



OPEN ACCESS

Is it ethically permissible for GPs to promote non-directed altruistic kidney donation to healthy adults?

Richard Armitage

Correspondence to

Dr Richard Armitage, School of Medicine, University of Nottingham, Nottingham, UK; richard.armitage@nhs.net

Received 9 November 2023

Accepted 9 March 2024

ABSTRACT

Doctors hold coexisting ethical duties to avoid causing deliberate harm to their patients (non-maleficence), to act in patients' best interests (beneficence), to respect patients' right to self-determination (autonomy) and to ensure that costs and benefits are fairly distributed among patients (justice). In the context of non-directed altruistic kidney donations (NDAKD), doctors' duties of autonomy and justice are in tension with those of non-maleficence and beneficence. This article examines these competing duties across three scenarios in which general practitioners (GPs) could promote NDAKD to healthy adults. In the first—when a healthy adult patient prompts the GP to discuss NDAKD—the GP is ethically obligated to counsel the patient about NDAKD to respect their autonomy, yet this does not constitute any form of promotion of NDAKD. In the remaining scenarios, healthy adult patients are unaware of the possibility of NDAKD. In the second, it is ethically permissible for GPs to indirectly raise awareness of NDAKD among healthy adults by displaying recruitment campaign material to non-specified groups of patients in their waiting rooms. In the third, it is ethically impermissible for GPs to directly promote NDAKD to individual healthy adults by raising the possibility of NDAKD with such individuals. The major counterarguments raised against this position are problems with kinds of counselling that fail to reach expected professional standards, rather than problems with the ethical claims made in this article.

INTRODUCTION**Kidney donation in the UK**

Around 6000 patients with end-stage renal disease sit on the UK's kidney donation waiting list at any one time.¹ In 2021–2022, 227 such individuals died without receiving a kidney, while 407 were removed from the list after their health deteriorated such that they were no longer able to undergo the necessary surgery and immunosuppressive therapies.¹ Around 3000 kidney transplantations take place each year in the UK, about two-thirds of which originate from deceased donors, and about one-third from living donors.¹ The most frequently donated solid organ in the UK are kidneys, 2263 of which were donated in 2021–2022, constituting 66.3% of all solid organ donations during that time.¹

Individuals who meet minimum standards of physical and mental health can continue to live healthily with a single kidney after donating the other. This process is called living kidney donation. Living kidney donations can be 'shared' across the UK through the UK Living Kidney Sharing Scheme (UKLKSS), either through paired-pooled donation (PPD) or altruistic donor chains (ADCs).² A linked donor–recipient pair consists of an individual on

the waiting list (recipient) and another individual who is willing to donate a kidney (donor), but the pair's tissues are incompatible and thus prevents a donation between them. Through the UKLKSS, such incompatible linked donor–recipient pairs are 'matched' with other such pairs that, in some combination, are collectively compatible for kidney sharing.

In PPDs, two-way (paired donation) sharing occurs between two linked pairs, while three-way (pooled donation) sharing occurs between three linked pairs. In ADCs, individuals not in linked pairs who intend to donate a kidney without a linked recipient receiving one in return ('non-directed altruistic donors,' NDADs) donate to a recipient in the paired/pooled scheme to trigger ADCs consisting of multiple donations.² Kidney donation undertaken by NDADs is known as 'non-directed altruistic kidney donation' (NDAKD).

Along with various assessments to ensure they meet physical health requirements, potential NDADs are subjected to two safeguarding procedures: a mental health assessment and a human tissue authority (HTA) independent assessment. While the former ensures the psychological and psychiatric health of NDADs is sufficient to safely undergo NDAKD,³ the latter ensures they are competent to give consent, understand the risks, are volunteering of their own will, and will not receive any reward for doing so.^{4,5} While, after donation, living donors are largely able to continue living healthily with a single remaining kidney, there is considerable disagreement about the risk of end-stage renal disease in living donors. Various studies, including those by O'Keefe *et al*,⁶ Matas *et al*⁷ and Matas and Rule,⁸ find only a small increase in absolute risk of end-stage renal disease in living donors. Yet, the risk may be higher for younger donors,⁹ and those with a family history of end-stage renal disease since, in such people, genetic factors (including individuals of Bangladeshi, African and Caribbean ethnicity) increase the risk of end-stage renal disease for both living donors and non-donors.¹⁰

The need for kidney donation in the UK

There is a substantial and growing need for living donor kidneys in the UK, which has intensified further since the COVID-19 pandemic.¹¹ Due to the superior health outcomes in recipients whose donated kidneys derive from living rather than deceased donors,¹² living donation is considered gold standard³ and, therefore, the need for living donor kidneys is particularly severe. Simultaneously, a survey commissioned by National Health Service (NHS) Blood and Transplant (NHSBT) in January 2017 found that 52% of the UK population



© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Armitage R. *J Med Ethics* Epub ahead of print: [please include Day Month Year]. doi:10.1136/jme-2023-109728

was 'unaware' of living kidney donation and that, once aware of it, 49% would consider donating to a friend, and 14% to a stranger.¹³ These data suggest that a substantial number of NDAKDs may take place if public awareness of living donation is increased. As such, a strategic action of NHSBT is to 'promote public and patient awareness and engagement in living donation across all sectors of society and develop the Living Kidney Initiative',¹⁴ Despite this, NHSBT did not comment on the ethics of promoting such activities.¹⁵ Beyond the UK, a study of multiple European countries recognised similar needs to increase living kidney donation and explored and contrasted the extent to which this is promoted within them.¹⁶ While the authors stated that 'it is appropriate to 'promote' an increase in donation rates to create transplant opportunities,' they did not examine the ethical permissibility of this action, nor the variety of promotional strategies identified, particularly within general practice. In the USA, there exists a similar need to increase living kidney donation, such that the American Medical Association states that 'physicians should participate in efforts to increase organ donation including promotion of voluntary donation'.¹⁷ This statement only refers to deceased organ donation, however, and no comment is made regarding living organ donation or the ethical permissibility of doctors taking actions designed to increase organ donations. In the UK, specifically with regard to NDAKD, the British Transplant Society recognises that 'increased public awareness since 2011 has led to more people volunteering to be considered for altruistic kidney donation,'³ but does not explore the reasons for this growth in public awareness and does not comment on the ethical permissibility of any techniques used to drive it.

