January - May 2024

HCB 524 – Special Topics in Bioethics: Organ Donation & Transplantation

Location: Room 067

Meeting Dates: Thursday, 6:00 – 9:00pm

January 25th (First Day of Class, first assignment due)

February 1st February 8th February 15th February 22nd

February 29th

March 7th (Assignment 2 due)

March 14th (No class, Spring Break)

March 21st

March 28th

April 4th

April 11th

April 18th

April 25th (**Final Assignment Due**)

May 2nd Last Day of Class

Class Time: 6:00 – 9:00pm

Instructor:

Brian Papszycki, MA Clinical Instructor, Center for Medical Humanities, Compassionate Care & Bioethics Brian.Papszycki@stonybrookmedicine.edu

Background

Organ and tissue donation is a relatively new intervention in the scope of medical history. Up until the late 1950's there was no cure for end stage renal disease or similar ailments such as chronic heart disease, liver failure, COPD, cystic fibrosis or any other disease that causes irreversible organ failure. Deceased and living donation, although life-saving and in critical need across the U.S., has been the subject of ethical debate over the years. These discussions range from the ethics of brain death, the dead donor rule, allocation of organs, consent/autonomy and the means of registering people to be donors on the consent registry. Many of these debates are ongoing today.

In this class we will examine the history of organ donation from the first U.S kidney transplant in 1957, the creation and function of Organ Procurement Organizations (OPOs) and the current state of organ donation and transplantation. We will examine the process of organ donation, including Brain Death Donation and Donation After Circulatory Death (DCD) as well as the many nuanced and often misunderstood aspects of donation such as family approach, the wait list, organ allocation and the role of religion/culture in consent.

This class will give students insight into both the bioethical studies of organ donation as well as the process and practical applications of donation from an OPO perspective.

Course Objectives

- 1. Student will be able to explain in detail the practical and ethical components of organ donation as they relate to the current state of medicine.
- 2. Students will explore historic and current thoughts on improving the organ shortage through the examination of clinical and ethical scenarios.

Readings

There is one major text for this course, Janet Radcliffe Richards' *The Ethics of Transplant: Why Careless Thought Costs Lives*, which will be read in sections along with supporting articles throughout the class. This book is an excellent presentation of bioethical issues related to organ donation and practical thought on improving the current state of transplantation. This will not be read in order and specific sections will not be required.

Amazon Link:

https://www.amazon.com/Ethics-Transplants-Careless-Thought-Costs/dp/019957555X/ref=sr 1 2?keywords=the+ethics+of+transplant&qid=1580171416&sr=8-2

<u>Careless Thought Costs Lives: The Ethics of Transplants: 9780199678778: Medicine & Health Science Books @ Amazon.com</u>

Course Calendar and Topics

January 25th

Introduction and Course Overview - Early Years of Organ Donation

We will start with an examination of the early years of organ donation and how progress brought about new ethical, and moral inquires. Throughout this course we will examine the fields of organ donation and transplantation from multiple perspectives; the donor, the donor family, the OPO (Organ Procurement Orgaization), the Hospital and the recipient. In this first class we will

also review the basics of organ and tissue donation, such as who can be a donor based on age and medical history and what can be donated.

Assignment One: On January 25th, please come to class with a 1-2-page double spaced summary of your current understanding/attitude towards organ donation. This does not need to be based on any readings but rather from experience. We will discuss this along with the introduction to Radcliffe Richards' text.

Readings:

Virtual Mentor. 2012;14(3):264-268. doi: 10.1001/virtualmentor.2012.14.3.mhst1-1203.

Starzal, TE (1967). Ethical problems in organ transplantation: A clinician's point of view. Ann of Intern Med., 1967 September; 67: 32-36

February 1st

Brain Death vs. Donation After Circulatory Death (DCD)

We will begin this class with an examination of the first reading from Radcliffe Richards, an introduction to organ donation and the ethics of transplant which opens with an inherent conflict about donation and how there is a "tension" amongst those waiting for a life-saving transplant and the potential donors and their families. We will then discuss the two different pathways to solid organ donation: Brain Death and Donation After Circulatory Death (DCD). Both types of donation raise their own set of ethical questions. We will examine both pathways in depth and discuss what ethical implications each has.

