Study Abroad for Pre-health Profession Students

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Medical study abroad programs can provide students interested in a healthcare profession valuable insight into medicine that they might not get in the United States. Shadowing experiences can help students decide if a career in healthcare is for them, or help them determine what medical discipline to pursue. While students can only observe in these settings, they still have the opportunity to learn about medicine and in many countries, universal healthcare. Organizations offering medical study abroad programs have increased recently in number. Medlife, founded in 1996, is one of the earliest and more well known. GoAbroad.com lists a number of medical internships offered by other organizations.

The Center for Health Profession Studies (http://sites.udel.edu/healthpro) at the University of Delaware (UD) has sponsored several study abroad programs to European countries. We often collaborate with the organization Atlantis (https://atlantisglobal.org/). These are 3-week programs in winter or summer session. To reinforce study abroad experiences, students need to reflect thoughtfully on what they have experienced. In the programs that we sponsor, students are enrolled in a graded course and are required to write a reflection paper with a minimum length of 10 pages. Students are also required to address some of the differences that they have experienced between European and American healthcare systems. Similar programs are offered by other faculty members at UD.

What do students gain from a study abroad experience?

The journey in becoming a healthcare professional is difficult and requires a strong commitment. Study abroad experiences can validate and invigorate students' desire to enter the medical profession. As one student enrolled in the Italy program wrote in her paper,

"I walk away from this experience with a renewed sense of conviction that I am in the right major and the right career path, and I am excited to see where the next few years take me."

Some students grow up wanting to be a healthcare professional, but they are unaware what it is like to be a physician or other healthcare provider. After experiencing typical days in the life of a physician, students can be convinced that this is the profession for them. A student wrote,

"I was able to gain insight on what it means to be a doctor on a daily basis as well as how another county's healthcare system works, and how it compares to our own healthcare system. Anyone can read a textbook about healthcare, but it is so much more tangible and impactful when it is experienced firsthand. This also goes for what it means to be a doctor—anyone can tell you what a doctor does, but to be able to observe the entire process in person is an experience that I am extremely grateful for."

Sometimes study abroad experiences do not lead to a firm conviction. As one student explains,

"My reason for going through this program was to finally figure out what I want my future in health care to look like. Before I began shadowing, I was between becoming a physician's assistant or a doctor but leaning more towards the physician's assistant route. Now, I am not sure if this program helped clear up that decision or make me even more confused, but I do know that I need to work in health care."

This student reinforced her desire to become a healthcare professional but added indecision about what path to take. This is not necessarily a negative outcome, because it forces the student to reflect more on his or her desires. This would give her a better opportunity to make the best choice. The following student developed an appreciation for a medical specialty that she had not considered before.

"I was surprised about my fondness towards the department [radiology] because patient interaction is basically the reason I wanted to be a doctor. Still, after my experience in Cattinara's Radiology department [Trieste, Italy], I can say that I would most definitely consider being a radiologist as a future career choice."

Students participating in study abroad programs have the opportunity to interact with other prehealthcare students. Programs sponsored by the Center for Health Profession Studies have not only included premedical students but also students interested in becoming physician assistants, physical therapists, and nurses to mention a few. The students can learn about other healthcare professions from peers enrolled in the program. In addition, students can see the interactions between physicians, nurses, and other healthcare providers in other countries. The physical assistant profession is not present in foreign countries. Students can appreciate the many team members necessary for quality patient care.

Learn About Other Cultures

Some of the students in our programs had prior experience traveling abroad, but few had been on study abroad programs and none of the participants had been on a pre-medical internship in another country. Most had little to no background knowledge of the countries that they would visit. Prior to departure, mandatory orientation meetings included information about local culture, customs and etiquette, food, traditions and taboos. Safety protocols were also reviewed prior to the program and when the students arrived at their host sites. The onsite orientation provided additional lessons about the local culture.

In addition to going to the hospital and learning about the medical culture, the onsite Atlantis site coordinators offered valuable opportunities for students to learn about the country's culture. The students frequently participated in excursions, such as museums and architectural landmarks, to see the sites and observe the local culture. In addition, on some programs UD students participated in a service opportunity. Local citizens who wanted to learn how to speak conversational English were matched with a student several times during the program to talk about their lives, experiences, and dreams. The students found this to be a very rewarding experience.

Learn About Medicine Outside Comfort Zone

Medical internships in a foreign country force students to have experiences outside their comfort zone. They are submersed in a foreign country for three weeks. Many students are not even able to speak the language. Students quickly gain an appreciation and respect for different cultures, characteristics that give them a perspective on global health that they can draw on as health practitioners. As one student wrote,

"...this program would further my education outside of the US in many health-related areas, not just physical therapy which is the career I aspire to pursue. I expressed my desire to step outside my comfort zone and experience the unique Italian lifestyle and history, allowing myself to grow not only as a student, but as an individual."

