

Editorial

Moral distance and distributive justice: how the increase in organ donation is helping us make better ethical decisions

If you went to work one day and, by action or inaction, caused the death of three people and cost your health system half a million pounds, what reaction would you expect? This situation used to be common in the UK when a failure to explore and support organ donation might be excused with such stock phrases as “I don’t admit dead people” or “the living before the dead”. This ethical failing is known as moral distance: an excessive focus on the physically close or immediate, leading to a lack of attention paid to the wider consequences of one’s actions (or inactions). These consequences could include harming or contributing to the deaths of patients who are separated from the clinician by space and time, but are no less affected by the clinician’s decision.

All of us, to a greater or lesser extent, will at times fall into the trap of moral distance, but fortunately the application of such phrases to organ donation is now rare. For the last four years, there have been more deceased donations and transplants than ever before and, for the first time, the transplant waiting list has decreased. This change has not occurred because a greater proportion of families are consenting to donation,

but because intensivists and anaesthetists are approaching more families and supporting more patients to be in a position to donate after death [1, 2].

Arguments designed to overcome moral distance in organ donation have traditionally been justified by an appeal to predominantly utilitarian claims, such as transplantation saves lives [3]. The famous utilitarian philosophical thought experiment of the ‘Trolley Problem’ is a helpful starting point for exploring moral distance and how it can be more easily overcome by using moral imagination (Box 1).

Despite the fact that pulling the lever actively causes a death, most people say that they would pull the lever because that is the action that will save the most lives.

When doctors are dealing with a potential organ donor, they are effectively confronted with a similar

Box 1

Imagine that a train is hurtling down the track and if unstopped is going to kill five people. You can pull a lever that will divert the train onto another track. However, doing so will cause the death of one person on this other track but save the five people who will die if you do not pull the lever. Do you pull the lever?

situation. If they pull the lever (use the person’s organs to save several others), they may not be actively leading to the donor’s death, but they are making a choice that has a cost, whichever way they choose. Three people die every day in the UK while waiting for an organ. An average of 12 potential organ donors die every day in the UK, but only four donate their organs; if more did so, fewer people would die [2]. Clinicians’ choices can affect, for good or ill, the opportunity for donation. One of us (DS) would even claim that the high rate of family refusal in the UK, one of the worst in Europe, justifies a stronger, more persuasive style of approach to the family when asking for consent/authorisation for donation, particularly if the patient is already on the Organ Donor Register [4, 5]. While doctors are understandably reluctant to upset relatives further, there is an array of ethical, legal and professional support for exploring donation with families [6–12]. Evidence suggests that donation helps families cope with their bereavement, and a large number of families who say no to donation soon come to regret that decision, not least because it might disrespect the last wish of their loved one [13, 14].

If doctors choose to employ their moral imagination, they can more easily bridge the moral distance between themselves and patients who are distant in time and space. This exercise can help guide ethical decision-making. However, as we all know, the use of moral imagination is not always simple to apply, especially in resource-starved situations with competing patient demands.

This is particularly true in the UK [15, 16]. The potential organ donor is in competition for an intensive care unit (ICU) bed against those who already occupy a bed, those in need of a bed, and those who might need a bed in the future. Admission to an ICU purely for end-of-life care that may result in organ donation, or facilitating organ donation for a patient already on the ICU, may strain ICU resources and risks potential harm to other patients. This harm is no different to the potential risk of harm to other patients that occurs when pushing on with elective surgery that requires an ICU bed despite bed shortages, or choosing to admit a less sick patient into the last ICU bed.

Another way to consider the problem of moral distance is in terms of distributive justice. Though all doctors try to benefit their patients without harming them, whilst also respecting their autonomy, the principle of justice comes into particular focus when it is not possible to benefit all patients equally, and difficult choices must be made. This is where John Rawls's 'difference principle' can be helpful [17]. Rawls's principle,

which was created to form part of the political basis for a fair society, holds that any inequalities resulting from distribution of resources must be 'reasonably expected to be to everyone's advantage'. In practice, this amounts to 'try to maximise the interests of the worst off: the so-called 'maximin strategy' (Table 1).

Who is the worst-off? Triage incorporates many aspects of the maximin strategy. Balancing risks of patient harm against benefit is a routine part of an intensivist's or theatre anaesthetist's gatekeeper role. The abstract maximin strategy actually generates quite specific guidance: identify who is the worst-off patient, and maximise his/her interests first.

