did not improve outcomes in the RECOVERY and COALITION II trials, routine use of azithromycin in patients admitted to hospital with COVID-19 should be avoided, to allow better allocation of health-care resources.

Collaborative research efforts such as RECOVERY, COALITION COVID-19 Brazil,[8–10] and SOLIDARITY[11] are evidence that pragmatic, randomised clinical trials can be promptly initiated in different countries and settings during a pandemic, as we have seen with COVID-19. Ongoing randomised clinical trials from these collaborative research efforts and from other groups are testing other potential therapies for COVID-19 such as anticoagulants, newer antivirals, anti-inflammatories, and immunomodulatory agents. Results from these studies will help to inform treatment decisions in clinical practice. The experience and the knowledge gained from successfully launching these studies in a matter of weeks has important implications for research not only in COVID-19 but also for future pandemics and for common diseases.[12] Finally, innovations such as big data technologies and linkage with electronic health records, mobile applications, and wearable devices can further transform pragmatic randomised clinical trials, making them larger, more efficient, and easier to implement.

Otavio Berwanger
otavio.berwanger@einstein.br

Academic Research Organization, Hospital Israelita Albert Einstein, 05652–900 Sao Paulo, Brazil

1   Califf RM, Curtis LH, Harrington RA, Hernandez AF, Peterson ED. Generating evidence for therapeutic effects: the need for well-conducted randomized trials. *J Clin Invest* 2021; **131:** e146391.
2   Yusuf S, Collins R, Peto R. Why do we need some large, simple randomized trials? *Stat Med* 1984; **3:** 409–22.
3   Bauchner H, Fontanarosa PB. Randomized clinical trials and COVID-19: managing expectations. *JAMA* 2020; **323:** 2262–63.
4   RECOVERY Collaborative Group. Dexamethasone in hospitalized patients with Covid-19—preliminary report. *N Engl J Med* 2020; published online July 17. https://www.nejm.org/doi/full/10.1056/NEJMoa2021436.
5   Horby P, Mafham M, Linsell L, et al. Effect of hydroxychloroquine in hospitalized patients with Covid-19. *N Engl J Med* 2020; **383:** 2030–40.
6   Horby PW, Mafham M, Bell JL, et al. Lopinavir–ritonavir in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. *Lancet* 2020; **396:** 1345–52.
7   RECOVERY Collaborative Group. Azithromycin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. *Lancet* 2021; published online Feb 2. https://doi.org/10.1016/S0140-6736(21)00149-5.
8   Furtado RHM, Berwanger O, Fonseca HA, et al. Azithromycin in addition to standard of care versus standard of care alone in the treatment of patients admitted to the hospital with severe COVID-19 in Brazil (COALITION II): a randomised clinical trial. *Lancet* 2020; **396:** 959–67.
9   Cavalcanti AB, Zampieri FG, Rosa RG, et al. Hydroxychloroquine with or without azithromycin in mild-to-moderate Covid-19. *N Engl J Med* 2020; **383:** 2041–52.
10   Tomazini BM, Maia IS, Cavalcanti AB, et al. Effect of dexamethasone on days alive and ventilator-free in patients with moderate or severe acute respiratory distress syndrome and COVID-19: the CoDEX randomized clinical trial. *JAMA* 2020; **324:** 1307–16.
11   WHO SOLIDARITY Trial Consortium. Repurposed antiviral drugs for COVID-19—interim WHO Solidarity Trial results. *N Engl J Med* 2020; published online Dec 2. https://doi.org/10.1056/NEJMoa2023184.
12   Kalil AC. Treating COVID-19-off-label drug use, compassionate use, and randomized clinical trials during pandemics. *JAMA* 2020; **323:** 1897–98.

Research in forced displacement: guidance for a feminist and decolonial approach

The COVID-19 pandemic has deepened inequities and undermined health, human rights, and gender equality for forcibly displaced populations.[1,2] The United Nations Refugee Agency estimates that, at the end of 2019, there were 79·5 million people forcibly displaced as a result of persecution, conflict, violence, human rights violations, or events seriously disturbing public order.[3] Evidence about the needs of these populations is crucial to tailor effective and equitable responses, but data collection efforts are faced with considerable new challenges during the COVID-19 pandemic. Many researchers are attempting to overcome such challenges by collecting data remotely, but doing so creates ethical and practical concerns that risk perpetuating gender, racial, and other inequities. For example, the gender divide in mobile phone ownership,[4] internet access, and digital literacy creates barriers to data collection from women, further silencing their voices and that of other groups without access to these technologies. Overcrowded living spaces, mobility restrictions, and lack of autonomy over technology use (due to COVID-19, gender norms, or both) exacerbate ethical concerns regarding confidentiality, privacy, and safety during remote data collection.