Not only do students experience the culture of a different country but also different medical specialties. The students in our programs spend an average of 25 hours per week in the hospital. While they are able to request to shadow in a medical specialty they are interested in, the students are also exposed to a variety of other hospital specialties. In most programs, students shadow in three different specialties. They have seen the birth of babies, cardiac catheterizations, orthopedic surgeries, emergency medicine, pediatrics, and other specialties.

Students are guided by attending physicians who know that this is an exciting and stressful experience for the students. The intensity of the exposure to the real day to day operation of a hospital enlightened the students. For some participants, this was a new experience and not always comfortable. Occasionally, students had to leave the room during a medical procedure.

Shadowing experiences can give students insight into becoming excellent health practioners. They can learn from experienced and caring practicing physicians and medical students. A student made this comment,

"After leaving the first room, I asked the doctor what he was going to do with those patients and he said something that has stuck with me, 'when I look at these patients I think to myself, what quality of life am I giving these people? But then I remember it is always the patient first and that it isn't entirely up to me and that I have to take into consideration of what they want.' This statement really made me realize that this Professor is a brilliant man. He also said, 'before I am physician, I am a man, just a normal man. Professionals tend to forget this and often take away the humanity of the job.' This professor was so insightful throughout my week there."

Another student wrote about a valuable lesson that she learned. During a day of shadowing, a physician was busy with a number of tasks and was not able to spend much time with the student. The following day, the physician apologized. The student wrote,

"This physician felt it a personal responsibility to impart knowledge to me, an American student whom he'd known for a mere week. Dr. Matteo demonstrated empathy, a character trait indispensable to any healthcare employee. I gained a valuable lesson that day, one that no textbook could ever teach."

Competitive Edge for Professional Healthcare Programs

The unique set of experiences provided to students in medical internships are designed to broaden the student's intellectual and practical understanding of the medical profession. Study abroad experiences help students distinguish themselves as outstanding applicants for medical school and other health-related professional schools. On their personal statement of the application, applicants can share their first-hand experiences observing medical care in a different country and how this has impacted their lives. After completing the study abroad program, students are well versed in European healthcare practices, and during interviews, they can articulate the differences between the American and European healthcare systems. They also can relate cultural experiences they had while attending the program. One student wrote in her paper,

"Another goal of mine was to better comprehend the implications of nationwide public healthcare, in order to be able to advocate for the healthcare issues in the United States. Going into the trip I had the expectation that some aspects of European healthcare would be different from the United States, for example the number of patients in the hospital and the attitude of doctors. However, once I experienced them, I was shocked by the magnitude of those differences."

Study abroad programs at the University of Delaware

Locations of programs sponsored by the Center for Health Profession Studies include the Azores Islands (Portugal), Spain, Hungary, and Italy. The Center's mission is to enable future generations of healthcare professionals pursue their callings as global health leaders. We want every medical internship abroad program we sponsor to reflect a deep concern for ethical solidity, educational value and innovative, cutting-edge thinking. Medical internships abroad for our growing population of premedical/pre-health profession students are designed not only to help UD students obtain admission into medical and professional schools but also to learn more about the world we live in.

Our collaborators from Atlantis make the arrangements for shadowing, housing and meals, and cultural excursions. Atlantis also provides bilingual site coordinators. Nationwide, the majority of students in Atlantis programs enroll individually. However, at UD most students are enrolled in our group programs. From 2015 through summer 2018, 21 UD students have chosen to enroll with Atlantis directly and not receive course credit. Study abroad programs are expensive and not paying tuition for a course saves the students money.

Acceptance into our medical internship programs is very competitive. Normally, about 40 students apply for 18 positions. Applicants are recruited through University sponsored Study Abroad Fairs, information meetings, email announcements to faculty and students, posters and word of mouth. Students of previous programs are excellent ambassadors due to the overwhelming positive experiences they have had.

On the application, students are required to write essays about their interest in a healthcare profession and their past experiences shadowing healthcare professionals. The student's letter of recommendation from a healthcare provider or faculty member and their grade point average (GPA) are also considered before offering an applicant an interview.

Interviews are important in determining who will be selected to attend the program and to establish a waitlist. Interview questions were established to provide consistent criteria in making final decisions. Questions are intended to assess the student's passion for healthcare, their commitment to the community, and their intellectual and emotional maturity. Knowledge and concern about global health issues and past shadowing experiences are also explored in the discussions.

The faculty director's final decisions for accepting students entails several factors, first the student's comments on the application and answers to the interview questions. Also important is if the student was able to demonstrate that he or she is committed to healthcare, helping others, and has sensitivity to global issues. Students with higher GPAs and who are juniors or seniors are given priority. Freshmen and sophomores will have more opportunities to participate in a study abroad experience than upper classmen. In addition, underclassmen tend to be less mature and have fewer experiences convincing them that healthcare is a profession for them.

