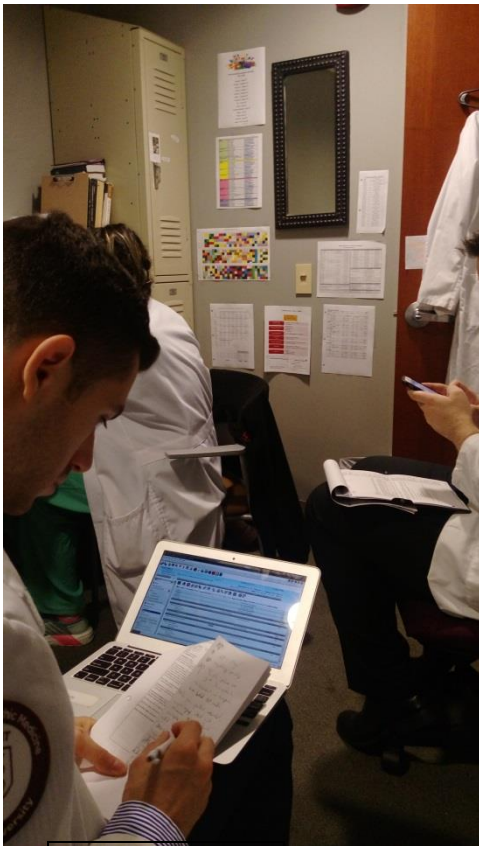


For my first week in the Global Health program, I joined Dr. Lin in hospital service at the Robert Wood Johnson University Hospital. The diseases and the level of care were not all that different from what I have seen in Taiwanese hospitals; the difference lies in the people here. Right away, during the first morning round I had already noticed the importance of communication to the medical teams here. Resident doctors, attending doctors, medical students, and pharmacist students communicated constantly, and each had a mutual respect for one another. Although the level of care do not differ much between the two countries, the depth of care is much greater here at Robert Wood Johnson. I was extremely touched by the compassion the doctors on the family medicine team exude and am deeply inspired by the team work and the patient care.



- **Art of Medicine:** soft skills ranging from communication, patient-doctor relationships, and team work

1. **Divide and Conquer: students learn by doing**

Something that I can definitely try to apply upon my return to Taiwan is sharing resident's work. Before coming to Rutgers, I have always understood that residents were responsible for typing up the notes, and in a sense, as students, we were not "good enough" to be of help. The division of work is very clear in Taiwan; each doctor would have a certain number of patients that they were in charge of: from typing up notes, ordering medication, checking data and other examination results. At Rutgers, on the other hand, the family medicine team approaches daily tasks as a team effort. Pharmacy and medical students alike, were included in this effort, and this is true even when the

residents have a hectic schedule. As a result, the students learn by doing and become more competent in the process; the residents get to take some of the burden off their shoulders. However, I did recognize that taking the time out to teach the students what to do is at the expense of the resident's time- and frankly, there is just not a lot of free time in medicine sometimes. And so I am very appreciative of the time and patience doctors on the family medicine team have allotted, to make the past week a bountiful learning experience. As a student, I will try to offer help to my residents when I return to Taiwan and learn in the process, so that I am of help. As a future resident, I will be willing to teach my juniors, so that they feel more involved and understand that mastering medicine requires practice.

2. Connecting the Dots: consulting within the team and beyond to different disciplines and the primary doctors

Communication is a big skill on this family medicine team. This includes talking within the team (during sign outs and even throughout the day for result updates and patients' conditions), interdisciplinary communications, and cross- facilities communications. In the U.S., most of our patients in the hospital have a primary care doctor, a medical professional who regularly sees the patients. Therefore, communicating to the primary doctors not only gives us relevant clinical contexts, it is also crucial for the benefit of the patients, that doctors from both sides (primary and current care) understand the patients' condition as much as possible.

For the daily morning meeting, the resident on night shift was responsible for updating the patients' conditions on the sign-out sheet, so that the team is updated on the patient list, lab results, and any recent medication changes since they last saw the patient.

During the morning meetings and throughout the day, the team then decides if it serves the patient's best interest to consult a specialty team.

The senior resident talked constantly, to the team to split up the work and for interdisciplinary consult. She said, that as the family medicine team, it is our job to connect the dots.

