

The Illicit Organ Trade: Biographical, Anatomical, Economic and Legal Aspects

Nater Paul Akpen

College of Health Sciences, Benue State University, Makurdi, Nigeria. ORCID: 0009-0009-0446-1043
Email: akpennater@gmail.com

Abstract: A kidney can cost up to \$ 200,000. Humans have two kidneys but normally require just one to live. Individuals can donate one to relatives for altruistic reasons. But to pay \$ 200,000 - or any other amount - to obtain a kidney, no country in the world allows that. Except for Iran. This global blanket ban has pushed the trade of organs underground and it now ranks as the fourth most lucrative illegal activity – behind only drugs, arms, and human trafficking. Rising incidence of end-stage kidney disease will increase demand for replacement kidneys, both gifted and bought. This essay studies this trade using two case studies, one of a Nigerian leading legislator arrested in the UK for getting a kidney for his daughter and another on kidney demand in Iran where trade in organs is permitted. The global value of the trade is studied, and literature gaps are discussed. The inadequacies of the current system are highlighted and improvements suggested, based on best practices around the world.

Keywords:

1. Organ trade
2. Organ donation
3. Organ transplant
4. Kidneys
5. Altruism
6. Nudging

2025 Journal ASAP

DOI: [10.5281/zenodo.17591291](https://doi.org/10.5281/zenodo.17591291)

Received 4 May 2025
Revised 15 October 2025
Accepted 7 November 2025
Available online 12 November 2025

1. Background

With organs damaged beyond natural and surgical repair, and with no artificial equivalents, patients were once doomed to certain death. In the 1950s, the success of organ transplantation surgery marked a notable change (Duguay, Hermon, & Smith, 2020). From then up to the present, transplantation has saved many lives. The organs for transplantation are sourced from human donors – either deceased individuals (especially in the cases of the heart, pancreas, and liver) or living individuals (especially kidneys and other tissues) (Ambagtsheer, 2017). By far, the kidney is the most sought-after organ and the most traded; it can be derived from the dead or the living.

A kidney can cost up to \$ 200,000 (Dahlkamp, Hofner, Hoffman, & Latsch, 2025; Caplan, Dominguez-Gil, Matesanz, & Prior, 2009). Humans have two kidneys but normally require just one to live. Individuals can donate one to relatives for altruistic reasons. But to pay \$ 200,000 -

or any other amount - to obtain a kidney, no country in the world (except Iran) allows that. That is, any kidneys bought or sold are done so illegally.

This essay holds that the ban on organ trade has pushed organs "exchange" underground. As an illegal activity, organ trade now ranks as the fourth most lucrative illegal activity – only behind drugs, arms, and human trafficking. With increasing end-stage kidney disease, the demand (both for donations and purchases) for replacement kidneys would increase (de Jong, et al., 2013).. With this demand, the importance of the topic is heightened as without action, it would solidify its status a setting for systematic and persistent exploitation of both the poor who may have kidneys to sell, the sick who may have few options for organ replacement.

The conclusions of this essay will be arrived at through a review of published literature.

2. A history of organ trafficking

With organs damaged beyond natural and surgical repair, and with no artificial equivalents, patients were once subjected to death. In the 1950s, the success of organ transplantation surgery proved to be a notable change (Duguay, Hermon & Smith, 2020). From then up to the present, transplantation has saved many lives. The organs for transplantation come from human sources – dead humans (especially in the case of the heart, pancreas, and liver) or living humans (especially kidneys and other tissues) (Ambagtsheer, 2017). By far, the kidney is the most sought-after organ and the most traded; it can be harvested from the dead or living.

With transplantation success attained in the 1950s, it soon became evident that the demand for organs outweighed the supply. The absence of a normal legal market for those organs meant that a black market for organs was going to occur. Thus, in the 1980s, the earliest reports of commercial organ trade were made, and it concerned poor Indian citizens who were selling kidneys to foreign patients; nearly 80% of kidneys procured in Indian hospitals were transplanted into patients from the Middle East, Malaysia, and Singapore (Bos, 2015). A retrospective Lancet¹ report at the time had documented 131 Emirati and Omani patients who had travelled to Bombay, India – along with their doctors – and received kidneys from local "donors" who were paid. At the time, the authors of the Lancet report were not so concerned with the commercialisation of the kidneys – which was, if not illegal, repugnant. The concern then was the post-operative complications – not on the "donors" who were losing a kidney – but on the recipients who were gaining new kidneys (Salahudeen, Woods, Pingle, et al., 1990).

In 1994, India passed an outright law, the Indian Transplantation of Human Organs Act, which made buying and selling of human organs illegal. However, this did not slow the market; the opposite was the case: over three hundred citizens of Chennai, India sold a kidney within the six years from 1994 – 2000 (Goyal, Metha, Schneiderman, et al., 2002). Given the underground nature of the trade, figures such as these may be significant undercounts.

In 1988, there was a high-profile case of organ trafficking that resembled the Ekweremadu affair. For a start, it took place in the United Kingdom. It involved a well-known nephrologist (i.e., a specialist kidney doctor), an unnamed wealthy patient, and an unknown Turkish citizen . The patient had put out an advertisement in Turkish newspapers that he was in search of a kidney donor. Anyone who was willing to donate and matched the criteria was going to be paid 2000 – 3000 British Pounds. The Turkish citizen was found to match all criteria; he was recruited and taken to London for the procedure at the facility of this well-known surgeon.

The donor had a letter of introduction that stated the patient was going to be supported and cared for after the transplantation. When this scheme was discovered, the nephrologist and

¹ The Lancet is among the most prestigious medical journals in the world.

other doctors involved in the case lost their practising licenses. This time, the UK Human Organ Transplant Act had not yet come into force; the perpetrators had no criminal charges brought against them. It was simply a case of the medical profession disciplining members of their rank for unethical practice. The law came into force later that year (Price & Mackay, 1991).

In 2000, Latvia and Germany were found to be involved in cross-national organ trafficking. The Latvian State Forensic Medical Centre had delivered human tissues to Tutogen, a German company. The German company in turn paid "compensation" to the Latvian Medical Centre. These transactions took place from 1994 to 2003 and involved the tissues of more than four hundred deceased persons. Relatives of these deceased persons, such as Ms Elberete (whose husband was the deceased) found out about this practice and reported it to the police as the tissues had been harvested and sold without consent. Criminal investigations were commenced. These investigations were concluded in 2005. The verdict? No one was found guilty (Olsena, 2008).

