The challenge of prognostication and making decisions about ceilings of treatment

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Introduction

Do not attempt cardiopulmonary resuscitation (DNACPR) and treatment escalation plans (TEPs) ensure patients receive appropriate medical treatment upon deterioration.

80-90% of patients who die in hospital have a DNACPR in place however there are inconsistencies in decision-making, communication and documentation.

The National Learning and Reporting system found that one third of incidents relating to DNACPR caused harm and most of these were related to failure to anticipate the need for DNACPR, poor handover, failure to implement DNACPR and failure to review the decision as circumstances change over time.

Our Objective

To determine the variability in how senior clinicians prognosticate patients on an acute medical unit in three London hospitals.

Methods

A questionnaire challenged clinicians to review 5 fictional clinical scenarios and rank in order of which patient was most likely to require a DNACPR/TEP decision (1= least likely, 5=most likely). Patients had increasing illness severity according to 3 validated scoring metrics. We anticipated the sickest patients with the poorest outcomes to be ranked most likely to require a DNACPR/TEP.

Scoring metrics used:

- **Charlson co-morbidity index**: scenarios had increasing mortality from 0-90%
- **APACHE II score**: considers age, organ failure and 12 measurements to calculate mortality, scenarios had 40-90%.
- **Barthel’s index**: Patients had increasing dependency in daily activities

Level of correlation was deduced using Pearson’s correlation co-efficient and significance analysed using an unpaired T-test.

RESULTS

Figure 1 Ranking by senior clinicians for scenarios based on Charlson index

Limited correlation between clinician ranking and mortality from the Apache II score and Charlson co-morbidity index with correlation co-efficient of 0.75 and 0.46 respectively (insignificant, p > 0.05).

Greater correlation between clinician ranking and dependency based on the Barthel’s index (R² = 0.94, significant p < 0.05).

Discussion

Clinicians are concordant in making decisions about ceilings of treatment when considering patient dependency. There is however, discordance in clinician ranking for the questions based on co-morbidities, age and physiological parameters, suggesting that these factors influence clinician decision making in differing ways.

Additional considerations:

- Increasing specialisation leading to uncertainty for clinicians about conditions which they do not commonly treat.
- Resistance to make decisions without understanding patient viewpoint.
- Concern that DNACPRs inadvertently lead to a do not provide active care ethos, DNACPR forms have been shown to lead to less active monitoring amongst nurses and less physician willingness to take blood cultures and offer blood transfusion.
- Difference in experience and differing personality type between clinicians, this can lead to differences in decision making.

Conclusion

There is much variation in the way clinicians undertake ceilings of treatment decisions. Clinicians may not always be aware of the prognosis, but look to other factors such as dependency, futility, patient wishes, quality of life after CPR. With the increasing pressures in the NHS, it is more challenging to make appropriate decisions in the acute care setting. Perhaps there should be more of a role for the multi-disciplinary team (particularly palliative care, outreach, allied health professionals and general practitioners) in sharing this responsibility and making more personalised recommendations for future emergencies.

References

1. Frizelle FA. Resuscitation policy should focus on the patient, not the “do not attempt” (DNACPR) order. BMJ. 2012;344(d):e2491.