Extensive discussion has taken place regarding the ethical status of living kidney donation, including NDAKD.^{18–25} Debate has also centred on the ethical implications of the use of social and other forms of media by individuals and non-profit organisations to increase the number of directed kidney donations,^{21 26} and of doctors directly contacting the relatives of those in need of replacement kidneys to encourage direct donation.²⁵ Despite this, it appears that no discussion to date has taken place regarding the ethical permissibility of doctors promoting NDAKD to healthy adults.

Due to the increasing need for living kidneys donations in the UK, the ability for such kidneys to be collected and shared through the UKLKSS, and the absence of discussion concerning the ethical permissibility of doctors promoting NDAKD to healthy adults, such discussion is now warranted.

What amounts to ethical permissibility?

The framework of professional ethics devised by Beauchamp and Childress²⁷ shall be drawn on to determine to what extent it should be considered ethically permissible for general practitioners (GPs) to promote NDAKD to healthy adults. This framework comprises four *prima facie* ethical principles that are equally important in clinical practice: beneficence (to act for the benefit of the patient, such as preventing or removing harm or the active promotion of some good, such as health), non-maleficence (which requires doctors to avoid causing intentional harm to patients, or the deliberate avoidance of actions that are expected to cause them harm), respect for autonomy (the patient's capacity for self-determination and to make independent decisions in the absence of undue pressure, solicitation or coercion), and justice (which requires doctors to ensure that the benefits and costs of actions are fairly distributed between patients).

In the context of NDAKD, doctors' duties of autonomy and justice are held in tension with those of non-maleficence and beneficence. Doctors should not prevent those intending to undergo NDAKD from doing so (respect for autonomy), while NDAKD redistributes 'spare' kidneys to those in greater need of them (justice) and allows donors to continue living healthy lives. However, removing the kidney of a healthy adult is, by definition, to render him less healthy and, therefore, is to inflict harm on him (thereby violating non-maleficence), while allowing him to undergo NDAKD is to fail to prevent a foreseeable harm being done to him (thereby violating beneficence). It is also vital that the considerable disagreement about the risk of end-stage renal disease in living donors is communicated clearly to and understood by potential living donors through the process of counselling. Importantly, however, NDAKD often improves the psychological well-being of the NDAD, meaning it may actually serve to respect beneficence.^{28–30} Ethical permissibility shall, therefore, be considered to amount to actions that preserve autonomy (by avoiding undue pressure, solicitation and coercion on potential NDADs) and promote justice (through increasing the number of NDADs), while minimising non-maleficence and promoting beneficence. Since the safeguards inherent to the UKLKSS are applied at all potential NDADs, and serve to minimise non-maleficence (by denying those without adequate health the opportunity to undergo NDAKD) and minimise the violation of beneficence (by allowing only those who stand to have their psychological well-being improved by becoming NDADs to do so), this article shall equate ethical permissibility with the extent to which the autonomy of the potential NDAD is respected across three scenarios in which GPs could promote NDAKD to healthy adults. The article shall assume that NDAKD only takes place in a voluntary, fully informed, consensual, legal and unpaid manner, and is subjected to the procedures inherent to the UKLKSS that are intended to safeguard the psychological and psychiatric health of NDADs.

COUNSELLING, INDIRECT AWARENESS RAISING AND DIRECT PROMOTION

The particular terminology that is central to this article—counselling, indirect awareness raising and direct promotion—shall now be defined.

Counselling

Guidance on professional standards for doctors practising in the UK states that they must communicate effectively with patients to give them 'the information they want or need to know in a way that they can understand'³¹ so that they can make decisions relevant to, for example, diagnoses, prognoses, and options for managing conditions.³² Counselling is the process by which this standard is achieved. Accordingly, counselling is a process between the doctor and individual patients, and goes beyond the mere provision of relevant facts. Rather, it is the process by which patients come to understand those facts within the context of their lives and in a manner which allows them to make well-considered decisions.³³ Counselling aims to represent relevant information in a 'value-neutral' manner, devoid of intent to induce any particular action in the patient.²⁵

Indirect awareness raising

In the context of healthcare and public health, indirect awareness raising involves the provision of information to whole groups or subgroups (and, therefore, is considered 'indirect,' since 'direct' constitutes provision of information to particular

individuals) in order to support the health-related choices and autonomous decision-making of individuals within those groups or subgroups.³⁴ It is a fundamental strategy for health promotion and is widely used within public health and primary care settings to increase public knowledge of specific health risks (such as cardiovascular disease,³⁵ dementia³⁶ and oral cancers³⁷) and the possibility of donating blood and deceased organs.³⁸

Direct promotion

Promotion is considered to be the actions that are purposefully designed to induce specified behaviour changes in individuals who are determined by a third party, such as the purchasing of particular goods in retail environments, or the donation of blood or deceased organs in healthcare contexts.¹⁶ Promotion is direct when it purposely targets specific individuals rather than groups. Therefore, the information conveyed in direct promotion is not value-neutral since it aims to provoke particular behaviours rather than empower individuals to make well-considered decisions.

