Exploring system drivers of gender inequity in development assistance for health and opportunities for action [version 1; peer review: 3 approved with reservations]

Doris Bartel¹, Amanda Coile², Annette Zou³, Adolfo Martinez Valle⁴, Hester Mkwinda Nyasulu⁵, Logan Brenzel⁶, Nosa Orobaton⁶, Sweta Saxena⁷, Paulina Addy⁸, Sita Strother², Modupe Ogundimu⁹, Banny Banerjee³, Dyness Kasungami¹

¹Independent, Washington, District of Columbia, USA
²JSI Research and Training Institute, Inc., Arlington, Virginia, 22202, USA
³Global ChangeLabs, Portola Valley, California, 94028, USA
⁴Health Policy and Population Research Center (CIPPS), Universidad Nacional Autónoma de México, Mexico City, 04510, Mexico
⁵White Ribbon Alliance, Malawi, Lilongwe, Malawi
⁶Bill & Melinda Gates Foundation, Seattle, Washington, 98109, USA
⁷U.S. Agency for International Development (USAID), Washington, District of Columbia, 20523, USA
⁸Women in Agricultural Development, Ministry of Food and Agriculture, Accra, Ghana
⁹National Health Insurance Scheme, Abuja, Nigeria

Abstract

Background: Deep-rooted and widespread gender-based bias and discrimination threaten achievement of the Sustainable Development Goals. Despite evidence that addressing gender inequities contributes to better health and development outcomes, the resources for, and effectiveness of, such efforts in development assistance for health (DAH) have been insufficient. This paper explores systemic challenges in DAH that perpetuate or contribute to gender inequities, with a particular focus on the role of external donors and funders.

Methods: We applied a co-creation system design process to map and analyze interactions between donors and recipient countries, and articulate drivers of gender inequities within the landscape of DAH. We conducted qualitative primary data collection and analysis in 2021 via virtual facilitated discussions and visual mapping exercises among a diverse set of 41 stakeholders, including representatives from donor institutions, country governments, academia, and civil society.

Results: Six systemic challenges emerged as perpetuating or contributing to gender inequities in DAH: 1) insufficient input and leadership from groups affected by gender bias and discrimination; 2)
decision-maker blind spots inhibit capacity to address gender inequities; 3) imbalanced power dynamics contribute to insufficient resources and attention to gender priorities; 4) donor funding structures limit efforts to effectively address gender inequities; 5) fragmented programming impedes coordinated attention to the root causes of gender inequities; and 6) data bias contributes to insufficient understanding of and attention to gender inequities.

**Conclusions:** Many of the drivers impeding progress on gender equity in DAH are embedded in power dynamics that distance and disempower people affected by gender inequities. Overcoming these dynamics will require more than technical solutions. Groups affected by gender inequities must be centered in leadership and decision-making at micro and macro levels, with practices and structures that enable co-creation and mutual accountability in the design, implementation, and evaluation of health programs.

**Keywords**
gender, gender inequity, development assistance for health, system analysis, co-creation, power, gender transformative, health system.
Introduction
Deep-rooted and widespread gender-based bias and discrimination threaten the achievement of the Sustainable Development Goals (SDGs) (https://sdgs.un.org/goals), including ensuring healthy lives and well-being of people at all ages and gender equality as a fundamental human right. Here, gender refers to the culturally defined roles, responsibilities, attributes, and entitlements associated with being, or being perceived as, female or male in a given setting, commonly learned through socialization, along with related social and structural power dynamics.

Gender is one of many social determinants that contribute to health and development outcomes. Gender norms can shape institutional systems and practices, including whether and how the health needs of certain groups of people are acknowledged, whether they can access resources such as health care, and whether they can realize their choices and rights. Gender bias and discrimination in institutions and national health systems enables practices and policies that produce inequitable health and gender outcomes. These inequities are socially produced, systematic in their distribution, avoidable, unfair, and unjust.