The ongoing pandemic has also exposed persisting power hierarchies between researchers and forcibly displaced populations. These populations experience power asymmetries in their position as the so-called beneficiaries of humanitarian research and action,

and are often excluded from participation in decision making about the research intended to benefit their communities. Forcibly displaced women and girls are consistently categorised as vulnerable and needing protection or rescuing, which takes away their agency and power of action, while risking exploitation or abuse by the same humanitarian actors that supposedly aim to protect them. Recent efforts to address these hierarchies through the process of localisation—ie, recognising, respecting, and strengthening leadership by local authorities and the capacity of local civil society in humanitarian action to better address the needs of affected populations and better prepare actors for future humanitarian responses—have been criticised for neglecting the insidious effects of sexism and racism, both intrinsically linked to colonial legacies.[5]

The perceived urgency to collect data remotely also exposes neocolonial power hierarchies between researchers in affected settings and those in resource-rich settings, where funding is often concentrated. Researchers from advanced economies predominantly define the research questions with little or tokenistic consultation of in-country researchers or communities.[6,7] With COVID-19-related movement restrictions, research can typically only be done by collecting data remotely or by delegating data collection to in-country researchers. In the haste to produce evidence, interactions can become one sided or top down, as those in higher hierarchical positions issue directives to front-line actors. The new nature of these interactions also risks the so-called ethics dumping,[8] that is, off-loading risk to in-country researchers by asking them to facilitate data collection under the unique challenges presented by the COVID-19 pandemic. These hurdles demand that researchers confront power hierarchies in knowledge production processes.

We propose the application of feminist values to address these concerns. Although there are many feminist strands, feminists are united in seeking to address unequal power hierarchies and striving for social and environmental justice.[9,10] Feminist researchers advocate for intersectional analysis that centres the voices and knowledge of communities, embedding decolonial lenses and ethics of care approaches that value people more than they value data.[11,12] Feminist research explicitly examines gendered and colonial power hierarchies at play in the research process, and is grounded in reciprocal engagement with communities to equalise power dynamics. By advocating

Panel: Recommendations for a feminist approach during research in forced displacement settings

Stage 1: conceptualisation of research and data collection
- Establish equitable partnerships to conduct research on topics that are relevant and beneficial to all members of communities

Stage 2: funding
- Meaningfully involve all researchers in budget preparation and ensure an equitable allocation of resources

Stage 3: research design
- Consider the political, social, economic, and historical contexts and power hierarchies of the research setting and plan for the meaningful participation of individuals and communities with less power

Stage 4: collecting data
- Consider how gendered and colonial power hierarchies might be reinforced by capacity building of front-line researchers and engagement with communities
- Ensure collection of data on gender to allow for capturing gender and other inequities

Stage 5: data analysis and dissemination
- Engage front-line researchers and study populations in conducting intersectional gender analysis, as well as in interpretation, writing, and dissemination of findings
- Use findings to challenge unjust systems and policies and deliver gender transformative and equitable programmes

Please refer to the appendix for more details.

a feminist approach, we propose moving beyond the performative dimensions of being gender-sensitive and decolonial, towards understanding what it means to equitably share power within research collaborations in a meaningful way that challenges traditional methods of knowledge production.[6]

The COVID-19 pandemic presents a crucial opportunity for researchers working with forcibly displaced populations to rethink their traditional approaches. Applying feminist values to data collection during COVID-19 and beyond requires putting at the centre the knowledge of those from whom data are being collected. We provide key recommendations (panel) and a detailed checklist (appendix) for applying a feminist approach that takes into account ethical, gender, and decolonisation considerations when collecting data in forced displacement settings.

At the time of research conceptualisation, applying a feminist approach equates to meaningfully engaging forcibly displaced populations so that research is relevant to their concerns, instead of solely focusing on what researchers believe is important.[7] This engagement must include considerations of how gender intersects with other axes of power such as race, ethnicity, or displacement status to shape individual experiences.

Taking such steps at the research conceptualisation stage allows ethical approaches to codeveloping recruitment and data collection strategies, treating forcibly displaced populations as more than data providers, and ensuring the participants' privacy and confidentiality.[13] Consideration of power hierarchies includes reflection on the dynamics between front-line researchers, who hold power despite being so-called local participants, and communities, leading to concrete steps to reduce power imbalances. Power hierarchies and politics also shape how data are analysed, published, and shared. Choices on which data are deemed relevant, how the analysis is presented, and how authorship is decided are all arenas in which power is exercised to prioritise some voices and silence others. Feminist values emphasise meaningful decision making and relational engagement, from research conceptualisation to publication and beyond.