SCENARIOS

The followings are three hypothetical scenarios in which a GP acts with the intention to help his patients to become altruistic kidney donors.

Scenario 1: counselling

A healthy adult patient is already aware of the possibility of NDAKD. He arranges an appointment to see his GP, during which he spontaneously raises the possibility of becoming an NDAD and asks his GP to counsel him on the process.

Scenario 2: indirect awareness raising

A healthy adult patient is unaware of the possibility of NDAKD but becomes aware due to the actions of the GP. In this scenario, the GP has previously displayed recruitment campaign material regarding NDAKD, which highlights the potential eligibility of healthy adults to become NDADs to non-specified groups of patients in the waiting rooms of his surgery. Subsequently, a healthy adult patient, who has booked an appointment with the GP to discuss an unrelated matter, becomes aware of NDAKD as a direct result of seeing the recruitment campaign material while sitting in the waiting room and, during his appointment, asks the GP to counsel him on becoming an NDAD.

Scenario 3: direct promotion

In a similar manner to scenario 2, a healthy adult patient is unaware of the possibility of NDAKD but becomes aware due to the actions of the GP. In this scenario, however, the GP directly promotes NDAKD to individual healthy adults by raising the possibility of NDAKD with such individuals. This takes place in an opportunistic fashion during appointments that were booked by the patient for unrelated reasons. As a result, a healthy adult patient becomes aware of NDAKD and asks the GP to counsel him on the possibility of becoming an NDAD.

THE ETHICAL PERMISSIBILITY OF EACH SCENARIO

Scenario 1: counselling

In this scenario, the GP is ethically obligated to fully and impartially counsel the patient about NDAKD. This is because the patient has spontaneously raised the possibility of NDAKD himself. To not fully counsel the patient by providing value-neutral, truthful information and context-relative counselling²⁵

on this matter would, therefore, not only be to fall short of the professional standards demanded of doctors practising in the UK, but would also fail to respect the patient's autonomy by denying to support him to make autonomous decisions.³⁹ By providing the requested counselling as per the aforementioned definition, however, the GP would provide the necessary information in a value-neutral manner that the patient can understand within the context of his life, and thereby empower him to make well-considered decisions regarding the possibility of becoming an NDAD. As such, not only is such counselling expected by professional standards, it is required for the maintenance of the patient's autonomy and is therefore ethically obligatory for the GP to provide. It is also noted that, if the GP holds a valid conscientious objection towards living donation (it is recognised in the medical ethics guidelines regarding organ donation in some countries that doctors might hold such conscientious objections⁴⁰), he is able to protect his conscience by not providing the counselling as requested. This is because the request for counselling does not constitute a life-threatening emergency in which any delay to the provision of care would violate the principles of beneficence and non-maleficence and, therefore, render the conscientious objection invalid. However, any GP exercising his conscience in this manner would be duty-bound to arrange for such counselling to be provided by an appropriate colleague to ensure the patient's autonomy is upheld.^{41–45}

It is important to note that, if the relevant information is communicated in a truthful and value-neutral manner, honouring the patient's request to provide counselling regarding NDAKD would not constitute indirect awareness raising or direct promotion. This is because this counselling is directed towards a specific individual (while indirect awareness raising is aimed at whole groups or subgroups), and the necessary information is provided in a value-neutral manner designed to empower the individual to make well-considered decisions (while direct promotion aims to provoke particular kinds of behaviour as determined by a third party).

The provision of such counselling also serves to promote justice in terms of the fair allocation of scarce resources. As established above, NDAKD satisfies the principle of justice since it serves to fairly redistribute 'spare' kidneys to those in greater need of them while allowing donors to continue living healthy lives. Since the patient is already aware of the possibility of NDAKD, and he intends to be counselled on the possibility of becoming an NDAD, providing such counselling empowers him to make well-considered decisions in the context of his own life. This decision may be to become an NDAD, which would culminate in the distribution of a 'spare' kidney to another in greater need of it. While the decision may be to not become an NDAD, such a decision would not act against the principle of justice, but stand neutrally in relation to it. Therefore, providing the requested counselling promotes justice without risk of violating this principle.

In addition, should the patient ultimately decide to become an NDAD following counselling from the GP, this would occur through the UKLSS. This framework contains safeguards (assessments of physical and mental health, and the independent assessment of the HTA) designed to ensure the minimisation of non-maleficence (by denying those without adequate health the opportunity to undergo NDAKD) and the promotion of beneficence (by allowing only those who stand to have their psychological well-being improved through becoming NDADs to do so) towards those that become donors through it.

Accordingly, not only is it ethically permissible for the GP to counsel the patient on NDAKD within the context of scenario

1, it is in fact ethically obligatory for him to do so, since such an action serves to respect the patient's autonomy and promote justice while minimising non-maleficence and promoting beneficence.