Readings:

The Ethics of Transplant: Introduction (pp. 1-31)

A definition of irreversible coma. Report of the Ad Hoc Committee at Harvard Medical School to Examine the Definition of Brain Death. *JAMA*. 1968;205(6):337-340

Razdan, M., (2015) Breakdown in the Organ Donation Process and Its Effect on Organ Viability. Journal of Transplantation, Vol 2015. Article ID 831501, 8 pages

Truog, R.D., (2013) The Dead Donor Rule and the Future of Organ Donation. *The New England Journal of Medicine*, 369:14, October 3rd, 2013, pp. 1287-1289

Reich, D.J., (2009) ASTS Recommended Practice Guidelines for Controlled Donation after Cardiac Death Organ Procurement and Transplantation. *American Journal of Transplantation 2009*; 9: 2004–2011

February 8th

Brain Death in the Media

Public perception of brain death and organ donation play a major role in the rate of donation and the likelihood of 1) Someone signing up on the consent registry and 2) A family consenting to donate their loved one's organs. The dead donor rule and legislation to outlaw the recovery of organs from a non-consenting living person are fundamentally necessary for donation and transplant in the U.S, however myths and misconceptions still exist and can be influenced by the media. In this class we will explore some examples of brain death and donation/transplant in mainstream media.

Readings:

The Ethics of Transplant: pp 147-157 and 175-203

The Ethics of Transplant: pp 204-232

Lewis and Caplan, (2015) Brain Death in the Media, *The Transplantation Society*, May 2016, Volume 100, Number 5

Manara, A.R., (2016) A case for stopping early withdrawal of life sustaining therapies in patients with devastating brain injuries. *Journal of the Intensive Care Society, DOI:* 10.1177/1751143716647980

Mahra, M.R., (2018) The Drug Intoxication Epidemic and Solid-Organ Transplantation, May 2018, *The New England Journal of Medicine*, 378:20

Truog, R.D., (2003) Role of brain death and the dead-donor rule in the ethics of organ transplantation, *Journal of Critical Care Medicine*, 2003 Vol. 31 No. 9

February 15th

The Ethics of Donation After Circulatory Death (DCD)

Before the Ad Hoc committee at Harvard developed the criteria for Brain Death in the early 1960's, DCD was the only method of recovering organs for transplant. However, given the delicate nature of end-of-life decision making and the complex process of DCD, the ethical and moral debate about this donation pathway still stands today. In this class we will examine the DCD pathway and explore the ethical questions surrounding it.

Readings:

- Page, A.A., (2016), Early Results Using Donation After Circulatory Death (DCD) Donor Hearts. Topical Collection *on Thoracic Transplantation*, *DOI 10.1007/s40472-016-0106-9*
- American Thoracic Society Health Policy Committee, (July 2012), An Official American Thoracic Society/International Society for Heart and Lung Transplantation/Society of Critical Care Medicine/Association of Organ and Procurement Organizations/United Network of Organ Sharing Statement: Ethical and Policy Considerations in Organ Donation after Circulatory Determination of Death. Am J Respir Crit Care Med Vol 188, Iss. 1, pp 103–109, Jul 1, 2013
- Motta, E.D., (2005) The Ethics of Heparin Administration to the Potential Non-Heart-Beating Organ Donor. *Journal of Professional Nursing*, Vol 21, No 2 (March–April), 2005: pp 97–102
- Bernat, J.L., (2006) Report of a National Conference on Donation after Cardiac Death. *American Journal of Transplantation* 2006; 6: 281–291. doi: 10.1111/j.1600-6143.2005.01194.x
- Steinbrook, R, (2007) Organ Donation After Cardiac Death, New England Journal of Medicine, n engl j med 357;3

February 22nd

The Registry: Opt-in vs. Opt-out

Currently the U.S. utilizes an opt-in system for people to sign up on the consent registry for organ donation. This means that one needs to voluntarily sign up on the registry to give first person consent for organ and tissue donation. Many believe that if the U.S adopted an opt-out system in which consent is presumed and one must voluntarily opt not to be an organ or tissue donor, that donation rates would increase and wait list times would decrease. Countries such as Spain, Belgium and Croatia have an opt-out system and boast increased donation rates over countries with systems like the U.S. In this class we will examine the ethical nature of these two systems and whether an opt-out system could be a feasible solution to the U.S. organ shortage.