In 2015, the case was reopened and was heard at the European Court of Human Rights. The case was *Elberete v. Latvia* (application number 61243/08). The court ruled that "taking and selling the tissues without consent constituted a violation of articles 3 and 8 of the European Convention of Human Rights (degrading treatment, lack of respect to private life)". On Article 8, the Court noted it was the right of Ms Elberete to consent to the removal of her husband's tissues and that the domestic authorities had failed to provide the legal and practical conditions for exercising this right. Given the large number of people from who had their tissues removed, it was more important that proper mechanisms existed to help with the expression of wishes regarding the experts' discretion on the matter. The court thus concluded that Latvia breached the article by not having "adequate legal safeguards against arbitrariness".

On Article 3, the Court found that the suffering of Ms Elberete extended beyond the death of a husband – she had only discovered the nature and number of tissues removed from her husband's body during the European Court proceedings. It emphasised that respect for human dignity was at the core of the European Convention. The Court's conclusions were that the suffering caused to Ms Elberete was "degrading treatment", an affront to dignity and thus contrary to the Article. The court-mandated the Latvian authorities to pay financial compensation (European Court of Human Rights, 2015).

From Africa to Asia to Europe, and the Americas, there is a presence or the potential for the existence of organ trafficking operations. It is as much a health-related question as it is a legal question – as has been touched upon and as would be discussed more fully in the following sections.

3. A biographical sketch of Sen. Ike Ekweremadu: Case study

"Ike Ekweremadu ... you have been convicted of conspiracy to commit an offence of human trafficking. You brought a young man to London to exploit him. The exploitation was the proposed donation of a kidney in return for a reward, the reward being money and a chance to work in the United Kingdom."

[Sentencing Remarks of Mr Justice Johnson, Central Criminal Court, 5 May 2023]

Mr Ike Ekweremadu and his wife Beatrice were absent at their son, Lloyd's wedding. This is unthinkable in the Nigerian context as it is the parents of the bride and groom who fret over every aspect of the wedding ceremony. A grand wedding is the greatest honour that a parent gives to their children.

While the parents were absent as they were commencing prison sentences in the United Kingdom, ministers of the central government, two former heads of the Nigerian legislature, and politicians of the highest calibre were present. In his down moments, Mr. Ekweremadu was not abandoned. Indeed, Lloyd, the new groom, was made a government commissioner in his state.

How much influence could Mr. Ekweremadu wield from prison? The cream of Nigeria's elite attended his event while he was in prison, and a much-respected former Nigerian president wrote officially to the United Kingdom government (perhaps influenced by the arguments of lobbyists) requesting that Mr Ekweremadu be pardoned (Aworinde, 2023).

If Mr Ekweremadu could appear to command such consideration from prison, could the kidney donor who had reported Mr Ekweremadu hope to remain safe in Nigeria? Perhaps, this provides a glimpse into the arguments that were made in court by the defendants. More broadly, this shows the sophistry and seriousness of international organ trafficking.

Mr. Ekweremadu was born in 1962 – two years after Nigeria's independence from Britain (Ijaseun, 2022). His father was an Igwe, head of a royal family, from Nigeria's Eastern region among the Ibos, that fiercely independent and entrepreneurial ethnic group who call themselves the Jews of Africa. When he completed secondary school (i.e., high school), he earned the highest distinction possible – a Grade 1. This was an early step in his ladder climb.

For a university education, he chose to study law. He trained at the University of Nigeria, Nsukka (UNN). He was admitted to the Nigeria Bar in 1987. Thereafter, he topped things up with master's and Doctorate degrees.

His entry into politics was at the grassroots. Even here, he excelled: he was named the Best Local Government Council Chairman of the Year. With this A grade in grassroots politics, he moved a step higher. He became chief of staff to the governor of his state and later became the cabinet secretary of the same state.

From here, he contested elections and won a senatorial seat in 2003. He was re-elected four times in 2007, 2011, 2015, and 2019. He was the deputy Senate president of Nigeria from 2015 to 2019. He soon outgrew the ponds of Nigeria, becoming First Deputy Speaker of the Economic Community of West African States (ECOWAS) parliament.

After 20 years as a senator, he had plans to retire from the senate chamber. That he is now holed up in a British prison is not the climactic conclusion that he would have hoped for.

His crime? He had conspired to harvest a kidney in the United Kingdom. He was not doing this for financial reasons (Judiciary of England and Wales, 2023). His daughter, Sonia, was diagnosed with nephrotic syndrome and needed a kidney transplant. The conspiracy was that Mr Ekweremadu got the individual from whom the kidney was to be harvested to pose as both an altruistic donor and a relative. This individual was no donor and was no relative (Judiciary of England and Wales, 2023).

In the absence of an altruistic donor, Mr Ekweremadu's sick daughter would have been added to an organ transplant waiting list. No organs are legally sold on the open market. Kidney transplants are not only repugnant but illegal in all countries of the world except Iran (Ambagtsheer, 2017). Mr Ekweremadu fell from grace because he attempted to purchase a kidney in a country where it was illegal to do so. As the UK's prohibition of the organ trade renders conduct such as Mr Ekweremadu's illegal, it enables criminal syndicates to operate in the UK an underground organ harvesting market that cannot flourish in Iran (due to the legality of buying organs). Moreover, demand for organs is more easily met through financial incentives mobilized by a market than through reliance on altruistic motives, which results in long waiting lines for kidney transplants and many patients not receiving needed replacement kidneys. Prohibition of trade in organs fuels criminality and fails to meet the needs of patients.

Why do people sell their body parts? How does regulation affect the illicit financial flows attributable to organ harvesting and trade? How large is this trade? Examination of these questions can start with a brief history of organ trafficking.

4. The anatomy of an organ trafficking operation

The organ trafficking operation is organised and complex. Like the human anatomy, which is organised and complex, organ trafficking has many moving parts. The figure below gives a sense of this.