Going back to Taiwan, doing a better job communicating is something I can work on.

3. Getting to know the patients: patient-doctor relationships

Doctors in the U.S. have close bonds with the patients. We discussed the patients by names, introduced ourselves to the family members, and talked to the patients daily in a relaxed setting. We explained the current situation to them and discussed on the number of treatments available. Taking the time to talk to these patients make us more sensitive to changes in their conditions and thereby helping us help them.

Also, the discussions we have had with these patients spanned into their close relationships, living accommodations, work, and whatever we believed may affect their well-beings and adherence to treatments.

The comprehensive understanding of our patients allow for tailored treatment with better plan adherence. Taking the time to build friendly patient- doctor relationships is of utmost importance to any medical plan.

For my first week in the Global Health program, I joined Dr. Lin in hospital service at the Robert Wood Johnson University Hospital. The treatments and examination modalities were comparable to Taiwanese hospitals, but the medical practice itself varied profoundly, summarized in the three points mentioned above. These are great take-away points from this global health exchange.

For my second week at Rutgers, I had the opportunity to visit clinics around New Brunswick (1 paid and 1 unpaid), where I saw the practical side to medicine, in which tests were ordered only if the result would change the management. I also went to a grand round hosted by Internal Medicine, where I experienced one of the best presentations I have seen live, a Pediatrics EBM symposium, and a few classes on campus. Because I treasure the opportunity to be a part of the global health rotation, I am making most of my time abroad to take lectures, to go to talks, and to experience being a medical student in the US.

A. Clinic: intricacy and finances of medicine

In this past week in New Jersey, I witnessed the intricate and the financial aspects of medicine. By intricacy, I refer to the psychologists/ behavioral scientists on site to provide mental health support; at a given point in the appointment, if a medical doctor felt that his/ her patient may benefit from talking to a mental health specialist, the medical doctor will then introduce the patient to the psychologist in a warm hand off. Furthermore, in the outpatient clinic, as Dr. Lin explained to me, we limit our examinations and referral on a needed basis.

Throughout our medical training, doctors have told us that repeatedly the impact of psychological health on the physiological health; we have also been told to order tests when it would affect further management. However, at Rutgers Family Medicine is where practice actually meets theory.

Although current medical training stresses the importance of shared decision making with the patients, doctors, given their medical training, are by design the ones making these judgement calls. The problem, however, is that doctors and patients may not share the same interests: ordering more tests allow the doctors to have more objective information, while adding the patients' financial burden. And so, there are two things I may be able to do, as a future doctor, to lessen the medical knowledge gap between doctors and patients:

1. **Advise the patient like you would to a family member.** Empower them with the explanation of why we might consider doing these tests and what these tests may tell us.
2. **Inform the patients when observation is reasonable.** Telling the patients which tests may wait is an especially important action to take in Taiwan, because the majority of the patients do not question the doctors.

In the past week, I also got a tour at the Promise Clinic to see the student-run clinic firsthand. With the help of attending doctors, resident physicians, these volunteers took it upon themselves to provide **free primary care** services to the **uninsured** clients of Elijah's Promise Soup Kitchen. Many of the patients cared for by the clinic are afflicted with chronic conditions such as hypertension and diabetes mellitus. Obtaining regular follow up and medication is crucial to the maintenance of health, but it may easily become a financial burden. With the National Insurance system in Taiwan, I rarely thought about the finances that support these long-term treatments, but the realization I have had since going to the Promise Clinic is the fact that somebody had to pay for the medication: government, patients, charity? And as students, despite not having a stable source of income, we may help by advocating the cause to support a regular medical check-up, medication for the homeless; we may help fundraise; we may really get to know the community so that we better understand the needs of its constituents. For example, the Promise Clinic provides basic health maintenance, screenings, medications, and laboratory work. In addition to physical health, psychiatry resident physicians are on site to provide psychiatric care for non-emergent cases. When need be, the Promise Clinic also assists qualifying patients in applying for Charity Care so that they may meet Specialty Care needs such as Optometry, Podiatry, Endocrinology, Cardiology, etc.

