Introduction
It is well known that many adverse events in healthcare are caused by poor teamwork and communication failure. Crew Resource Management (CRM) focuses on behaviors that support communication and teamwork through the application of leadership, situation awareness, assertiveness and decision making. Simulation-based training is increasingly recognized as a useful and safe educational tool to learn and practice non-technical skills in healthcare industry.

Objectives
This study is to assess healthcare professionals' changes in attitudes after participating in a locally adopted CRM simulation-based training.

Methodology
A multidisciplinary team including physicians and nurses worked together for developing a locally adopted CRM simulation-based curriculum for healthcare professionals. It is a 1-day CRM simulation-based training using lectures, video-feedback and interactive exercises. In the simulation session, high-fidelity simulators and moulage were used to create real-life crisis scenarios. Participants were required to practice the CRM concepts and skills in the exercise, after which they were debriefed by CRM simulation-based instructors in a team approach. Participants’ satisfaction with the course was assessed by a 12-item standardized questionnaire, whereas a 32-item standardized questionnaire was administered before, and at an interval of a month and a year after the workshop to assess any changes in participants’ perception of their competency and CRM knowledge.

Result
From 2013 to 2015, 33 workshops were conducted with 502 attendees. 423 (84%)
completed pre and post-one month questionnaires and 76 out of 191 (40%) completed pre and both post-one month and one year questionnaires. Overall satisfaction among attendees was 99%. Majority of them agreed that the scenarios were realistic (99%), able to facilitate decision making (98%) and the debriefing session that followed each scenario was useful (99%). Participants also agreed that simulation-based training was more powerful than classroom-based training (97%). From the post-workshop surveillances, majority of the participants reported that they will apply CRM principles and skills in their daily practice (P<0.001), and felt more competent (p<0.001) to be clinical team leaders and members (p=0.001) after joining the course. Increment in CRM knowledge among participants was statistically significant (p<0.001) as measured by Wilcoxon signed rank test. Improvements were also found in participants' attitude towards teamwork, safety and speak up culture.