



College of Pharmacy Experiential Education Newsletter

Experiential Education Newsletter

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College of Pharmacy , QU Health, Qatar University

Doha, Qatar

Editorial Board



We welcome you to the College of Pharmacy (CPH) Experiential Education Newsletter. The aim from this letter is to shed the light on the activities and updates of the experiential program and to showcase the skills and abilities of CPH students during their SPEP and PharmD rotations and their preceptors.

The newsletter will cover different highlights from the experiential team, preceptors and CPH students.

Hazem Elewa

Dr. Hazem Elewa (Editor-in-Chief)

Dr. Monica Zolezzi (Assistant Editor)

Dr. Ziad Nasr (Assistant Editor)

Dr. Stephanie Atweh (Associate Editor)



With self compassion...
Let's talk about what's happening with students ...
when they receive the feedback.

CPH hosted the annual preceptor development this year with a workshop session titled “**Providing Effective Feedback**”. The event took place at Ibn-al-Bitar auditorium at the College of Pharmacy on March 8th, 2023.

The workshop aim was to educate, model and reinforce effective feedback mechanisms between preceptors and pharmacy students during experiential rotations. More than 80 preceptors participated in the event.

The session was delivered by our guest speakers, Dr. Sarah Al Dahir from Xavier University and Dr. Tayseer ElGaili from QU-Health wellness office. It was followed by interactive discussions with real-life case scenarios. This workshop was facilitated by our guest speakers and it was well received by our audience. It was a great opportunity for the preceptors to apply what they had learned during the session.

During the event, preceptors were asked to fill the preceptor satisfaction survey and we thank them for their valuable feedback. We are always excited to hear from you and we appreciate your thoughts and comments in order to provide you with dedicated support.

Here is a link for the preceptor satisfaction survey if you would like to submit and did not get a chance yet TAKE THE SURVEY!¹

¹<https://www.surveymonkey.com/r/DRTRF22>



1 - Dr. Sarah Al Dahir's discussion during the annual preceptor event

PharmD Program Insights



Student Exchange between QU-CPH and XU

As part of students exchange agreement between the colleges of Pharmacy at Qatar University (QU-CPH) and Xavier University (XU), USA, international internships took place where QU-CPH Doctor of Pharmacy (PharmD) students were selected to complete their pharmacy practice experiences at XU. Two students from Qatar QU-CPH completed a clinical rotation at XU in New Orleans, Louisiana, USA from October 23, 2022 – November 17, 2022. PharmD students, Mariam Mustafa and Reem Hajeomar were precepted by Dr Sara Al Dahir, Clinical Associate Professor/Fulbright Scholar-Division of Clinical and Administrative Sciences, College of Pharmacy, XU. Our PharmD QU students got the chance to experience different academic, administrative, research work, and site visits during their rotation at XU.

For the teaching part, Reem and Mariam got the chance to prepare and present lectures on different topics along with practice exam questions and cases. In addition to that, they were involved in administrative work through which they helped in interviewing the students that applied for the international rotation at QU-CPH from XU, this was alongside Dr. Sara Al Dahir. From the research part, they got involved in research projects that Dr. Al Dahir was working on. They helped delivering questionnaires, creating posters, making videos, and reviewing a grant proposal. The studies were community-based and were related to COVID vaccines and treatments.

Moreover, our PharmD students visited the Local community pharmacies to experience the difference between the states and Qatar. Besides, they visited Oschner hospital liver and renal transplant unit where they shadowed clinical pharmacist in inpatient and outpatient settings. On a side note, rich discussions took place with Dr. Al Dahir on different graduate study opportunities in the US including masters and fellowships.

“It was great to be able to re-open our international exchange program this year, the first after COVID-19 pandemic. Four PharmD students were able to spend 4 weeks in an Academic Leadership rotation at Xavier University in Louisiana, USA and at University of British Columbia in Vancouver, Canada. These experiences broaden their understanding of pharmacy education and how it is shaping the evolution of pharmacy practice worldwide. These programs continue to inspire our students to become leaders to promote pharmacy advancements within Qatar.”