Scenario 2: indirect awareness raising

In this scenario, it is ethically permissible for the GP to indirectly raise awareness of NDAKD in this manner. This is because the action taken by the GP—displaying recruitment campaign material, which highlights the potential eligibility of healthy adults to become NDADs to a non-specified group of patients in his waiting room—serves to respect, rather than violate, the autonomy of those patients. This is the case for two reasons: first, the recruitment campaign materials are displayed to groups of patients, rather than directed towards particular individuals. As such, no individual can be said to have been specifically 'targeted' by the materials, as they are displayed to whoever appears in the waiting room. Furthermore, the materials are displayed to a non-specified group of patients (namely, all patients, including those whose status would not be considered 'healthy,' as well as those who have not yet reached adulthood) rather than exclusively to the group of patients that contain potential NDADs (healthy adults); second, the materials are displayed in a passive manner, meaning no attempt is made beyond their mere display to increase the likelihood that their contents are acted on or even viewed. As such, the displaying of recruitment campaign materials in this manner—which amounts to indirect awareness raising—does not manufacture any undue pressure, solicitation or coercion in individuals who view them. Accordingly, any intention to potentially become an NDAD that an individual subsequently forms as a consequence of seeing these materials constitutes an authentic intention, meaning the GP's action does not violate the individual's capacity for self-determination. In addition, should a patient form an intention to potentially become an NDAD as a result of viewing these materials, and subsequently ask his GP to counsel him on this process, then scenario 1 is replicated in which the GP is ethically obligated to provide this counselling for the reasons explained in scenario 1.

The display of such materials also serves to promote justice since this action increases the likelihood that 'spare' kidneys will be redistributed through NDAKD from healthy adults to those in greater need of them while allowing donors to continue living healthy lives. However, since such materials serve to generate the potential intention to undergo NDAD in those who otherwise would not harbour such an intention (through the process of indirect awareness raising), the GP's actions in scenario 2 promotes justice to a greater extent than those in scenario 1. This is because counselling merely provides value-neutral information to empower well-considered decisions that emerged from a previously generated authentic intention to undergo NDAD, while indirect awareness raising serves to generate additional such authentic intentions, which may potentially lead to a greater number of redistributed 'spare' kidneys.

In a similar manner to scenario 1, should the patient in scenario 2 ultimately decide to become an NDAD, this would take place through the UKLSS, which contains safeguards designed to ensure the minimisation of non-maleficence and the promotion of beneficence towards those that become donors through it.

As such, while it is not ethically obligatory for the GP to engage in indirect awareness raising, such as through the displaying of recruitment campaign materials, it is ethically permissible for him to do so. This is because such an action both respects patient autonomy and promotes justice while minimising non-maleficence and promoting beneficence, thereby rendering it an

ethically permissible act. The act falls short of being ethically obligated, however, because indirect awareness raising does not deal with a pre-existing authentic intention (an intention that was not the product of undue pressure, solicitation or coercion) in the manner that counselling does. As previously established, the GP is ethically obligated to counsel the patient on a pre-existing intention. Indirect awareness raising, however, does not deal with pre-existing authentic intentions, but has the potential to generate newly formed authentic intentions. While the GP is ethically obligated to counsel the patient when requested to do so, he is not ethically obligated to generate new authentic intentions in the patient. Instead, it is simply ethically permissible for him to do so.

Scenario 3: direct promotion

In this scenario, it is ethically impermissible for the GP to directly promote NDAKD in this manner. This is because the action taken by the GP—raising the possibility of NDAKD with particular patients without their prompting him to do so—serves to violate the autonomy of those patients. The action of the GP is likely to be perceived as undue pressure, and even solicitation, of the patient in question. This is primarily because the GP raises the possibility of NDAKD without being prompted to do so by the patient, and secondarily because the GP is physically present in the room with the patient at the point when the possibility is raised. Since the direct promotion comes from the medical professional responsible for the clinical care of the patient in question, the patient may become concerned that his access to, and the quality of, the clinical care afforded to him by the GP may be subsequently influenced by the nature of his response to the issue of NDAKD as raised by the GP. In this manner, such direct promotion may be considered as coercion. As such, if the patient in question subsequently forms an intention to become an NDAD, it is unlikely that this is an authentic intention, since it would be the product of undue pressure, solicitation, or even coercion from the GP, and would therefore violate the patient's autonomy. Notably, this would also be the case in the context of PPD or directed kidney donation if the GP is aware that one of the patient's friends or relatives has end-stage renal disease and is in need of a donor kidney. Aside from the potential violation of the GP's duty to confidentiality, directly promoting kidney donation in this case (through formation of a linked donor-recipient pair in PPD, or direct donation to the recipient) would likely be perceived by the patient as coercion, as the patient may interpret this promotion as the GP's opinion that the patient has a moral duty to donate in order to benefit his friend or relative. The patient might become concerned, therefore, that his response would be considered by the GP as a testimony to his moral character, and the GP's provision of care towards him might be influenced accordingly. The formation of an intention to become an NDAD as a result of such direct promotion would violate the patient's autonomy and is, therefore, impermissible.

The direct promotion of NDAKD in this manner may serve to promote justice, since this action may coerce healthy adults into becoming NDADs and, therefore, induce the redistribution of 'spare' kidneys to those in greater need of them while allowing donors to continue living healthy lives. However, doing so violates the patient's autonomy and, according to what this article considers to amount to ethical permissibility, thereby renders this an illegitimate promotion of justice and the action ethically impermissible. In addition, such coercion may in fact serve to also violate justice when benefits and costs beyond the sharing of 'spare' kidneys are considered. For example, public trust in blood and organ donation processes would

likely diminish if it became widely known that GPs coerce their patients into becoming NDADs, which would consequently lead to fewer patients volunteering to donate these tissues overall.

As such, it is ethically impermissible for the GP to promote NDAKD to individual healthy adults since doing so violates the autonomy and capacity to self-determine of such patients, and may also violate the principle of justice.

