

## An escape game concept for the preparation of medications in clinical trials in the sterile sector : a playful and useful training course



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### Objectives

The preparation of injectable medications in clinical trials (CT) requires a sterile environment

➔ **Initial and further training is required for the hospital pharmacy staff .**

**Objectives :** to set up a playful, simulation-based evaluation such as an "escape game" for the hospital pharmacy staff who have to prepare CT medicines in a sterile environment.

### Methods

Creation of a fake study as well as a fake prescription and a fake manufacturing sheet

➔ Simulation of an CT medicines preparation in a false "sterile environment".The player is accompanied by an examiner.

➔ Debriefing + quizz

The player must find the errors inserted on a prescription : Concentration error, dosage error, date error, lack of validation by the pharmacist...

➔ **When all errors are found: the player wins the key to open the sterile environment**



➔ The player must then find the dress code errors on the manipulator : each error earns him points.

➔ **The total of points allows to open the padlock of the equipment store**



➔ The player must choose the materials needed for the fabrication of the medicine: each correct material of equipment earns him points.

➔ **The total of points allows him to free the manipulator**



➔ The player observes the manipulator. He or she acts as a manipulative helper. The player must find the handling errors (error of volume sampled, gesture that can break sterility...) : each error earns him points.



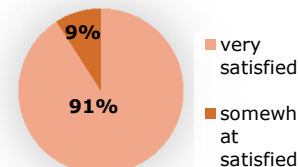
➔ **The total of points allows him to open the last padlock**

### Results

**11 participants :** 3 pharmacists, 2 residents, 3 pharmacy students and 3 technicians  
average duration of the game: **41 min 57** average response to the quiz: **4,4/5**

Question	Moyenne des réponses (/5)
Point gain after the completion of the game: « "Do you feel comfortable with sterile environment preparation ?", (0: not at all comfortable to 5: very comfortable) ? »	+0,4 point/5
Did you feel stuck during the game? (0: not blocked at all to 5: very blocked)	3,4/5
Did you find the game useful (0: useless to 5: very useful)?	4,8/5
Did you find the game difficult (0: easy to 5: very difficult)?	2,8/5

### Player satisfaction



### Conclusion-discussion

- The real-life simulation and the "escape game" concept had a **positive impact on improving professional practices.**
- This game was able to highlight **the evolution** of each participant and allowed them to question **certain bad preparation practices**

This evaluation will be applied to the **staff after theoretical and practical training.**

The real-life simulation with a fake manipulator allowed the participants to be trained on mistakes that must not be made in the "sterile environment mistakes"