Dr. Monica Zolezzi, Director of QU-CPH PharmD program

“This rotation was a rich experience that did not only give me exposure to a new health system and medical practice but also a new culture. It was very interesting to compare between pharmacy practice in Qatar and the United States. I hope to use what I learnt from this rotation in the near future and apply it in my everyday practice to help further develop the evolving role of pharmacists in Qatar. I am very grateful for Qatar University and Xavier University for providing me with this opportunity.”

Reem Hajeomar, QU-CPH PharmD student



Student Exchange between QU-CPH and UBC

As a part of students exchange agreement between the colleges of Pharmacy at QU and University of British Columbia (UBC) in Canada, international internships took place where QU-CPH PharmD students were selected to complete their pharmacy practice experiences at UBC. Two students from QU-CPH completed a clinical rotation at UBC in Vancouver, Canada from 25th February 2023 to 24th March 2023. PharmD students, Nadin Kamel and Halima Saadia were precepted by Dr. Kerry Wilbur- Executive Director of Entry-to-Practice Education and Dr. Janice Yeung- Director of Office of Experiential Education in the Faculty of Pharmaceutical Sciences. Our PharmD QU students got the chance to experience different academic, administrative, research work, and site visits during their rotation at UBC.

“As part of my PharmD program at College of Pharmacy, Qatar University, I had an opportunity to do an academic leadership rotation at University of British Columbia (UBC) in Vancouver, Canada. This was a truly transformative experience that provided me with invaluable insights into the academic and professional practice in Canada. This enriching experience encompassed a wide array of learning opportunities, including attending workshops, lectures, and engaging in site visits to various healthcare facilities. It also provided exposure to the latest advancements within the Canadian pharmacy profession, shedding light on the ongoing efforts to expand the pharmacists’ role in healthcare delivery. It was

inspiring to witness firsthand the dedication and innovation that underpin these initiatives. I would like to extend my sincere gratitude to Dr. Kerry Wilbur and Dr. Janice Yeung for their exceptional guidance and hospitality throughout my academic leadership rotation. Their role as preceptors has been instrumental in facilitating our exposure to the Canadian academic and practice environment. Their unwavering support and commitment to our learning journey have provided us with invaluable opportunities to grow and gain meaningful experiences. I am truly grateful for their mentorship and the warm welcome they extended to us during our time at UBC.”

Halima Saadia, QU-CPH PharmD student

"This was an incredible experience that surpassed all expectations. I immersed myself in the vibrant and exciting Canadian educational environment by forming valuable networks with faculty members at the college and pharmacists in practice. I had the opportunity to attend many workshops, lectures, and meetings, as well as visit hospitals and community pharmacies, which allowed me to gain exposure to the Canadian academic and practice environment. I came away from my visit with a renewed sense of enthusiasm for the field of pharmacy and a deep appreciation for being part of this community.”

Nadin Kamel, QU-CPH PharmD student



2 - Meeting with the Dean Michael Coughtrie



3 - Attending a workshop with Dr. Janice

SPEP Program Insights



The 2022 13th SPEP cycle entailed a total of 186 rotations, each consisting of a total of 160 hours of structured practical experiential training. Of these, 72 took place in hospitals, 63 in community pharmacies, and 43 in primary health care clinics. In addition, 8 elective rotations were offered in industrial pharmacy practice at Qatar Pharma. These rotations involved more than 200 preceptors participating in teaching and mentoring our students. During the 2022 cycle, a total of 116 preceptors completed 122 CEI courses.

Students finish most of their SPEP rotations during the fall of their final year as a cohort of capstone courses to ensure they are able to apply what they learnt during their pharmacy studies. This was the comment from Fatima Nazar (BSc Pharmacy P4 student)

"An essential part of being a final year pharmacy student is understanding the different areas of pharmacy practice, and I am grateful to have achieved this objective upon completion of the Structured Practical Experiences in Pharmacy (SPEP) as part of my undergraduate pharmacy curriculum at the College of Pharmacy. Each SPEP rotation had learning objectives and opportunities designed to achieve the 9 NAPRA competencies of a competent pharmacist and explore every aspect of the pharmacy practice including hospital, clinic, community, and industrial settings. From practice setting to patient care and collaboration with other healthcare professionals, everything was covered in these objectives. Furthermore, the learning opportunities created in these settings enabled me to apply campus-based learning in professional practice setting, under the leadership of exemplary preceptors. This experience has enabled me to become a more competent pharmacist, and as I approach graduation, I am more

confident of my abilities and skills as a pharmacist. As Julius Caesar has said, "Experience is the teacher of all things."