Notably, a hybrid scenario which incorporates elements of scenario 1 and scenario 3 exists. This involves a patient who is unaware of the possibility of becoming an NDAD visiting his GP to discuss his well-being, his sense of life purpose, and his desire to help others through acts of altruism, and to ask the GP for possible options to achieve this desire. This hybrid scenario combines the patient's lack of knowledge of NDAD from scenario 3 and the patient's desire to act altruistically from scenario 1. In this hybrid scenario, the GP could offer various suggestions, such as volunteering time, donating to charitable causes or donating blood products. In addition, since NDAKD often improves the psychological well-being of the NDAD (including through high rates of life satisfaction), and since NDADs rarely regret their decision to donate^{28–30}, becoming an NDAD is also a potentially viable option by which the patient might achieve his desire. But would it be ethically permissible for the GP to raise this option? Since respect for patient autonomy requires the patient to be aware of all available options such that he can make an informed decision, the GP would be required to respond to the patient's request for possible options with a list that includes becoming an NDAD. Simultaneously, the inherent risks of this process, including the considerable disagreement about the risk of end-stage renal disease in living donors, must be communicated to and understood by the patient for his decision to be informed.

COUNTERARGUMENTS

This section shall deal with four major counterarguments to the position taken in this article.

Counterargument 1: GPs may intentionally mislead patients when counselling them

Walter Glannon claims that 'value-laden presentation of information may strongly shape the patient's assessment of risk and the decision whether to donate a kidney.'⁴⁶ Such communication of inaccurate, dishonest and incomplete information, intentionally designed to encourage the patient to become an NDAD could, therefore, 'unintentionally limit the patient's autonomy.'⁴⁶ If this was to occur, the resulting violation of patient autonomy would undermine the ethical permissibility of counselling the patient with regard to NDAKD. However, Glannon proffered this claim with regard to doctors who 'encourage' healthy adult patients to undergo NDAKD, yet did not provide an explanation of what constitutes this encouragement (eg, counselling, indirect awareness raising, direct promotion or something else entirely?). It is, therefore, implied that encouragement simply amounts to this 'value-laden presentation of information' when it is directed to a patient in the context of potentially becoming an NDAD. The definition of counselling used throughout this article, however, holds that counselling aims to convey relevant information in a value-neutral manner, devoid of intent to induce any particular action in the patient.²⁵ Accordingly, when formulated as such, counselling is designed to empower patients to make well-considered decisions in the context of their lives,³³ rather than behave in the manner desired by the doctor and denotes a professional standard which doctors in the UK are expected to reach.^{31 32} This stands in stark contrast with the claim made

by Glannon pertaining to the intentional misleading of patients through the counselling directed towards them. Accordingly, should Glannon's concern come to fruition, this would simply represent a failure of the doctor to provide counselling in accordance with the professional standards expected of him, rather than an attack on the ethical permissibility of counselling patients with regard to NDAD. As such, the GP referred to in scenario 1 (and the GP referred to in scenario 2, in the event that a patient influenced by the recruitment campaign materials requests such counselling) continues to be ethically obligated to provide counselling as requested by the patient to the professional standard expected of him. Such counselling is inherently devoid of values.

Counterargument 2: GPs may unintentionally mislead patients when counselling them

While Glannon's claim in counterargument 1 pertained to the intentional misleading of patients through value-laden counselling, it is possible that counselling patients with regard to NDAKD may potentially unintentionally mislead them. For example, Maple *et al* found that a patient's appetite for risk may be strongly influenced by the language used when counselling them on the risks of living kidney donation, and that patients foster a higher tolerance for risk when data pertaining to equivalent risk are presented in terms of chance of survival rather than chance of harm.⁴⁷ Without sufficient awareness and correction of this phenomenon the counselling doctor may, therefore, unintentionally mislead patients when counselling them about the risks of becoming NDADs. However, this feature of human psychology, referred to as the 'framing effect,'⁴⁸ is a well-recognised cognitive bias in which an individual's reaction to a particular choice is influenced by whether that choice is presented as a loss or a gain, and is known to manifest across a wide range of decision-making domains, not only in medicine and not only in relation to NDAKD.⁴⁹ Furthermore, it is possible for the effects of the bias to be eliminated when data pertaining to risk are presented in particular ways.⁵⁰ As such, this counterargument resembles counterargument 1 in that it is critical of the manner in which counselling is performed, rather than an attack on the ethical permissibility of counselling patients with regard to NDAKD. If GPs counsel patients about NDAKD in a manner in accordance with the professional standards expected of them, the steps necessary to eliminate the framing effect will be taken, and its effects on patient decision-making nullified. As such, the GPs referred to in scenarios 1 and 2 continue to be ethically obligated to provide counselling as requested by the patient to the professional standard expected of them.

