SIMULATION TRAINING: AN INNOVATIVE AND EFFICIENT TOOL TO TEACH MEDICATION RECOGNITION TO PHARMACY STUDENTS

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BACKGROUND
Medication reconciliation (MR) is an essential clinical pharmacy activity requiring appropriate knowledge, skills and behaviors.
To standardize students’ MR learning in hospital, a simulation training program on best possible medication history (BPMH) was developed for clinical pharmacy students.

MATERIAL AND METHOD
- **Educational objectives:**
  - To formalize a comprehensive BPMH
  - To conduct a patient interview.

- **Training program divided into 3 parts.**
  
  **PART 1: Theoretical part**
  All students
  Support presentation: power point
  1 pharmacist trainer
  Length: 1 h 30

  **PART 2: Simulation technical session**
  Group of 2 students:
  2 pharmacists: Trainer + actor
  Length: 1 h 30

  **PART 3: Tutorled practice in clinical unit**
  Student individually supervised by a pharmacist tutor

- **Draw of the scenarios: Sheet of collection by scenario: Reconciliation sheet**
- **Objectives and progress of the session:**
  - Presentation of the material available at 10;
  - Assignment of the scenarios.

- **2 evolutionary scenarios depending on the decision-making of students:**
  - Finding information (10 min);
  - Patient interview (15 min x 2);
  - Formalization of the BPMH (10 min).

- **FEASIBILITY**
  - Evaluation from an organizational point of view regarding the respect of the:
    - Training planning,
    - Continuity of pharmacy activities

- **RESULTS**
  - Number of students: 39
  - Trainers: 2 pharmacists
  - Study period: 1 year
  - Number of training sessions: 4 sessions during a week (mornings)
  - Quiz’s mean score before training: 14/20
  - Quiz’s mean score after training: 18/20

  - Acquired - PART 2:
    - Preparation of the patient interview;
    - Communication techniques (behaviors, wording of questions, attitudes...);
    - Collection of information during the interview: medications prescribed, self-medications, specific medications (drops, creams...), pharmaceutical record, allergy, name of the community pharmacist...

    - Requiring improvements - PART 2:
      - Order of questions;
      - Collecting dosages for each drug;
      - Making a photocopie of the prescription if the patient provides it during the interview;
      - If necessary, asking again details to the patient when you return the pharmacetical record or the prescription;
      - Regarding the community pharmacist phone call: asking a fax of the prescription;
      - Starting by asking open questions to the patient...

  - Acquired – PART 3 (opinion of tutors):
    - All of the skills have been acquired;
    - All students were able to formalize a comprehensive BPMH and to conduct a patient interview "serenely".

- **CONCLUSIONS**
  - Simulation is an innovative, playful and relevant tool.
  - This training, standardizing the students’ MR learning, is effective and feasible in hospital.
  - It allows to combine the 3 qualities needed for a good MR practice: knowledge, skills and behaviors.
  - This training will be sustained and could be extended to other professionals such as hospital pharmacy technicians.

- **EFFECTIVENESS**
  - The effectiveness was assessed by the achievement of the first 3 levels of Kirkpatrick’s Model:
    - **Behavior** using a satisfaction survey
    - **Learning** using a knowledge quiz before and 6 month after the training
  - 2-score for paired data has been used (e=+5%)
  - **Examination** of behaviors observed by a pharmacist with a competency sheet (29 skills)

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