

DESIGN AND ASSESSMENT OF AN E-LEARNING COURSE TO TRAIN CLINICAL PHARMACISTS IN VITAMIN K ANTAGONISTS CONSULTATION

PURPOSE

1. Develop and validate the training methodology
2. Provide the E-learning program

RESULTS

1. The evaluation of the pharmacy students highlighted a **significant individual progression** associated to a high level of satisfaction.
2. Regarding to **VKA consultation accreditations**, e-learning program results were **comparable** to those obtained with the conventional training associated to a **shorter training time**.

Moreover, **e-learning training method was much appreciated**, particularly distance learning, free access to the slideshow, learning flexibility and flash animation for role plays.

BACKGROUND

- > Vitamin K antagonists (VKA) concerned **1.1 million patients in France**.
- > Represent a **high-risk drug** related to their **narrow therapeutic range**.
- > Haemorrhagic complications lead 18 000 hospitalisations and 6 000 deaths per year.
- > Our hospital is involved in VKA consultations since 2009 in cardiology unit.
- > **Clinician requests increase** every year.
- > Last year, 120 consultations were performed in **all adult wards of our hospital**.

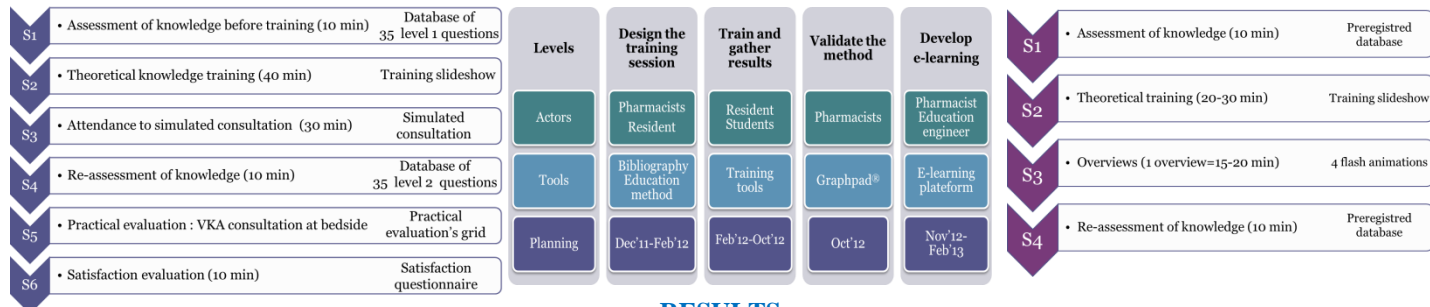
MATERIAL AND METHOD

Training method : 6 steps (S)

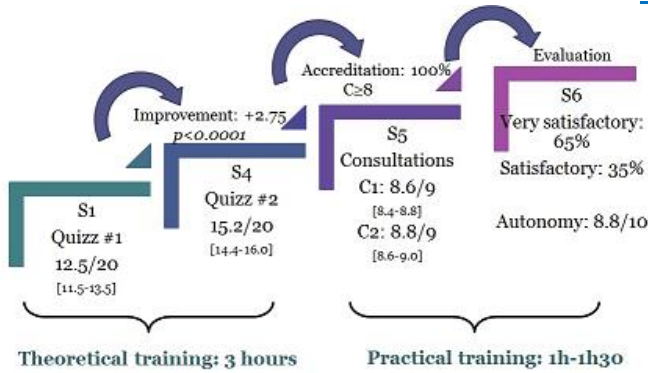
Tools

E-learning implementation

E-learning program



RESULTS



Training method results (n=34 students)

S1	S4	Improvement		Validation	
Quizz 1	Quizz 2	Consultation 1	Consultation 2		
17.9/20	17.2/20	-0.7 NS	8.5/9	8.8/9	100%

- Around **two hours** were necessary to complete the program.
- No significant differences were observed between practical training scores of e-learning and conventional training learners.

E-learning test (n=10 pre-registered pharmacists)

E-LEARNING PROGRAM



CONCLUSION

- > Anticoagulant monitoring combined to patient sensibilization is a **major issue for decrease haemorrhagic complications**.
- > Training pharmacists consultant is at once **necessary and critical**.

- > E-learning greatly **save time** while providing **efficiency**.
- > The perspectives for this year are to **extend the e-learning** in two others teaching hospitals and to **include new oral anticoagulants particularities** into the program.