Since 2015, a total of 104 students were selected to attend 8 different programs. Some programs were as small as three students while other programs had up to 25 participants. Nationally, study abroad programs are more attractive to women than men. About 65% of participants are women. At UD for all study abroad programs from 2015 through 2017, 73% (1973/2700) of the participants were female. Our programs have an even larger percentage of women. Of the 104 students, 87 (84%) were female and 17 (16%) were male. This is in contradiction to the number of applicants to medical school, in which 49.5% (25,600/51,680) were women in 2017-2018.

In programs sponsored by the Center for Health Profession Studies, 74 students (71%) were juniors or seniors when they participated in the program (*Figure 1*). A total of 17 academic majors from 4 different Colleges were represented. As expected, students are generally enrolled in a health science related major (*Figure 2*). Although, about 22% (23/104) were biological science majors.

Figure 1. Number of students by class enrolled in medical study abroad programs offered by the Center for Health Profession Studies, total number enrolled 104.

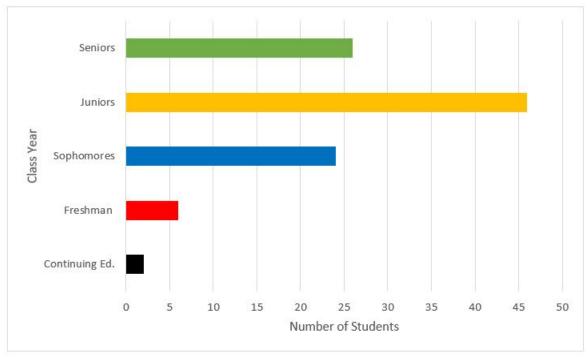
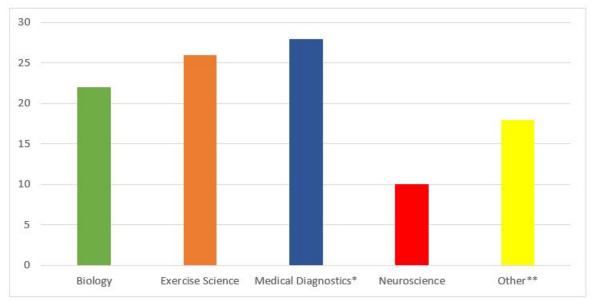


Figure 2. Participants by major in medical study abroad programs offered by the Center for Health Profession Studies, total number enrolled 104. (*Medical Diagnostics includes Medical Laboratory Science and Interest Group majors. **Other majors represented include Athletic Training, Biochemistry, Chemistry, Cognitive Science, Dietetics, Health Behavior Science, Liberal Studies (Medical/Dental Scholars Program), Nursing, Pre-Medical Post Baccalaureate Certificate Program, Pre-veterinary Science, Psychology, and Nutritional Sciences.)



Student Feedback

Upon completion of study abroad programs, the Institute for Global Studies at UD administers online program evaluations from the students. All students are required to register for a zero-credit, pass/fall course. Students must complete the evaluation to get a passing grade; this

ensures nearly 100% participation. Overall, students enrolled in the programs sponsored by the Center for Health Profession Studies are well received. See Table 1 for sample comments. Students are also asked to use a scale of 1 (poor) to 5 (excellent) to rate the program. Our programs have a mean of about 4.4.

Table 1. Sample comments made by students on program evaluation form.

Comment

I appreciated the activities and excursions we participated in while on the trip; they shed light on the culture and background of the location we studied in.

This course really helped to shape the path I hope to follow in medical school and beyond, allowing me to see which departments weren't for me.

It was incredible, both inside the hospitals and outside. We went to see a lot of the area we stayed in, and the shadowing experience was very helpful.

This course was amazing and I was able to really learn from experiences instead of just reading information. Shadowing doctors every day gave me a better understanding of healthcare and the path the I wish to take for my career.

I could not have asked for a more relevant course to immerse myself in the healthcare system of a foreign country.

We did have briefings and debriefings for each week of the fellowship and it helped me better understand the significance of the fellowship, and also what my classmates were experiencing in the same fellowship.

This course allowed us to immerse ourselves in a universal healthcare experience.

Conclusion

To gain the most from a study abroad experience, students need to reflect thoughtfully on their experiences. In our programs, the faculty director facilitates de-briefing sessions with all the students. In these meetings the students share their experiences with other group members. It gives the group time to learn and process their days together. In addition, students are required to submit a reflection paper.

Medical internships provide valuable, life-long experiences. For some students, the internship solidifies commitment and passion for healthcare. Others may change their goals or adjust their timeframes. The students create memories that can shape them to be better healthcare providers. Overall, completing a medical internship abroad is a life-changing endeavor for all of the students.

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