



Flipped classroom based on objective structured clinical examinations analysis by undergraduate students of Pharmacology course from the Podiatry Degree improve their learning and assessment communication skills about medicines.

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Background and Aims: The flipped classroom (FC) combine online learning and face-to-face classroom activities. In FC students engage in content learning before class, thereby maximising in-class time for active learning. Objective Structured Clinical Examinations (OSCEs) are versatile multipurpose evaluative tools usually utilized to assess health care professionals in clinical setting. OSCE include communication skills and ability to handle unpredictable patient behaviour usually not included in the traditional clinical exam, and it can be quite useful used as simulation for students' analysis and learning. We aim to evaluate the impact of the individual and in-group analysis of OSCEs (filmed by other students) looking for correct and incorrect behaviours and contents in their learning of pharmacology.

Summary of work and outcomes: A 5-year prospective study in which students of Pharmacology course from the Podiatry Degree analysed filmed OSCEs individually and in a group in a flipped classroom. Each group (max 5 students) analysed along 1 week a filmed OSCE, prepare a summary of correct and incorrect items related to clinical events, medicines uses, and people behaviours. The students presented their analysis results to the rest of the class. After each presentation, the other students of the class were encouraged to ask questions and after that, the students voluntarily answered a satisfaction survey.

Result and Discussion: 405 students, 65.2% female, 20±5.3 years old were included. Students spend 13.4±5.4 h on making the filmed-OSCE analysis. The percentage of students satisfied with this way of studying pharmacology was 96.5%. OSCEs analysis by students increased their percentage of success in the final assessment in both OSCEs-related and OSCEs-non-related questions (+18.5% and +10.1%).

Conclusion: Filmed Objective Structured Clinical Examinations analysis by undergraduate students on the Pharmacology course of Podiatry Degree improved their knowledge about medicines use and their communication skills during the assessment.

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