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Interprofessional education is becoming an increasingly vital part of the optometric curriculum. The Association of Schools and Colleges of Optometry (ASCO), citing the World Health Organization (2010), defines interprofessional education as that which “occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.”¹

Optometry is an important component of a patient’s health care. The fact that optometric patient care overlaps with that of other professions and the resulting patient gain through interprofessional collaboration has long been recognized.² The significance of this has been reinforced recently in ASCO’s 2011 document “Attributes of Students Graduating from Schools and Colleges of Optometry.” The document states that optometry school graduates are expected to be able to “work as an integral member of the larger interprofessional healthcare team to improve patient care outcomes” through “collaboration, co-management and referral” with other professions.³ With the implementation of healthcare reform and the expanding scope of optometric practice, it becomes essential for optometrists to collaborate with other professionals in delivering effective and comprehensive patient health care.

Competency to practice within the interprofessional environment can be developed through a number of educational modalities. In the classroom setting this involves taking courses in common with students of other disciplines. A number of optometry schools are part of a health professions-specific campus. For example, the Health Professions Division (HPD) of Nova Southeastern University (NSU) includes optometry, osteopathic medicine, dentistry, nursing, health care sciences and pharmacy all housed within the same complex.

In the clinical setting, interprofessional education most commonly takes place at multidisciplinary healthcare sites such as community health centers and Veterans Affairs hospitals. At NSU, fourth-year optometry externs, under faculty supervision, learn to coordinate care with healthcare providers from other professions. Yet this education may not be sufficient for providing the student with the necessary skills to operate in an interprofessional setting that is less structured, more intensive, and with only limited tools at one’s disposal. The annual NSU HPD medical mission trip to Jamaica provides this type of environment.

The History and Composition of the Mission Trip

The trip has taken place for the past 14 years and serves a number of locations on the island of Jamaica. The overall trip is sponsored by NSU HPD and the not-for-profit organization Women of H.O.P.E. The trip has been organized by Dr. Paula Anderson-Worts, an Associate Professor at the College of Osteopathic Medicine, and Jamaican-born philanthropist and radio personality Mr. Don Daly, to address the need for quality health care to underserved populations in Jamaica. The most recent trip, June 4-13, 2014, was to the areas of Kingston and St. Mary. The optometry unit participated in the St. Mary portion, from June 7-13. The overall team consisted of approximately 160 volunteers, faculty and students from HPD, including dentistry, medicine, pharmacy, occupational therapy, physical therapy and nursing. In total, there were 40 volunteers, 89 students and 31 faculty. Optometric care was provided by eight students, all in their third year, two faculty and one NSU alumni optometrist who grew up in Jamaica, along with three volunteers in St. Mary. Over the course of the full 10-day mission, more than 3,000 patient encounters took place, including nearly 400 by optometry.

The optometry unit was organized by the National Optometric Student Association (NOSA) at the university. NOSA, along with its faculty advisor, has been dedicated to assisting with this endeavor by providing eye care to the underserved communities in Jamaica. The association has participated in the mission trip for the full 14 years. The students coordinate the collection of donated prescription glasses, sunglasses, supplies and topical medications such as anti-glaucoma drops, antibiotics and artificial tears. They work with the local Lions Club in collecting donated glasses and sunglasses as well as hold various fundraisers to support the mission trip. Over the years, the students have helped thousands of patients improve their vision. They have also diagnosed eye diseases and educated patients and other health professions about visual health.

A Chronicle of the Mission Trip

Interprofessional collaboration began before the trip. Planning meetings to discuss the operational aspects were held months before. One of the most important things done at these meetings was the design of a T-shirt that represented all professions. Students submitted designs, which were voted on by the entire group. The shirt, with symbols from the different professions, helped to establish a team identity. It also identified the group to our host country. The entire group wore the T-shirts throughout the first day, from the airport to arrival at the hotel.

A meeting was held for the entire group the first night to go over the procedures and protocol for the mission. Patients

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were seen at several locations within the St. Mary region. Most of these were churches located approximately an hour's ride from the hotel. The equipment for all the professions was transported on one truck that shuttled between sites. At the beginning and end of the day, everyone pitched in to load the equipment on and off the truck. Minibuses transported the interprofessional teams to their site of the day.

Prior to reaching the site, the entire group stopped for breakfast at a large restaurant. Each day, students from a different profession made a short presentation about their profession to the group at large. In the case of optometry, the student described what optometrists do, emphasizing the broad scope of practice and optometrists' role as primary eyecare providers within the overall healthcare system. Educating professions about one another in this manner serves to foster interdisciplinary collaboration and results in better patient care.



Figure 1. During the mission trip, a room in a church was converted into a makeshift eye, dental and medical clinic.

Following breakfast, groups were bused to each site. Teams of faculty and students representing each profession were present at every site. Because there is no clinical infrastructure at the sites, allocation of space between professions became a challenge. A hot and brightly lit church room was turned into a makeshift eye, dental and medical clinic by creative use of available space.

(Figure 1) Professions had to work with one another regarding allocation of chairs, tables, electrical outlets and division of areas within rooms.

