

## Evaluation of satisfaction level and variation in knowledge after high-fidelity simulation multidisciplinary activities for medical residents



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**Background and Aims:** The use of high-fidelity simulation learning method is recognized of a high impart in the learning process among trainees through experiential learning with reflection on action. A multidisciplinary program of high-fidelity simulation activities named the "Simulation Club" was hold at Humanitas Simulation Centre and dedicated to medical residents of every of the nineteen residency programs of Humanitas teaching hospital. The main goal of these activities was to teach management of emergent scenarios of common interest multidisciplinary. In the present study we evaluate the satisfaction level of participant residents and their knowledge acquisition through the activity. In the graphics we show some of the results obtained during the survey of the 104 participants.





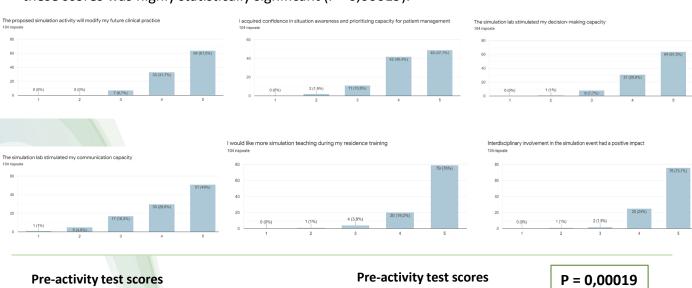


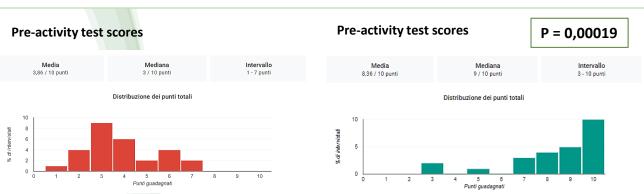




**Methods:** This cross-sectional study was conducted through an anonymous, non-mandatory survey delivered after the completion of the activities. The survey was validated by an expert reviewer, and the reliability calculated for each item. Responses were measured on 5-point Likert-scale items. To measure the knowledge acquisition during the sessions, in each of them, a preactivity and a post-activity multiple-choice test was delivered to participants and results compared.

**Results:** A hundred and four participations took place during the Simulation Club. 97% of residents answer to the delivered survey, the pre-activity and the post-activity test. Residents agreed on overall satisfaction rate which was 4.6 out of 5. Participants agreed in that the high-fidelity simulation activity allowed them to develop their non-technical skills as communication capacity, teamworking, leadership and situation awareness with a level of 4,5. All residents agreed in they would like more simulation training during their learning activities. The mean percentage of correct answers for pre-tests was 52,43 % and for post-tests was 92,32 %; the difference between these scores was highly statistically significant (P= 0,00019).





**Conclusion:** The use of high-fidelity multidisciplinary simulation for medical residents resulted in a very high satisfaction level and improved the residents' reasoning skills.