PNAS OPINION

In the wake of USAID cuts, we can create a Demographic and Health Survey Program founded on more equitable data infrastructure and stronger research integrity

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The collapse in USAID support, while regrettable, presents a long-overdue opportunity to reform the DHS model and put in place something even better. Image credit: Shutterstock/Oni Abimbola.

It's now been more than a year since President Trump's dismantling of the US Agency for International Development (USAID), which led to the closure of its Demographic and Health Survey (DHS) Program. In place for decades, the DHS Program produced and shared, free of charge, some of the highest-quality data on population health in low- and middle-income countries (LMICs). Our own analysis found at least 9,000 published studies, reports, and book chapters based on more than 400 DHS surveys in almost 100 countries (Fig. 1).* And the DHS has been instrumental in improving the evidence base for health policies and interventions, particularly in Sub-Saharan Africa and Central and Southern Asia (Fig. 2).

The loss of its data infrastructure is widely perceived as a threat to health and development progress and the regular monitoring of population health and well-being of the most vulnerable populations of the world (1–3). An emergency three-year grant from the Gates Foundation in July 2025 eased the immediate crisis, enabled new surveys in Nigeria and Kenya, and restarted the distribution of data

*We compiled a database of 9,271 documents published after 1984 that used DHS data through a systematic search of the Scopus platform. From there, we extracted and geotagged country information by detecting country names within the title, abstract, and keyword fields of each publication (Fig. 1). These countries were then grouped into regions based on UN classifications (Fig. 2).

Author contributions: J.A.G., K.L.D.M., J.W., E.A.S., M.K., U.G., B.M.J., and L.M. designed research; A.A.N. and L.M. performed research; J.A.G. and A.A.N. analyzed data; and J.A.G, K.L.D.M., M.K., and L.M. wrote the paper.

The authors declare no competing interest.

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Published February 25, 2026.

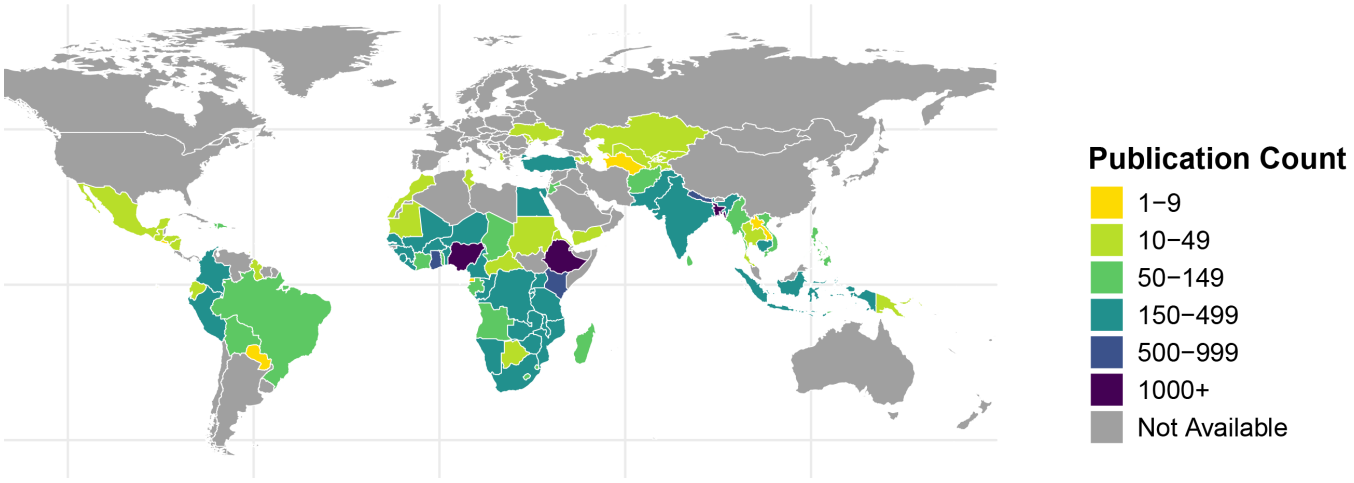

Fig. 1. Number of publications using Demographic Health Survey data since 1985 on countries where DHS surveys were conducted. Data are from Scopus.

to researchers. But the long-term future of the work remains in severe doubt.

