

For pharmacist to evaluate patients for potential drug-related problems, asking the right questions to obtain relevant information and properly assess them with clinical knowledge and holistic mindset is crucial. This process needs to be repeatedly practiced and reinforced with real-life scenarios to solidify critical thinking and knowledge application abilities.

To cultivate student's ability to conduct holistic patient and drug therapy assessment, an interactive pharmacy virtual simulation programme with animation characteristics was developed using psychiatric patient cases.

Six simulated videos featuring scenarios on screening/initial patient interview, therapy assessment and adverse effect management were developed. To portray patient experience, two Virtual-Reality videos featuring patient symptoms were created. Students can participate in hands-on patient assessment by, entering in free-text, the questions they shall ask the patient in various scenarios. They will also be prompted to choose from pull-down menu the responses they shall give after assessing the relevant information collected from the virtual psychiatric patients. The modules will be used as part of the flipped classroom strategies of the course PHAR 3414 Pharmacology and therapeutics 3 in Spring semester.

This interactive pharmacy virtual simulation programme allows students to visualize the real life situations, interview patients with specific questions and generate responses accordingly. Student's observational skills for clinical signs could also be enhanced with the animations and videos. Based on preliminary student feedback, student can see knowledge application to real life scenarios involving patient assessment and counseling. They also appreciated the free-text entry which forced them to think independently on how to solve problems.