditions of this unique patient population.

DISCUSSION

Interprofessional collaboration has become increasingly relevant within the treatment setting and entry-level health-care practitioners require the skills to communicate effectively with other disciplines in order to optimize patient care. Student physical therapists, many of whom will go on to work in acute

care settings, will be working closely with other disciplines. In the outpatient clinical setting, clinicians should be able to communicate effectively with other providers and refer out to appropriate disciplines as needed. Service learning opportunities that also build these professional skills, such as the FWFHP, are a good option for incorporating clinical experience and IPE into graduate health-care programs. In addition to communicating with other clinicians, students need to be aware of health literacy disparities in many patient populations and be prepared to communicate effectively in order to mitigate these gaps and promote patient education (Coleman et al., 2013).

Although no quantitative research measuring outcomes for student participants has been completed to date, students have given overwhelmingly positive feedback about their experiences with the program. Participants have expressed gaining clinical skills and interprofessional experience, as well as a deeper sense of empathy toward patients and an appreciation for access to basic health care and other services. Faculty members involved in the FWFHP have also conveyed that mentorship in this setting has contributed to both personal and professional development. One faculty member involved in the program expressed a transformation of both personal and professional identities, with immense benefits in the roles of both physical therapist and professor. The authors believe that others could benefit from reflections on what aspects of this program have been effective for student learning and what conditions have been challenging.

There are several characteristics of the FWFHP that have been successful for academic and professional student development. The unique combination of immersive SL, a cross-cultural experience, and IPE have been a valuable model for exposing students to several important themes in health-care education simultaneously. Additionally, the small number of student volunteers allows faculty mentors to work closely with students and provide guidance and feedback. Expecting active student preparation prior to participating in the program may contribute to building communication, organization, and teamwork skills. Students must work together to develop fundraising campaigns and boost public awareness about the health-care needs of this underserved population. Finally, the timing within the DPT curriculum is optimal; students have completed necessary coursework and will learn from the IPECP experience before completing the majority of their clinical internships.

In spite of the many strengths of this program, some aspects have been challenging and there is potential for improvement. Obstacles include a shortage of translators and only being able to see each patient once. Although students learn some Spanish prior to the trip, the majority of participants are not fluent and effective communication can be difficult without a multitude of available translators. As described, students work to overcome barriers by translating written home exercise programs and screening translated films that provide patient education. However, the nuances of provider-patient communication may be lost, and it can be difficult to emphasize the importance of preventative strategies, such as postural education, off-loading, and foot care. Prevention is especially challenging with this patient population, as strategies that would be beneficial for body mechanics hinder

the workers' pace. Students provide practical health-care information, though they must recognize the reality of these strenuous working conditions.

This immersive learning opportunity combines aspects of civic engagement, interprofessional collaboration, and treating a patient population with a unique culture. Integrating these components into IPECP opportunities has the potential to foster understanding of the scope and skills of various disciplines, improve patient communication skills, deepen empathy and commitment to service, build clinical reasoning ability, and enhance cultural competency by exposing students to a unique set of patients. Multifaceted learning opportunities may be more effective tools for helping students develop personally, professionally, and academically than utilizing any single method in the classroom setting. Through this type of program, students are exposed to the challenges of communicating effectively with diverse patients, families, and other providers. This exposure, which would be difficult to recreate in the classroom setting, allows students to develop skills needed to collaborate with future colleagues, including translators and other health-care personnel, and with patients themselves.

Many students have the opportunity to engage in an ISL experiences through their academic institutions. Thus it would be useful to determine what aspects are most effective

as pedagogical tools. The authors' personal experience has led to the perspective that combining IPE, immersion learning, a cross-cultural experience, and caring for an underserved patient population is a relevant model for successfully designing and implementing dynamic interprofessional learning opportunities that benefit both students and patients. Additional research is needed to investigate how multifaceted ISL experiences compare to traditional courses within the classroom setting. Potential outcome measures that would be useful to investigate include perspectives on ISL, communication skills, empathy toward patients, future academic and clinical performance, and long-term commitment to community health promotion and patient advocacy.

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JG developed the concept behind this article and contributed to writing and editing this article. RF participated in researching background information, writing, and editing the manuscript.

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