## **JULY 2024**





## URNA LWA

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## INTRODUCTION

In this first South African-curated edition of the ISODP Journal Watch, we highlight six diverse papers from around the world.

From Nottingham in the UK, we have a longitudinal survey of healthcare worker attitudes, which shows increasing polarisation towards donation after circulatory death but a continued high favorability to specialist nurses after organ donation.

There is an excellent article about directed deceased donation that uses real-world and hypothetical scenarios and analyzes the approaches of different countries to this issue.

We have two educational articles from Korea and the USA looking at medical student education and specialized training for requesters for vascular composite allografts, respectively.

A Turkish study outlines the process for the successful adaptation of a previously validated Organ Donation Attitude Survey into Turkish. The methodology of the paper is statistically robust and could serve as a model for other countries and languages looking to recreate such tools for their own use.

Two papers look at the technological impacts of extracorporeal membrane oxygenation technology in the context of donation. From Europe, the impact of normothermic regional perfusion in the pediatric population is robustly discussed in a well-written report from a working group looking at the multitude of challenges in this space. From Japan a retrospective review compared outcomes from donors who either received conventional CPR or extracorporeal CPR prior to donation with differences noted in terms of graft outcomes in liver and lung recipients.

We hope you enjoy reading these summaries as much as we did. Our next edition is planned for September. Feel free to reach out to your regional ISODP council member to forward any interesting articles to the Journal Watch team for review and possible inclusion in subsequent editions.

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## A Single-Center Exploration of Attitudes to Deceased Organ Donation Over Time Among Healthcare Staff in Intensive Care



## A Single-center Exploration of Attitudes to Deceased Organ Donation Over Time Among Healthcare Staff in Intensive Care

## Heeley, Benjamin et al. Transplant Direct, Nov 8 2023

#### Corresponding author: Laurence Hodierne - laurence.hodierne@nhs.net

This study looked at the evolving attitudes of ICU staff towards deceased organ donation at Nottingham University Hospitals NHS Trust at three time points: 2015, 2018, and 2020. Written surveys examined attitudes towards donation after brain death (DBD), donation after circulatory death (DCD), and the role of specialized nurses in organ donation (SNOD). The findings indicated favourable attitudes towards DBD and SNOD, but there was an observed increase in polarisation and negative feelings towards DCD. This negativity was mostly attributed to DCD's complexity and lengthy duration. The research highlights the importance of understanding the viewpoints of healthcare workers on organ donation in order to facilitate enhanced support and training.

The longitudinal methodology and thematic analysis offered in this study offer readers insight into the changing attitudes inside the healthcare environment, particularly with DCD practices, which are rapidly evolving globally. The consistent attitude of support for the integration of specialized nurses in aiding organ donation requests in the ICU environment is encouraging.



## When is directed deceased donation justified? Practical, ethical, and legal issue

### Shaw, David et al. Journal of the Intensive Care Society, Feb 13, 2024

#### Corresponding author: David Shaw - david.shaw@unibas.ch

Directed deceased donation (DDD) allows an organ from a deceased donor to be allocated to a specific recipient. This well-written article explores DDD by providing an overview of the medical and legal context around the world using a real-world example. Most national legislation prohibits DDD, but it is permitted under specific conditions in the UK, USA, Japan and Canada. The authors review these systems and lay out the ethical arguments for DDD, which include improved patient autonomy and the potential to increase donation rates. They also discuss the ethical arguments against DDD, such as the violation of the altruistic, unconditional gift that donation typically represents, the reduction in transparency, and the potential for discrimination.

Highlighting the key need for DDD to maintain fairness and justice the authors use hyptothetical cases to build their arguments and conclude with 6 key points within which DDD could ethically be permitted.





## Normothermic regional perfusion in paediatric donation after circulatory determination of death—the Oxford position statement from ELPAT

## Brierley, J et al. Frontiers in Transplantation, Jan 28 2024

#### Corresponding author: Joe Brierley - joe.brierley@gosh.nhs.uk

In this workshop report, the authors highlight large differences in the acceptability and practice of normothermic regional perfusion in pediatric donors after circulatory death. Normalized regional perfusion (NRP) in donation has several advantages, including the ability to assess graft function after withdrawal of life-sustaining treatment. This is particularly valuable in liver transplantation. Overall, this perfusion technique has the potential to not only improve donor graft quality but also increase the donor pool.

The report highlights ethical and technical issues with NRP, raised by the Ethical Legal and Psychological Aspects of Organ Transplantation (ELPLAT), a section of the European Society of Organ Transplantation (ESOT). Concerns were raised regarding public acceptability and the ethical considerations regarding death and how it is defined. The definition of death varies across different countries, and its regulation impacts the use of NRP. Some members felt that there remains a technical possibility and ethically unacceptable risk of restoring cerebral blood loss and 'invalidating' death.

Spain's successful implementation of adult and pediatric NRP has undoubtedly helped reduce waiting list times. The use of NRP within stringent national protocols has resulted in the near clearing of liver transplant waiting lists in the country. If implemented appropriately, NRP will vastly increase the donor pool and transform the transplantation procurement process.

The authors conclude that animal data and the emerging Spanish experience should inform ethical deliberation, public debate, and professional consensus and that this should be given national priority because of its potential impact on pediatric donation and transplantation rates.



