Directed and Conditional Uterus Donation

ABSTRACT

Uterus transplantation (UTx) is highly anticipated for the benefits that it might bring to individuals wanting to carry a pregnancy in order to reproduce who do not have a functioning uterus. The surgery – now having been performed successfully in several countries around the world – remains experimental. However, UTx is at some point expected to become a routine treatment for people without a uterus and considering themselves in need of one: women with AUFI; transgender women; and even cisgender men who wish to gestate. Given the unique benefits UTx offers, uteri are likely to be 'in demand', and such demand, we suggest, will feasibly outstrip supply. Therefore, allocation of those uteri available for transplant may become a pressing issue. In this paper, we consider one aspect of organ allocation – the preferences of donors in making a directed or conditional donation of their uterus. To what extent, in the context of uterus donation, would such donations be ethically permissible?

INTRODUCTION

Since the first successful uterus transplantation (UTx) was performed in Sweden in 2014, more than seventy transplants have taken place worldwide.¹ UTx represents an important development for people who wish to reproduce but are unable to gestate for themselves, including women with absolute uterine factor infertility (AUFI; infertility caused by an absent or non-functioning uterus),² or potentially transgender women^{3,4} and cisgender men.⁵ There is considerable ethico-legal literature that considers some of the issues surrounding UTx, including the ethics of performing the procedure considering risks to donors^{6,7} and recipients,⁶ the justifications for live donation,^{8,9} and questions about who should fund the procedure.^{10,11,12,13} While there is a considerable literature, and there is work examining the potential risk of coercion where potential donors are family/friends,^{6,14} we are not aware of any investigation of the ethics and legalities of directed and conditional uterus donation.

Our central aim in this paper is to highlight the need to consider whether we *ought to* allow directed and/or conditional donation of uteri. Literature to date tends to presume the permissiveness of a person's directed uterus donation – presumably, because most instances involve family members donating directly in clinical trials.¹⁵ In our discussion, we begin by outlining the law in England and Wales. The law provides a clear place from which to begin ethical investigation; it outlines the status quo that can be critiqued.¹⁶ The law also has a direct, formative influence on the behaviour of medical professionals providing transplants, therefore examining the law ensures that bioethical analysis is 'pragmatically oriented'.¹⁶ We use English and Welsh law as an example because of our familiarity with its content, though there are other jurisdictions that regulate these matters similarly.

Because UTx is clearly still an experimental procedure, demand does not outstrip supply. However, our discussion is important because it is plausible that as the procedure becomes more routine there may be more people seeking a uterus transplant than there are donors; especially when/if there are limits on who can donate. In such circumstances, directed donation, as opposed to allocation based on 'objective' criteria like clinical need or wait time, could be in need of an explicit ethical justification. Furthermore, we are not aware of any investigation of the permissiveness of conditional donations in the context of UTx. This is despite the fact that people may be more likely to make conditional stipulations, or to believe that they should be entitled to make conditional stipulations, about transplants that are not lifesaving and that are pertinent to gender identity and recognition. The reasons people may want to make conditional donations are complex and psychosocial. We do not, therefore, have space to consider all possible reasons for conditional donation, or to reflect on whether these reasons are good reasons. Nonetheless, we do not believe that donations motivated by racism, homophobia, or transphobia are ever justifiable. The scope of this paper is limited to raising the potential justifications for, and issues with, directed and conditional donation of uteri. We argue that in this context justifications for such donations are distinct from those that are raised about organ donation more broadly.

ⁱ For example, in the UK people donating their uterus must already be parents (including children by surrogacy or adoption). See: Jones et al. 2016.

DONATING A UTERUS

A uterus can be transplanted from a live donor or a cadaver. In live donors, the extraction of the uterus is performed as an open hysterectomy, though research is ongoing to try and develop laparoscopic techniques. The surgery is complex, and the surgical isolation of uterine vessels in retrieval is time-consuming. The surgery is demanding of the donor, in addition to any necessary preparation period (e.g., hormone treatment) and post-operative recovery. The procedure itself is simpler when performed on a deceased donor as larger vessels can be extracted with the uterus.