Trafficking in Human Beings for Organ Removal

Alternative diagram for basic modes of trafficking in human beings for the removal of organs with a transnational dimension

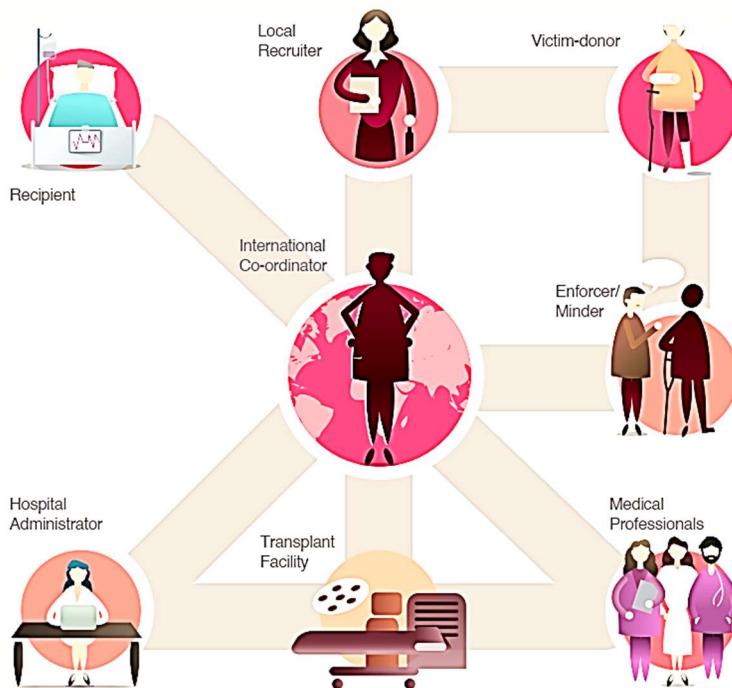


Figure 1. Basic modes of trafficking in human beings for the removal of organs

Source: OSCE (2020)

The broker is the centrepiece of the organ trafficking operation. The broker is the head or the heart – if not *both* head and heart – of the operation. Naturally, the other facilitators are instrumental in the whole operation. However, the brokers are the *sine qua non* of the whole operation. One may think that the recipient of a kidney the donor, or the skilled surgeon should be the most critical component of the operation: this is not the case.

An attempt at connecting the donor and the recipient is maze-like, often circuitous, and labyrinthine. It is the broker who can navigate this labyrinth and bring the willing buyer in contact with the willing seller. The broker contacts nearly all facilitators of the operation; the recipient contacts only the broker (aside from the operating surgeon). That is, the recipient

would make no real “business-like” contact with any of the other facilitators except “surgical contact” with the medical professional and “organ contact” with the donor.

4.1. Defining a broker

While the definition for a broker is bereft of uniformity, the following has been offered:

An intermediary between a kidney buyer and seller who connects the two using his/her knowledge of medical personnel and facilities that engage in illegal transplantations. The broker's key asset in this market is his/her greater knowledge of other stakeholders to whom the seller does not have direct access.

(Yea, 2010)

At the head of an organ trafficking syndicate is a broker who usually has an international character and is a founder of the criminal network. The broker is the strategic manager of the whole operation and usually makes first contact with potential recipients (through the Internet or verbal recommendation). The broker sometimes approaches suppliers directly or commissions scouts to search for willing individuals. It is also not rare for suppliers to eventually become brokers themselves (Caplan et al., 2009). With most networks, the broker further establishes and regulates the supply of recipients, receives, and passes on all payments, and oversees the matching and recruitment of organ suppliers (Bos, 2015).

That the broker has sole access to the organ recipient is key to the profitability of the organ trafficking operation. As would be seen, from an economic standpoint, the recipient pays the most and from a health standpoint, he gains the most. Through a tactful manipulation of the economic status and health needs (sometimes desperate health needs) of the organ recipient, the broker emerges as the biggest winner of the organ trafficking operation.

There may be more than one broker in large transnational networks. But always, the broker would aim to set prices for the transplant operation that would be most profitable to himself (Codreanu et al. 2013). Doctors, directors of hospitals or tissue-matching laboratories may be the brokers.

Iso, retrospective evidence arising from actual prosecutions shows that the more the brokers acted as “business executives” the more likely it is that vulnerable people would be donors (Bos, 2015). Brokers commonly exploit suppliers’ vulnerabilities – mostly poverty and illiteracy – through deceit, coercion, abduction, or fraud (Yea, 2010). For example, a broker had told a Brazilian supplier that he was going to be “healthier with just one kidney” (Schepers-Hughes, 2011). There is no medical evidence supporting this: it is all deceit. A Hindu supplier had to undergo circumcision to pass as a relative of his Muslim recipient (Moniruzzaman, 2012).²

Passports are often seized after border crossing to ensure that the suppliers cannot return to their countries of origin without first “donating” their kidneys. The brokers also organise a scheme to deceive the authorities. Suppliers are coached on questions they would be asked and how they would respond to them, and how it is important to deny that they would receive any kind of payment for the organ that they were “donating.”

In the Ekweremadu affair, Dr Obeta was the broker. The kidney supplier in the affair was promised residency and employment in the United Kingdom. Dr Obeta had also arranged for false documents that strove to show the supplier as a relative of the Ekweremadus.

² While Muslims are required by their faith to be circumcised, Hindus are not.

4.2. Suppliers

Some brokers have insisted that some suppliers have approached them themselves, put pressure on them to arrange for organ sale and have been “disappointed, frustrated or angry” if they fail to pass medical tests and are therefore ineligible to supply a kidney (Yea, 2010). Some researchers consider such suppliers victims of “systemic” vulnerabilities and exploitation (Lundin, 2012).

Moreover, coercion is typically low at recruitment and increases progressively as the transplantation nears (Moniruzzaman, 2012). As the process for selling the kidney unravels – the need for surgery (for one who perhaps has never had surgery), international travels (sometimes through dangerous illegal routes), and post-donation complications, the donor’s resistance to the sale increases. If the donor knew all these earlier, his recruitment would most likely have been unsuccessful. It is therefore clear that “information asymmetry” is an important principle in the broker-supplier relationship (Mendoza, 2010).

