Incorporating case-based discussions within a medicines information advanced experiential placement

D. Sammut Alessi, R. Agius, A. Cutajar, L. Grech, L. M. Azzopardi

Department of Pharmacy, Faculty of Medicine and Surgery, University of Malta

Introduction: The Department of Pharmacy at the University of Malta offers a three-year international post-graduate Doctorate in Pharmacy programme in collaboration with the University of Illinois, Chicago, United States of America. Within this course, students may opt for a Medicines Information Advanced Pharmacy Practice Experiential rotation. This rotation includes a case-based discussion (CBD) designed to structurally assess students on the delivery of patient care.

Method: An advanced pharmacy practice case is selected by the preceptor for preparation as a CBD by each student. The case is selected by the preceptor to strategically practice a research-based environment to facilitate the students in developing required workplace skills. During the case assignment the preceptor explains the goals of the activity. Students are expected to apply critical appraisal skills in managing patient care, identify care issues and discuss holistically an action plan.

Results: The CBDs are delivered by students in front of experienced preceptors and structurally evaluated by two assessors including preceptors and programme coordinator. The Clinical Case Presentation Evaluation Form assesses for clarity, accuracy and validity of the case discussion together with problem identification and skill in delivery of the discussion. The structured assessment form is utilised to deliver constructive feedback to the students, which enables the identification of key areas of improvement and to further elicit reflections on patient-centred care.

Conclusions: The application of CBDs using carefully chosen cases by the preceptors supports critical thinking skills and reflection on clinical pharmacy interventions by the students. Throughout the process of organising, collating the data and delivering the CBDs, students are empowered to take initiative, engage in clinical decision making, and use problem-solving skills using actual patient-specific factors.

Multimedia resources in pharmacy education: A lab experience

R. Oliveira, C. M. Lopes

Biomedical Research Centre (CEBIMED)/Research Centre of the Fernando Pessoa Energy, Environment and Health Research Unit (FP-ENAS), Faculty of Health Sciences, University Fernando Pessoa, Portugal

Introduction: During the COVID-19 pandemic crisis, teachers were forced to suddenly adjust their teaching methods. The phenomenon was particularly challenging for teaching laboratory classes at a time of full lockdown. Visual memory shows the personal ability to process images and this type of memory is very important for enhancing learning and processing of information. This experience aimed to develop pedagogical strategies to help the students' learning process in a particular moment, as well as to use the methods developed to enhance future learning of pharmaceutical techniques within pharmacy education.

Method: Multimedia resources were used to produce short videos of the preparation of laboratory assignments for pharmaceutical technology classes. In synchronous online classes, the videos were watched, commented on, the compounding preparation record was performed and at the end of the class the video was shown once again to consolidate the compounding process. In a first approach, in 2019/2020, students did not repeat the assignments in person and carried out their assessment remotely. In a blended-learning approach, with different students in 2020/2021, they had the opportunity to return to the lab to repeat the experiment protocols viewed online and perform the assessment in person.

Results: There was no relevant difference between the grades obtained with classical face-to-face teaching (before the pandemic) and with the use of e-learning/blended-learning methodologies. However, students with online exclusive learning reported that they would have liked to repeat the assignments face-to-face in the laboratory. The blended-learning students reported that seeing the videos before the experimental work helped their memory and execution, leading to the perception that the video resources are useful.

Conclusions: A combination method of multimedia resources to stimulate visual memory and practical execution of the activity may have a synergistic effect on learning and acquisition of practical skills.