UTx is thought to be an attractive option for people who want to reproduce but who would otherwise not have the ability to gestate. These individuals can otherwise become parents by adoption (though this precludes the possibility of a genetic link) and gestational surrogacy (though the intended parent does not get to *experience* 'some of the physical and emotional aspects of pregnancy'8). Further, gestational surrogacy can be legally, practically, and emotionally complex because the intended parent is not automatically recognised as having parental rights and responsibility at birth.¹⁸

In England, the Human Tissue Act 2004 governs deceased donation, with recent amendment by the Organ Donation (Deemed Consent) Act 2019 specifying that adults are considered to have provided permission for the donation of their organs upon their death unless they have made an express indication to the contrary (this amendment has been in force since May 2020). In Wales, a similar system of deemed consent (also known as opt out, presumed consent, and deemed authorisation) has been in place since December 2015 per the Human Transplantation (Wales) Act 2013. Whilst there are differences between the two systems, ^{19,20} for our purposes they are the same. There has been some debate in the ethical literature about whether the uterus ought to be treated differently to – or the same as – other organs. ⁸ The uterus has been included in the list of organs and tissues that are explicitly excluded from deemed consent in both England and Wales. ²¹ This means that a person, or someone in a 'qualifying relationship' ii on their behalf if they are deceased, needs to provide their explicit consent for the donation of their uterus after death. ⁱⁱⁱ The law, then, perceives some manner of distinction between uteri (and

_

ii Human Tissue Act 2004, s.27(4).

iii Human Tissue Act 2004, s.3(6A) as amended by the Organ Donation (Deemed Consent) Act 2019, s.1(4).

other excluded bodily materials that are generally more 'experimental') and other organs that are now established candidates for transplant (for example, the heart, lungs, liver, corneas etc.).

While it is considered more ethically contentious, ⁹ live donation of uteri is thought to be more clinically successful. ^{22, iv} Legally speaking, a living person can donate their uterus where they give their informed consent and the medical professionals are certain that they are donating without unlawful inducement (e.g., payment). ^v It is presumed that live donations will be directed, as the vast majority are. Instances of living non-directed donation must be specifically approved by the Human Tissue Authority. ²³

CONDITIONAL AND DIRECTED DONATION

While there is overlap, it is necessary to distinguish conditional and directed donation. However, in the literature there is no clear and widely accepted distinction between the two. Indeed, the two are sometimes conflated.^{24,25} For the purposes of our discussion, we adopt the distinction neatly summarised by Cronin and Price:

'Directed donation of deceased donor organs, which involves the direction of an organ (or organs) to a specified *person*, is distinct from conditional donation, in which donation is made to (or perhaps withheld from) a specific *class of person'* [emphases added].²⁴

Cronin and Price specify deceased donation, but their clarification is equally applicable to living donation.²⁶ The overlap comes in that *directed* donation involves the attachment of *conditions* to donation – directed donation is, then, conditional donation in common parlance, but not so per specific definitions.

V Human Tissue Act 2004, s.32.

^{iv} An anonymous reviewer rightly points out that there is limited evidence to support this claim given that donation using a deceased donor has only been undertaken a small number of times, thus making it difficult to compare success rates.

Directed donations are permitted in the case of living donors.²³ However, deceased donation can be directed in limited circumstances, and the direction is treated as a request.²⁷ NHS Blood and Transplant (NHSBT) concluded that 'cases of requested allocation of deceased donor organs are likely to be very few in number [...] such cases have not had any significant impact on the UK-wide organ allocation scheme or the individuals on the transplant list waiting for a transplant'. 27 They emphasise that since the Human Tissue Act 2004 vi centres the wishes of the deceased in the authorisation of donation that 'in line with this principle and bearing in mind such cases should not impact on the allocation system in any adverse way [...]. The requested allocation of an organ to a specified relative or friend may be permissible'. ²⁷ Directed donations in living donors are treated differently for both principled and practical reasons. There is the obvious fact that since the motivation of the living donor is to aid a specific individual – the organ simply is not available to others because the donor would be unlikely to donate other than where they can direct the donation. There are also unique relational benefits to the donor arising from donation. Moreover, where it is a living donation the procedure can be arranged in advance so that the donor and recipient are in the same place. Where it is a deceased donation, the organ needs to be used as soon as possible, and so it may be that the person the deceased would have wanted the organ to go to is not available and a higher quality transplant can be performed by giving the organ to someone available immediately. There may also be another individual who is in much greater clinical need.