Counterargument 3: promoting NDAKD may reduce the trust patients hold in GPs

Glannon also states that 'many patients perceive their doctors as authority figures and trust them to always act in their best interests.'⁴⁶ This reflects the ethical obligation of doctors to be trustworthy,⁵¹ which is widely reflected in the professional standards to which their practice is expected to adhere.⁵² Glannon subsequently claims that 'encouraging a healthy patient to donate a kidney to a stranger may trade on this trust and unduly influence the patient's reasoning about the probable benefit and harm.'⁴⁶ Once again, what constitutes this encouragement is not clarified, but if it is considered to amount to intentional misleading through counselling, or even unintentional misleading through counselling, then these collapse into counterarguments 1 and 2 and are dealt with as above, thereby preserving public trust in doctors. However, if this amounts to the provision of counselling, in a manner that meets the definition adopted in this

article, of a patient who has raised the possibility of becoming an NDAD, then Glannon's claim is that it is never in the best interests of a patient for him to become an NDAD and, accordingly, doctors should never counsel patients on this matter as doing so may facilitate a decision that violates beneficence. This position is misguided in the first two scenarios for the following reasons: in scenario 1, not only would this refusal to counsel such a patient fail to respect his autonomy, it would deny the fact that NDAKD often improves the psychological well-being of the NDAD, meaning it may actually serve to respect beneficence.^{28–30} Accordingly, the GP's refusal to provide the counselling that the patient requests is itself likely to reduce the trust the patient holds in the GP; in scenario 2, the indirect nature in which the GP undergoes awareness raising of NDAKD prevents the occurrence of undue pressure, solicitation and coercion. Given this, in addition to the counselling that would subsequently follow a patient who responds favourably to the GP's recruitment campaign materials, the trust that patients hold in GPs is unlikely to be harmed. In the context of scenario 3, any counselling that takes place, regardless of whether or not it takes place according to the definition adopted by this article, is ethically illegitimate since it is likely to be in response to an intention that is the product of undue pressure, solicitation or even coercion from the GP. As such, Glannon's claim is not applicable to this scenario, since it is considered ethically impermissible.

Counterargument 4: assuming that beneficence and non-maleficence are assured by the UKLKSS may be ill-advised

This article assumes that the safeguards inherent to the UKLKSS—the assessments of physical and mental health, and the HTA independent assessment—minimise non-maleficence and the violation of beneficence. Any GP in the aforementioned scenarios who promotes NDAKD to healthy adults in the UK must assume that the UKLKSS—to which potential donors would be signposted—will also harbour this assumption if such action is to be considered potentially ethically permissible. It is unlikely that any such GP has undertaken a thorough analysis of the extent to which the UKLKSS minimises non-maleficence and the violation of beneficence, meaning this assumption may be ill-advised. However, it would be unrealistic and entirely unworkable for GPs to be expected to undertake a detailed ethical analysis of all existing NHS services to which their patient may be referred. Accordingly, GPs are legitimately able to assume, to a substantial degree, that ethical standards are routinely met within the health service that they operate. To expect otherwise would be overly burdensome on GPs and would prevent the timely provision of healthcare. The particular nature of the UKLKSS, however, may indeed warrant further investigation by the signposting GP, not merely because living organ donation is an infrequent event and a widely debated subject in bioethical discourse.

The UKLKSS itself frequently reports on the measures that it takes, and the manner in which it abides by UK legislation, through its BTS Ethics Committee, in order to minimise non-maleficence and the violation of beneficence towards living donors.³ Furthermore, independent research suggests that the physical, mental and psychosocial health outcomes of living kidney donors in the UK is largely positive,⁵³ and in keeping with those in other health systems that adopt similar safeguards as the UKLKSS, such as Holland⁵⁴ and Singapore⁵⁵ (a systemic review of 51 studies across 19 countries found similar results).⁵⁶ Positive outcomes across such metrics suggest that non-maleficence and violation of beneficence are successfully minimised through the UKLKSS (although the considerable disagreement about the risk of end-stage renal disease in living donors must be understood

by potential living donors for them to make an informed decision regarding donation). As such, it is reasonable for GPs to adopt the assumption, meaning their doing so does not weaken the arguments made regarding the scenarios above. With regard to NDAKD in jurisdictions outside the UK, and therefore, those donations beyond the remit of the UKLKSS, a similar assessment of the inherent safeguards and performance of the relevant kidney sharing schemes would be required by the GP (eg, living donation in the USA requires the appointment an Independent Living Donor Advocate.⁵⁷

CONCLUSION

This article has recognised the increasing need for living kidney donors, the ability for living kidneys to be shared through the UKLKSS, and the potential for GPs to generate these by promoting NDAKD to healthy adults. In the absence of any discussion regarding the ethical status of such actions, this article has been concerned with the extent to which it should be considered ethically permissible for GPs to promote NDAKD to healthy adults. Ethical permissibility is considered to amount to actions that preserve patient autonomy and promote justice, while minimising non-maleficence and promoting beneficence.

The article finds that, in a healthy adult patient who holds an authentic intention to become an NDAD that is not the product of the GP's actions, the GP is ethically obligated to provide counselling on this issue. This is to respect the patient's autonomy and does not constitute any form of promotion of NDAKD. The article also finds that it is ethically permissible for GPs to engage in indirect awareness raising of NDAKD, such as displaying recruitment campaign materials that highlight the potential for healthy adults to become NDAKD to non-specified groups of patients in the waiting rooms of their surgery. This is because such actions do not constitute any undue pressure, solicitation or coercion on the individuals who view them, meaning any intention to potentially become an NDAD that is subsequently formed by an individual as a consequence of seeing such materials constitutes an authentic intention, and the GP's action, therefore, does not violate their capacity for self-determination. Finally, the article finds that it is ethically impermissible for GPs to directly promote NDAKD to individual healthy adults by raising the possibility of NDAKD with such individuals opportunistically during appointments. This is because doing so violates the autonomy of such patients and may also violate the principle of justice. The major counterarguments raised against this position are revealed to be problems with kinds of counselling that fail to reach expected professional standards, rather than problems with the ethical claims made in this article.

