

Category : **ICU organization**

A227 - Does simulation training in an intensive care setting improve final-year medical students' feelings of preparedness and level of competence?

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Introduction:

Undergraduate curricula should offer hands-on experiences related to acute care. Instructional models offer guidelines for developing effective learning strategies in an intensive care context.

This study aimed to 1) determine the association between student's level of preparedness to manage acutely ill patients and their level of competence before and after a simulation course, (2) explore how the design of the course influenced students' feelings of preparedness.

Methods:

Ten final-year medical students, while in an internship in the intensive care unit, participated in a one-month course designed with the 4C/ID model to learn acute care management [1]. Students' feelings of preparedness and level of competence were measured before (pretest) and after (posttest) the course, as well as the correlation between these concepts. Then, two focus groups were conducted to provide a deeper understanding of the design factors of the course that affect feelings of preparedness.

Results:

Students' feelings of preparedness scores on the posttest ($M = 37, SD = 2.81$) were significantly higher than on the pretest ($M = 32, SD = 4.53$) ($p < 0.05$). The level of competence on the posttest ($M = 3, SD = 0.632$) was significantly higher than on the pretest ($M = 1, SD = 0.516$) ($p < 0.05$). We did not find a correlation between these two concepts at the pretest ($r = -.064, p = .829$). We found a strong correlation between the level of competence and students' feelings of preparedness at the posttest ($r = .751, p < 0.05$). Design factors that influence students' feelings of preparedness include modeling examples, exposition to authentic learning tasks of adequate complexity, feedback, and teaching a structured strategy.

Conclusion:

A course designed with 4C/ID model improved students' self-confidence related to acute care management with a strong alignment with the level of competence. These results could inform educators of the design course to teach critical care skills.

References:

[1] Vandewaetere M et al. Med Teach 37(1): 4-20, 2015