Guidance issued by the Department of Health (now Department of Health and Social Care) in 2010^{28} first stipulated the circumstances in which directed donation may be permissible. These criteria are now contained in more recent policy by NHSBT.²⁷ Requested allocation of a deceased donor organ to a named family member or friend²⁷ can be considered²⁸ where:

- there is appropriate consent,
- the donation is not conditional on the request,
- no others are in desperate clinical need of the organ,
- the deceased indicated a decision to donate to a named relative or friend or a family member indicates that the deceased would have expressed this decision,
- the relative or friend is on the transplant waiting list

vi This Act – as amended - still remains at the foundation of the deemed consent model.

- the transplant is clinically indicated.²⁷

The policy emphasises that priority will be given to others over the deceased's directed request where they are in urgent clinical need.²⁷ Urgent clinical need is defined as schemes for 'urgent transplant' – these exist (at present) for livers, hearts, and lungs – and patients qualify for these lists when they have days to live without transplant. These patients take priority over any directed donation if the organ in question is suitable for them.²⁷

Conditional donations are not legally permissible in England and Wales. The Human Tissue Authority stipulates that no organ is to be transplanted 'under a form of consent which seeks to impose restrictions on the class of recipient of the organ, including any restriction based on a protected characteristic under the Equality Act 2010 or based on language. This includes the recipient's age, disability, gender, marriage or civil partnership, pregnancy or maternity, race (which includes colour, nationality and ethnicity), religion or belief (which includes philosophical belief), sex or sexual orientation'. NHSBT 'does not accept organs from deceased donors where any restriction is attached'. Allocation policy states that 'it is a fundamental principle of the UK donation programme that organs are freely and unconditionally given'. In what follows we consider whether the principles established in the law result in ethically justifiable outcomes in the context of UTx donation.

DIRECTED/CONDITIONAL UTERUS DONATION

It is not inconceivable that people will attempt to donate their uterus conditionally – or wish to consent to a directed donation on their death, despite this being seemingly legally impermissible. In this section, we highlight some feasible situations that would constitute ethico-legal problems.

Directed Donation

While there are some who might argue that living directed donation of a uterus would be controversial, these arguments do not relate to the fact that the donation is directed (that the organ would go to a specific person). Concern is most often about donation itself on the grounds of the donor's health. If it is assumed that living uterus donation is ethically permissible, that the donation should be directed is not likely to be considered controversial. Directed donation might be considered more controversial in instances of deceased donation. Firstly, because the preferences of a person who is now dead do not hold the same weight as those of a living person. Once dead, individuals are 'beyond harm or benefit'29 as there can be no awareness or feeling of having been 'wronged'.²⁹ Secondly, because allocation following deceased donation is most often determined based on clinical need. Uteri are, however, an excluded material from deemed consent in England.²¹ Where a person wants to direct the donation of their uterus ahead of their death, this would be treated differently in law from directed donation of those organs that are subject to deemed consent. Uteri are, in effect, legally labelled a 'non-vital organ transplant'8 in their specific exclusion from deemed consent provision.²¹ This distinction is pertinent for reasons we will discuss shortly. We use a case study (that is a possibility even if not highly likely to occurvii) to illustrate why this is the case, and why the legally permitted directed deceased donation of uteri might be thought ethically permissible.

Box 1

Scenario 1:

A has a close relationship with her younger sister, B. B was born with AUFI but has always wanted to reproduce – including to carry a pregnancy. A and B have discussed A donating her uterus to B at some point in the future, but A wanted to have a child of her own first. A is diagnosed with a potentially terminal illness and inquires as to the suitability of her uterus for transplant if she dies. Her doctor informs her that in such a case her uterus would likely be suitable for transplant.

A intends not to opt out of donating her organs. However, she wants to provide explicit consent to donate her uterus – but only in the event that B, who is a match, would be the recipient of the organ.