A growing body of evidence suggests that eliminating or mitigating gender and health inequities contributes to better health and development outcomes. However, despite decades of global commitments and advocacy by women’s groups and scholars, resources and effectiveness of efforts to reduce gender inequities in development assistance for health (DAH) investments have been limited or insufficient. Scholars and feminist activist groups are asking why actions are weak, resources small or ineffective, and progress is slow. A complex and multifaceted set of contributing factors is possible. For example, recent studies show that global health institution accountability for and implementation of gender policies and practices are inadequate. Gender bias and inequities pervade the leadership, organizational structures, and culture of global health institutions such as donors, international nongovernmental organizations (INGOs), and multilateral agencies. Furthermore, some studies suggest that broader system dynamics and power asymmetries between actors in DAH play a role in shaping the way that health systems are conceptualized, funded, governed, and implemented, and can inadvertently reinforce gender and health inequities.

There is growing recognition within the global health community that complex and protracted challenges such as gender and health inequities require a deeper understanding of the linkages, relationships, interactions, and behaviors of such actors. While there has been significant research in how system dynamics and power asymmetries between actors in global health aid play a role in shaping health systems, no studies, to our knowledge, have examined the drivers of gender inequity across the broader landscape of DAH.

A systems approach to gender and health inequities
Systems theory, an interdisciplinary field of science that analyzes the dynamic interactions of interrelated, interdependent parts that make up a complex whole, has gained attention as relevant for health systems analysis and interventions. Application of systems theory can benefit the exploration of macro-level dynamics affecting complex and protracted issues, making it a useful basis for exploring the drivers of gender and health inequities in DAH. Systems approaches have been used in social intervention research, such as studies examining interventions that tackle intimate partner violence. However, there are relatively few studies that use a systems approach to analyze progress in minimizing gender and health inequities. Moreover, the operant dynamics and drivers in the landscape of DAH that reinforce gender bias are poorly documented.

The field of systems approaches is evolving. Diverse approaches are emerging from different fields of study, epistemologies, and contextual boundaries. Many such approaches focus on describing the system, without emphasis on opportunities for change. In contrast, System Acupuncture® is a theory and method that enables the design of innovative, actionable, and synergistic interventions that drive deep and sustained transformation of system behaviors and outcomes. The System Acupuncture® approach adds value by enabling engagement of diverse actors in understanding the complexity of system drivers in gender inequity in DAH and identifying opportunities for system-level transformation.

Framing and purpose of this paper
This paper builds on prior work examining the shifts needed in DAH to facilitate a redistribution of power, and coordination and accountability between countries and donors in designing health technical assistance (TA) interventions. Such shifts are needed to foster more resilient health systems and sustained...
health outcomes. We anticipate that efforts to redistribute power in ways that center local stakeholders in decision-making and build mutual accountability cannot be fully realized without addressing gender inequities.

The objective of this paper is to identify systemic challenges in DAH that are perpetuating or contributing to gender inequities, with a particular focus on the role of external donors and funders. In this paper, we map and analyze interactions between donors and recipient countries and articulate drivers of gender inequities within the landscape of DAH. As a basis for exploring and identifying actionable steps to improve gender and health equity outcomes, we aim to highlight systemic issues that impede or slow progress in addressing gender and health inequities in DAH.

**Methods**

**Study design**

The work presented in this paper was conducted as part of a broader initiative led by the Inter-agency Working Group (IAWG) for Capacity Strengthening to co-create a systems’ understanding of capacity strengthening in the context of global DAH.

Using the methods and tools from System Acupuncture®, we took a structured process consistent with social constructivist approaches to enable system actors to collectively understand and improve a complex adaptive system. For the IAWG initiative and this paper, the scope of the system is defined by the complex relationships of actors and institutions interacting within the landscape of DAH, and the norms that inform their behaviors and decisions.

The IAWG aligned around a set of critical shifts for capacity strengthening (Figure 1), which outlines a vision for more country-driven, coordinated, and equitable health investments. These critical shifts served as a framework to co-create a systems understanding of capacity strengthening and collectively investigate ways to improve programming in DAH. The initiative’s hypothesis was that application and realization of the critical shifts by actors in the system would enhance the capacity of global health institutions to deliver sustained health outcomes. A gender lens was prioritized as part of the process in recognition that gender bias and inequities are manifest throughout the global health landscape, and the critical shifts and desired impact from health investments cannot be fully realized without addressing these factors.