For example, what should be prioritised for the operating theatre: the ruptured abdominal aortic aneurysm (AAA); the laparotomy for bowel obstruction; the organ donation; or the elective orthopaedic list whose operations will be cancelled if the organ recovery goes ahead in daylight hours? Three options prioritise living patients within your hospital, one of whom (with a ruptured AAA) will almost certainly die without immediate surgery. In the case of those who

need organs, you have no idea who or where they are – they may potentially even be outside the UK. We would argue the maximin priority here should be:

- 1 ruptured abdominal aortic aneurysm (worst-off patient; will die immediately without treatment);
- 2 organ donation recovery (many patients likely to be harmed or die without transplantation; a dying patient's wish may not be fulfilled; and a family's bereavement may be increased);
- 3 laparotomy for bowel obstruction (patient likely to deteriorate without surgery; delay risks the patient's death but does not guarantee serious harm);
- 4 elective orthopaedic list (pain and distress suffered by the patients but more serious consequences unlikely).

A strict utilitarian might put the organ donation ahead of the ruptured AAA, as there is an opportunity to save more than one life. Note how the maximin principle reminds us to consider the importance of organ allocation to morally distant patients. The clinician who focuses only on the patients before him/her might put organ donation third or perhaps

Table 1 Beauchamp's and Childress's four principles of biomedical ethics [18] with an expansion of distributive justice.

Principle	Enactment
1. Respect for autonomy	Let patients make their own decisions
2. Beneficence	Benefit patients
3. Non-maleficence	Avoid harming patients
4. Distributive justice	Allocate resources fairly
John Rawls's difference principle	Ensure any inequality is to everyone's advantage
Maximin strategy	Maximise the interests of the worst-off

even fourth on this list, but would be choosing to ignore the harm to the distant patients; and unlike ICU beds or theatres, where future emergencies will be able to be accommodated, organs must be distributed immediately or not at all.

Being a gatekeeper necessitates difficult decisions. Using one's moral imagination or the principles of distributive justice and the maxim strategy *does not* in any way dictate what clinical decision one should make. Better ethics is about having better justifications for decisions; it is not about always agreeing or there being only one correct answer, especially when the benefits and harms are finely balanced. What a consideration of moral distance and distributive justice offers clinicians is an ethical framework that moves any debate regarding resource allocation away from emotion and toward rationality.

These considerations are by no means confined to organ donation, but it is often in organ donation scenarios where they are vocalised. That is why we believe that the challenges in organ donation are teaching us better ethics that can be applied to *all* our patients.

The 2000 publication by the Department of Health, *Comprehensive Critical Care*, implicitly warned against moral distance in its recommendations that critical care should be regarded as 'a patient not a place' [19]. From this publication came the phrase 'ICU without walls'. We would go one step further, especially within the context of a publically funded National Health Service: the ICU and theatre without walls extends not just

beyond the walls of the ICU or theatre complex but even beyond the walls of the hospital. There is a lever and whether we choose to pull the lever or not, the decision will have consequences for many patients, not just the ones already under our care. It is better to keep our eyes on the track before us and also keep our minds on the track around the bend.

Competing interests

No external funding and no competing interests declared.

D. Shaw

Senior Research Fellow
Institute for Biomedical Ethics
University of Basel
Basel, Switzerland

D. Gardiner

Consultant Intensivist, Deputy
National Clinical Lead for Organ
Donation
Nottingham University Hospitals
NHS Trust
Nottingham, UK
NHS Blood and Transplant, UK
Email: dalegardiner@doctors.net.uk

