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EDITORIAL (BY INVITATION)

Organ donation after acute subarachnoid hemorrhage: opt in or opt out?

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The chronic shortage of organ donors is a healthcare challenge in many European countries. Identifying ways to increase the number of donors is an important goal for both policy-makers and physicians. In this light, Olli-Pekka Kämäräinen and colleagues analyze the organ donation population in their academic institution in the current issue of *Acta Neurochirurgica* and discuss factors that could increase the number of available donors [3]. They analyzed 769 acute subarachnoid hemorrhage patients over an 11-year study period and found that 83 patients were potential organ donors (PODs), whereas the donor conversion rate (the ratio of actual versus potential donors) was 59%. Interestingly, they found that this rate rose from 52 to 74% after the introduction of presumed consent for organ donation, also known as opt-out.

In an opt-out system, people are presumed to consent to organ donation unless they indicate otherwise. Finland has adopted this system in 2010, joining a collection of European countries that is still expanding: recently, the Netherlands decided to adopt opt-out in 2020 [5].

Opt-out versus opt-in is a fascinating ethical discussion. Proponents of opt-out argue that presumed consent is ethically desirable because it adds to the greater good by increasing the number of organs available for transplantation. Moreover, it will unburden the relatives of the deceased, who are otherwise often confronted with a difficult and unexpected dilemma in an already emotionally challenging situation [5]. On the other hand, opponents argue that it is not ethical to presume consent: not saying "no" is not the same as saying "yes." We generally do not accept presumed consent for other purposes, such as third-party sharing of (medical) data. This presumption is considered especially problematic for disadvantaged minorities or people of lower literacy who may not have sufficient opportunity to express their choice [2].

Legal arguments are also used. Opponents of opt-out argue that the right to bodily integrity, being a universal human right, should be unconditional, and should not have to be "earned" in any way. This principle is violated by introducing a requirement (i.e., opting out) before the right is respected. Proponents counter this by arguing that while respectful treatment is self-evident, a person who is dead (including brain death) does not formally enjoy the full set of human rights. Their legal position should thus be evaluated in light of possible benefits of organ donation. The right to life of organ recipients would thus outweigh the right to bodily integrity of organ donors. Ultimately, the choice to support opt-in or opt-out is a political and personal one.

Unfortunately, dialog is less rational in practice. Presumptions that doctors are greedily "harvesting" organs, that relative's feelings and concerns will be ignored, or that the government will assume totalitarian ownership of people's organs have clouded public debate. Some even fear that public backlash will in fact lead to fewer organ donations [1]. In this light, it is reassuring that Kämäräinen and colleagues report that since the introduction of opt-out in Finland, de facto care has not changed; families' strict objections to donation are respected even in the absence of a formal right to veto [3].

Measuring the impact of opt-out on the number of organ donors is challenging. While opt-out countries generally have higher donation rates than opt-in countries [4], causality cannot be concluded from this data alone. Availability of PODs, capacity of the national transplant system, education and information access of the population, and religion are among the confounders that influence these comparisons [4].

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Comparing donor rates within the same country before and after introduction of opt-out, like in the present study [3], may be a better approach. While the absolute number of donors in this population has gone down due to a 50% decrease in PODs over the study period, Kämäräinen's results suggest that opt-out could have had a positive effect on donor conversion rate. At the very least, they demonstrate that there was no increase in refusals of consent due to public backlash. These findings are in line with recent data from Wales, where relative rates of organ donations went up when compared to the rest of the UK after the introduction of opt-out [1]. While most other before-after studies show similar results, it is hard to draw definitive conclusions from the present data [4, 6]. Further large-scale investigation of the effect of opt-out is desirable, and studies like Kämäräinen's will be followed with great interest.

References

1. Albertsen A (2018) Deemed consent: assessing the new opt-out approach to organ procurement in Wales. J Med Ethics 44:314–318. https://doi.org/10.1136/medethics-2017-104475
2. Bruce CR, Koch P (2017) Flawed assumptions: ethical problems with proposed presumed consent legislation. Am J Transplant Off J Am Soc Transplant Am Soc Transplant Surg 17:3262–3263. https://doi.org/10.1111/ajt.14402
3. Olli-Pekka Kämäräinen JH, Lindgren A, Lång M, Bendel S, Uusaro A, Parviainen I, Koivisto T, Isoniemi H, Jääskeläinen JE (2018) Identification of potential organ donors after aneurysmal subarachnoid hemorrhage in a population based neurointensive care in Eastern Finland. Acta Neurochirurgica xxx:yyyy–zzzz
4. Rithalia A, McDaid C, Suekarran S, Myers L, Sowden A (2009) Impact of presumed consent for organ donation on donation rates: a systematic review. BMJ (Clin Res Ed) 338:a3162. https://doi.org/10.1136/bmj.a3162
5. Sheldon T (2018) Dutch to start presumed consent for organ donation in 2020. BMJ (Clin Res Ed) 360:k768. https://doi.org/10.1136/bmj.k768
6. Willis BH, Quigley M (2014) Opt-out organ donation: on evidence and public policy. J R Soc Med 107:56–60. https://doi.org/10.1177/0141076813507707