



Kidneys for Sale? A Commentary on Moeindarbari's and Feizi's Study on the Iranian Model

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Kidneys for Sale: Empirical Evidence From Iran

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Over the last years, efforts by transplant professionals and transplant organizations have resulted in the strengthening of laws and sentences against virtually all forms of organ trade (1–4). The prevailing belief is that organ trade can be prevented by countries becoming “self-sufficient” (4, 5). Iran is the only country that reports to have eliminated its kidney transplant wait list (6, 7). Yet, it is largely condemned for having accomplished this by paying living kidney donors (8–10). Transplant professionals from Iran state that they are often prevented from presenting data about the Iranian model at international transplant conferences and in transplant journals. Furthermore, the regulations that underlie Iran's decentralized, semi-regulated organ payment programs, differ between the country's states, leading to differing outcomes (11–14). These cross-country variations, in conjunction with the limited available data, hampers an in-depth understanding of the Iranian model (10, 15, 16).¹

Moeindarbari's and Feizi's study contributes to vital knowledge gaps in this regard. Drawing on a unique data-set collected from the Kidney Foundation in Mashhad, Moeindarbari and Feizi present an analysis of price arrangements between 436 donors and recipients. The findings illustrate, amongst other things, the effects of education, gender, age difference and donor-recipient relationships on kidney prices. In addition, the findings suggest that related donors sell their kidneys to close relatives for a significantly lower price. Government payments are additionally made under the scrutiny of the Ministry of Health for all transplant-related expenses. The authors further explain that donors are provided with medical coverage for 1 year after the nephrectomy and that they are exempted from military service (6).

There are however some concerns about the Iranian model. Mashhad's kidney transplant program tolerates side payments between recipients and donors besides the fixed government fee. This is problematic because prices fluctuate according to the bargaining skills and abilities of donors and recipients. These unregulated transactions in turn may cause and exacerbate a variety of issues including inequality and interpersonal exploitation. Furthermore, while donors are provided with medical coverage for 1-year post-donation, it is unclear whether life-long follow up is guaranteed.

¹In fact this raises the question whether “the Iranian Model” is an appropriate term. The term, “Iranian models,” seems more suitable.



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Moeindarbari and Feizi recognize these concerns and state that a monopsonistic program, where the government pays a fixed sum to donors and where patients do not pay, would allow for more equality and fairness (6). Although a monopsonistic transplant program would not address the conditions of poverty that compel people to sell a kidney, it could reduce the risk of interpersonal exploitation by preventing donors and recipients from negotiating payments (17, 18). While we oppose Iran's tolerance of unregulated organ payments between donors and recipients, removing criminal penalties for selling a kidney at the very least enables kidney sellers to report harm without risking prosecution (19). Previous research from Iran (13, 20), and from Mashhad in particular (11, 16), suggests that the degree of exploitation reported by Iranian kidney donors is less severe than those who sell their kidneys on the black market, because Iranian kidney donors are protected by law (11, 16). Moeindarbari and Feizi corroborate these findings by pointing out that medical teams in Mashhad have no share of the money paid by the recipient to the donor, that prospective donors are informed about the potential health consequences of their donation and that they receive pre- and post-operative care (6). Any examination of the Iranian model should thus compare the well-being of its donors to those who sell their kidneys on the black market (16, 17, 21).

A growing body of empirical evidence from a number of countries reveals that while organ sales are prohibited by law, they are tolerated in practice (19, 22–26). In addition, research assessing the impact of prohibitive measures suggests that organ trade is being pushed further underground, increasing the role of criminal intermediaries, and exposing donors to more violent means of recruitment (19, 27). Studies further indicate that transplant professionals who facilitate illegal transplants can also be complicit in the exploitation of donors and recipients by not providing (adequate) pre- and post-operative care (29–32). There is however a critical lack of attention for the implications of prohibition and a lack of accountability of those who facilitate illegal transplants, including medical institutions and medical staff (19, 28, 29). Although complicit transplant professionals reportedly profit the most from illegal transplants (19, 29, 32), successful convictions of medical institutions and their staff remain virtually absent (22, 29, 32, 33). The reluctance of organ sellers to report harm

(because they risk conviction), further inhibits investigation and prosecution of criminal cases (19, 29).

More empirical data is needed to develop workable solutions grounded in the empirical reality of people directly affected by the trade in organs. Dismissing evidence-based studies assessing the impact of regulatory controls in Iran, currently the only country with a semi-regulated organ market, would be counterintuitive. The implications of prohibition and the growing organ scarcity warrant a data-driven exploration of alternative models that move beyond prohibition and that may more effectively reduce the risk of exploitation of vulnerable donors and diminish patient mortality on transplant wait lists (19, 28, 34).