Here, we argue that the collapse in USAID support, while regrettable, presents a long-overdue opportunity to reform the DHS model and to put in place something even better. A revitalized DHS should be country-led, less expensive, and more equitable. And it should distribute DHS data as a public good across the world without US gate keeping. This would make the DHS more sustainable and capable of supporting its important work for years to come.

Valuable Insights

There is no doubt that the data and insights generated by the DHS Program over the years have been critically important in fields including maternal health, child health, immunization, HIV/AIDS, maternal mortality, child mortality, fertility, family planning and reproductive health, malaria, and nutrition (4). LMICs themselves use the information to monitor and evaluate national and global programs and to make decisions on health and development. DHS data have also been extensively used by USAID; UNICEF; the United Nations Population Fund (UNFPA); the UN Statistics Division; the UN Population Division; The World Bank; The Global Fund; Gavi, the Vaccine Alliance; the UK's Foreign, Commonwealth & Development Office; and myriad other donors, stakeholders, and researchers to monitor and track global health and population development indicators.

DHS data filled glaring data gaps and, in turn, informed countless country-led programs. A recent UN analysis concluded that DHS surveys provided over half of the data points on national child mortality rates between 1950 and 2023, many of which were for LMICs (5). Women Count, the UN gender data strategy, supported Kenya's government to use the 2022 Kenya DHS to inform policies and development plans that helped create specialized gender-based violence courts (6). In Rwanda, an analysis of the 2020 DHS survey was used by the Ministry of Gender and Family Promotion to reform the country's National Gender Policy, draft a policy on gender-based violence, develop a national men engagement strategy, and inform a change in education policies that allowed teen mothers to go back to school.

But the DHS model had its flaws and its critics. Heavily funded by the US government and run through a US company, ICF International—which controlled who could access the data and under what conditions—LMIC interests were not always represented. And the program was expensive: The USAID contract was worth $237 million for the last five-year period. While other donors and governments of survey countries have increased contributions and covered local costs of data collection—between 2018 and 2024, every $1 of USAID investment in a given survey was boosted with $1.46 from these other sources (7)—the abrupt withdrawal of USAID funding left a sizable gap.

The Gates money offers a temporary reprieve. But the community must now move to devise a more cost-effective replacement for the DHS Program, and one in which LMICs take the lead.

Sharing Data

As we collectively sketch out this possible future, an equally urgent issue must be addressed—one that results from the DHS Program's centralized control of access to data. The termination of the DHS Program leaves a void of information and uncertainty around whether its data will continue to be available beyond the Gates-funded period. This uncertainty has incentivized researchers to informally share DHS data.

We know that DHS data users are acutely aware of the many hours that respondents spend in time-intensive interviews and the financial and organizational resources that national statistical offices invest in the large-scale collection of these data. We understand the fear that these tremendous investments could go to waste if the data are not available. Survey respondents, after all, provided informed consent with the expectation that their data be used to improve population health and well-being.

But there has been no change to the terms that govern DHS data use and dissemination. In other words, researchers who hold datasets are still bound by the original agreement they accepted when granted access. This agreement requires them to use the data only for approved research purposes and refrain from redistribution. Researchers should be aware