⁻

vii Note that even if such a scenario is not highly likely to occur, it still has utility in demonstrating the limitations of conventional thinking about directed donation.

In Scenario 1 (contained in Box 1), A can request that B receive her organ in the event that she dies and her uterus is suitable for transplant. VIII NHSBT policy stipulates that 'if a living donor dies before their intended living donation can be carried out, the acceptability to the intended recipient depends upon what organ is being donated and to whom'. For example, in the case of livers the urgent liver list takes priority, but kidneys can go to the person named. There is not the same legal impetus placed on directed deceased donation of the uterus. Of course, that the law distinguishes the uterus does not mean that it *ought* to be distinguished, or that the basis for so doing is coherent. It is the case, however, that since the uterus is distinguished directed donation may be permitted in current law, and in what follows we consider whether this is justifiable.

Since the uterus is not an organ that when transplanted prevents loss of life, some may argue that directed donation is permissible simply because, in situations like that above, A choosing to give her uterus to B does not subvert an established priority list of people who are critically ill and therefore may die because they missed an opportunity for transplant because of the preferences of another person. However, while it may not prevent loss of life, there is a very specific benefit from this organ. It does enable individuals who feel strongly about experiencing being pregnant to have that experience. 6,31 It allows them to reproduce in a manner in which they are recognised as the legal mother of a child at birth. For many people, the chance to experience pregnancy and reproduce may even be something they consider to 'save' their life. For these reasons, it is likely that as UTx becomes more established a procedure there might be considerable demand. This demand could easily outstrip supply because the object of transplant is not subject to deemed consent and so the availability of organs is dependent on individuals opting to donate it. This requires individuals to engage with their donation preferences, and it could be one of those organs about which donation makes people feel more uncomfortable. For example, amongst people willing to donate most of their organs there is often disquiet around certain body parts - e.g., the eyes.³² As a reproductive organ, it is conceivable that some people would feel the same, or an even greater, discomfort in relation to donation of the uterus as an intimate part of themselves. 32,33 Indeed, in the case of uteri it is conceivable that this would go beyond the internal consideration of the 'ick factor' that can cause many not to donate their corneas to incorporate external value judgements about

viii The only issue may be a question of whether there is sufficient documented evidence of A's intent regarding donation of her uterus. Family members, however, could provide evidence of this.

potential recipients (such as transphobia) – we will revisit this shortly. One US study, however, seemed to indicate that fewer people than might be anticipated have 'ick factor' reservations.³⁴ This is a matter on which further empirical research would be of great utility to provide more understanding about the reasons why people may or may not be willing to donate such an organ.

With demand outstripping supply, it could be argued that because the value of the organ to the individual in need of it is so great it would be unfair to preclude some individuals from accessing it because donations are directed towards others (irrespective of how long they have been waiting, or how good a match they are etc.). Similar arguments might be made about other transplants that are not considered technically lifesaving, such as corneas. Even though a recipient may not live longer as a direct result of the transplant, being able to see again may be something that some individuals describe as enhancing their life experience to such a degree they consider if 'lifesaving'. We do not specifically claim that UTx is different to transplants that are traditionally considered 'quality-of-life-enhancing' and that justifications for directed donation would be much different. For those who want to reproduce and experience a pregnancy, UTx will hold significant value in enabling them to have a particular type of life (as a parent who gestated) that they otherwise would not have had. Furthermore, UTx is a timesensitive procedure; the process is likely to be safer when the recipient is younger (and pregnancy following the procedure may be safer^{ix}). The only people who would be able to rely on receiving a uterus would be those people who knew someone willing to donate while living, or willing to donate directly on the event of their death. This does seem to be a matter of inequity.

