Innovative curriculum design for learner-centeredness and eustress learning in critical care educational programs

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ABSTRACT

Background: Hamad Medical Corporation (HMC), Qatar, aims to be MAGNET accredited (Nurse Excellence Program) by the American Nurse Credentialing Center (ANCC), in addition to be an academic health center. For these accreditations it is required to establish specialty foundation courses¹ and one of these courses is the Critical Care Foundation Program (CCFP) which was designed by HMC critical care and educational experts. During the planning and curriculum design stages, the scientific and planning committee had a thematic focus on; learner-centeredness, active learning, and eustress learning strategies²,³.

Methods: Stressful learning has negative impact on achieving learning outcomes²,³. For effective implementation of learner-centeredness and eustress learning, the CCFP design embedded different interactive teaching and assessment strategies including but not limited to; case-based teaching, competency-based teaching, interactive group learning conversations, and demonstration workshops¹,²,⁴,⁵. To get the CCFP certificates learners should attend the whole program. However, there is a clinical
attachment (competency assessment) and the CCFP was designed as eight teaching days over 8 weeks (one day per week). The program design was planned purposefully as the critical care nurses are given enough time to go to the critical care clinical fields to do the competency assessment for related CCFP teaching topics. Eight hundred critical care nurses have attended CCFP over the last four years. During the program, learners were given a chance and appropriate time to consolidate their knowledge and skills, in addition to bridge the gap between theory and practice, and to become competent and specialized ICU nurses with normal and tolerable levels of stress (eustress)\textsuperscript{3–5}. As per the Qatar Certified Healthcare Practitioner Continuing Professional Development requirement, all course participants completed an evaluation form, which we administered online and combined with the participants' ability

Table 1. Learners' feedback regarding the Critical Care Foundation Program (CCFP) (n = 800).

- 95\% of the learners were satisfied with the duration of the CCFP
- 90\% agreed that the program content was comprehensive and related to their practice
- 97\% agreed that CCFP had impact on their knowledge and skills
- 99\% agreed that the assessment process was comprehensive and effective with adaptable level of stress
- 100\% would advise others to attend the program as they believed it was very beneficial
- 20\% suggested giving more time for some of the sessions especially the respiratory day
- 25\% reported that having 30 learners each time can affect the active involvement of learners during workshops and group activities
- 100\% of learners were happy with the clinical competency assessment and MCQ exam as part of the assessment process

Table 2. Critical Care Nursing Network, scientific and planning committee, and critical care experts recommendations and actions.

- Anecdotal evidence of improvements in clinical care and knowledge from head nurses across HMC has been obtained. The reported favorable impact of the program is such that the Critical Care Nursing Network (CCNN) at HMC is supporting its continuation.
- The competency taskforce of the CCNN raised the importance of linking CCFP clinical competency assignment with the new Lippincott competency framework as the new competency framework will be classified as: core, specialty, and subspecialty. The CCNN recommended to link the critical care specialty competencies with current CCFP competencies and to revise the current CCFP competency checklist accordingly.
- Upon recommendation from the scientific and planning committee, and critical care experts, it has been decided that the size of groups should only be 15 to 20 learners instead of 30.
- There was a request from the critical care head nurses and link educators to develop more competency assessors to assess the CCFP competency skills.
to download the program completion certificate. The data from the participants’ evaluation forms was reviewed by the course scientific and planning committee which then was used to make further recommendations.

Results: The CCFP curriculum design was helpful and effective in controlling critical care nurse’s stress level which was evident by learner’s self-reporting feedback and assessment tools (Table 1). Moreover, the program design was effective for active learner’s engagement which was evident by the learner’s feedback, educational experts, and peer review reports (Tables 1 and 2). A total of 800 nurses underwent the critical care specialty competency assessment process, and they were signed off as competent in all the domains assessed.

Conclusion: Eustress learning allocates the learner at the center of the learning process and provides better learning outcomes. The design of this teaching curriculum which integrates different modalities of teaching and assessment methods helps learners to be actively involved in the learning and assessment process. Considering flexible and evidence based assessment methods in addition to written exams is recommended to decrease stress among learners. Reflection, and competency clinical attachment are recommended teaching and assessment methods to decrease learning and assessment stress levels, and to promote the effectiveness of the learning and teaching process.

Keywords: Curriculum design, Eustress learning, critical care, competency assessment

Ethical approval

The reporting of this data has been accepted as a Quality Improvement project by the Nursing Continuing Professional Development Committee of Hamad Medical Corporation and therefore is exempt from Institutional Review Board approval.

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