4.3. Brokering in court

Testimonies against brokers in the law courts are rare: recipients and suppliers tend not to file complaints against them, as such brokers rarely get sentenced. This is especially pitiable as the broker is the most important member of the organ trafficking network. It is possible that they also benefit the most from the enterprise – indeed, they may be the very ones that make it lucrative. They may also be the only ones that can make a business out of organ trade: there are just so many kidneys that a recipient would need, or a supplier can donate within a lifetime. Doctors, hospitals, recruiters, etc. can make also make a business out of organ trafficking. Without them, the business cannot even exist. But the pay differential between say the surgeon and the broker is wide – wide enough to suggest that a surgeon cannot fund a trafficking network – unless and until he becomes a broker himself. This is often the case whereby surgeons, hospitals, enforcers, and local recruiters can become brokers.

Indeed, a Turkish company, Trans Transplantyon, had offered kidney transplant services to UK citizens, amongst others. The transplantations were to take place in India or Russia; the fee was 22, 000 British Pounds. They had facilitated four hundred successful transplants; had operated in continental Europe for over six years and had planned to set up an office in London (Bos, 2015). Trans Transplantyon fit the role of broker – four hundred times over.

In the Ekeweremadu affair, the broker was sentenced. But even then, his jail time was less than the sentence of the other defendants. This is consistent with literature elsewhere (Codreanu et al., 2013).

5. Quantity surveying of the illicit organ trade

At its most fundamental level, the purpose of the organ trade for the broker is exploitation to obtain material or financial benefit. The greater the exploitation, the greater the benefits that are obtained. Organ trade consists overwhelmingly of kidney trade (as kidney diseases that require kidney transplants are usually end-of-life cases thus heightening the urgency and propensity for exploitation) (de Jong et al., 2013). As a result, estimations of the financial aspects of organ trade take kidney trade as a point of reference from which to extrapolate.

Information gaps exist that make estimation of the financial aspects of the illicit organ trade difficult. These gaps will be discussed below. Once their discussion is exhausted, the best available data on illicit organ trade will be examined from three standpoints. Namely, the cost of buying, the cost of selling, and the link between buyers and sellers.

5.1. Accounting for literature gaps

Organ donors do not meet organ recipients. However, after a successful transplant, organ donors meet with the money of organ recipients. How does this happen? Most studies are silent on the institutions or actors from whom donors receive their payments. While the role of brokers or middlemen is established, other actors receive payments. These include physicians, staff of hospitals, and various kinds of companies. If literature does not identify these individuals, whatever figure is arrived at may only capture sums due to brokers and suppliers. This is the first gap in illicit organ trade literature.

Second, it is unclear how money flows in the illicit organ trade. Because bank accounts are often not owned or used by the poor, money is paid to organ suppliers (who are usually poor) by hand (Tong, et al., 2012). This makes it unclear how much is exchanged concerning organ transplantation. Transaction also do not leave a trail for determining inbound and outbound funds – assuming that courts give warrants to eliminate bank secrecy. Brokers and transplant doctors and hospitals may also be paid this way. Consequently, figures reported upon may only represent those of one or a few members of an extensive, often cross-border, operation.

Taken together, these two gaps make estimating the profitability of the illicit organ trade is difficult – perhaps an impossibility. (Anecdotally, the exchanges between donor and recipient can be known through interviews of past donors and recipients and covertly posing as either donors or recipient.) However, it is a lucrative business as the succeeding paragraphs within this section would show.

5.2. The cost of buying

Many people find organ trade repugnant and hold that organs should not be sold or bartered (Roth, 2015). That is why organ buying is often called "organ donation" and paid-for organs are often described as "gifts". These euphemisms are used to escape or weaken the prevalent repugnance.

Buying is used here to convey certain points with greater clarity. The individual buying the organ is the organ recipient (the one who originally paid money for the organ and the one whose body would eventually house the bought organ).

The World Health Organisation and Council of Europe estimate that the amount paid for a kidney range from \$10,000 to \$200,000 (Dahlkamp, et. al., 2025; Caplan, et al., 2009). These figures are dependent on the buyer's country of origin. Buyers from Turkey, Egypt, and Korea paid sums that ranged from \$20,000 to \$75,000 per kidney (de Jong, et al., 2013). In Pakistan, local buyers were charged differently from foreign buyers: while local buyers were charged \$2,800 - \$13,500, foreign buyers paid \$20,000 - \$30,000 (de Jong, et al., 2013).

In the Philippines, a kidney could cost a buyer anything from \$65,000 to \$85,000 (Turner, 2009). An Israeli syndicate charged Israeli kidney buyers \$100,000 to \$120,000; non-Israeli kidney buyers were charged \$125,000 to \$135,000 (Lundin, 2012). In 2012, a US organ broker confessed to selling kidneys to buyers who paid \$160,000 (Cohen, 2013).

In some of these cases, there are disparities between what is paid by the local buyer and foreign buyer. Guesses may be made about the origins of these disparities.

First, buyers paid for packages that in addition to the kidney they were buying included screening, transportation, accommodation, organ transplantation costs, and hospital stay costs (de Jong, et al., 2013). Disparities may have therefore arisen for the cost of international travel, for example.

Second, committing a crime across international borders may have required bribing officials from different countries (immigration, customs, health regulation officers, etc) to get cover – and more so than would have been required for local transplants.

Third, there may have been a disparity between local and foreign transplants as foreign buyers may have been thought of as having greater facility for payments. This pattern is seen, for example, in the tourism industry where tourists are charged differently from locals.

Fourth, it may be logically difficult to match foreigners to local kidneys. Organ transplantation has the greatest chance of success when the tissue type of the donor matches that of the recipient. Thus a transplant between identical twins is usually a nearly perfect transplantation situation. Potentially, the foreigner may significantly differ from most of the available local donors. The difficulty in getting a suitable donor would translate to higher fees.

The buyer has no direct financial gain from "buying" a kidney – in a comparable way that the buyer of a Ferrari has no direct financial "gain" from buying the luxury vehicle. Whatever financial benefit may arise indirectly whereby the kidney buyer lives for longer and thus may be economically productive for longer. His real benefit is a medical one whereby by buying a kidney he or she reverses what a death sentence.

5.3. The cost of selling

The price received by sellers, just like the price paid by buyers, varies worldwide. Individuals have received between \$1000 and \$2500 as payment for their kidneys or liver in countries such as India, Pakistan, Bangladesh, Colombia, and the Philippines (de Jong, et al., 2013). In Iran, where organ trade is legal and regulated by the government, sellers are paid a standard \$1,219 by the government and buyers may reward sellers with gifts (de Jong, et al., 2013). In Israel and Turkey, sellers have been given between \$7,500 and \$20,000 (Mendoza, 2012).

