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WHO's adoption of SAGER guidelines and GATHER: setting standards for better science with sex and gender in mind

A growing awareness of sex and gender bias in evidence has spurred the development of numerous tools to address this concern. The Sex and Gender Equity in Research (SAGER) guidelines[1] and the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER)[2,3] stand out as noteworthy initiatives, designed to foster more transparent research and reporting practices that bridge the gender evidence gap. These tools enable researchers to unravel the complexities that underlie health risks and outcomes and generate more accurate and relevant findings that can inform effective and equitable policies and interventions for better health outcomes.

In 2023, WHO adopted the SAGER guidelines to tackle sporadic and suboptimal reporting of sex and gender data. The SAGER guidelines, published in 2016, are widely cited, included in the recommended reporting guidelines of the International Committee of Medical Journal Editors, and adapted by major academic publishers and scientific journals. They promote complete and routine reporting of disaggregated data, and encourage inclusion of sex and gender dimensions in research design, data collection, analysis, and publication.[1] Implementation of the SAGER guidelines will reshape scientific practices and help eliminate gender data gaps, facilitating the generation of evidence that benefits everyone.[4] In parallel, since its publication in 2016, GATHER aims to ensure that global health estimates produced through statistical models follow best practices for reliable, transparent, and disaggregated data reporting.[3] GATHER's provision to report the inclusion criteria and data identification process requires concurrent presentation of population characteristics, including age and sex.[3]

WHO has an important role in advocating for health equity and gender equality and relies on the highest standard of scientific evidence for its normative guidelines and flagship reports. As a global authority that sets standards for research ethics and high-quality research with real-life impact, WHO bears a responsibility to address the sex and gender evidence gap in global health. Hence, WHO's adoption of the SAGER guidelines and GATHER is a significant step towards reduction of gender data gaps and advancing gender equality and health equity.

Moreover, WHO contributes to evidence generation through research, generation of global comparable estimates, collaborations, and commissioned studies on health issues, interventions, and policy implications.[5] Each year, WHO publishes flagship reports based on health statistics, surveys, and other programmatic and epidemiological data. During 2020–21, 3875 peer-reviewed journal articles were published, authored, or funded by WHO.[6] It is fundamental that this vast body of research and evidence reports data disaggregated by sex, as a minimum, and considers various gender dimensions to produce the best possible evidence.

In 2007, after the adoption of World Health Assembly resolution 60.25, WHO accelerated its efforts towards addressing gender disparities through research, policy, and practice.[7] Despite the resolution recommendations, reporting of data by sex remains fragmented, and intersectional sex and gender analysis is more an exception than a norm. Sex and gender are not routinely integrated into clinical trials, epidemiological studies, and operational research and not considered in programmatic data on service access and health outcomes.[8,9] In the 2019 World Health Statistics, only 11 of 28 relevant Sustainable Development Goals indicators were sex-disaggregated.[10] During the COVID-19 pandemic, while data on cases and deaths were reported by sex by most countries, sex-disaggregated data on testing, hospitalisation, and admissions to intensive care units were rarely reported. According to Global Health 50/50, 91% of the COVID-19-related health policies were gender-blind.[11] This finding underscores the need for comprehensive sex and gender considerations in future pandemic preparedness and response.[12]

In 2023, for the first time, WHO's 2022 Mid-Term Report presented sex-disaggregated data of its outcome indicators.[13] Despite the potential to disaggregate data by sex for 31 of the 46 outcome indicators tracked in its 13th General Programme of Work (GPW13), only 13 indicators with official WHO estimates currently have available sex-disaggregated data.[14] Although WHO's high-level commitment to gender equality, equity, and human rights are evident in its GPW13, it faces barriers in generating evidence that routinely accounts for sex and gender.

The enduring gender evidence gap arises from insufficient collection of granular data, which hampers meaningful sex-based and gender-based analysis. Comprehensive collection of sex-related and gender-related information is hindered by challenges in data collection, fragmented health information systems, women's under-representation in clinical trials, implicit biases in research priorities and methodologies, and constrained resources. More frequently, data are collected but inconsistently reported and inaccessible, and sex and gender analyses remain ad hoc. This poor reporting reduces transparency and reproducibility, obstructs efforts to address health disparities, and impedes evidence-based policy making and interventions.

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WHO's adoption and systematic implementation of the SAGER guidelines and GATHER will help make the global health research landscape more grounded in robust and inclusive evidence. WHO sets powerful precedents and standards for the world to follow and, leading by example, the institutionalisation of these guidelines will also encourage their application in research, routine health information systems, and health policies. This endeavour relies on cross-sector collaborations, involving civil society, research institutions, member states, and key stakeholders in the research ecosystem. Together, we enhance the impact and benefits of these guidelines.

Collecting, analysing, and reporting data on sex and gender is a crucial stepping stone towards evidence-based actions that fully leverage the transformative role of WHO and health systems in advancing gender equality in and beyond health. In 2023, WHO launched the Health Inequality Data Repository, where 86% of over 2000 indicators are available by sex.[15] The adoption of SAGER guidelines and GATHER further strengthens these efforts and is pivotal within WHO's broader strategic agenda, outlined in the Roadmap to Advance Gender Equality, Human Rights and Health Equity 2023–2030, launched in December, 2023.[16] The Roadmap aims to make the WHO Secretariat fit for purpose to support member states in advancing gender equality, women's empowerment, human rights, and health equity—all integral to WHO's mandate and vision for universal health coverage and leaving no one behind.

WHO must take necessary steps to strengthen capacity at global, regional, and country levels, raise awareness, and staunchly champion the widespread implementation of these guidelines and the actions outlined in the strategic Roadmap. These initiatives are imperative and will propel the organisation to lead towards closing the gender evidence gap.

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Race-based data alone are not enough: a call to action

Arguments supporting the use of race-based and Indigenous identity data have long depended on the belief that states only count individuals who are perceived to matter to the political and economic benefits of these states. Although governments have touted efforts to collect disaggregated data as proactive and protective,[1–3] past and present failures to act systemically on information gleaned from race-based data[4] question the purpose of its collection. Institutional and political agendas that inhibit effective public health strategies to combat systemic racism subvert the value added by disaggregated data. Questioning how and why race-based health data are collected is fundamental to disrupting performative attempts to achieve health equity.

Since the 1990s, the USA, UK, and Canada have consistently acquired data based on race,[5–7] a socially constructed concept that was created to justify the marginalisation of specific populations.[8] The historical background and timing of introducing national racial categories often aligned with distinct periods of discrimination. For example, the US census added "Mexican" as a category in 1930,[9] when President Herbert Hoover's administration scapegoated Mexicans during the Great Depression and forcibly deported about 1 million Mexicans and Mexican Americans from the USA.[10] When race is categorised on the basis of histories of alienation and exploitation, classification standards cannot appropriately and accurately inform how racism is measured in health-care settings.

Throughout this Comment, we refer to racialised populations as people who have historically been and continue to be affected by systemic racism. However, we recognise that racialisation is experienced uniquely