- 2 Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998. Substitution in Clause 6, Schedule 1. The Gazette of India: Extraordinary [Part III— Sec. 4] Notification. New Delhi, the 12th February, 2020 No. MCI-12(2)/2019-Med. Misc./189334. Available at www.nmc.org.in/e-gazette (accessed on 3 Apr 2021).
- 3 Jain VK, Iyengar KP, Vaishya R. Is the English language a barrier to the non-English-speaking authors in academic publishing? *Postgrad Med J* 2020 Nov 6:postgradmedj-2020-139243. doi: 10.1136/postgradmedj-2020-139243.
- 4 Iyengar KP, Jain VK, Sakthivel P, Malhotra N, Ish P. Competency-based novel medical curriculum in India. *Postgrad Med J* 2021 Feb 9:postgradmedj-2020-139690. doi: 10.1136/postgradmedj-2020-139690.
- 5 Medical Council of India. Competency based undergraduate curriculum for the Indian medical graduate. Available at https://wbuhs.ac.in/wp-content/uploads/ 2019/01/UG- Curriculum-Vol-I.pdf (accessed on 28 Mar 2021).
- 6 Morrison CD. "From 'sage on the stage' to 'guide on the side': A good start". Int J Scholarsh Teach Learn 2014;8:18-22.
- 7 Ish P, Sakthivel P, Gupta N, Malhotra N, Rajeshwari M. E-learning of medical residents during COVID-19: Perspective from a developing nation. *Postgrad Med J* 2020 Oct 28:postgradmedj-2020-139022. doi: 10.1136/postgradmedj-2020-139022.

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[**To cite:** Gupta N, Ish P, Sakthivel P, Iyengar KP. New essential criteria for medical faculty in India: A paradigm shift. [Letter] *Natl Med J India* 2021;**34**:317–18.]

Gender discrepancies in organ donation in India: The invisible road to exploitation of womanhood?

Gender inequities in accessing medical treatment are a global issue. This bias also extends to major, life-saving procedures such as organ transplantation. Women constitute the majority of living kidney donors, but receive fewer live kidney transplants compared to men.^{1,2} Similar disparities exist in relation to accessing and outcomes of liver transplantation.³ In India, the difference is even more stark; women constituted less than one-third of living organ recipients in 2019 but more than three-quarters of living donors.^{4,5} We propose some explanations for observed gender differences in organ donation in India as well as some recommendations:

Possible explanations for gender differences in organ donation:

- 1. *Economic implications:* In most Indian families, men are the sole breadwinners. Consequently, the financial implications of being indisposed for weeks following organ donation would serve as a deterrent for men to donate.
- 2. Greater sense of self-sacrifice among women: Globally, women, in general, have a greater sense of responsibility and self-sacrifice than men.⁶ In India, women see caring for their family members as an extension of their domestic duties. Thus, they are more likely than men to step up and volunteer to donate during a family crisis.
- 3. A third unproven hypothesis is that women are more willing to donate because they have already experienced a major medical event such as childbirth, and they trust the medical system.⁷ Scientific evidence, however, indicates that pregnancy serves as a possible

'sensitizing event' triggering immune response in donors,⁸ thus posing increased risk of post-transplant complications in recipients.

4. Gender bias by institutions/specialists in harvesting living organs: Studies have shown that gender bias on the part of institutions or physicians, which reflects in the content of doctor-patient interactions, may also contribute to gender disparity in transplant;² such factors may be amplified in the Indian setting.

Recommendations to improve gender disparity in organ donation:

- 1. Ensure support through women-centred organizations with adequate information and education about organ donation and human rights. An Indian study has shown that men are more informed than women about organ transplantation.⁹
- Mental health professionals should be involved in the multidisciplinary organ transplant team—this will help in a more complete assessment of the aspects related to the emotional state of the donor and ensure the due process of informed consent.
- 3. Pre-transplant evaluation should also cover psychosocial and economic aspects to uncover undesirable motivations for donation such as underlying abuse, threat, coercion, violence and related consequences. Referral to a counsellor before organ transplantation is routinely practised and must be encouraged.

Ethical aspects of organ transplantation in India have not received the attention they deserve. An approach based on education, support and advocacy is needed to improve gender parity in organ donations. More research into this aspect is also warranted to uncover the various levels at which bias may operate and inform remedial action.

Conflicts of interest. None declared

REFERENCES

- Bal MM, Saikia B. Gender bias in renal transplantation: Are women alone donating kidneys in India? *Transplant Proc* 2007;39:2961–3.
- 2 Jindal RM, Ryan JJ, Sajjad I, Murthy MH, Baines LS. Kidney transplantation and gender disparity. Am J Nephrol 2005;25:474–83.
- 3 Oloruntoba OO, Moylan CA. Gender-based disparities in access to and outcomes of liver transplantation. World J Hepatol 2015;7:460-7.
- 4 Sahay M. Men are from Mars, women are from Venus: Gender disparity in transplantation. *Indian J Transplant* 2019;13:237.
- 5 Organ Report. Available at https://notto.gov.in/organreport.htm (accessed on 17 Jun 2021).
- 6 Legato M. Gender-specific issues in organ transplantation. In: Sanfey IH, Frcsi Frcsi F, (eds). *Principles of gender-specific medicine*. New York:Elsevier; 2004: 1116–27.
- 7 Kendrick M. Why do more women donate organs than men? Available at www.bbc.com/future/article/20180730-why-more-women-donate-organs-than-men. (accessed on 17 Jun 2021).
- 8 Mor G, Cardenas I. The immune system in pregnancy: A unique complexity. Am J Reprod Immunol 2010;63:425–33.
- 9 Poreddi V, Sunitha TS, Thimmaiah R, Math SB. Gender differences in perceptions and attitudes of general population towards organ donation: An Indian perspective. *Saudi J Kidney Dis Transpl* 2017;28:599–608.

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[**To cite:** Pattnaik JI, Padhy SK, Menon V. Gender discrepancies in organ donation in India: The invisible road to exploitation of womanhood? [Letter]. *Natl Med J India* 2021;**34:**318.]