The Promise Clinic included a group of patients with undocumented or uninsured background. Students running the clinic continuously think of new ideas to best fit the needs of the patients. Dr. Lin said, mental health therapies are best served in the native language of the patients. Likewise, the student-doctors took the initiative to hold depression/ bipolar therapy sessions in Spanish. At its set date to begin, it will be the first depression/ bipolar support group held in Spanish.

Medical students run the clinic. The first year students may take the patients' vital signs, while the second year students perform physical examinations and take the history of the patient. The third and fourth year medical students overlook the underclassmen to teach and guide them in processing through lists of differential diagnosis. And so, the Promise Clinic not only serves as an outreach to the community, but it is also an invaluable clinical experience in medical training.

B. The experience is what I make of it: grand round, symposium, classes I would have never been able to take in Taiwan

On the Internal Medicine grand round, the talk by Dr. Gupreet Dhaliwal was one of the best presentation I have seen live. He eased his way into the important points that he wanted to get across and had gotten the full attention of his audience. His art of public speaking was so masterful that he was able to get continuous laughter from the audience throughout the informative, educational talk. Aside from admiring his extraordinary presentation skills, I also learned a few techniques that might make me better at making clinical diagnosis. The doctor mentioned, of course, the importance of building a fundamental medical knowledge, but in terms of how to apply the knowledge, he suggested:

- 1) Continuously fine-tuning: by the time a doctor becomes an attending physician, he/ she will be very comfortable in diagnosing 80-90% of the patients who come to the clinic, and they are generally good doctors. However, to become a great clinician, one needs to fine-tune. For example, once I have mastered the differential diagnosis of low back pain, I might want to think about how to talk to a patient with depression about his/ her back pain and what other methods might be available to treat his/ her condition.
- 2) Have a regular feedback system: doctors make the clinical decisions to observe a patient or to refer to a specialist when they suspect something more serious. Is there a systematic way to track how these patients end up, so that we may update our differential diagnosis the next time we see the similar symptoms
- 3) Simulations: get into the daily habit of doing case studies, perhaps even set a goal for myself to get a specific score before I turn off the application.
- 4) Deliberate practice and repetitions: knowing what I need to work on is important, so the word that Dr. Dhaliwal really wanted to emphasize was “deliberate.”

At the conclusion of his talk, he stressed again, that just because I do something a lot, does not mean that I would get great at it. Becoming better at making clinical diagnosis is like getting better at other things: we need a mechanism that feeds back our performances so that we know where there is still room for improvement. Then, we deliberately practice what we still lack until we get better. Dr. Dhaliwal also emphasized the power in building to our databases every day, even if it is just a small detail about a given disease. The daily progress may accumulate to amazing results.

Throughout the week, I joined Dr. Lin in her class for Yr.2 medical students, with whom we took turns practicing talking to a patient about making lifestyle changes. Afterwards, I went to a Global Health lecture by Dr. Adrian Balica, who discussed the financial implications of minimally invasive procedures and its monetary benefits for the patients.

Then, on Friday, I went to two very interesting classes that I probably would have never gotten the chance to have lectures in. The first one was an anthropology course; Dr. Ryne Palombit talked about the life of primates and the diversity of primate societies: multi-male, multi-female groups, one-male, multi-female groups, fission-fusion community, monogamy, and polyandry.

The professor spoke from firsthand encounter with these primates, describing infanticide and the male strategy for doing so, as well as female counterstrategies, in trying to protect her offspring. From the enthusiasm that the professor lectured in, I also delved wholeheartedly into the lives of our close relatives by Darwinian Theory. I found the class to be extremely intriguing in itself, but also because that by studying the primates, we might also learn something about human nature, too.

Last but not least, I attended the lecture on the sciences of food, during which Dr. Shiuying Ho talked about the sensory evaluation of foods, food ingredients. The topic is close to my heart because it was one of the subjects I wanted to study in before starting medical school. The professor made it fun and interactive by demonstrating how the human nose may pick up meticulous details in the different components of salt.

On week 2, I began thinking about the fiscal aspect of medicine, and I wonder what I would be able to do after I go back to Taiwan to help out the less-privileged (aboriginal communities where transportation may be an issue). I began thinking about how to do a great presentation. I began thinking about what habits may I adapt to become an excellent clinician. Lastly, I began to fully appreciate the opportunity I have gotten to come to the United States for my global health rotation. The experience is truly what I make of it.