Dismantling well established data collection practices, especially in forced displacement settings, requires a sustained commitment from all parties in the research ecosystem and changes to the architecture that enables these practices. COVID-19 has given us the opportunity to reflect on and challenge long-existing power hierarchies within research—a process that is needed to address lingering colonial and patriarchal power relations and avoid ethical pitfalls. We believe that applying a feminist lens is not merely about demolishing problematic structures, but also about collaboratively building up new ones for a more just world.

*Neha S Singh, Michelle Lokot, Chi-Chi Undie, Monica A Onyango, Rosemary Morgan, Anne Harmer, Jane Freedman, Shirin Heidari
neha.singh@lshtm.ac.uk

Health in Humanitarian Crises Centre, London School of Hygiene & Tropical Medicine, London WC1H 9SH, UK (NSS, ML); Population Council, Nairobi, Kenya (C-CU); Department of Global Health, Boston University School of Public Health, Boston, MA, USA (MAO); Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA (RM); Elrha, London, UK (AH); University of Paris 8, Paris, France (JF); GENDRO, Geneva, Switzerland (SH); Global Health Centre, Graduate Institute of International and Development Studies, Geneva, Switzerland (SH)

1 Médecins Sans Frontières. Stigma and disrupted care: facing COVID-19 in Bangladesh. 2020. https://www.msf.ie/article/stigma-disrupted-care-facing-covid-19-bangladesh (accessed Jan 5, 2021).

2 Mballa C, Ngebeh J, De Vriese M, Drew K, Parr A, Undie C. UNHCR and partner practices of community-based protection across sectors in the East and Horn of Africa and the Great Lakes Region. Nairobi, Kenya. 2020. UNHCR and Population Council. https://knowledgecommons.popcouncil.org/departments_sbsr-rh/1310/ (accessed Jan 5, 2021).

3 United Nations High Commissioner for Refugees. Global trends: forced displacement in 2019. June, 2020. https://www.unhcr.org/uk/statistics/unhcrstats/5ee200e37/unhcr-global-trends-2019.html (accessed Jan 5, 2021).

4 United Nations High Commissioner for Refugees. The digital lives of refugees: what's next? 2019. https://www.unhcr.org/jo/12182-the-digital-lives-of-refugees-whats-next.html (accessed Jan 5, 2021).

5 Slim H. Is racism part of our reluctance to localise humanitarian action? 2020. https://odihpn.org/blog/is-racism-part-of-our-reluctance-to-localise-humanitarian-action/ (accessed Jan 5, 2021).

6 Brun C, Lund R. Real-time research: decolonising research practices–or just another spectacle of researcher–practitioner collaboration? Dev Pract 2010; 20: 812–26.

7 Lokot M. The space between us: feminist values and humanitarian power dynamics in research with refugees. Gend Dev 2019; 27: 467–84.

8 Schroeder D, Cook J, Hirsch F, Fenet S, Muthuswamy V, eds. Ethics dumping: case studies from North-South research collaborations. Cham, Switzerland: Springer Nature, 2018.

9 Brooks A, Hesse-Biber SN. An invitation to feminist research. In: Hesse-Bilber SN, ed. Feminist research practice: a primer. Thousand Oaks, USA: SAGE Publishing, 2007.

10 Davies SE, Harman S, Manjoo R, Tanyag M, Wenham C. Why it must be a feminist global health agenda. Lancet 2019; 393: 601–03.

11 Kapilashrami A, Hankivsky O. Intersectionality and why it matters to global health. Lancet 2018; 391: 2589–91.

12 Pinet M, Leon-Himmelstine C. How can COVID-19 be the catalyst to decolonise development research? 2020. Oxfam. https://oxfamblogs.org/fp2p/how-can-covid-19-be-the-catalyst-to-decolonise-development-research (accessed Jan 5, 2021).

13 Calia C, Reid C, Guerra G, et al. Ethical challenges in the COVID-19 research context: a toolkit for supporting analysis and resolution. Ethics Behav 2021; 1: 1–16.

Urgent needs of low-income and middle-income countries for COVID-19 vaccines and therapeutics

WHO and partners have learnt from the mis-steps in the response to the 2009 H1N1 influenza pandemic[1] and established the Access to COVID-19 Tools (ACT) Accelerator to promote equitable access to vaccines, therapeutics, and diagnostics.[2] However, many high-income countries already have bilateral agreements with manufacturers of COVID-19 vaccines.[3] The COVAX Facility of the ACT Accelerator has agreements to access 2 billion doses of WHO pre-qualified vaccines during 2021, but this represents only