Innovating learning in Family Medicine: adaptation of clinical situations to virtual environment

Introduction: The development of clinical reasoning in students has been a major challenge for healthcare educators. The use of text and static images no longer produce the same effects, especially considering the profile of the nowadays students who grew up surrounded by technology and yearn for the use of this technology in education.

Objective: The goal of our study was to show the efficiency of the flowcharts modeling tool XMind 2012 Ltd (XMind) for transforming clinical situations into organized flowcharts, creating virtual environment of interactive learning.

Methodology or experience description: The clinical situations were fitted in a fictitious city (Santa Fé), modeled in third dimension in the software Google Sketchup 8, offering to the postgraduating students in Family Health (nurses, doctors and dentists) simulations into a basic health unit, with development of a serious game. For the simulation, where the student decides the best way to resolve the case (diagnosis, treatment) was necessary transforming texts into fluxes, through XMind, creating interactivity, potentiated by importation of integrated 3D screen in the planned sequence for the action in the environment for the use of the software e_adventure.

Results: XMind provided the transformation of a textual clinical case into organized multiple choice model flowcharts, creating virtual environment of learning and problem-based learning in clinical education.

Conclusions or Hypothesis: The use of XMind proved to be effective in the transformation of complex clinical situations into decision trees. The use of technology provides an alternative and innovator teaching method in Family Medicine, and the created game is a very helpful tool to approximate education of technology.