#SCOD11.1: SCOD - Simulation

SCOD11.1.2 Ranking the factors that impact a Virtual Patients learning experience (9464)

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ABSTRACT:
Background: Nowadays, Virtual Patients Simulators provides an immersive learning environment to clinical training. An international multicentric study was conducted with 11 medical and nursing schools, from January to August of 2020. 617 students, from both curriculums, participated in small group sessions with the Virtual Patient Simulator Body InteractTM.
Summary of Work: An instrument was created to assess, pre- and post- session, the impact of the simulator on students attitudes, learning and experience. 25 paired items from this tool enabled the assessment of progress in the answers of the group test-takers. The sum of variation in the pre- and post-data gathered, properly normalized, determined an Impact Score, seeking to measure if the use of the simulator could be translated in a learning outcome for students. The items with the higher discriminatory power regarding the positive Impact Score values were represented hierarchically using a decision tree method, through CHAID (Chi-square Automatic Interaction Detection) algorithm.
Summary of Results: Positive Impact score (n = 329), was firstly discriminated by the clinical decision-making strategies item. Positive progress of this item (n = 152, Impact Score mean = 6.81) was highly discriminated by the opportunities created to participate in clinical simulation item. In the opposite branch, students who do not recognize the benefits of virtual patients in decision-making strategies (n = 177, Impact Score mean = 3.08), the Impact Score was highly discriminated by the adequate training in communication techniques progress item.
Discussion and Conclusions: Virtual Patients are crosswise used as a valid tool to develop and train clinical reasoning and decision-making skills, both in Medicine and Nursing curriculums. Features and uses regarding the use of this type of simulation can be defined to foster the educational benefit, since a set of conditions, both in terms of quality and quantity, have been identified through students perceptions.
Take-home Messages: The design of Virtual Patient educational interventions, in a formal curriculum setting, should take in account the factors and conditions that enhances its potential in student learning, such as promoting the effective possibility for students to put into practice decision-making strategies and the frequency in which students participate in clinical simulation activities.