In a 2003 criminal case, police found that an international organ trade syndicate paid up to \$20,000 to individuals for kidneys but later discovered that poor Romanians and Brazilians were willing to accept far less (de Jong, et al., 2013). As far as the cost of selling goes, it appears that the poorer the seller, the lesser the price. But poverty is only one factor that drives the costs of organs down.

In the same criminal case, it was found that going rates of \$10,000 due to sellers went down as the sellers were in excess – a sort of "donor/seller waiting list". Prices for the organs went down to \$3,000 (de Jong, et al., 2013). The same pattern was seen in Bangladesh where the average selling cost of \$1,400 per organ went down due to abundant organ supply. Supply is therefore a factor affecting the cost of selling in the illicit organ trade.

Other factors are desperate need for cash, lack of pricing information, seller's reference point and context (\$1000 is a plump sum for an individual who earns \$100 per annum; it would not be plump for one who earns \$500 per month).

But the selling costs discussed above are only the agreed-upon costs. It sometimes varies from what individuals are eventually paid. Sellers are usually paid on an incremental basis with the balance to be paid when the transplant is done. It has been reported that 25-50% of the amount negotiated by the seller is often withheld indefinitely (Tong, et al., 2012).

Non-financial costs of selling a kidney are the following: declining health status, inability to do labour-intensive work, and thus worsening economic conditions. It appears, therefore, that selling a kidney does not erase the very conditions that may have necessitated the sale in the first place. The discrepancy between the cost of selling and the cost of buying indicates the profitability of the business.

5.4. The cost of the link between the buyer and the seller

The link between the buyer and the seller is the broker. He neither owns the organ nor requires transplantation. He is not the source of the funds for illicit organ trade. He is not the destination for organ trade. Yet he makes the most profit from it. Indeed, he knows the organ trade market better than the buyer and the seller and may determine whether there can be any trade in the

first instance (Ambagtsheer, 2017). Moreover, he is under no economic pressure (as the seller may be) and no medical pressure (as the buyer may be). This allows him to drive hard bargains with the possibility of exploiting both parties. Healthcare practitioners are also deceived by the machinations of the broker – such as being convinced that the donated kidney is from a relative and for altruistic reasons.

Can one buy a kidney more than once in a lifetime? It is possible but unlikely. Can one sell more than once? It is unlikely. Can one facilitate the sale of a kidney more than one? Surely. And there lies what is the actual cost of the organ and where the true emphasis of law enforcement should be with regards to stemming the illegal activity – in the short term. In the long term, there must be action to reduce the need of both buyers and sellers for the evil genius: the link, the broker, the middleman.

The cost upper limits for selling and buying a kidney are \$20,000 and \$200,000 respectively (Caplan, Dominguez-Gil, Matesanz, et al., 2009). This means the broker goes off with a \$180,000 (that is, \$200,000 less \$20,000) profit before “taxes” with which to settle transplantation costs and other logistics while keeping a greater part of the chunk. The lower limits for buying and selling a kidney are \$1,000 and \$10,000 which leaves the broker with a profit of \$9,000 for transplantation and logistics. When it is factored in that brokers often tend not to completely pay to sellers, the profit further widens.

As stated earlier, there is an information gap as to the amount that is finally accrued by the broker. However, it is the broker that controls what the supplier receives, and what the hospital and logistics payments would be. It is therefore clear that the organ trade is a profitable one especially as the broker controls a lot of the consisting elements.

6. How legislation may be fuelling illicit financial flows

Organ trafficking is an illegal multibillion-dollar industry. With up to \$1.7 billion made per year, organ trafficking is the fourth most profitable illegal activity – less than a decade earlier, it ranked tenth (May, 2017). The basis for the operation of the expansive international trade networks is globalization and the proliferation of communication and transportation technologies. The development of these networks has been insidious and is now said to have successfully “blended into legal structures and institutions” (Naylor, 2002). Further, they have expanded their activities into other legal and illegal fields (Castells, 1998).

6.1. Widespread condemnation

While organ trade is widely condemned, only in very a few cases have victims made accusations or the accused, prosecuted. It appears, therefore, to follow a well-known pattern of “punitive condemnation through legislation but [non-existent] awareness and expertise on how to detect and enforce” (Amabagtsheer & Weimar, 2012). For example, how do you assess the presence or absence of altruism – that key quality for organ transplantation to proceed? Payment of money may be the best indicator. Whereby one who receives money is not altruistic but who does not receive is not altruistic. But there may be other gains beside money which be distort the altruism argument.

Organ trafficking is, primarily, a demand-driven crime. For a long time, governments have sought to clamp down on demand outside approved medical channels by laws against it; the effect has been mixed, if not limited (MacCoun & Reuter, 2001). Indeed, Garland (2001) suggests that the response of legislatures to demand-driven activities is often “impulsive”, and “unreflective”, and avoids the recognition of the underlying issues – the issues that cause the demand for illegal kidneys in the first place.

Some of this legislation is politically motivated with a need to restore public confidence and demonstrate control. For example, when the kidney transplant affair involved the high-powered British nephrologist, the society was appalled that such a thing could have happened in their territory and the modern age. The immediate response was a law that outrightly criminalised organ trade (Price & Mackay, 1991). Public confidence was restored. Nobody was successfully prosecuted under the law until 2023 – Ike Ekweremadu (Weaver, 2023).

However, it is not plausible that such procedures ceased after the law. Indeed, the broker for the Ekweremadu case – Dr Obeta – had received his kidney only the year before (J judiciary of England and Wales, 2023). Further, the policies neither aim at removing the root causes of crimes (i.e., life-threatening conditions) nor the risks that may arise (i.e., death, a black market that would corrupt a system and fund other forms of Illicit Financial Flows).

Organ trade is prohibited to eliminate repugnancy, preying on the poor, and undermining altruism. In fact, all these things – repugnancy, preying, and undermining of altruism occur not in spite but because of the prohibition of organ trade and because of the black market that emerges from it. It does this and even more: drives up prices, generates illegal incomes, diffuses crime into other regions and sectors, and pushes trade underground thereby heightening crime rates and victimization (Best, et al., 2001).

Legal organ trade may be accused of having similarities to illegal organ trade – such as repugnancy. Repugnancy is empowered by “illegality.” Legalisation of organ trade would at least peel back the layers of repugnancy.