Eye care was provided to help the patients to the fullest extent possible: dispensing prescription glasses or sunglasses (many of which were given to patients who had none), diagnosing sight-threatening conditions such as glaucoma, advanced cataracts and diabetic retinopathy, and dispensing eye drops and educating patients about the management of their condition. Patients waited on long lines for their exam and could go to more than one service if time permitted. Students worked with enthusiasm and efficiency, performing at a very high level throughout the entire mission.

Professions worked together as needed. Referrals could be made to different disciplines. One such case was a patient diagnosed with bilateral proliferative diabetic retinopathy. The patient was immediately referred to medicine and upon testing was found to have an extremely elevated blood glucose level of 270 mg/dL. The medical team provided counseling, prescribed medications and sought to obtain follow-up within the local healthcare system.

Patients with reduced visual function also required a team approach. For example, those with end-stage glaucoma were referred to occupational therapy. Early in the mission, students required more direction from the supervisor in patient management. But over the course of days, they were able to function with increasing independence. They would walk over to the medicine, dental or pharmacy areas to collaborate in patient care as needed. **(Figure 2)** They served as gatekeepers for patients referred to optometry from other professions as well. These included patients with systemic health problems such as diabetes and hypertension that are known to affect the eyes as well as those observed to have vision problems by other providers and told to have their eyes checked.

At the end of each day, the equipment was packed up and the group proceeded to dinner at the same restaurant. Once again, the meal served as a venue for the exchange of information for the entire group. Each profession reported on an interesting case from that day. **(Figure 3)** Cases including complete hyphema, band keratopathy and high myopia were shared with the group at large and served to illustrate the diversity of patients seen by the optometry students.



Figure 2. Optometry students and dentistry students shared space with the other health professions, facilitating collaboration between provider teams.

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After dinner, buses took the groups back to the hotel. Although typically people sat with individuals from their same profession, there was bound to be some interprofessional mixing. Students as well as faculty had the opportunity to mingle with those in other professions, exchanging information about each other's professions and backgrounds.

On any project such as this, it would not be unexpected to encounter some conflicts between professions. The work must be performed quickly, efficiently and without the support of the traditional clinical setting. At the outset, individuals tended to group with people of their own professions. With time, more interaction occurred. During the last night of the trip, a big party was held and the professions intermingled more than at any other time during the trip, outside of the workspace.

On a budget-conscious trip with limited resources, even conflicts over seating spaces on buses can emerge. However, such conflicts can be used as teaching tools for the beginning optometric practitioner. All professions are territorial in some respects, defining their duties and boundaries with regard to other professions. Effective interdisciplinary collaboration means working through this with compromise and resolve. A week-long intensive mission trip allows such lessons to be learned quickly.

Student Feedback

After the trip, written feedback pertaining to interprofessional education was sought from students. The response was overwhelmingly positive. When asked what taking part in the trip with other professions meant, one student replied, "It allowed me to realize how important it is to communicate with other disciplines. One of the reasons I chose Nova was due to its multidisciplinary opportunities. It was great to be able to refer patients with diabetic retinopathy to medicine or patients that had back pain to occupational therapy. Just recently I sent a referral letter to a primary care practitioner in clinic." The student's response underscores the application of interdisciplinary experience gained on the mission to ordinary clinical practice.

Another student reported that the trip "validated the optometric profession to be grouped with medicine, dentistry and pharmacy" and felt satisfaction "educating them on what we do." Many expressed satisfaction with being able to refer patients to other services. As one student described, "By going over to the pharmacy area several times to get medication that the patients needed that we did not have for them, it felt good to be able to do something for patients that couldn't be helped just optometrically." Because they were new clinical interns, this was the first opportunity for many of the students to collaborate with other professions.

When asked specifically what was learned, one student reported the opportunity of "seeing the big picture of how one condition may require many practitioners to treat and how all the different disciplines are able to diagnose certain conditions through their specialty." Another pointed out the value of working not just with students but with doctors from other professions. An environment such as a mission trip, which is less structured than that of a traditional clinic, offers increased opportunities for students to interface with doctors.

Many students enjoyed the overall group sessions during lunch and dinner. As one shared, "At the end of the day it was a great learning experience to hear about the other disciplines' tough cases from the day."

There was also personal satisfaction with the realization that the mission required a team effort. As one student remarked, "We all needed each other to fully help patients. Getting equipment together, sharing buses, having some drinks, referring to one another and just being immersed with the other disciplines forced us to get to know one another and it was nice."

A final educational component of the mission was the post-trip summary. Students were asked to write an article about their experience, which would be published in the college's news magazine. This gave them the opportunity to articulate and consolidate their learning. Reporting back on their trip and spreading the word to their classmates also provided them with a vehicle to reinforce what they learned and encourage others to take part in future trips.

In summary, interprofessional optometric education is an important development that is here to stay. A medical mission trip can add to the traditional educational strategies that take place within classroom and outpatient settings. It offers unique opportunities for enhancing interprofessional understanding and collaboration. It works to better serve patients by



Figure 3. Students convened for a meal at the end of each day, which allowed the interprofessional sharing of cases and the exchange of other information.

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imparting skills that can be transferred back to everyday practice settings. It provides an exceptional contribution toward the success of interprofessional health care.

References

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