Primary data were collected and analyzed via facilitated discussions and visual mapping exercises (described below) to develop and iterate emerging themes, explore insights from stakeholders, and refine the maps to reach a shared understanding of system dynamics across the DAH landscape. The discussions helped articulate and clarify the perspectives and experiences of a diverse set of stakeholders, which included donors, national government ministry representatives, academia, and civil society. This iterative virtual engagement was facilitated by the secretariat over nine months in 2021.

Guided by the System Acupuncture® approach, we undertook the following steps:

**Desk Review:** We conducted discussions with the IAWG and completed an iterative and non-systematic literature review to inform the system mapping process. The literature review was based on Google Scholar and PubMed searches using multiple permutations of search terms: gender, power, social determinants, social accountability, development assistance for health, donor, and health system. An iterative approach was applied, refining terms and adding articles from sources cited as the review proceeded. Sources were selected on the basis of relevance to the topic of gender, power, and development assistance for health. The literature review was limited to English language sources from the years 2000 to 2022. In total, 52 peer-reviewed journal articles and nine relevant reports and commentaries were reviewed. Systematic analysis of the sources included thematic coding for themes based on questions driving the review, including:

(1) How do gender bias, discrimination and power dynamics manifest in national health systems, and how do gender inequities contribute to poor health?; (2) How do gender bias, discrimination and power dynamics manifest in the landscape of donor assistance for health?; (3) How does donor assistance for health programming succeed or fail to support attention to gender bias and discrimination?

**Mapping the system:** System maps were used to co-create, describe, and visualize the multi-dimensional view of causal connections between individual drivers in the system. Drivers refer...
<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aligning to donor/funder driven priorities &amp; decisions</td>
<td>Aligning to country driven priorities &amp; decisions</td>
</tr>
<tr>
<td>2. Creating technical &amp; financial dependence</td>
<td>Respecting sovereignty &amp; fostering independence</td>
</tr>
<tr>
<td>3. Following structures &amp; standards that erode trust</td>
<td>Collaborating on the basis of trust &amp; mutual accountability</td>
</tr>
<tr>
<td>4. Driving fragmented short-term efforts &amp; resource allocation</td>
<td>Driving strategic &amp; coordinated investments across the system for long term change</td>
</tr>
<tr>
<td>5. Using generalized &amp; solution-centric approaches</td>
<td>Using approaches that contextualize &amp; respond to the needs of the problem</td>
</tr>
<tr>
<td>6. Designing programs that are static, rigid &amp; compliance driven</td>
<td>Designing programs that are adaptive, iterative &amp; foster innovation</td>
</tr>
<tr>
<td>7. Focusing on increasing capacity in TA recipients</td>
<td>Strengthening capacity of individuals, institutions and the entire system</td>
</tr>
<tr>
<td>8. Contributing to systems that perpetuate gender &amp; power inequity</td>
<td>Fostering systems that promote equity in gender &amp; power</td>
</tr>
<tr>
<td>9. Providing limited opportunities or mechanisms for community feedback or dissent</td>
<td>Promoting feedback &amp; learning between communities &amp; donors/funders</td>
</tr>
</tbody>
</table>

Shift from a system where priorities, models, and structures are imposed on countries by donors/funders, to one where communities and governments own and lead the agenda-setting and coordination of health programming. In this way, donors/funders are playing a complementary, supportive role, listening and responding to local needs and priorities.

Shift from a system that depends on continuous donor/funder support for survival to one that builds on existing local governance and structures, leverages in-country capacity, and prioritizes sustainability through local resources and expertise.

Shift from a system that perpetuates power structures and mistrust in institutions and individual motivations to one that fosters mutual understanding of differing cultural norms and power dynamics, and promotes accountability across different levels and stakeholders (funders, government, implementers, etc.).

Shift from funding siloed, fragmented, and piecemeal efforts to investing in long-term gains and system-based approaches that align with country priorities. Allocate or mobilize the resources necessary to meet the true cost of the health challenge.

Shift from predefined and uprooted solution-driven approaches (e.g., ‘one-size-fits-all’, ‘best-practice-led’, ‘cookie-cutter-solutions’) to approaches that seek to understand the local context and adjust to suit local needs. Understand why past projects succeed or fail before scaling or discontinuing them and to inform new program design.