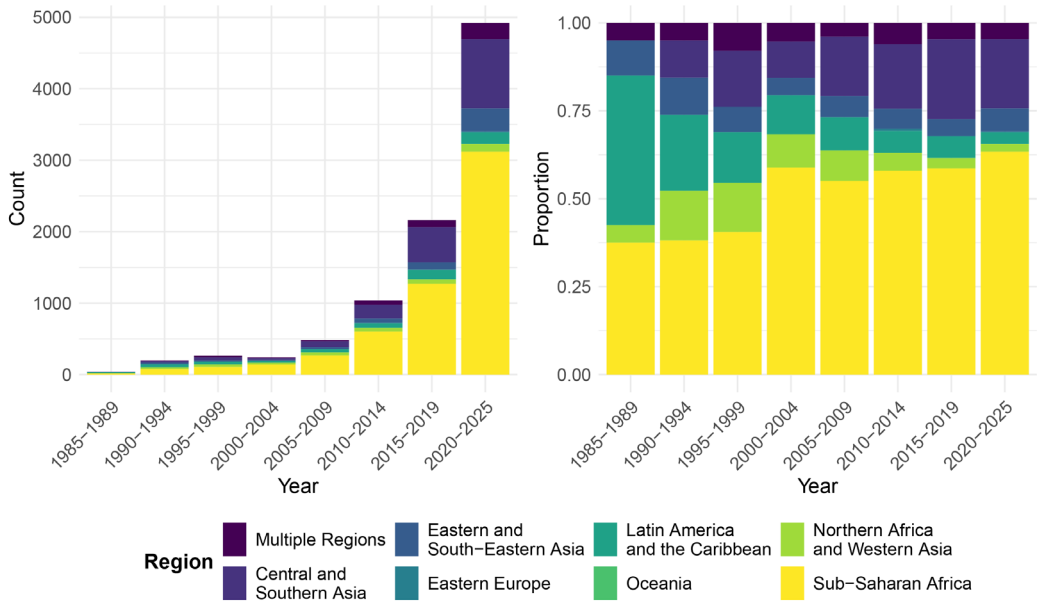

Fig. 2. Publications using Demographic Health Survey data by world region, 1985–2025. *Left* shows counts, while *Right* shows proportions.

that sharing data without authorization, however well-intentioned, may violate the rights of national statistical agencies and of survey respondents. This applies, even though no mention of countries as the data owners is made in the data use agreements.

Informal data sharing also undermines credible academic reproducibility. If a unique original data source is not centrally accessible, and a central mechanism to report and correct errors in the original database no longer exists, there is little to no standardized quality or version control. Dependence on informal research networks to access DHS data could reinforce existing inequalities in data availability and representation in scientific discourse, as it would likely disadvantage researchers from marginalized backgrounds, users from LMICs, and early-career scholars.

It also enables both accidental and malicious data manipulation. This is a grave concern particularly in countries where access to DHS datasets or findings has been blocked, sometimes due to negative political implications. Data also become harder to trace, raising concerns about unapproved uses in sensitive areas like violence against women or HIV status. For example, the DHS Program's terms of data use prohibit use of the data to identify respondents, communities where they lived, or for marketing and commercial purposes (8).

Ensuring Stability

How can continued data availability be ensured in the future? The Gates funding has allowed the DHS website to reopen to disseminate data again, operating under the assumption that the prior agreements with countries to redistribute their data still hold. But this is a temporary solution.

We strongly encourage country statistical offices to make their DHS data available from their own websites to ensure long-term stability and local stewardship. In addition to dissemination from LMICs, the Harvard Dataverse, a widely used open data repository, may provide a viable model for long-term public data storage that preserves country ownership and oversight while ensuring broad accessibility.

We recommend granting unrestricted access to governments, nonprofit researchers, scholars, and students, given that the DHS data have already been anonymized and, in most cases, many years have passed since data collection. At the same time, sensitive data such as geolocations should continue to be protected through additional safeguards by requiring special permission for access.

Beyond the central storage of the data, we also recommend that the harmonized versions of the DHS data be deposited in well-established global data repositories, such as the Integrated Public Use Microdata Series (IPUMS) Global Health repository (9) and the Gateway to Global Aging Data repository (10). New nodes in Africa, Asia, and Latin America are necessary to ensure reliability of access through redundancy.

These efforts will require coordination to ensure that the most recent versions of each dataset are consistently maintained. We recommend the adoption of a standardized data use agreement that can be used across all countries to facilitate access. In related developments, many LMICs have adopted national statistics laws in recent years to legally situate the collection of national data within government entities such as national statistical offices. To adhere to these laws, renegotiation of data use agreements may be necessary. Sustaining the large DHS data holdings will require continued and diversified funding.

Widespread Impacts

The future of other core activities of the DHS Program beyond data dissemination remains uncertain, too. Few details on the objectives of the Gates grant are publicly

available, but no mention is made of most of the previous core activities of the USAID-funded DHS Program, which included research, data dissemination, and capacity strengthening.

> **We call on researchers to join the discussions on next steps, to ensure that the collapse of the DHS Program and future uncertainty of DHS data availability does not go hand in hand with the collapse of research integrity and best scientific practices.**

The DHS Program's Africa-based partnerships with the African Institute for Development Policy in Malawi and the Institut de Formation et de Recherche Démographiques in Cameroon established under the latest DHS round have been terminated, along with US-based partnerships with institutions such as EnCompass and the Johns Hopkins Center for Communication Programs. The DHS website lists only 15 surveys as ongoing (4), compared with 25 when the program was shuttered in March 2025.