References

1. Vincent A, Logan L. Consent for organ donation. *British Journal of Anaesthesia* 2012; **108** (S1): i80–i87.
2. NHS Blood and Transplant. Organ donation and transplantation activity report 2012/13. http://www.organdonation.nhs.uk/statistics/transplant_activity_report/current_activity_reports/ukt/activity_report_2012_13.pdf (accessed 02/01/2014).
3. White SA, Prasad KR. Liver transplantation from non-heart beating donors: a promising way to increase the supply of organs. *British Medical Journal* 2006; **332**: 376–7.
4. Shaw D, Elger B. Persuading bereaved families to permit organ donation. *Intensive Care Medicine* 2014; **40**: 96–8.
5. Shaw D. We should not let families stop organ donation from their dead relatives. *British Medical Journal* 2012; **345**: e5275.
6. Department of Health. Legal issues relevant to non-heartbeating organ donation, 2009. <https://www.gov.uk/government/publications/non-heartbeating-organ-donation-legal-issues> (accessed 02/01/2014).
7. UK Donation Ethics Committee. An ethical framework for controlled donation after circulatory death, 2011. http://www.aomrc.org.uk/doc_view/9426-executive-summary-an-ethical-framework-for-controlled-donation-after-circulatory-death (accessed 26/09/2014).
8. Department of Health. Report from the Organ Donation Taskforce: organs for transplant, 2008. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082122 (accessed 26/09/2014).
9. Academy of Medical Royal Colleges. A code of practice for the diagnosis and confirmation of death, 2008. http://www.aomrc.org.uk/doc_view/42-a-code-of-practice-for-the-diagnosis-and-confirmation-of-death (accessed 26/09/2014).
10. General Medical Council. Treatment and care towards the end of life: good practice in decision making, 2010. www.gmc-uk.org/guidance/ethical_guidance/end_of_life_care.asp (accessed 02/01/2014).
11. National Institute for Health and Care Excellence. Organ Donation for Transplantation: improving donor identification and consent rates for deceased organ donation, 2011. <http://guidance.nice.org.uk/CG135> (accessed 02/01/2014).
12. British Transplantation Society and Intensive Care Society. Donation after Circulatory Death: report of a consensus meeting, 2010. <http://www.bts.org.uk/Documents/Guidelines/Active/DCD%20for%20BTS%20and%20ICMS%20FINAL.pdf> (accessed 26/09/2014).
13. Morais M, da Silva RC, Duca WJ. Families who previously refused organ donation would agree to donate in a new situation: a cross-sectional study. *Transplant Proceedings* 2012; **44**: 2268–71.
14. Omrod JA, Ryder T, Chadwick RJ, Bonner SM. Experiences of families when a relative is diagnosed brain stem dead: understanding of death, observation of brain stem death testing and attitudes to organ donation. *Anaesthesia* 2005; **60**: 1002–8.
15. Adhikari N, Fowler R, Bhagwanjee S, Rubenfeld G. Critical care and the global burden of critical illness in adults. *Lancet* 2010; **376**: 1339–46.

16. Rhodes A, Ferdinande P, Flaatten H, Guidet B, Metnitz PG, Moreno RP. The variability of critical care bed numbers in Europe. *Intensive Care Medicine* 2012; **38**: 1647–53.
17. Lamont J, Favor C. Distributive justice. In: Zalta EN, ed. *The Stanford Encyclopedia of Philosophy* (Spring 2013 Edition). <http://plato.stanford.edu/entries/justice-distributive/> (accessed 02/01/2014).
18. Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*, 5th Edn. Oxford: Oxford University Press, 2001.
19. Department of Health. Comprehensive critical care: a review of adult critical care services, 2000. http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/dh_4006585 (accessed 26/09/2014).
- doi:10.1111/anae.12931

Editorial

Rumsfeld revisited: knowns and unknowns affecting the right heart

...because as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns – the ones we don't know we don't know.

– Donald H. Rumsfeld,
US Secretary of Defense, 2002
(www.defense.gov/Transcripts/Transcript.aspx?TranscriptID=2636 (accessed 10/10/14))

In this edition of *Anaesthesia*, Pilkington et al. present a timely review of pulmonary hypertension and its management in patients undergoing non-cardiac surgery [1]. The review provides information and guidance for the management of patients who have a documented diagnosis of pulmonary hypertension where the specific cause of the condition and associated cardiac function, especially right ventricular function, has been previously assessed. They highlight the increased peri-operative morbidity and mortality in this group

of patients and stress the integral role of the right ventricle, and its matching with the pulmonary circulation, in the prevention of such complications.

It is striking that many of the associated risk factors identified in the review are also commonly seen in patients presenting for emergency surgery, particularly, surgery for hip fracture and emergency laparotomy. The question arises as to what influence undiagnosed pulmonary hypertension, and in particular, right heart dysfunction per se, may have on the outcome of these procedures.

Disease prevalence

In the UK, the prevalence of heart failure is 0.9% in men and 0.7% in women, with a sharp rise with increasing age: 13.1% in men and 11.9% in women aged ≥ 75 years [2]. The most common cause of heart failure in the UK is coronary artery disease which, in turn, has a prevalence in the UK population of 3.5% [3]. The specific prevalence of

right heart failure is much more difficult to identify. The National Pulmonary Hypertension Audit [4] suggests a prevalence of 124 patients per million people in the UK, but this is likely to be a significant underestimate, given that prevalence is based upon holding an active referral to one of the nationally designated pulmonary hypertension centres during the audit period. Again, the distribution of patients is skewed towards the elderly, peaking in the seventh and eighth decades.

Right heart failure has received much less attention than that of its left-sided counterpart, despite the two being inextricably linked. More common causes of right heart failure include:

- pressure overload (increased afterload), including the most common cause, left heart failure, and pulmonary hypertension;
- volume overload (increased preload);
- ischaemia and infarction;
- congenital heart disease.