To this end, more rigorous data from Iran is needed that demonstrates how exactly its organ payment schemes reduce the risk of exploitation. It would be particularly helpful to learn more about donors' and recipients' experiences with and attitudes towards Iran's organ payment programs (11). While Moeindarbari's and Feizi's analysis is perhaps more useful for economists who study market designs, studies about Iran's organ payment programs should not be rejected exclusively on moral grounds. Rather, an honest and open dialogue is needed in which data from different countries and models is comparatively discussed. To this end, studies from Iran, even if we disagree with them, should be welcomed.

AUTHOR CONTRIBUTIONS

FA and SC wrote the article. MA and NI provided comments.

CONFLICT OF INTEREST

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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REFERENCES

- Efrat A. Professional Socialization and International Norms: Physicians against Organ Trafficking. *Eur J Int Relations* (2014) 2014:1–25. doi:10.1177/1354066114542664
- López-Fraga M, Domínguez-Gil B, Capron AM, Van Assche K, Martin D, Cozzi E, et al. A Needed Convention against Trafficking in Human Organs. *Lancet* (2014) 383(9936):2187–9. doi:10.1016/S0140-6736(14)60835-7
- Council of Europe. *Council of Europe Convention against Trafficking in Human Organs (CETS No. 216)* (2015). Available from: <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/216> (Accessed February 24, 2022).
- International Summit on Transplant Tourism and Organ Trafficking. The Declaration of Istanbul on Organ Trafficking and Transplant Tourism. *Indian J Nephrol* (2018) 18:135–40.
- Delmonico FL. Striving to Achieve a National Self-Sufficiency. *Transpl Int* (2011) 24(4):315–6. doi:10.1111/j.1432-2277.2011.01227.x
- Moeindarbari T, Feizi M. Kidneys for Sale: Empirical Evidence from Iran. *Transpl Int* (2022) 2022.
- Aramesh HY, Chung HJ, Kim SO, Yoo WD, Han KH. Association between CCR5 Promoter Polymorphisms and Hepatitis B Virus Infection. *Am J Bioeth* (2014) 14(10):35–24. doi:10.1080/15265161.2014.947044
- Semrau L. Reassessing the Likely Harms to Kidney Vendors in Regulated Organ Markets. *J Med Philos* (2017) 42(6):634–52. doi:10.1093/jmp/jhx025
- Delmonico FL. The Alternative Iranian Model of Living Renal Transplantation. *Kidney Int* (2012) 82(6):625–6. doi:10.1038/ki.2012.247