Funding cuts for data have gone beyond the DHS, affecting USAID support for national population censuses, health management information systems, logistic management information systems, and civil and vital registration systems, among others. These abrupt and severe changes may not only effectively dismantle core DHS infrastructure and support; they may also affect broader networks of expertise and local capacities and training, impairing stakeholders' capacity to restart survey efforts after the DHS Program's termination.

The Gates grant buys time for countries and stakeholders to develop a new model of data collection, harmonization, ownership, and distribution. This will take multi-institution cooperation and should embrace the opportunity to decolonize and recenter data infrastructure and capacity in LMICs. The DHS Program made important advances in this direction—ensuring that countries implemented surveys and directly owned the data. This independence must continue, so that surveys are owned and implemented locally. And it must be expanded so that countries have greater control of the content, while data continue to inform country governments, as well as global stakeholders and donors.

We urge country governments, donors, and other stakeholders and data users to look ahead and strategically intensify investments into lasting high-quality data collection efforts that offer standardization of indicators and data harmonization and are led by institutions in LMICs. Their expertise and ownership must be central to such advances.

Any new model will still need core leadership—this time based in countries where DHS surveys take place—to ensure global standardization of survey methodology and data harmonization. Such local leadership could ensure that priorities reflect the needs of the LMICs, to monitor internal and external goals for population health. For example, many countries face dual burdens of communicable and noncommunicable diseases and need data on the adult population beyond the reproductive years that DHS historically covered.

International Collaboration

To help build this future model, researchers could turn to underutilized high-quality diverse data sources. These include the Health and Demographic Surveillance Systems, Civil Registration and Vital Statistics systems, census microdata files, UNICEF's Multiple Indicator Cluster Surveys, the Young Lives Study, the Living Standards Measurement Study, routinely collected national health system data, and countless nationally led data collection efforts. While these data are not a replacement for DHS, they could fill gaps in the short term and offer new opportunities in the long-term—provided these data remain consistently available across countries.

Increased use of alternative data sources would help streamline future data collections across surveys and support the development of new survey and analysis tools. Diversifying the use of population data sources could also minimize redundancy in future data collection efforts and so make them more cost-effective.

Such a shift also has the potential to extend the research topics under investigation, the hypotheses that can be tested, and the methodologies that can be employed. It could accelerate urgent research on emerging challenges that populations are facing in the context of climate change, pandemics, conflict, and other major stressors.

Researchers should expand cross-national research collaborations, particularly among LMIC scholars and high-income-country scholars, to harmonize different data sources. And they should make their methodologies publicly available to encourage reproducibility. Embedding this work into local institutions, including national statistical offices and universities, could lower costs further.

To assist, the DHS Program's Code Library on GitHub offers several repositories that researchers can draw on to produce indicators used in the standard DHS report chapters, as well as carry out advanced data linkage and statistical analyses. We invite researchers to share their code for analyses that innovatively link DHS with other diverse data sources. Only in this way can the field produce studies with a cross-national perspective at rapid speed, which can complement and motivate country-centered research.

All of this is a starting point, prompted by fears that a dark age for health data may be looming for LMICs (2). We call on researchers to join the discussions on next steps, to ensure that the collapse of the DHS Program and future uncertainty of DHS data availability does not go hand in hand with the collapse of research integrity and best scientific practices. It should instead prompt an intensified collaboration for global data access with actors in LMICs on vital lines of scientific inquiry.

Equity and accessibility must be the central principles that guide how we rebuild DHS data collection and access. Only then can we empower countries to achieve health and development goals.

ACKNOWLEDGMENTS. J.A.G., A.A.N., and J.W. acknowledge support from the Leverhulme Trust (Grant RC-2018-003) for the Leverhulme Centre for Demographic Science and from Nuffield College at the University of Oxford. J.W. and U.G. acknowledge support from UK Research and Innovation Grant EP/Y031172/1. A.A.N. acknowledges support from the Economic Social Research Council through Connecting Generations Centre Grant ES/W002116/1.

J.A.G. thanks Ridhi Kashyap and Jonas Schöley for helpful discussions and Vincent Straub for useful ideas on the article's format. L.M. thanks William Dow and Bas Weerman for insightful suggestions.

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