Writing on other demand-driven activities, authors have suggested decriminalization and regulation (Hentrich, n.d.; Ambagtsheer & Weimar, 2012). They argue that social harms within a regulated market are bound to be less than those in prohibited markets. The Iranian model of organ trade appears to have borne these arguments in mind (*see section 7 below*).

A large field exists between prohibition and decriminalisation. It may be here that the optimal solution can be found about organ trade. At all times, however, the permeating thought would be that solutions would be realistic in what they can achieve and be true to themselves about who the true winners of prohibited or decriminalised organ trade milieu are.

6.2. Unintended facilitation

Aside for Iran, laws are unanimous in their condemnation of organ trade and the prohibition of individuals from buying or selling organs. However, they fail to provide suggestions on how to handle organ shortages which are consistently on the climb. Demand for the organs is thus pushed underground – and not eliminated. Illicit organ trade has legal, medical, and ethical components. At present, it appears only the legal component receives attention. The medical and ethical ones are left unintended. The situation is akin to having three holes in a dam but plugging just one.

By not being victim-focused, the causes of the illicit trade are not removed. The victims in the organ trade are principally the buyer and the seller. Again, demand drives organ trade. In the absence of measures taken to stem the demand for organs or legally supply adequate numbers of kidneys, organ trade would flourish and to a significant extent because the medical problem that caused the demand for the organs in the first place remains. The current model is criminal law-focused and therefore post-hoc (after the fact) and not ad hoc (before the fact).

But even the laws outlawing organ trade are failing to function at their optimum due to a deliberate absence of political will (Aronowitz & Isitman, 2013). Here is what is meant: while countries ban organ trade, they permit – if not facilitate – their citizens to travel to destination countries and have organs transplanted into them (Lundin, 2012). It does not end here. Upon completion of the procedure, the country in question provides directed healthcare to such

individuals (Lundin, 2012). Organ trade is outlawed but government policy provides for post-transplant care for a commercially obtained organ. This is hypocrisy but also an admission that there is something fundamentally wrong with the current way of giving and receiving organs.

It appears therefore that we are legislating our way into a bumming illicit organ trade. What should then be equally clear is that we cannot only legislate our way out of it.

7. Combatting illicit organ trade

Illicit organ trade, for all its faults, solves a problem. A medical problem. How can this problem still be solved while eliminating the trade's faults – chief of all the intrinsic illegality? This would be the guiding principle of what would be offered here as a substitute for illicit organ trade. As per the legality of organ trade, only one case study exists, namely, Iran. It would thus be examined.

The broker is the regulator of the trade. We cannot thus expect it to be fair. Buyers and sellers would continue to have complementary needs. The buyers' need is a medical one. The sellers' needs are mostly non-medical. What needs are permissible for a seller to have? Economic? Altruism? The current model of organ exchange says altruism. It simply does not work or has not worked well enough (Aronowitz & Isitman, 2013).

A study by the United Nations and the Council of Europe found that while international legal instruments exist for the prevention and combating of illicit organ trade, they had mostly failed – as evidenced by the soaring profitability of the trade (Caplan, et al., 2009). But beyond failure at curbing the trade, have the legal instruments facilitated the trade? The potential role of law in facilitating the trade, among other elements, is examined below.

7.1. Current Attempts: Non-market options

There have been at least two approaches to meet the demand for organs. The leading question for these approaches has been thus: "How can an increase in the supply of organs be fostered through legal and regulated channels?"

One way involves instituting a "presumed consent" or "opt-out" system. This means that a person is automatically presumed to be an organ donor when they die unless they explicitly refuse to be donors (Hentrich, n.d.) through the option: "check the box below if you do not want to participate in the organ donor program." Opt-out is the practice in European countries such as Spain, Wales, Scotland, Belgium, Luxemburg and Bulgaria (Lee & Tham, 2022).

In other countries, an opposite system is in place (Hentrich, n.d.). That is, a person has to opt-in to organ donation by making his consent known before death. So, it is "check the box below if you want to participate in the organ donation program" (Ariely, 2011; Lee & Tham, 2022). This seemingly minor change in form has been reported to yield noteworthy results. In opt-out countries, where individuals "opt-in" by default, the effective consent to donation was higher (Lee & Tham, 2022).

Organ trade has legal, medical, and ethical components. Nudging touches on the ethical component. Nudges are defined as "subtle changes to the design of the environment or the framing of information that can influence our behaviours" (Thaler & Sunstein, 2008). The use of nudges in healthcare is generally restricted to improving patient outcomes and healthcare delivery. Through intentional design, rigorous experimentation, and systematic evaluation (including evaluation of ethical concerns), there is an opportunity to expand the use of nudges in healthcare settings.

7.2. Suggested approaches in literature: Market options

There are two approaches to operationalizing market-based systems for organ trade in literature. The first is an incentive-based governmental regulation and the second is market-based sales. The incentive-based governmental regulation would involve some material inducements – which may be financial – before a kidney is given (Henrich, n.d.). However, the government would serve as an ombudsman. That is, individuals cannot simply walk into a shop and obtain new kidneys. The government would facilitate and set terms for the exchange and would determine and arbitrate where wrongdoing is reported.

The incentives would come from the government. It would arise from the individual desiring to buy a kidney. This has the potential to protect the human rights of both the buyer and the seller. In effect, the government became what the broker was on the black market – albeit, hopefully, a beneficent one.

The second system which is a sales system is akin to walking into a shop to buy a kidney. When questions such as who would set the prices and who would protect rights arise, it becomes suggestive that the market-sales system may be fraught with the challenges of a “winner-takes-all” market system. The markets operate based on profit-making. The terms of the trade would thus be set on this basis and inequality would be widened. Those who desire kidneys would only get them if they were wealthy enough. Those who desire to sell kidneys would only be able to do so if the going prices offer the market a plump enough profit.

The potential buyers who are not rich enough, would not get organs. Those potential sellers who are not willing to lower their price enough would not be able to sell kidneys. Apart from having similar characteristics to the black market, this sales system would only institutionalize the black market.

8. Lessons from Iran (*with adjustments*)

There is no commercialism. There are no middlemen or companies to sell the kidneys. No patient can go and buy a kidney. There is no benefit to the transplant team. The operation is just part of the overall medical program at the university. There are no foreign recipients. Nobody can come to Iran to buy kidneys ... There are no foreign donors ... Rich and poor are transplanted equally. There is no discrimination. The donor is free to refuse the government reward (BNET, 2003).