## A Standardized Education Program on Deceased Organ and Tissue Donation for Premedical and Medical Students in Korea

## Jeon, HJ et al. Transplant Direct, Feb 2024

#### Corresponding author: Curie Ahn - curie@snu.ac.kr.uk

This study assesses a new educational program at Seoul National University College of Medicine in South Korea to improve awareness and attitudes toward deceased organ and tissue donation among premedical and medical students.

A combination of online and offline self-learning materials, group study sessions, and interactive poster presentations formed the intervention. Materials (in Korean) were made available through <u>Vitallink Academy's YouTube channel</u>, and students participated in activities designed to augment their understanding of organ donation.

In a country with low rates of family consent (36%), it was notable that only 33.3% of first-year medical students showed interest in deceased organ/tissue donation-related issues.

The program's effectiveness was evaluated through pre- and post-education surveys, which showed significant improvements in students' attitudes and willingness to support organ donation. For instance, positive attitudes towards organ donation increased from 74.7% to 97.7%, and the willingness to register as organ donors increased from 76.8% to 96.5%.

The study clearly underscores the importance of targeted education in encouraging positive attitudes toward organ donation in medical professionals in training.





## Developing online communication training to request donation for vascularized composite allotransplantation (VCA): improving performance to match new US organ donation targets

## Siminoff, Laura et al. BMC Medical Education, Jan 22 2024

### Corresponding author: Laura Siminoff - lasiminoff@temple.edu

This informative paper focuses on emotional communication skills, which are crucial in influencing the donation decisions of family decision-makers (FDMs). These skills enable longer, more detailed conversations, show empathy and concern, and build positive connections with family members approached for consent to donation.

Discussing the donation of uncommon anatomical gifts, like face, hands, and genitalia, or vascularized composite allotransplants (VCA), requires excellent communication and technical knowledge of VCA and its benefits. An online, ondemand training program was developed based on a previously tested and evidence-based communication skills training program to address this need. The appeal of such teaching methods is their cost-effectiveness and broad reach.

The interactive eLearning modules were adapted to include:

- Technical information about VCA
- Communication skills
- Two VCA scenarios (face and hand donation)
- Practice modules (integrating previous modules)

The authors outline in detail how the course was created and the rationale behind each step. As part of this process, pre- and post-test surveys were used, although the results of this beta-testing step are not included in the paper. This is more of a narrative paper outlining the educational approach undertaken by the authors to meet a training need in vascular composite allografts, which makes for interesting reading and may lead one to explore the availability of these Communicating Effectively about Donation (CEaD) <u>online resources</u>.



# Organ donation after extracorporeal cardiopulmonary resuscitation: a nationwide retrospective cohort study

### Yumoto, Tetsuya et al. Critical Care, May 13 2024

#### Corresponding author: Tetsuya Yumoto - tyumoto@cc.okayama-u.ac.jp

The research team of Okayama University, Japan, investigated organ donation practices and recipient outcomes in two patient cohorts suffering cardiac arrest prior to donation. During the study period, individuals undergoing ECMO treatment were not eligible for a legal diagnosis of brain death until the guidelines were updated on January 1, 2024. As a result, brain death could only be diagnosed post-decannulation of veno-arterial (VA) ECMO when possible. Additionally, in Japan, transferring potential organ donors between hospitals for the purpose of donation is prohibited.

The first group underwent extracorporeal cardiopulmonary resuscitation (ECPR), and the second group did not receive ECPR. Donors after brain death and donors after circulatory death were included. The reader must interpret the results within the context of what is legally permitted and practiced in Japan, which is different from other jurisdictions. This retrospective analysis compared variables such as time to procurement, donation rates, and graft survival.

The authors showed no significant differences between donors supported with or without ECPR. Of the 370 post-cardiac arrest participants, only 7% underwent ECPR. The authors note that the ECPR group had an increased time interval from admission to procurement: a median of 13 days compared to 9 days in the non-ECPR group. Additionally, the outcomes of lung and liver graft survival rates were worse in the donor group who received ECPR.

The author correctly indicates that transplantation is not the primary endpoint of ECPR and concludes that the study shows research needs in the field prior to donation.

	SURVEY
SURVEY Excellent Good Average Poor Very Poor	Excellent Good Average

# Adaptation of Organ Donation Attitude Survey: Reliability and Validity Maintained as Demonstrated in a Turkish Population

### Yasin Uzuntarla Transplantation Proceedings, Sept 2023

#### Corresponding author: Yasin Uzuntarla - yasinuzuntarla@gmail.com

The article studied an adaptation and validation of the Organ Donation Attitude Survey (ODAS) for use in Turkey. First developed by Rumsey et al. in 2003, this survey assesses individuals' attitudes towards organ donation.

Conducted among 1,088 students from the faculty of nursing and the vocational school of health services at Gulhane Training and Research Hospital. The survey was translated into Turkish and tested for reliability and validity.

The paper is rigorously methodologically, using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to analyze the data. The adapted survey retained its integrity. The reliability of the survey was verified using Composite Reliability and Cronbach's alpha values, which were found to be within acceptable ranges.

The results demonstrated that the adapted survey is a valid and reliable tool for evaluating attitudes toward organ donation in the Turkish population. In particular, the survey showed that the participants generally had positive attitudes towards organ donation, partially due to the university hospital's active role in fostering organ donation awareness.

The article highlights the relevance of localized validation of tools to ensure cultural importance and accuracy in measuring public attitudes. It also underscores the crucial role of education and awareness efforts in improving organ donation rates. From this study, one can learn about the processes involved in adapting and validating an existing survey for a different cultural context, as well as the ongoing need to address public health issues through customized educational interventions.