However, if we take it that the inequity in access to uteri is grounds for not allowing directed donation, this might further reduce the pool of available organs. Because express consent is needed, it is likely only to be a minority that would even think of providing such consent. Most of whom are likely to consider it *because* they know of an individual who needs it. We do not know much about what A is like as an individual and whether the donation of her uterus is something she would have considered were her sister not in need of it. In any event, it is B's need that leads A to consider donation. Consequently, it could be argued that disallowing

ix Though we note that there are many myths about the risks of pregnancy for 'older' people that ultimately perpetuate pro-natalist motherhood imperatives in younger people.

directed donation would result in even fewer people having access to the material benefits of UTx. A's being allowed to donate a uterus directly to B is unlikely to mean that another person, X, does not receive the organ. The reality is that B is not receiving the organ over X. X was unlikely to ever receive the organ because A was not likely to consider donation in the absence of B. If directed donation is not allowed, A might not go through the motions of making her intention to donate known (there is not the same impetus of a person close to her benefiting) or she may allow other feelings (such as unease at donating a reproductive organ) to dictate her decision making. However, the law does not require that A make her intentions about any donation known before death, and it would be possible for her family to consent to uterine donation on her behalf after death. As such, it might also be argued that the organ *may* have been made available to other persons in need of it in any event. This reasoning is, however, reliant on an uncertain counter factual. It seems more plausible that there would be a donation only in the event that A, or any other individual, went out of their way to request it.

Conditional Donation

As much as the idea of conditional donation can conjure up feelings of disgust – particularly when one considers instances of racial conditions³⁵ – it remains that there is a strong ethical case in favour of it. Wilkinson notes the utilitarian argument whereby a policy against conditional donation ultimately results in levelling down, meaning 'reducing access to organs for some and increasing it for no one'. ³⁶ In the widely discussed racist donation case in the UK in 1998, ³⁷ it is true that a life was saved that otherwise may have been lost. To rule out conditional donation, then, one must accept that it will in some circumstances result in the loss of life. On fairness arguments too, Wilkinson makes a point of consistency in that the transplant system is, given the lasting organ shortage, inherently unfair because it necessarily allows some to die whilst others receive lifesaving transplants. Allowing such a system to operate suggests that 'meeting needs beats fairness', ³⁶ and that such a thought process ought to be extended to accept conditional donations even if they are unsavoury. However, there could also be a strong utilitarian objection to allowing such donations. ^{xi} If conditional donation were permitted, it is possible that a tipping point could be reached where such a significant proportion of donations

.

^x We are grateful to an anonymous reviewer for raising this point.

xi We are grateful to an anonymous reviewer for raising this point.

have conditions attached that fewer lives are saved overall given the complexities that would arise in allocation in combination with clinical suitability of particular candidates.

We are not entirely convinced of the latter formulation. Certainly, there would most likely be a number of donors attaching conditions who otherwise would not. However, it is hard to believe that this would ever reach a tipping point; it seems more realistic that a critical mass of donors would make the decision to donate purely altruistically, free of conditions, and be happy for anyone to benefit.

Regardless, in the UTx context arguments that claim a utilitarian justification for conditional donation are, at best, weak and, at worst, entirely inapplicable. This position can be rooted in Singer's argument about 'comparable moral importance'.³⁸ The underlying principle of most arguments in favour of permitting conditional donation is one of utility; saving lives is the end goal, and contributions to this goal should be supported even if they are less than ideal in origin. Where the donation and resulting transplant in question is not going to save someone's life, however, such arguments are less convincing. Here, the ethically and socially problematic nature of conditional donation becomes a harm that can potentially rival the benefit afforded by organ or tissue donation. Singer argues that 'if it is in our power to prevent something bad from happening, without thereby sacrificing anything of comparable moral importance, we ought, morally, to do it'.³⁸ In essence, balancing the benefits and harms of preventing that 'something bad' – albeit from an unbalanced starting point of favouring prevention.

Where a donation is lifesaving – leading to, for example, a heart transplant – the something bad is the death of the would-be recipient. While one may remain unconvinced, it is easy to see how someone could consider the positive societal message of non-discriminatory allocation of lifesaving organs (which is sacrificed in permitting conditional donation) *not* to be of comparable moral importance. The almost subconscious inclination toward the sanctity of life in society at large (whether religious or secular) arguably has prevented the law and regulators from endorsing an innocent's death to make a principled point. It is important to remember, after all, that the something bad where a conditional donation is refused is not shouldered by

the donor, but the would-be recipient, who is (it is fair to assume in at least most cases) innocent in relation to the potentially repugnant conditions being attached to donation.