SPEP Program Updates



We are happy to announce the below updates for the **14th SPEP cycle**:

We will be resuming the international elective rotations (at least 6-10 placements in the United Kingdom and New Zealand: Mint Pharmacy, DeMontfort University, University of Otago).

We have also secured partnerships with private hospitals (Al-Ahli Hospital) as well as recruited over 50 new preceptors and sites at Wellcare, Kulud, and Ebn Sina pharmacy chains.

We are also excited to share that we have updated our assignment map and evaluation forms to make it more beneficial for both the students and preceptors.

Visiting Student Insights: UBC PharmD Students' Visit



We were extremely delighted at QU-CPH to host two PharmD students from UBC: Marwan Kasim and Rezkalla Farkouh, for their academic rotation from the 29th of January, 2023 till the 24th of February, 2023. Students were involved in many teaching activities and also had the chance to rotate among various different clinical training sites. Read below what they had to say about their experience.

“Hello everyone! My name is Marwan Kasim and I’m a 4th year PharmD student at UBC in Vancouver, Canada. I was placed at QU for 1-month for my academic-teaching rotation and I can honestly say that my 1-month stay at QU was too short! There was a wealth of knowledge that I had gained from my experience. One of the strengths of my stay here was seeing the diversity in healthcare practice as well as the exposure to different positions within the College of Pharmacy. This ranged from the interactive IPE sessions to the thought provoking CPD sessions, to facilitating Professional Skills sessions as well. Not to mention shadowing clinical pharmacists at multiple hospitals and seeing how well they do their job in interacting with patients and caring for those in need. Lastly, I also have to mention the wide array of extracurricular activities and student-led clubs that are available to be a part of. There was so much to see and do and every single day of my stay here was different than the last!”

Marwan Kasim

“This opportunity has been invaluable as it allowed me to conduct multiple teaching activities thanks to the high level of responsibility that I was entrusted with, which made me feel immensely valued.

Additionally, the care, generosity, and support extended to me by my preceptors and other faculty members during my time in Qatar made my experience truly unforgettable”.

Rezkalla Farkouh

Intervention of the Month



Description of the Drug-Related Problem (DRP): Mrs.RJ presented to the community pharmacy with a worsening cough, sore throat and headache. She has been taking multiple over-the-counter medications which she bought from another pharmacy 10 days ago. Upon further data gathering it was clear that there was a duplication of therapy since she was taking two medications that contain decongestant simultaneously : one had pseudoephedrine and the other had phenylephrine.

Pharmacy Intern's Intervention: I explained to Mrs. RJ that it is not recommended to take any decongestant for more than 3 to 5 days. This might have lead to rebound congestion also known as "rhinitis medicamentosa". I advised her to stop taking those decongestants immediately, then I recommended she starts a cough syrup for dry cough which contains butamirate citrate, and works by clearing the nasal passages along with a nasal saline spray to keep her nasal mucosa hydrated.

Drug Information Question (DIQ) of the Month



In patients with Type 2 Diabetes, is semaglutide oral formulation, taken once every day, more efficacious in reducing the Hb1Ac values as compared to semaglutide subcutaneous injection formulation taken once weekly?

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are recommended by the American Diabetes Association and the European Association for the Study of Diabetes as the first-line therapy for adults with Type-2 Diabetes because of their effectiveness in HbA1c reduction. [1] Semaglutide is a GLP-1 RA that works by improving the efficiency of incretin function by activation of the GLP-1 receptors.[2] It is the only GLP-1 receptor agonist that is available in the oral formulation as well as the injectable formulation. [3]

While the efficacy of oral and subcutaneous semaglutide has been established in the PIONEER and SUSTAIN trials respectively [3], there are no head-to-head trials that compare the efficacy of these formulations in reducing the Hb1Ac values in patients with Type 2 diabetes.

