

Appendix 1. Validated questionnaire survey from So et al. (20) 2019

Questionnaire

Survey in TOR among medical practitioners in emergency department.

Thank you for participating in this survey.

It would take about **5-10 minutes** to complete this questionnaire. Individual personal data collected will be kept confidential, and will be used anonymously and solely for research purposes.

Should there be any enquiry, please contact Dr. Nur Aiza Binti Mohamed Salleh (draizasalleh@gmail.com)

Demographic data

Year of graduation:	Hospital:
Gender: Male / Female	Religion:

Year of experience in EM

- Less than 1 year 1-5 years more than 5 years

Current status

- EM physician EM trainee service MO contract MO

Time of last ACLS course

- >2 years ≤2 years never

Current instructor of BLS/ACLS/PALS

- Yes No

Received training on ethics or legal aspects on TOR/DNACPR

- Yes No

Received training on breaking news (i.e. lessons with instructors, exclude self-reading)

- Yes No

Questions**1. For the following scenarios, please indicate how long you would resuscitate the patient.**

[0: no resuscitation, 4: prolonged resuscitation]

Multiple co-morbidities, aged 85, non-witnessed cardiac arrest, asystole as initial rhythm on scene	0	1	2	3	4
Multiple co-morbidities, aged 85, witnessed arrest, bystander CPR, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 85, non-witnessed cardiac arrest, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 85, witnessed cardiac arrest, bystander CPR, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 85, witnessed cardiac arrest, bystander CPR + defibrillation, asystole as initial rhythm on scene	0	1	2	3	4
Multiple co-morbidities, aged 40, witnessed cardiac arrest, bystander CPR, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 40, witnessed cardiac arrest, bystander CPR alone, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 40, witnessed cardiac arrest, bystander CPR + defibrillation, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 15, non-witnessed cardiac arrest, asystole as initial rhythm on scene	0	1	2	3	4
Good past health, aged 15, witnessed cardiac arrest, bystander CPR, asystole as initial rhythm on scene	0	1	2	3	4

2. In the past 6 months (0: never, 4: always)

How often do you allow family members to be present in resuscitation?	0	1	2	3	4
You stopped your resuscitation for medically futile patients because relatives are calm and well accepted.	0	1	2	3	4
You prolonged your resuscitation for medically futile patients if relatives are not prepared to accept death of their relatives.	0	1	2	3	4

3. Will you prolong your resuscitation for patients with cardiac arrest if patient had organ donation card signed? Yes No**4. The following personal can certify patient dead: [tick the correct answers]**

- Ambulance driver	
- Medical attendant	
- Registered medical practitioner	
- Registered nurse	
- Police officer	

5. Do you think a departmental guideline on TOR will be useful to you? Strongly agree Agree Neutral Disagree Strongly disagree**6. For 100 patients presented to A&E with OHCA, how many patients do you think can survive until day 30, or until hospital discharge?**

7. Do you know that there are validated rules for TOR?

Yes No (Skip Q8 if answer is No)

8. Please briefly state the TOR criteria of any TOR rules that you know.

9. DNACPR order by OHCA patients can be overridden by the attending EM physician base on one's own clinical judgment.

Yes No

10. Resuscitation is considered medically not futile if ROSC occurs after CPR.

Yes No

11. Medical futility is a subjective decision.

Yes No

12. No resuscitation should be performed on arrival at A&E for OHCA patients if they are considered medically futile.

Strongly agree Agree Neutral Disagree Strongly disagree

13. Cardiac death patients usually can donate the same types and numbers of organs compared with brain death patients.

Yes No

Strongly agree Agree Neutral Disagree Strongly disagree

14. Hospital ethics / Q&S (quality and safety) Support team, if readily available, would provide you more confidence in early TOR.

Strongly agree Agree Neutral Disagree Strongly disagree

15. What is your attitude towards euthanasia?

Strongly agree Agree Neutral Disagree Strongly disagree

16. Please rate the importance of the below factors that you would consider while considering TOR.

(0: not important, 4: most important)

DNACPR card for OHCA

DNACPR (in-hospital) documented during previous hospitalization

Premorbid status and premorbid co-morbidities

Time from cardiac arrest to BLS initiation

Defibrillation by ambulance crew/layman

Age of the patient

Successful intubation

17. TOR is similar to euthanasia.

Yes No

18. In the case of cardiac arrest for more than 20 minutes with no reversible cause, do you think that non-physicians (e.g. ambulance men or nurse) can diagnose death in the field?

- Strongly agree Agree Neutral Disagree Strongly disagree

19. In prehospital cardiac arrest, do you think that ambulance men could decide not to resuscitate a patient according to protocols?

(e.g. non-witnessed arrest with no bystander CPR/shock, with asystole as initial rhythm by ambulance crew).

- Strongly agree Agree Neutral Disagree Strongly disagree

20. Ideally, selected family members (e.g. calm relatives/parents of kids) should be allowed to witness resuscitation process with a nurse as accompany.

- Strongly agree Agree Neutral Disagree Strongly disagree

21. Do you think that a rule for TOR should be implemented in accident and emergency departments on Malaysia?

- Yes No

22. If there is a departmental guideline for TOR, how frequency do you think you will follow the guideline not to initiate resuscitation?

(0: Never, 4: Always) (e.g. BLS TOR rules: arrest was not witnessed by EMS personnel, and no AED shock before transport. ALS TOR rule: Non-witnessed arrest, with no bystander CPR and no AED shock before transport)

- 0 1 2 3 4

23. Do you think the presence of relatives would prolong your duration of resuscitation?

(0: Never, 4: Always)

- 0 1 2 3 4

24. What factor(s) concern you most when you follow/not to follow departmental guidelines for TOR?

< This is the end of this questionnaire. Thank you for your participation. >

Abbreviations: EM: Emergency medicine, CPR: Cardiopulmonary resuscitation, ACLS: Advanced Cardiac Life Support, TOR: Termination of resuscitation, OHCA: Out-of-hospital cardiac arrest, DNACPR: Do not attempt cardiopulmonary resuscitation