Readings:

The Ethics of Transplant: pp 152-174

- Rithalia A. and McDaid C., (2009) Impact of presumed consent for organ donation: a systematic review. *The British Medical Journal*, BMJ 2009;338:a3162 doi:10.1136/bmj.a3162
- Shepherd, L. (2014), An international comparison of deceased and living organ donation/transplant rates in opt-in and opt-out systems: a panel study. BMC Medicine 2014 12:131.
- Saunders, B. (2011) Opt-out organ donation without presumptions. *Journal of Medical Ethics*, J Med Ethics 2012;38:69e72. doi:10.1136/medethics-2011-100039

February 29th

Organ Allocation: The Wait List

Following our discussion about the op-in vs. opt-out registry systems, we will examine how the wait list and allocation of organs currently works in the U.S. We will examine the creation of the organization that currently regulates the waitlist, the United Network of Organ Sharing (UNOS) and the ethical nature of allocating a scarce resource to those in need.

Readings:

- Persad G., Wertheimer A., Emanuel E., (2009) *The Lancet*, Department of Ethics 2009; 373: 423–31
- Glazier A.K., (2018) The Lung Lawsuit: A Case Study in Organ Allocation Policy and Administrative Law, *Journal of Health & Biomedical Law*, XIV (2018) 139-148
- Enhancing Liver Distribution, U.S. DEPT. OF HEALTH AND HUM. SERVS. (Dec. 2017), https://optn.transplant.hrsa.gov/governance/public-comment/enhancing-liver-distribution.
- Smith M., The Gross Inequality of Organ Transplants in America, NEW REPUBLIC (Nov. 8, 2017), https://newrepublic.com/article/145682/gross-inequality-organ-transplants-america (finding that income disparities may affect patients that are in the organ waiting list).

March 7th

The Role of Religion in Organ Donation and Transplantation (Guest Speaker)

Assignment Two: On March 2nd please come to class with a 3-5 page double spaced paper arguing for either an opt-in or opt-out consent registry system. Please consider both the articles and reading from *The Ethics of Transplant*. We will be discussing this during class.

Religion and culture play major roles in in all of healthcare, especially when it comes to organ donation and transplantation. We will examine how religion can influence decision making when it comes to organ donation and how it effects the organ shortage, especially in New York and UNOS Region 9.

Readings:

Oliver, M., (2012) Donating in good faith or getting into trouble? Religion and organ donation revisited. *World J Transplant* 2012 October 24; 2(5): 69-73 ISSN 2220-3230 (online)

No class the week of March 14th due to spring break

March 21st

Living Donation vs. Deceased Donation (Guest Speaker)

It is well known in the transplant community that an organ donated from a living recipient will (in most cases) function better and faster than an organ from a deceased donor. However, living donation is not without its own set of ethical considerations. In this class we will examine the process for living donation and the ethical and moral questions surrounding it.

Readings:

The Ethics of Transplant: pp 32-102

Truog, R.D., (2005) The Ethics of Organ Donation by Living Donors, *The New England Journal of Medicine*, engl j med 353;5

March 28th

Organ Donation Case Studies: Examining the Practical Ethics of Organ Donation

Organ donation is something that takes place in hospitals every day across the U.S. In this class we will examine several organ donations cases and how the ethical and moral quandaries that surround them were played out in real time. We will examine each case in depth and discuss during class.

Readings:

Valdes, M., (2002) Organ donation after neurologically unsurvivable injury: a case study with ethical implications for physicians. *Baylor University Medical Center Proceedings*, BUMC Proceedings, 2002;15:129–132

April 4th

The Organ Shortage: How Do We Improve?

