

AN OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE) TO EVALUATE CLINICAL/COMMUNICATION SKILLS OF PHARMACY STUDENTS

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INTRODUCTION

- Pharmacy education has undergone changes as it involves skill acquisition and practice development. As supported by its reliability and validity, OSCE has become the standard for evaluation of clinical skills in pharmacy students worldwide.
- Miller described a conceptual 'pyramidal' model of the various facets of clinical skills.



OBJECTIVE

- To describe OSCE, their development and application for assessing competences, among fifth-year Pharmacy students of the Cardenal Herrera-CEU University.

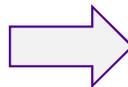
METHODOLOGY

- The Cardenal Herrera-CEU University conducts its first OSCE in Pharmacy, with 5 individual assessments or "stations", for 30 students that concluded their training in 2018.
- The OSCE includes several stages: to prepare the stage/cases, simulation and evaluation.

DESIGN OF THE OSCE

- 1. ANALYSIS OF OSCEs** of other Faculties of Pharmacy to determine the activities and resources that establish the development.

- ✓ Type of station
- ✓ Personal
- ✓ Materials
- ✓ Test
- ✓ Evaluation of results

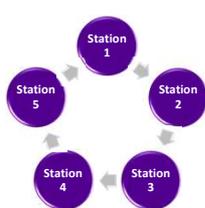


- 2. DESIGN OF THE STATIONS/CASES**

- TITLE OF THE STATION
- EVALUATED COMPETENCES
- COMPETENCE TYPE (COMPETENCE MAP)
- DEVELOPMENT OF THE STATION
- MATERIAL
- NAME OF THE TEACHER, SUBJECT AND COURSE

DEVELOPMENT OF THE OSCE

- Individual simulated cases** provide information to students at the beginning of the simulation, complementary information only becomes known if student investigate. Candidates read the instructions then enter the station and proceed to perform the clinical task.



- STATION 1. Toxicity produced by plants**
- STATION 2. Advice in the treatment of parasitosis**
- STATION 3. Measurement of blood pressure**
- STATION 4. Antibiotic dispensing**
- STATION 5. Dose calculation in pediatrics**

EVALUATION OF THE OSCE

- Examiners** observe the candidate carrying out the task and their performance is scored by using a **predefined checklist**.
- The **competences tested** (Table 1) include *inter alia* patient counselling and communication, identification and resolution of drug-related problems (DRPs), literature evaluation/drug information, provision and manual skills.

TABLE 1. COMPETENCE MAP FOR OSCE

| COMPETENT COMPONENTS | EVALUATION PERCENTAGE (%) |
|--|---------------------------|
| Therapeutic management of the patient | 30 |
| Formulation and analysis laboratory | 25 |
| Prevention and health promotion | 15 |
| Pharmaceutical Planning and Management | 10 |
| Communication skills with the patient | 10 |
| Interprofessional relations | 5 |
| Sources of medication information | 5 |
| TOTAL | 100 |

RESULTS

- Results indicate that OSCE was well structured and assessed clinical/communication needed for a professional pharmacist.
- The examination revealed that students were better in **communicating with the patient and therapeutic management of the patient** than in obtaining information.
- The average mark obtained in OSCE by the 30 students evaluated was 6,2/10.

Results obtained in the different stations evaluated (from 0 to 10 points).



- The station that results with the **best rating** was the station 4, antibiotic dispensing.



CONCLUSION

- The implementation of OSCE among fifth-year students is technically feasible and allowed evaluation of clinical competences and communication skills.
- The authors wish to acknowledge the significant contributions made by staff of the Faculty of Health Sciences (Teaching Innovation Project, PI01A-SV-17).

REFERENCES

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