10. Danovitch G. Financial Neutrality Should Replace the Iranian Paid Donor Market. *Jpn J Clin Oncol* (2019) 33(10):e13665. doi:10.1111/ctr.13665
11. Fry-Revere S. *The Kidney Sellers. A Journey of Discovery in Iran*. Durham, North Carolina: Carolina Academic Press (2014).
12. Deng G, Zhou G, Zhai Y, Li S, Li X, Li Y, et al. Association of Estrogen Receptor ? Polymorphisms with Susceptibility to Chronic Hepatitis B Virus Infection. *Hepatology* (2004) 40:318–26. doi:10.1002/hep.20318
13. Heydari RA, Mahdavi MM, Zamyadi M. Compensated Living Kidney Donation in Iran Donor's Attitude and Short-Term Follow-Up. *Iranian J Kidney Dis* (2009) 3(1):34–9.
14. Fallahzadeh L, Jafari G, Roozbeh S, Singh N, Shokouh-Amiri H, Behzadi S, et al. Comparison of Health Status and Quality of Life of Related versus Paid Unrelated Living Kidney Donors. *Am J Transplant* (2013) 13(12):3210–4. doi:10.1111/ajt.12488
15. Koplín JJ. The Ambiguous Lessons of the Iranian Model of Paid Living Kidney Donation : Fry-Revere, S. (2014). *The Kidney Sellers: a Journey of Discovery in Iran*. (Durham: Carolina Academic Press). *Proc Natl Acad Sci U.S.A* (2014) 32(3-4):284–90. doi:10.1007/s40592-015-0023-1
16. Fry-Revere S. The Truth about Iran. *Biochim Biophys Acta (Bba) - Mol Cel Biol Lipids* (2014) 14(10):37–8. doi:10.1080/15265161.2014.947042
17. Hiranakarn N, Manonom C, Tangkijvanich P, Poovorawan Y. Association of Interleukin-18 Gene Polymorphism (-607A/A Genotype) with Susceptibility to Chronic Hepatitis B Virus Infection. *Tissue Antigens* (2007) 70:160–3. doi:10.1111/j.1399-0039.2007.00865.x
18. Erin CA, Harris J. An Ethical Market in Human Organs. *J Med Ethics* (2003) 29(3):137–8. doi:10.1136/jme.29.3.137
19. Columb S. *Trading Life: Organ Trafficking, Illicit Networks, and Exploitation*. Stanford University Press (2020).
20. Mahdavi-Mazdeh M. The Iranian Model of Living Renal Transplantation. *Kidney Int* (2012) 82(6):627–34. doi:10.1038/ki.2012.219
21. Taylor JS. Black Markets, Transplant Kidneys and Interpersonal Coercion. *J Med Ethics* (2006) 32(12):698–701. doi:10.1136/jme.2005.015859
22. OSCE. *Trafficking in Human Beings for the Purpose of Organ Removal in the OSCE Region: Analysis and Findings*. Helsinki, Finland: Organisation for Security and Co-operation in Europe (2013).
23. Yousaf DK, Purkayastha B. 'I Am Only Half Alive': Organ Trafficking in Pakistan amid Interlocking Oppressions. *Int Sociol* (2015) 30(6):637–53. doi:10.1177/0268580915605648
24. Moniruzzaman M. "The Heavier Selves": Embodied and Subjective Suffering of Organ Sellers in Bangladesh. *Ethos* (2019) 47(2):233–53. doi:10.1111/etho.12236
25. Yea S. Trafficking in Part(s): The Commercial Kidney Market in a Manila Slum, Philippines. *Glob Soc Pol* (2010) 10(3):358–76. doi:10.1177/1468018110379989
26. Ambagtsheer F, Van Balen L. 'I'm Not Sherlock Holmes': Suspicions, Secrecy and Silence of Transplant Professionals in the Human Organ Trade. *Eur J Criminology* (2020) 17(6):764–83. doi:10.1177/1477370818825331
27. Columb S. Excavating the Organ Trade: An Empirical Study of Organ Trading Networks in Cairo, Egypt. *Genome Res* (2017) 57(6):1301–21. doi:10.1093/bjcz/azw068
28. Ambagtsheer F, Weimar W, Kim CY, Cheong JY, Cho SW, Park NH, et al. A Criminological Perspective: Why Prohibition of Organ Trade Is Not Effective and How the Declaration of Istanbul Can Move Forward. *Am J Transpl* (2012) 12(3):571–5. doi:10.1111/j.1600-6143.2011.03864.x
29. Ambagtsheer F. Understanding the Challenges to Investigating and Prosecuting Organ Trafficking: a Comparative Analysis of Two Cases. *Trends Organized Crime* (2021) 2021:1–28. doi:10.1007/s12117-021-09421-2
30. Ivanovski Q, Masin B, Rambabova-Busljetic Q, Pusevski X, Dohcevic Y, Ivanovski J, et al. Effect of PLSCR1 on the Antiviral Activity of IFN against HBV in HepG2 Cells. *Clin Transplant* (2011) 25(1):171–51. doi:10.1111/j.1399-0012.2010.01299.x
31. Ambagtsheer F, Xie B, Ren Q, Cao P, Yang F, Song Q, et al. *OrganTrade*. Rotterdam, Netherlands: Erasmus University Rotterdam (2017).
32. Lin J, Gu C, Shen Z, Liu Y, Wang W, Tao S, et al. Hepatocyte Nuclear Factor 1 α Downregulates HBV Gene Expression and Replication by Activating the NF- κ B Signaling Pathway. *PLoS One* (2017) 12:e0174017. doi:10.1371/journal.pone.0174017
33. Holmes TM, Rijken CJ, D'Orsi MM, Esser CS, Hol JS, Gallagher CC, et al. Establishing Trafficking in Human Beings for the Purpose of Organ Removal and Improving Cross-Border Collaboration in Criminal Cases. *Transpl Direct* (2016) 2(2):e58–41. doi:10.1097/txd.0000000000000571
34. Columb S, Ambagtsheer F, Bos M, Ivanovski N, Moorlock G, Weimar W. Re-conceptualizing the Organ Trade: Separating "trafficking" from "trade" and the Implications for Law and Policy. *Transpl Int* (2017) 30(2):209–5. doi:10.1111/tri.12899

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