Contributors RA was the sole author.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests RA is both a GP and a non-directed altruistic kidney donor. RA acts as the guarantor.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID ID

Richard Armitage <http://orcid.org/0000-0003-1165-6753>

REFERENCES

- NHS Blood and Transplant. Organ and tissue donation and transplantation activity report 2021/22. Available: <https://nhsbt.dbe.blob.core.windows.net/umbraco-assets-corp/27108/activity-report-2021-2022.pdf> [Accessed 9 Nov 2023].
- NHS Blood and Transplant. ODT clinical: UK living kidney sharing scheme. Available: <https://www.odt.nhs.uk/living-donation/uk-living-kidney-sharing-scheme/> [Accessed 9 Nov 2023].
- British Transplant Society. *Guidelines for Living Donor Kidney Transplantation: Fourth Edition*. 2018. Available: https://bts.org.uk/wp-content/uploads/2018/07/FINAL_LDKT-guidelines_June-2018.pdf [Accessed 9 Nov 2023].
- Human Tissue Authority. Guidance for living organ donors on the human tissue authority's independent assessment process. 2018. Available: <https://content.hta.gov.uk/sites/default/files/2022-02/Guidance%20for%20living%20organ%20donors%20on%20HTA%20assessments.pdf> [Accessed 9 Nov 2023].
- Human Tissue Authority. Roles of the HTA and NHSBT. Available: <https://www.hta.gov.uk/guidance-public/body-organ-and-tissue-donation/living-organ-donation/roles-hta-and-nhsbt> [Accessed 9 Nov 2023].
- O'Keefe LM, Ramond A, Oliver-Williams C, et al. Mid- and long-term health risks in living kidney donors: A systematic review and meta-analysis. *Ann Intern Med* 2018;168:276–84.
- Matas AJ, Berglund DM, Vock DM, et al. Causes and timing of end-stage renal disease after living kidney donation. *Am J Transplant* 2018;18:1140–50.
- Matas AJ, Rule AD. Long-term medical outcomes of living kidney donors. *Mayo Clin Proc* 2022;97:2107–22.
- Steiner RW. Moving closer to understanding the risks of living kidney donation. *Clin Transplant* 2016;30:10–6.
- Mathur R, Dreyer G, Yaqoob MM, et al. Ethnic differences in the progression of chronic kidney disease and risk of death in a UK diabetic population: an observational cohort study. *BMJ Open* 2018;8:e020145.
- NHS Blood and Transplant. Increased support for living donation vital to overcome impact of the pandemic for those waiting for transplant. 2021. Available: <https://www.nhsbt.nhs.uk/news/increased-support-for-living-donation-vital-to-overcome-impact-of-the-pandemic-for-those-waiting-for-transplant/> [Accessed 9 Nov 2023].
- Nemati E, Einollahi B, Lesan Pezeshki M, et al. Does kidney transplantation with deceased or living donor affect graft survival? *Nephrourol Mon* 2014;6:e12182.
- NHSBT. Would you give a kidney, rather than your heart, this Valentine's Day? 07 February 2017. Available: <https://www.nhsbt.nhs.uk/news/would-you-give-a-kidney-rather-than-your-heart-this-valentines-day/> [Accessed 9 Nov 2023].
- NHS Blood and Transplant. Organ donation and transplantation 2030: meeting the need – A Ten-Year vision for organ donation and transplantation in the United Kingdom. 2020. Available: <https://nhsbt.dbe.blob.core.windows.net/umbraco-assets-corp/23463/meeting-the-need-2030.pdf> [Accessed 9 Nov 2023].
- NHS Blood and Transplant. Final report of living transplant initiative. 2019. Available: <https://www.nhta-uk.org/wp-content/uploads/2019/11/LTI-FINAL-REPORT-Nov-2019.pdf> [Accessed 9 Nov 2023].
- Burnapp L, Van Assche K, Lennerling A, et al. Raising awareness of unspecified living kidney donation: an ELPAT view. *Clinical Kidney Journal* 2020;13:159–65.
- American Medical Association. Opinion 2.151 - Cadaveric organ donation: encouraging the study of motivation. *AMA J Ethics* 2012;14:204–14.
- Hilhorst MT. Directed Altruistic living organ donation: partial but not unfair. *Ethic Theory Moral Prac* 2005;8:197–215.
- Busari K, Garba A. Altruistic kidney donation: overview and ethical considerations. In: Tsoulfas G, ed. *Current Challenges and Advances in Organ Donation and Transplantation*. 2022.
- Moorlock G, Ives J, Draper H. Altruism in organ donation: an unnecessary requirement? *J Med Ethics* 2014;40:134–8.
- Thomas R, Consolo H, Oniscu GC. Have we reached the limits in Altruistic kidney donation? *Transpl Int* 2021;34:1187–97.
- Fleck L, Ward A. Altruistic organ donation: on giving a kidney to a stranger. *Camb Q Healthc Ethics* 2022;31:395–9.
- Landolt MA, Henderson AJZ, Gourlay W, et al. "They talk the talk": surveying attitudes and judging behavior about living anonymous kidney donation. *Transplantation* 2003;76:1437–44.
- Moorlock G. Directed Altruistic living donation: what is wrong with the beauty contest? *J Med Ethics* 2015;41:875–9.
- Hilhorst MT, Kranenburg LW, Busschbach JJV. Should health care professionals encourage living kidney donation? *Med Health Care Philos* 2007;10:81–90.
- Neidich EM, Neidich AB, Cooper JT, et al. The ethical complexities of online organ solicitation via donor-patient Websites: avoiding the "beauty contest" *Am J Transplant* 2012;12:43–7.
- Beauchamp T, Childress J. *Principles of Biomedical ethics* (OUP 2019). 2019.
