

Visiting Faculty Report of Course

Faculty Name: Rebecca Schoen, PharmD

Home University: Duquesne University, Pittsburgh, Pennsylvania, USA

KGU School: School of Pharmacy

Course Dates:

- Friday May 17, 2024: Lectures 1 and 2
- Saturday May 18, 2024: Lectures 3 and 4
- Monday May 20, 2024: Lectures 5 and 6
- Saturday May 25, 2024: Lectures 7 and 8

of Student Participants: 40, ranging from Year 2-5, but majority in Year 4.

Lecture 1 and 2:

In the first lecture, the students learned about the role of an ambulatory care pharmacist in the US. We discussed that an ambulatory care pharmacist is a clinical pharmacist role in the outpatient setting. Some ambulatory care pharmacists work under a legal agreement called a "collaborative practice agreement." There is variation with different states, but generally this legal agreement allows physicians to delegate medication changes to the pharmacist. The students also learned how an ambulatory care pharmacist collects information from the patient, assesses a medication regimen, and provides recommendations to patients and physicians in the clinic setting. We discussed how pharmacists document their interventions, gather information, and communicate with patients and providers using an electronic health record. This discussion provided insight into a unique role of pharmacists that is not typical in the Japanese healthcare system.

Lectures 3 and 4:

This lecture discussed three services that ambulatory pharmacists commonly provide in the US in more detail. We reviewed the process of medication reconciliation and the students practiced an activity with a patient case to simulate this experience. We also reviewed 4 categories of drug related problems: 1) indication, 2) effectiveness, 3) safety, and 4) adherence. The students completed a case demonstrating each of these 4 types of problems. We discussed how pharmacists look for these 4 types of problems in a medication therapy management appointment and watched an example video demonstrating this type of pharmacist-patient interaction. Finally, the students learned about patient counseling in the US and the "Three Prime Questions," a method for counseling that is widely taught in US pharmacy schools. We discussed how to use the "Three Prime Questions" to organize a counseling session and watched an example video of a pharmacist counseling a patient.

Lectures 5 and 6:

This lecture started with a broader discussion of digital health. We reviewed common terminology and examples for topics like "digital therapeutics," "telehealth" and "remote patient monitoring." The students learned about 2 digital therapeutics currently approved in

Japan for Hypertension and Smoking Cessation as well as other examples that may be available in the near future. After reviewing the various roles of technology in outpatient healthcare, we discussed the use of technology in cardiovascular conditions, specifically congestive heart failure and hypertension. We discussed the importance of home blood pressure monitoring and how pharmacists in the US commonly counsel patients how to check a home blood pressure reading and how US pharmacists interpret this data to make recommendations to drug therapy. Utilizing the Japanese Hypertension Society guidelines, we applied this information to a patient case and assessed a patient's blood pressure results. Students also practiced identifying appropriate blood pressure technique by looking at a picture of a patient having their blood pressure checked and determining the errors in the image.

Lecture 7 and 8:

This lecture also focused on technology for chronic disease management but this time in diabetes care. To set the background for this discussion the first part focused on why glycemic control is important in diabetes and what the mainstays in monitoring have traditionally been (hemoglobin a1c and glucometer testing). We then discussed the newer technology starting with continuous glucose monitors. We discussed how these devices work, how to counsel patients on their use, and how to interpret the reports that these devices can provide. We also discussed technology used in insulin delivery including the use of insulin smart pens, insulin pumps, and automated insulin delivery systems that combine insulin pump technology with continuous glucose monitors. We discussed how ambulatory care pharmacists are often involved in counseling patients on these tools and interpreting the results to guide recommendations on that patient's diabetes regimen. The students practiced their understanding by applying interpreting a continuous glucose monitor report for a patient case.

Assessment methods:

Students completed a 5 question quiz at the end of each course day that related to that day's learning objectives. The answers were reviewed after quiz submission or at the start of the following class to clarify any confusion.

Student Takeaways

On the last day of the course I asked the student to share "1 thing they learned or will remember from the course" using an audience poll response system in written English. At least one student commented on something from each of the four course dates. The most common response discussed the differences between the US and Japanese roles of the pharmacist, especially the use of a collaborative practice agreement. The direct interactions with pharmacists to discuss patient health and medications along with the pharmacist's ability to impact the prescribed medication regimen in the US was a surprise to them. Another major theme was on the role of technology in patient care in the US with the electronic health record and the use of technology to treat a patient's chronic disease like diabetes.