Thanks to Dr. Lin and everyone who hosted this program, students like me may get a wider perspective to medicine.

In my third and fourth week of global health rotation, I began my rotation in psychiatry consult. Here, we have had frequent one-to-one interactions with the patients. The psychiatry-consult team functions on a balance of autonomy and team work.

When a new consult comes in, a member of the team is sent off to evaluate the patient. Each of us was given specific instructions to take the history of the patients that may pertain to mental state assessments.

Doing so, each student practices evaluating a patient's capacity to make medical decisions, the need to make changes to the current medications, the risks for suicidal ideation and attempts, and need for inpatient psychiatric treatment. The psychiatry consult team is versatile in the recommendations it may provide, due to the professionalism of attending physicians leading the team.

The attending physicians were not only professional in psychiatry, but they were also creative, interactive, and patient in teaching the medical students.

Dr. Tobia, for example taught psychiatry through holding discussions on scenes from popular movies like “I’m Legend,” “Sixth Sense,” “Field of Dreams” and the sitcom “Seinfeld” episodes to provide a psychiatric perspective to “ghost movies” and seemingly every day occurrences.

Dr. Aziz and Dr. Trenton are great mentors as they prepare the students for rounds and take the time to discuss the post-round assessments and the final recommendations for each patient.

Dr. Trenton, Dr. Tobia, and Dr. Aziz also pointed out great learning points so that novices in psychiatry knew exactly where to start our studies in psychiatry; these included:

1. Choose an antidepressant (a combination of serotonin, norepinephrine, or dopamine uptake inhibitors) based on the past efficacy of the same kinds of antidepressants and *symptoms* of the patient
 - a. NE/DA: for smokers, drug addicts, obese patients
 - b. 5-HT: for patients with sleep disturbances, anxiety, suicidal ideations/ attempts
2. What not to miss: how to screen for major depressive disorder, general anxiety disorder, bipolar disorder, and PTSD
3. Analyze a patient’s mood and affect like a psychiatrist:
 - a. Congruence of affect to mood
 - b. Type: subjective to the interviewer
 - c. Intensity: over the duration of the interview on average (decreased intensity ranking from less to more severe: blunted → flat)
 - d. Range: peaks and troughs
 - i. Normal: broad
 - ii. Decreased: restricted, constricted
 - e. Change pattern: how fast (labile) or slow were the peak and troughs

During the final two weeks, a big learning point for me was getting down the brand names of common medications used in psychiatry to facilitate communicating the consult recommendations. And so, I have organized a list to help keep track of the medication names.

In the two weeks of psychiatry consult, I was able to have a lot of autonomy. I worked directly with the patients and really loved the interaction. The work load varied daily, but on Thursday, when the other medical students returned to school, I took the history and talked to four new patients and two follow-up patients. Throughout the day, I checked my phone constantly to make sure I did not miss a new consult, coming in. Before I knew it, I got a taste of a resident psychiatrist’s daily schedule (perhaps even more hectic).

The psychiatry consultation team, in a way, redefined the range of obligations a clerk may undertake. It taught me how to assess the patient, meticulously, and describe your evaluations clearly and coherently.

For the rotations to come, I surmise that I will continue building my vocabulary, and that the assessment points and communication skills I learned here will help me in whichever area of medicine I go to from here.

I also enjoyed the working in a team setting on the psychiatric consult rotation. In addition to having an attending physician as a mentor for the consultations, the resident psychiatrist, Cati, was a great help; she was patient and always had the answers when asked. On this team, I also met medical students who shared their training experiences here and abroad, and we talked about our goals for the future.

They noted how great it must have been to be able to go into medical school out of high school, but I reminded them how impressive their past experiences have been. Perhaps having the opportunity to explore other interests before getting into medicine is a good filter that picks out the most passionate individuals. Perhaps their former experiences gave them different perspectives in doctor-patient relationships. In addition to their clinical skills and knowledge, their compassion for the patients was, undeniably, contagious.

And to me, getting to know different people's stories is what global health rotation is all about.