- Massey EK, Kranenburg LW, Zuidema WC, et al. Encouraging psychological outcomes after Altruistic donation to a stranger. *Am J Transplant* 2010;10:1445–52.
- Clarke A, Mitchell A, Abraham C. Understanding donation experiences of unspecified (Altruistic) kidney donors. *British J Health Psychol* 2014;19:393–408. 10.1111/bjhp.12048 Available: <https://bpspsychub.onlinelibrary.wiley.com/doi/10.1111/bjhp.12048>
- Cazauvielh V, Moal V, Prudhomme T, et al. Psychological impact of living kidney donation: A systematic review by the EAU-YAU kidney transplant working group. *Transpl Int* 2023;36:11827.
- General Medical Council. Good medical practice. in effect from 22 April 2013. 2013. Available: https://www.gmc-uk.org/-/media/documents/good-medical-practice---english-20200128_pdf-51527435.pdf [Accessed 9 Nov 2023].
- General Medical Council. Decision making and consent. in effect from 09 November 2020. 2020. Available: https://www.gmc-uk.org/-/media/documents/gmc-guidance-for-doctors---decision-making-and-consent-english_pdf-84191055.pdf [Accessed 9 Nov 2023].
- Oduuncu FS. The role of non-Directiveness in genetic counseling. *Med Health Care Philos* 2002;5:53–63.
- Department of Health England. Better information, better choices, better health: putting information at the centre of health. 2004. Available: http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Healthcare/PatientChoice/BetterInformationChoicesHealth/DH_4123252 [Accessed 9 Nov 2023].
- Lawless M, Brown S, Kunadian V. Raising awareness about cardiovascular disease in women. *European Heart Journal* 2023;44:3110–2.
- National Institute for Health and Care Excellence. Dementia: quality standard [Qs184]. quality statement 1: raising awareness – health promotion interventions. 2019. Available: <https://www.nice.org.uk/guidance/qs184/chapter/quality-statement-1-raising-awareness-health-promotion-interventions> [Accessed 9 Nov 2023].
- Macpherson LMD. Raising awareness or oral cancer from a public and health professional perspective. *Br Dent J* 2018;225:809–14.
- NHS Blood and Transplant. Give blood. Available: <https://www.blood.co.uk> [Accessed 9 Nov 2023].
- Bergsma J. *Doctors and patients; strategies in long-term illness*. Dordrecht: Kluwer, 1997.
- Shemie SD, Simpson C, Blackmer J, et al. Donation physician ethics guide meeting participants. ethics guide recommendations for organ-donation-focused physicians: endorsed by the Canadian Medical Association. *Transplantation* 2017;101:S41–7.
- Weightman AC, Coghlan S, Clayton PA. Respecting living kidney donor autonomy: an argument for liberalising living kidney donor acceptance criteria. *Monash Bioeth Rev* 2023;41:156–73.
- Wicclair MR. Conscientious objection in health care. In: *Conscientious Objection in Healthcare: An Ethical Analysis*. Cambridge University Press, 2011.
- Childress J. Civil disobedience, conscientious objection, and evasive noncompliance. *J Med Philos* 1985;10:63–84.
- Savulescu J, Schuklenk U. Doctors have no right to refuse medical assistance in dying, abortion or contraception. *Bioethics* 2017;31:162–70.
- Hughes JA. Conscientious objection in Healthcare: why tribunals might be the answer. *J Med Ethics* 2017;43:213–7.
- Glannon W. Is it unethical for doctors to encourage healthy adults to donate a kidney to a stranger? Yes. *BMJ* 2011;343.
- Maple NH, Hadjianastassiou V, Jones R, et al. Understanding risk in living donor nephrectomy. *J Med Ethics* 2010;36:142–7.
- Tversky A, Kahneman D. The framing of decisions and the psychology of choice. *Science* 1981;211:453–8.
- Gong J, Zhang Y, Yang Z, et al. The framing effect in medical decision-making: a review of the literature. *Psychol Health Med* 2013;18:645–53.
- Garcia-Retamero R, Galesic M. How to reduce the effect of framing on messages about health. *J Gen Intern Med* 2010;25:1323–9.
- McCullough LB. Moral authority, power and trust in clinical ethics. *J Med Philos* 1999;24:3–10.
- Council GM. Good medical practice – domain 4: maintaining trust. in effect from 22 April 2013. 2013. Available: https://www.gmc-uk.org/-/media/documents/good-medical-practice---english-20200128_pdf-51527435.pdf [Accessed 9 Nov 2023].
- Timmerman L, Timman R, Laging M, et al. Predicting mental health after living kidney donation: the importance of psychological factors. *Br J Health Psychol* 2016;21:533–54.
- Wirken L, van Middendorp H, Hooghof CW, et al. Psychosocial consequences of living kidney donation: a prospective Multicentre study on health-related quality of life, donor-recipient relationships and regret. *Nephrol Dial Transplant* 2019;34:1045–55.
- Tee PS, Kee TYS, Lee CCW. The Psychosocial impact of living kidney donation among Asian kidney donors in Singapore. *Transplantation* 2020;104:S301.
- Clemens KK, Thiessen-Philbrook H, Parikh CR, et al. Psychosocial health of living kidney donors: A systematic review. *Am J Transplant* 2006;6:2965–77.
- Hays RE, LaPointe Rudow D, Dew MA, et al. The independent living donor advocate: a guidance document from the American society of transplantation's living donor community of practice (AST LDCOP). *Am J Transplant* 2015;15:518–25.