The above is a statement by an Iranian transplant surgeon. An immediate response would be that this is too good to be true. That it cannot be confirmed (Tober, 2007). Whether true or not, it sets remarkably exacting standards for how organ trade is to operate. Key clauses of the statements are taken apart to build a case for what can be a model for an organ trade market.

8.1. There is no commercialism. There are no middlemen or companies to sell the kidneys

This damaging role of middlemen in organ exchanges has been discussed above. The health and human rights of the most vulnerable persons – the dying person who needs a kidney to survive or the dying person who needs some money to survive – are best protected when the aim of one of the parties in the transaction is strictly profit-making or rent-seeking. It has been suggested that rights and health can be best protected in this setting through legal measures, self-regulation by the medical establishment, and increased awareness.

8.2. There is no benefit to the transplant team

For all else that organ harvest and transplant is, it is a surgical procedure. With the profit margins that may be available to medical teams due to the organ black market, organ trade is more than a surgical procedure. The “eligibility” of medical staff for profit is instrumental in participation in the organ trade. Where there is no benefit to them (apart from that due to a surgeon performing any other procedure), the chances of them keeping aside medical ethics would be slimmer.

Even in a new paradigm where organ sales are legal, surgeons should be able to perform their duty without the corrupting/tempting potentials of extra wealth. The absence of wealth may make transplantation on the black market more attractive for the unscrupulous surgeon. This is true. But the thinking is that the open trade of organs (as in the Iranian case) would shrink the profits arising from the black market and thus the number of surgeons enabling it with their skill.

8.3. There are no foreign recipients. There are no foreign donors

It is the norm in the black market that buyers from wealthy countries get their supplies from sellers from poor countries. Brokers peg both selling and buying costs on prevailing income reference points and contexts. For example, a kidney could cost either \$10,000 or \$200,000 depending on the country from which the buyer is. A kidney could be sold for \$1,000 or \$20,000 depending on where the individual is from. Crossing national borders facilitates the profitability of the black market. Restricting it to national borders would discourage medical tourism and would weaken the idea that organ transplantation is a branch of surgery where the wealthy use the organs of the poor as a spare part factory.

8.4. Rich and poor are transplanted equally

Transplantation must not become a tool for health inequalities. Therefore, the price fixed must be one that would be fair and not unduly beyond the reach of the poorest of citizens. There must also be checks in place to ensure that the wealthy do not skew the availability of these organs to themselves through corrupt practices. This skewing is present even in the current donation models of organ transplantation (Henrich, n.d.).

8.5. The donor is free to refuse the government reward

Repugnant trade is more than just a fancy concept. It has been reported that when organ donation became monetized, some individuals shied away from donating as they felt that the payment was putting a cost on their moral actions. In the Iranian case, such persons have an option: if your principles prevent you from selling your organs, you could donate them instead knowing that the government was not going to force you to prove altruistic motives. Indeed, such individuals in the donation models of organ transplantation may not be able to donate however strong their will is as the law demands that the recipient and donor be of the same family or prove altruism.

9. Conclusion

“Donate a kidney, buy the new iPad.” This was the advertisement slogan of an organ broker in China (Campbell & Davison, 2012). It underlines what has been the basis of the foregoing: those who could not have afforded an iPad would change their fortunes by “donating” a kidney. The vulnerable were preyed upon, laws broken, and criminal syndicates enriched. The medical need

for kidneys is soaring. The current model of obtaining kidneys is not fully serving demand. Laws against kidneys may be working in favour of the illicit organ trade.

This essay studies the historical, financial, legal, sociological, and ethical elements of organ transplantation and trade. The arguments were consummated by studying the Iranian system – the only one that allows for trade in kidneys. This study would offer options on how to approach at least two problems that would remain with us. Namely, the need for kidney transplantation and the growth of the illicit organ trade.

Organ trade should be legalized. Government should be the sole regulator. There should be a fixed uniform national pay to donors. There should be no cross-border trade. For deceased donations, there should be an opt out system that would take off after a sweeping advocacy campaign on the system and the need for organs.

Organ trade should be legalized. Governments, in collaboration with professional medical bodies, should be the sole regulator. For deceased donations, there should be an opt out system that would be set in place after a sweeping enlightenment campaign on the system and the need for organs. There should be a fixed uniform national pay to donors (or their next of kins). There should be no cross-border trade.

References

Ambagtsheer, F. (2017). *Organ trade*. Rotterdam, The Netherlands: Erasmus University Rotterdam.

Ambagtsheer, F., & Weimar, W. (2012). A criminological perspective: Why prohibition of organ trade is not effective and how the Declaration of Istanbul can move forward. *American Journal of Transplantation*, 12, 571–575.

Ariely, D. (2011, November 11). Dan Ariely asks, are we in control of our own decisions? [Video]. TED. http://www.ted.com/talks/lang/eng/dan_ariely_asks_are_we_in_control_of_our_ow_n_decisions.html

Aronowitz, A.A., & Isitman, E. (2013). Trafficking of human beings for the purpose of organ removal: Are (international) legal instruments effective measures to eradicate the practice? *Groningen Journal of International Law*, 1 (2).

Aworinde, O. (2023, May 5). The Ekweremadu trial: A timeline. Channels TV. <https://www.channelstv.com/2023/05/05/ekweremadus-trial-a-timeline/&text=The%20Ekweremadu%20Trial:%20A%20Timeline>

Best, D., Strang, J., Beswick, T., & Gossop, M. (2001). Assessment of a concentrated, high profile police operation: No discernible impact on drug availability, price, or purity. *British Journal of Criminology*, 41, 738–45.

BNET. (2003). Offering financial incentives for live donation has reduced Iran's kidney waiting list to zero, surgeon reports. http://findarticles.com/p/articles/mi_m0YUG/is_1_13/ai_n18615101/?tag=content

Bos, M. (2015). *Trafficking in human organs*. Brussels, Belgium: European Parliament.

