Participant evaluation of simulation training using crew resource management in a hospital setting in Hong Kong
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Introduction
Simulation-based training is increasingly used by healthcare professionals as a safe method to learn and practice technical and non-technical skills. Crew resource management (CRM) is the training for the effective application of non-technical skills like leadership, communication, decision making, assertiveness and situation awareness.

Objectives
To develop a course to use in medical simulation in an actual hospital setting after conducting a training need analysis on staff of the involved departments to (1) teach CRM skills to frontline healthcare professionals and (2) determine participant perceptions of CRM.

Methodology
The participants were consisted of frontline healthcare staffs from four departments: Obstetrics & Gynaecology, Anaesthesiology & Operating Theatre Services, Intensive Care Unit, and Accidental & Emergency. The course took place in Multidisciplinary Simulation and Skills Centre at Queen Elizabeth Hospital between June 2013 and December 2013. Each course was specially designed according to the needs in the clinical departments. The course content included a lecture and 2 scenarios followed by a structured debriefing session. CRM principles were introduced and taught throughout the course by trained instructors. Upon completion of each course, the
participants were surveyed using 5-point Likert scale and open-ended questions.

**Result**
Of the 55 participants who completed the simulation training program, 40 (72.7%) of them were female. Nineteen (34.5%) and 36 (65.5%) of the participants were doctors and nurses. Twenty-three participants (41.8%) were from Obstetrics & Gynaecology, 10 (18.2%) from Anaesthesiology & Operating Theatre Services, 12 (21.8%) from Intensive Care Unit, and 10 (18.2%) from Accident & Emergency. The overall rating of the participants with training program was high, ranging from 4.1 and 4.3 on the 5-point Likert scale. The participants favorably rated the course in areas of relevant to practice, organization and satisfaction, effectiveness of trainers, and the usefulness of debriefing session. Written responses found that 46 (83.6%) of the participants would recommend this training program to other colleagues. The key learning points stated by the participants were close loop communication skills, assertiveness, decision making and situational awareness. As a result, it is a highly rated training program suggesting that this type of training program should be more widely promoted in Hong Kong.