Throughout this class we have repeatedly discussed the current shortage of organs in the U.S and worldwide; is there an answer to this growing need? In this class we will discuss several proposals to remedy this shortage as well as ways that New York State has attempted to improve over the years.

Reading:

The Ethics of Transplant: pp 102-147 & 232-267

McNamara and Beasely, Determinants of Familial Consent to Organ Donation in the Hospital Setting. *The Partnership for organ Donation Boston, Massachusetts. Social Issues in Organ Donation*, pp. 219-228

Sounding Board (2002) Ethical Incentives – Not Payment – for Organ Donation, *The New England Journal of Medicine*, Engl J Med, Vol. 346, No. 25

- Koh, H.K., (2007) A Statewide Public Health Approach to Improving Organ Donation: The Massachusetts Organ Donation Initiative. *American Journal of Public Health* | January 2007, Vol 97, No. 1
- Tullius, S.G., (2018) Improving the Supply and Quality of Deceased-Donor Organs for Transplantation. *The New England Journal of Medicine*, N Engl J Med 2018;378:1920-9. DOI: 10.1056/NEJMra1507080

April 11th

Advances in Organ Donation: The Future of Transplant (Guest Speaker)

The field of organ donation and transplantation has been growing rapidly since its inception and continues to do so today. Organs from patient with HIV and Hep C are now able to be transplanted, Vascular Composite Allografts (VCA) like face and arm transplants are becoming more mainstream and the "heart in a box" and "Ex-Vivo" lung machines are improving. All these advancements will shape the future of organ donation and transplant and create an entirely new train of ethical and moral thought.

Readings:

- Pomahac, B., (2011) Restoration of Facial Form and Function After Severe Disfigurement from Burn Injury by Composite Facial Allograft. *The American Society of Transplantation and the American Society of Transplant Surgeons*, American Journal of Transplantation 2011; 11: 386–393
- Diaz-Siso, J.R., (2013) Vascularized composite tissue allotransplantation state of the art. *Clin Transplant* 2013: 27: 330–337 DOI: 10.1111/ctr.12117
- Cypel, M., (2011) Normothermic Ex Vivo Lung Perfusion in Clinical Lung Transplantation, *New England Journal of Medicine*, N Engl J Med 2011;364:1431-40.
- Parent, M, (2020) Ethical and logistical concerns for establishing NRP-cDCD heart transplantation in the United States, *The American Society of Transplantation and the American Society of Transplant Surgeons*, American Journal of Transplant, 2020; 10.1111/ajt.15772
- Yamada, K (2017) Xenotransplantation: Where Are We with Potential Kidney Recipients? Recent Progress and Potential Future Clinical Trials
- $\underline{\text{https://www.science.org/content/article/here-s-how-scientists-pulled-first-pig-human-heart-transplant}$

April 18th

Start Work on Final Project

This class along with the next two sessions will be dedicated to brainstorming and working on your final projects. This will last from now until the final presentations on May 4th and May 11th. We will also be watching various organ donation related videos, including news coverage and documentaries.

Final Assignment: There will be three options for your final project:

- 1) Write a 10-page paper (with citations) on one of the sections from Radcliffe Richard's work and relate to the status of organ and tissue donation in the U.S.
- 2) Conduct a survey of either family or peers related to organ and tissue donation and their perception of it. You must survey at least 3 people (if not more). Write a 10-page report to summarize your findings.
- 3) Re-write your initial assignment from Week 1, expand and discuss how your attitude towards organ donation has changed over the last semester. If it hasn't, explain why.

April 25th and May 2nd

Final Presentation

These last two sessions will be dedicated to finishing and presenting your final projects.

Grading

Attendance and participation: 50%

Assignments One and Two: 10% each (20%)

Final Assignment: 30%

From Official Stony Brook University Policy:

Statements required to appear in all syllabi on the Stony Brook campus:

Student Accessibility Support Center Statement

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and the Student Accessibility Support Center. For procedures and information go to the following website: https://ehs.stonybrook.edu/programs/fire-safety/emergency-evacuation/evacuation-guide-disabilities and search Fire Safety and Evacuation and Disabilities.

Academic Integrity Statement

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.