In the UTx context, however, the something bad arising from conditional donation is not the loss of life. By no means are we downplaying the benefits of UTx, which we noted above. However, it remains that UTx does not prevent an individual's death. As such, it may be that the benefits of refusing conditional donation *are* something of comparable moral importance in this scenario – the balance has certainly shifted.

Box 2

Scenario 2:

C is post-menopause and is sympathetic to the difficulties of women with AUFI. C decides that she would like to donate her uterus but does not know a specific individual who needs it. She contacts a hospital known for performing UTx and enquires about becoming a live donor. She specifies, however, that she is willing to donate her uterus only to a woman with AUFI.

It is conceivable that some individuals may seek to attach conditions such as those described in **Scenario 2 (Box 2)** and thus they should be subject to scrutiny. Such conditions might be counter to common intuitions of non-discrimination. First, the condition appears to discriminate against women who need a uterus transplant for a reason other than AUFI. Second, while C's condition does not *actively exclude* transgender women (she has not specified that she is willing to donate only to a cisgendered woman) they may still be prevented from receiving the uterus were the condition accepted. Transgender women are not recognised as being afflicted by AUFI (as this is clinically, at present, defined as a condition affecting only cisgender women^{39 xii)} they would thus not be *included* in the group of potential recipients.

While intuitively problematic, refusal of such donations would, ultimately, mean that someone in need of a uterus transplant would miss out. Where such refusals result in a process of levelling down, it is necessary to consider whether this is justified.

xii We recognise that a definition of AUFI that excludes transgender women is concerning.

There may be an important ethical distinction related to motivation in such scenarios. This is touched on by Wilkinson when he highlights the importance of separating the attaching and accepting of conditions.³⁶ It might be argued that C appears motivated by a want to help women affected by AUFI rather than to actively *not* help those who would be excluded should her conditional donation be accepted. The morally concerning aspect of C's conditions remains, however, a direct result of the way she has expressed her 'good intentions'.

Other conditions that are, prima facie, ethically questionable may be prematurely judged. The well-known case of racist donation discussed earlier may have come from a place of prejudice, but it is conceivable that racial conditions could be attached for positive reasons. Understandably, our instinctive revulsion to race conditions stems from a presumption that they will reinforce existing disadvantage – like the abovementioned case. However, one may wish for their organs to go to a patient of a particular ethnic group to help address disparities in organ allocation. Indeed, Arnason highlights how race-related conditions may even prove beneficial in encouraging donation within certain communities which may be less trusting of the medical establishment, particularly in the context of Black communities in the US.²⁵An immediate charge of racism where one seeks to attach conditions of race is, then, premature.

We are not arguing that conditions with the purpose of addressing disparity, where it is deemed that they are not motivated by racism, should *always* be accepted, but that we must recognise how apparently discriminatory attempts at conditional donation may be less disagreeable than first thought. The motivations behind such given conditions in any context may be more or less disagreeable. The militancy of one's conviction too, may play a part in how we feel about them. For example, one who wishes their organs to benefit a disadvantaged patient group but who, where this is not feasible (for, say, reasons of timing and/or compatibility xiii), revokes their donation may be viewed less sympathetically. Acknowledgement and discussion of these potential eventualities is necessary when exploring the ethical defensibility of conditional donation, in the context of uterus donation and beyond.

xiii Regarding race conditions in particular it is important to note that donor and recipient being of similar ethnic backgrounds often means a better match. As such, a white patient wishing to attach the condition that their organs benefit Black patients, for example, would likely need to be encouraged to drop such conditions on the basis of their organs potentially going to waste should they be attached.

Of course, it is likely that where an individual is seeking to attach conditions to the donation of their organs that come from a "good" place that they would still agree to donation if they were told that conditions are not permitted. As they are not motivated by prejudice, such individuals would, it is reasonable to assume, willingly see their organs help anyone if it is that or no donation. But there is still the question of levelling down when considering conditions attached with malicious intent, and in the UTx context it is certainly plausible that this would take place along the lines of gender identity and recognition.

