



# INTRODUCTION

- Immersive simulations are shown to motivate students and promote learning in a fun and safe environment.
- Body Interact (BI) is among the most successful VP programs and has been used as a teaching adjunct by medical schools in the United States and Europe.

# METHODS

- We identified 2 nephrology cases that would be appropriate for virtual simulation.
- We solicited the help of experts in order to build them in a VP platform.
- VP cases were piloted then used during class in groups of 8 students accompanied by L teaching faculty.
- VP allows direct interaction with the students including history gathering, physical examination, testing and live reaction to proposed treatments.

# **Application of a Virtual Patient (VP) program into** a medical school nephrology curriculum

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#### METHODS CONTINUED

- At the end of each class, students were asked to fill a survey/feedback form that consisted of a 4-point Likert scale questionnaire rating student agreement [(SA) strongly agree, (A) agree, (D) Disagree and (SD) Strongly Disagree].
- > The questionnaire focused on 6 parameters: program interface, user engagement, perceived educational value, likability, need for improvement and interest in dissemination.

### RESULTS

- > 32 CCLCM students used the VP platform for the 2 designed cases.
- > Survey response rate was 73%.
- Despite generally favorable feedback by the students, 68% thought that the program could be improved. Most of the desired improvements related to the speed of the program and to the presence of technical glitches on library computers.

# RESULTS CONTINUED

Table 1 shows the survey questions. The score represents the computed average of the responses where 1 corresponds to strongly disagree, 2 to disagree, 3 to agree and 4 to strongly agree.

QUESTION	SCORE
1. INTERFACE-GENERAL	
I like using technology in my learning	3.4
The program is user friendly	3.1
The program is easy to navigate	3.0
The program's graphics are adequate	3.3
The program's response time is adequate	2.8
2. INTERFACE-SPECIFIC	
Obtaining the patient history was easy	3.5
Ordering the tests/treatments was easy	3.4
The feedback at the end of the case was adequate	3.2
The terminology used is correct	3.4
3. ENGAGEMENT	
I was motivated to undertake the simulation	3.2
I was absorbed in the activity of the simulation	3.3
I felt that time passed quickly	3.3
The simulation was fun	3.5
4. EDUCATIONAL VALUE	
I found the program educational	3.3
The program is a useful learning aid	3.3
I preferred using the program to the standard	2.9
method of case discussion	2.5
5. LIKABILITY	
I like the interface of the program	3.0
I liked working the case	3.3
6. INTEREST IN DISSEMINATION	
I would like the simulation to be applied for	32
more cases in nephrology	
I would like the simulation to be applied for	3.2
more cases other than nephrology	
I would recommend this program get	3.1
integrated into the medical school curriculum	



# CONCLUSION

- We successfully incorporated a VP platform into the nephrology educational curriculum.
- > The BI program was well received and was found to be a useful educational adjunct.
- Our experience taught us that the use of gaming engines may require considerable computer processing power and this will need to be taken into account in future virtual endeavors.