Campbell, D. & Davison, N. (2012, May 27). Illegal kidney trade booms as new organ is 'sold every hour.' *The Guardian*. <https://theguardian.com/world/2012/may/27/kidney-trade-illegal-operations-who>

Caplan, A., Domínguez-Gil, B., Matesanz, R., & Prior, C. (2009). Trafficking in organs, tissues and cells and trafficking in human beings for the purpose of the removal of organs. Strasbourg, France: Council of Europe.

Castells, M. (1998). *The global criminal economy: End of millennium*. Blackwell.

Codreanu, N., Ambagtsheer, F., Weimar, W., de Jong, J., & Ivanovski, N. (2013). Brokers. In A. Pascalev, J. de Jong, F. Ambagtsheer, S Lundin, N Ivanovski, C Codreanu, M. Gunnarson, J. Yankov, I. Bystrom, M. Bos, W. Weimar (Eds), *Trafficking in human beings for the purpose of organ removal: A comprehensive literature review*. (pp.41 - 45). HOTT Project.

Cohen, I.G. (2012). Transplant tourism: the ethics and regulation of international markets for commercial kidney donors: Thematic synthesis of qualitative research. *Transplant Int.* 25(11), 1138-1149

Dahlkamp, J., Hofner, R., Hoffman, H., & Latsch, G., (2025, April 15). How Germans buy new kidneys in Kenya. *Spiegel International*.
<https://www.spiegel.de/international/world/organ-trafficking-how-germans-buy-new-kidneys-in-kenya-a-a16089cf-5bb6-40d3-ac38-fac8ef3eff4d>

de Jong, J., Bos, M., Ambagtsheer, F., Weimar, W., Lundin, S., Gunnarso, M., & Bystrom, I. (2013). Financial aspects of trafficking in human beings for the purpose of organ removal. In A. Pascalev, J. de Jong, F. Ambagtsheer, S Lundin, N Ivanovski, C Codreanu, M. Gunnarson, J. Yankov, I. Bystrom, M. Bos, W. Weimar (Eds.). *Trafficking in human beings for the purpose of organ removal: A comprehensive literature review*. (pp. 55 – 62). HOTT Project.

Duguay, J-P., Hermon, B., & Alexandra, S. (2020). *Trafficking in human organs: An overview* (Background paper). Ottawa, Canada: Parliamentary Information and Research Service.

European Court of Human Rights. (2015). Press release on ECHR 005: Removal of tissue from a deceased man's body without the knowledge or consent of his wife amounted to degrading treatment.
<https://hudoc.echr.coe.int/app/conversion/pdf/?library=ECHR&id=003-4979534-6105810&filename=Elberete%20v.%20Latvia%20-%20Removal%20of%20body%20tissue%20after%20death%20without%20consent.pdf>

Garland, D. (2001). *The culture of control: Crime and social order in contemporary society*. University of Chicago Press.

Goyal, M., Metha, R.L., Schneidermann, L.J. et al., (2002). Economic consequences of selling a kidney in India, *JAMA*, 288, 1589– 1593.

Hentrich, M. (n.d.). Health matters: Human organs donations, sales, and the black market.

Ijaseun, D. (2022, June 24). Timeline: Who is Ike Ekweremadu? *Business Day*.
<https://businessday.ng/politics/article/timeline-who-is-ike-ekweremadu/>

Judiciary of England and Wales. (2023). *Rex and Obinna Obeta, Ike Ekweremadu, & Beatrice Ekweremadu: Sentencing remarks of Mr Justice Johnson*. Central Criminal Court.

Lee, A., & Tham, J. (2022). Opt-in vs. Opt-out of organ donation in Scotland: Bioethical analysis. *The New Bioethics*, 28(4), 341–349.

Lundin, S. (2012). Organ economy: Organ trafficking in Moldova and Israel. *Public Underst Sci.*, 21(2), 226–241.

MacCoun, R.J., & Reuter, P. (2001). *Drug war heresies*. Cambridge University Press.

May, C. (2017). *Transnational crime and the developing world*. Global Financial Integrity.

Mendoza, R.L. (2012). Transplant Management from a Vendor's Perspective. *Journal of Health Management*, 14(1), 67-74.

Mendoza, R.L. (2010). Colombia's organ trade Evidence from Bogota and Mendellin. *Journal of Public Health (Germany)*, 18 (4), 375–384.

Moniruzzaman, M. (2012). “Living cadavers” in Bangladesh: Bioviolence in human organ bazaar. *Med Anthropol Q*, 26(1), 69–91.

Naylor, R. (2002). *Wages of crime: Black markets, illegal finance, and the underworld economy*. Cornell University Press.

Olsena, S. (2008). A Latvian case: The removal of tissue from 400 deceased persons. In: W. Weimar and M.A. Bos (Eds.). *Organ transplantation: ethical, legal, and psychosocial aspects, towards a common European policy*, (pp. 64 -71), Pabst.

OSCE (2020). *Trafficking in human beings for organ removal*. Austria: Organisation for Security and Co-operation in Europe.

Price, D., & Mackay, R. (1991). The trade in human organs. *The New Law Journal*, 141(6520), 1272–1273.

Roth, A.E. (2015). *Who gets what – and why: The new economic of matchmaking and market design*. Houghton Mifflin Harcourt.

Salahudeen, A.K., Woods, H.F., Pingle, A., et al., (1990). High mortality among recipients of bought living-unrelated donor kidneys. *Lancet*, 336, 725 – 728.

Schepers-Hughes, N. (2011). Mr Tati's holiday and Joao's safari – seeing the world through transplant tourism. *Body and Society*, 17 (2–3), 55–92.

Thaler, R.H., & Sunstein, C.R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.

Tober, D. M. (2007). Kidneys and Controversies in the Islamic Republic of Iran: The case of organ sale. *Body & Society*, 13(3), 151-170.

Tong, A., Chapman, J.R., Wong, G., Cross, N.B., Batabyal, P., & Craig, J.C. (2013). The experiences of organs. *Journal of Law, Medicine & Ethics*, 41(1), 269-85

Turner, L. (2009). Commercial organ transplantation in the Philippines. *Camb Q Healthc Ethics* 18(2), 192-196.

Weaver, M. (2023, May 5). Met police investigate more organ trafficking cases in UK. *The Guardian*. <https://theguardian.com/world/2023/may/05/met-police-investigate-more-organ-trafficking-cases-in-uk>

Yea, S. (2010). The commercial kidney market in a Manila slum, the Philippines. *Global Social Policy*, 10, 358–75.