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Letter to the Editor on Global Impact of the Covid-19 Pandemic on Solid Organ Transplantation



To the Editor:

We are writing about an in-press article in *Transplantation Proceedings* (<https://doi.org/10.1016/j.transproceed.2022.02.009>) titled, “Global Impact of the COVID-19 pandemic on Solid-organ transplantation” by Kute et al, accessed on February 11th, 2022 [1].

THIS important work sheds necessary light on the impact of the pandemic on organ donation and transplant activities around the world, blunting a steep rise in transplant volumes over the last two decades [2,3].

However, several assertions made by the authors in this study, especially those related to heart transplant (HT) volumes, are not supported by available data. The authors state that India had the most pronounced drop in HT volumes (52.4%). However, data from GODT (Global Observatory on Donation and Transplantation) suggest that several other countries had a similar or larger drop in HT volumes between 2019 and 2020, including Chile, Mexico, Peru, Serbia, Turkey, and the United Arab Emirates (Table 1) [4]. We have used a similar analytical framework previously and published a reduction in HT in Asia and Oceania, which was most pronounced in countries other than India [5].

Additionally, the authors seem to inconsistently use regional and country-level data to make comparisons throughout the paper. For instance, they initially used the customary World

Health Organization (WHO) regional classification (Africa, the Americas, Eastern Mediterranean, Europe, Western Pacific, and South-East Asia) but later used country-level data in making comparisons of an individual country to entire regions [6]. We want to recall that the Eastern Mediterranean Region consists of 21 countries [7]. The authors compared it with countries such as India, Brazil, and the United Kingdom at some points in their work. Doing so without providing a clear rationale not only causes confusion to readers but also can lead to incorrect conclusions, including the one that India had the largest reduction in HT volumes. Moreover, the authors seem to have used regional classifications erroneously to make comparisons, where GODT data on the “Americas”—a collective term used by WHO to encompass countries in North and South America—was interchangeably used to refer to North America on many occasions, such as in the authors’ first table [1,6]. Therefore, we would encourage the consistency of regional and country-level data comparison and reporting to better present outcomes.

Lastly, reported relative reductions by Kute et al were not corrected for each country’s population in that year, which has the potential advantage of isolating the effect of a country’s population on the total number of transplant activities. As such, the rate of decline in global rates of deceased donors would change from 11.5% to 15.3% (according to data in Table 2 by Kute et al.) [1]. Therefore, it would be interesting if the authors also consider reporting population-adjusted volumes for transplantation and organ donation and determine if the same conclusions can be made.

We strongly encourage the authors to address these discrepancies. Not doing so may deliver a misleading message, one that is not borne out by the totality of available evidence.

Table 1. Countries with a Higher Drop in Heart Transplantation Volumes Compared to India

Countries	HT in 2019	HT PMP in 2019	HT in 2020	HT PMP in 2020	Reduction (%)	Reduction Adjusted for the Population (%)
Peru	15	0.46	2	0.06	86.67	86.71
Serbia	7	0.80	1	0.11	85.71	85.71
Turkey	84	1.01	21	0.25	75.00	75.39
Mexico	33	0.25	9	0.07	72.73	72.01
Chile	45	2.46	17	0.89	62.22	63.80
United Arab Emirates	5	0.52	2	0.20	60.00	60.81
India	187	0.14	89	0.06	52.41	52.80

HT, heart transplant; PMP, per million population.

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DATA AVAILABILITY

Data will be made available on request.

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The authors have no competing interests

[1] Kute VB, Tullius SG, Rane H, Chauhan S, Mishra V, Meshram HS. Global impact of the COVID-19 pandemic on solid organ transplantation [e-pub ahead of print]. *Transplant Proc.* doi: 10.1097/TP.0000000000004151, accessed February 11, 2022.

[2] Manla Y, Al Sindi F, Attallah N, Al Badarin F, Ghalib H, Bader F. Temporal trends in brain-death organ donation in Asia: results from the Global Observatory on Donation and Transplantation. *Transplant Proc* 2022;54:233–6.

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[6] World Health Organization. WHO regional offices, <<https://www.who.int/about/who-we-are/regional-offices>>; accessed 11.02.22.

[7] Bader F, Manla Y, Hammouri M, Attallah N. Organ donation in the Eastern Mediterranean Region. *Transplantation* 2021;105:6–9.