One can relate this to charitable donation. If C were to donate financially to a charity with specific aims, we would not say that C is actively discriminating against those who do not benefit from this act of charity. We accept that charitable giving is an act that is, for many people, deeply personal, and often shaped by personal experiences (i.e., donating to cancer research if you have lost a relative to cancer). Similar motivations may be the basis for one seeking to attach conditions to donation of their uterus; for example, experiencing a friend or close friend having struggled with AUFI. It seems, then, that to deem the conditions C wants to attach to donation of her uterus ethically problematic, a relevant and defensible distinction needs to be made between donating one's money and donating one's bodily material.

Of course, one may object that there is a marked difference between money and bodily material such that this comparison lacks ethical clout. The significant literature around the buying and selling of bodily materials, for example, may come to the fore here. Instead, then, one might relate the situation to charitable donation of *time* – so volunteering for a particular charity that one feels a certain affinity with. Again, one would not consider it discriminatory to, say, arrange fundraising events for a rare disease charity when they could instead be volunteering at a food bank; we accept that altruistic acts often are rooted in a personal connection of some sort. C's conditions of donation being impermissible, then, would also require a relevant and defensible distinction to be made between donating one's *time* and donating one's bodily material. xiv

_

xiv We are grateful to an anonymous reviewer for raising this point.

CONCLUSION

UTx is on the horizon and is highly anticipated for the unique benefits it can bring for people without a functioning uterus who want to carry a pregnancy in order to reproduce. Because the uterus is not an organ subject to deemed consent in relation to deceased donation, and because living donation involves risks to the donor, it is likely that as the surgery becomes more routine demand for UTx will outstrip supply of uteri for donation. For this reason, the permissibility of directed and conditional uterine donation is important to examine. In this paper, we considered some possible scenarios to illustrate the need to evaluate the justifications for these types of donation. We have highlighted some of the important differences between uteri and other organs pertinent to this discussion. Comprehensively answering the questions we have touched on is beyond the scope of this paper and is in need of significant scholarly attention. Indeed, other considerations in need of examination that we have been unable to highlight here for matters of space concern what one might deem 'transactional donation', whereby the uterus is 'donated' as some manner of exchange. Nonetheless, we have mapped out several issues that such attention ought to focus on.

REFERENCES

- 1. Hammond-Browning N. Uterus transplantation: five years on from the world's first birth. 2019. Available: https://www.bionews.org.uk/page-145998 [Accessed 23 September 2021].
- **2.** Jones BP, Saso S, Yazbek J, Smith JR. Uterine transplantation: past, present and future. *BJOG* 2016;**123**:1434–8.
- **3.** Alghrani A. Uterus transplantation: does procreative liberty encompass a right to gestate? *J Law Biosci* 2016;**3**:636-41.
- **4.** Sampson A, Kimberly L, Goldman KN, Keefe DL, Quinn GP. Uterus transplantation in women who are genetically XY. *J Med Ethics* 2019;**45**:687-689.
- **5.** Robertson JA. Other women's wombs: uterus transplants and gestational surrogacy. J Law Biosci 2016:**3**:68-86.
- **6.** Mullock A, Romanis EC, Begovic D. Surrogacy and uterus transplantation using live donors: Examining the options from the perspective of 'womb-givers' *Bioethics* doi.org/10.1111/bioe.12921.
- 7. Hammond-Browning, N. UK criteria for uterus transplantation: A review. *BJOG* 2019;**126**:1320–1326.
- **8.** Arora KS, Blake V. Uterus transplantation: ethical and regulatory challenges. *J Med Ethics* 2014;40:396-400
- 9. Williams, NJ. Should deceased donation be morally preferred in uterine transplantation trials? *Bioethics* 2016;**30**:415–424.