According to a recent (June 2022) systematic review and meta-analysis that analyzed the efficacy and safety of oral semaglutide for glycemic management in adults with type 2 diabetes compared to subcutaneous semaglutide, placebo, and other GLP-1 RA comparators, it was found that oral semaglutide was non-inferior to semaglutide injectable formulation. The study included a total of 12 RCTs (6840 participants) selected from Cochrane Central Register of Controlled Trials and PubMed. It was

found that oral semaglutide was slightly less effective in reducing Hb1Ac levels, with Mean difference of -0.26% in Hb1Ac levels and 95% confidence interval of (0.44, -0.77) and p-value less than 0.05, which is statistically significant. [4] One of the limitations of this study is that there are differences in the background medications that were taken by the patients, as some of the patients were either treatment naïve or were taking other anti-diabetic medications as well. This means that it can be difficult to assume that the Hb1Ac value differences were solely due to the use of oral or subcutaneous semaglutide alone. Furthermore, the risk of bias is high in the studies included and hence a robust conclusion cannot be drawn solely from this study.[4]

Another systematic review and meta-analysis analyzed the reduction in Hb1Ac by oral semaglutide vs other GLP-1 in Type 2 diabetes patients previously receiving 1-2 oral antidiabetic medications. When 14mg oral once daily semaglutide was compared with 0.5 mg once weekly semaglutide subcutaneous injection, it was found that the difference in reduction of Hb1Ac between both arms was -0.04 (relative treatment difference), but was not statistically significant (95% CI, -0.29, 0.22). Similarly, when 14mg oral semaglutide tablet was compared with 1mg once weekly subcutaneous injection of semaglutide, it was not found to be statistically different. When we look at the proportion of patients who were able to achieve HbA1c level $<7\%$, it was 0.99 (95% CI 0.52, 1.96) (Oral 14mg Semaglutide Once daily vs 0.5mg subcutaneous semaglutide Once weekly) and 0.58 (95% CI 0.31, 1.13) for Oral 14mg semaglutide once daily vs subcutaneous 1mg semaglutide once weekly. Similarly, when we look at the proportion of patients who were able to achieve HbA1c level $<6.5\%$, the proportion was 0.98 (95% CI 0.51, 1.98) (oral 14mg semaglutide once daily vs 0.5mg subcutaneous semaglutide once weekly) and 0.63 (95% CI 0.33, 1.24) for oral 14mg semaglutide once daily vs subcutaneous 1mg semaglutide once weekly. These results, however, were not statistically significant and hence no robust conclusions can be drawn. [5] This study also ranked the GLP-1 RAs against each other in terms of reducing the Hb1Ac, and it was found that semaglutide once weekly (1mg) was ranked first overall against all the GLP-1 RAs, including the oral formulation (14mg). However, 0.5 mg subcutaneous semaglutide and 14mg oral semaglutide both ranked 3rd in reduction of Hb1Ac values in both $<6.5\%$, and $<7\%$. This hints that there may be some dose-related effect in reduction of Hb1Ac in both formulations, but this study only compares one dose of once daily semaglutide (14mg) when there are two other dose strengths 3mg and 7 mg, which are approved by the FDA. Hence, no conclusion can be drawn in this regard. [5]

Both formulations are available in Qatar, but no information can be found on the oral formulation in the Qatar National Formulary [6] Ministry of Public Health National Clinical Guidelines [7]. This could be because it was just recently approved, and the websites might not have been updated.

In terms of pricing in Qatar, the subcutaneous injection is expensive, and the cost of a single dose of subcutaneous injection (796QAR) is equivalent to one month supply of oral tablets (712QAR) [9]. Hence, the cost should also be kept in mind so patients can afford their medications and adhere to the treatment plan. [10]

Patient compliance is also a crucial factor in deciding which formulation should be prescribed. Oral formulation serves as a best alternative to the subcutaneous formulation for patients who have needle phobia, cannot administer the injection properly or do not have caregivers.[4] However, in addition to the difference in efficacy parameters, patients should also be educated that the efficacy of oral semaglutide is dependent on the accurate administration. It should be taken on an empty stomach, and one must wait for 30 minutes before taking any meal or drink as its absorption decreases when taken

with large amounts of food or water. This is not the case with the subcutaneous injection apart from the correct administration of the injection [8, 11, 12].

Overall, subcutaneous semaglutide is more efficacious than oral semaglutide in terms of Hb1Ac reduction but is more costly. Therefore, patient's ability to administer the medication correctly, and their capacity to afford their medication are two key factors that should be kept in mind while choosing the formulation for semaglutide.

Kindly click here ²to access the references.



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