

Supplemental Digital Content 3. Team dynamics and team clinical performance checklists

For the evaluation of an educational impact of both debriefing method, we used the team dynamic and team clinical performance checklists just which were already developed by Chung et al.¹ The team dynamics checklist was developed based on the elements of effective resuscitation team dynamics in the AHA ACLS provider course manual and team clinical performance checklist was also developed based on the megacode testing checklist from the AHA ACLS provider course manual.²

In Chung's study, each checklist consisted of 10 items and asked raters to judge participants' performance on task of each item; good (10), Fair (7) and poor (4). The highest score for each checklist was 100 points. In order to increase content relevance, each checklist was reviewed and modified by 10 emergency physicians twice. For simulated CPR video clips in which each CPR team consisted of 3 doctors and 2 nurses, the checklists were validated compared with subjective assessment of an expert panel. The checklist scores were not different from scores by expert consensus. The reliability of these checklists was evaluated using the mean difference in score for the same video clip between two experienced assessors, which was 4.6 ± 11.4 for dynamics and 4.8 ± 7.8 for performance. The Cronbach's α for the internal consistency of the checklists was 0.758 for dynamics and 0.866 for performance, respectively.

References

1. Chung SP, Cho J, Park YS, et al. Development of assessment tools for performance and leadership of a cardiopulmonary resuscitation team. *Korean J Crit Care Med* 2009; 24:64-8
2. Sinz E, Navarro K. *Advanced Cardiac Life Support Instructor Manual*. Dallas, TX: American Heart Association, 2011.

Team dynamics checklist

Assessment item	Score			
	Good (10)	Fair (7)	Poor (4)	N/A
Reassign team member functioning beyond his level				
Assign another task after receiving oral confirmation				
Encourage team members to speak clearly				
Assign tasks to team members clearly				
Avoid shouting or displaying aggression				
Inform the team leader when a task begins or ends				
Repeat the prescription medication order				
Share information with other team members				
Draw attention to changes in the patient's condition				
Seek advice from more experienced personnel				
N/A, not applicable				

Team clinical performance checklist

Assessment item	Score			
	Good (10)	Fair (7)	Poor (4)	N/A
Starts oxygen, places monitor, starts IV				
Ensure high quality CPR at all times				
Appropriate airway management				
Recognizes Ventricular fibrillation/Asystole/PEA				
Clears before analyze and shock				
Immediately resumes CPR after shocks				
Appropriate cycles: drug-rhythm check/shock-CPR				
Immediately resumes CPR after rhythm/pulse check				
Administers appropriate drugs and doses				
Verbalizes appropriate reversible causes				
N/A, not applicable; CPR, cardiopulmonary resuscitation; PEA, pulseless electrical activity				