- Wilkinson S, Williams NJ. Should uterus transplants be publicly funded? J Med Ethics 2016;42:559-565.
- 11. Alghrani A. Yes, uterus transplants should be publicly funded!' J Med Ethics 2016;42:566-567.
- **12.** Balayla J. Public funding of uterine transplantation. *J Med Ethics* 2016;**42**:568-569.
- **13.** Lotz M. Commentary on Nicola Williams and Stephen Wilkinson: 'Should Uterus Transplants Be Publicly Funded? *J Med Ethics* 2016;**42**:570-571.
- **14.** Alghrani A. Regulating Assisted Reproductive Technologies: New Horizons. Cambridge: Cambridge University Press 2018.
- Olausson, M. Live or deceased uterus donation. In M. Brannstrom (Ed.), Uterus transplantation (pp. 79–82). Springer 2020.
- **16.** Romanis, EC. Regulating the 'Brave New World:' Ethico-Legal Implications of the Quest for Partial Ectogenesis. PhD Thesis: University of Manchester 2020.
- 17. Johannesson L, Järvholm S. Uterus transplantation: current progress and future prospects. *Int J Womens Health*. 2016:**8**:43-51.
- 18. Horsey K. Fraying at the Edges: UK Surrogacy Law in 2015. Med L Rev 2016;24:608-621.
- **19.** Parsons JA. Welsh 2013 deemed consent legislation falls short of expectations. *Health Policy* 2018;**122**:941-944.
- **20.** Parsons JA. Deemed consent for organ donation: a comparison of the English and Scottish approaches. *J Law Biosci* 2020;**8**: lsab003.
- 21. The Human Tissue (Permitted Material: Exceptions) (England) Regulations 2020.
- **22.** Kvarnström N, Enskog A, Dahm-Kähler P, Brännström M. Live versus deceased donor in uterus transplantation. *Fertil Steril*. 2019;**112**:24-27.
- 23. Human Tissue Act 2004.
- 24. Wilkinson TM. What's not wrong with conditional organ donation? J Med Ethics 2003;29:163-164.
- 25. Arnason WB. Directed donation: the relevance of race. *Hastings Cent Rep* 1991;21:13-19.
- 26. Cronin AJ, Price D. Directed organ donation: is the donor the owner?. Clin Ethics. 2008;3:127-131.
- 27. NHS Blood and Transplant. Introduction to Selection and Allocation Policies. 2017. https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/12777/introduction-to-selection-and-allocation-policies-pol200.pdf (accessed 23 September 2021).
- 28. Human Tissue Authority. Donation of Solid Organs and Tissue for Transplantation Part Two: Deceased organ and tissue donation. Code of Practice. 2020. https://content.hta.gov.uk/sites/default/files/2020-11/Code%20F%20part%202.pdf (accessed 24 September 2021).
- 29. Partridge E. Posthumous Interests and Posthumous Respect. Ethics 1981;91:243-264.
- **30.** British Transplantation Society. Requested Allocation of a Deceased Donor Donation. 2021. https://bts.org.uk/wp-content/uploads/2016/09/finalguidanceen.pdf (accessed 23 September 2021).
- **31.** O'Donovan L. Pushing the boundaries: Uterine transplantation and the limits of reproductive autonomy. *Bioethics* 2018; **32**: 489-498.
- **32.** Williams NJ. Deceased Donation in Uterus Transplantation Trials: Novelty, Consent, and Surrogate Decision Making. *AJOB* 2018;**18**:18-20.
- 33. Catsanos R, Rogers W, Lotz M. The Ethics of Uterus Transplantation. *Bioethics* 2013;27:65-73.
- **34.** Rodrigue JR et al. Vascularized Composite Allograft Donation and Transplantation: A Survey of Public Attitudes in the United States. American Journal of Transplantation 2017;**17**:2687–2695.

- **35.** Department of Health. 2000. 'An Investigation into Conditional Organ Donation: The Report of the Panel'. London: HMSO.
- 36. Wilkinson TM. Ethics and the acquisition of organs. Oxford: Oxford University Press 2011.
- 37. BBC News. Dobson: 'No health apartheid'. 1999. http://news.bbc.co.uk/1/hi/health/387817.stm (accessed 24 September 2021).
- 38. Singer P. Famine, Affluence, and Morality. Philosophy & Public Affairs 1972;1:229-243
- **39.** Jahromi AH, Horen SR, Dorafshar AH et al. Uterine transplantation and donation in transgender individuals; proof of concept. *International Journal of Transgender Health* 2021 doi: 10.1080/26895269.2021.1915635