Shift from a system driven by static, inflexible, and standardized program design (i.e., timelines, activities, metrics, etc.) to one that emphasizes monitoring, evaluation, research and learning, and supports programs designed for flexibility and agility to navigate unprecedented challenges and innovate unprecedented solutions focused on making sustainable impact.

Shift from a system that presumes capacity gaps in TA/CS recipients to one that recognizes the need for institutions, structures, and all stakeholders involved in TA/CS to synergistically improve their capacity to enhance impact efficacy.

Shift from taking actions that are blind to gender and power inequities and perpetuate hierarchical structures driven by privilege and power to recognizing the role and importance of gender equity in health outcomes. Create a conscientious ecosystem, driving towards greater equity in gender, power, and other forms of inequity.

Shift from systems that are closed to community-driven feedback or dissent to drive systems that foster feedback and learning across multiple levels (e.g., communities, implementers, governments, and donors/funders). Decouple funding power with the right to evaluate and enable all stakeholders to contribute to decisions and evaluation.

**Figure 1.** Critical shifts for capacity Strengthening.
to identifiable forces (i.e., structural, policy, and funding decisions or behaviors) that can influence different elements of the system to act in specific ways (in this case, perpetuating gender inequities in the DAH landscape). The maps were then reviewed, discussed, and honed through a virtual co-creation workshop as part of the broader system mapping exercise. The workshop was held over two days in April 2021 and convened 41 people from 13 countries. Participants included representatives of government, civil society, funding institutions, academia, and implementing agencies. The IAWG members and the Secretariat identified participants within their networks who could bring diverse perspectives on how health funding and TA is structured at various levels and how donor processes, models, and norms constrain or amplify health system capacity strengthening and sustainable health outcomes. Participants were selected to ensure diversity in background, institutional affiliation, geography and perspectives in order to co-create a systems view.

A subset of six participants, facilitated by a gender expert, explored dynamics and drivers related to gender and health inequities that are slowing or impeding progress in DAH. During the workshop, participants used a collaborative virtual whiteboard tool to capture and depict specific behaviors, dynamics, and characteristics of donor and country stakeholder group interactions that hinder progress to reduce gender and health inequities, as they experienced them in their context.

Synthesizing key challenge areas in the system: We then synthesized the content developed by the workshop participants by spatially arranging the drivers into three broad contexts based on where the policy or funding decisions, behaviors, or actions occur: the donor space, the country space, and the space where they intersect. The synthesis resulted in the identification and mapping of six key systemic challenges (referred to hereafter as ‘syndromes’) that highlight a collection of system drivers that pose barriers to the critical shifts and ultimately to gender and health equity.

Iteration and expansion of six system syndromes: The same subset of six participants from the original workshop and several IAWG and secretariat members participated in two follow-on virtual co-creation sessions to iterate and expand on these six syndromes. In addition, three semi-structured key informant interviews were held with gender experts with expertise in DAH, gender institutional capacity-strengthening or health system capacity strengthening, to validate the findings.

Ethical statement

All data collection was carried out through a facilitated co-creation process, including one virtual workshop and a series of discussions. The process elicited impersonal and anonymous feedback from selected participants. To ensure privacy and confidentiality, participant insights were gathered anonymously via a virtual whiteboard tool.

In the first phase, co-creation workshops, oral consent to collect inputs and record sessions was obtained from all participants at the start of the workshop sessions, per standard practice for minimal risk interactions. Participants were assured of confidentiality and that all findings would be anonymized and provisions made for the protection of privacy and confidentiality of the participants and the information they provided. No individual interviews were conducted. All inputs were collected and analyzed with complete anonymity and are therefore unable to be linked to a single individual. The project team did not seek ethical approval for the first phase because we determined the activities were exempt, given that they did not constitute human subjects research as described under US HHS regulation 45 CFR 46(e)(1). In the case of the workshops, the information obtained was not about the participants, but rather their expert opinions and feedback.

In the second phase, small group discussions, the JSI institutional review board deemed the process and tools exempt from full review under CFR 46.101(b)(2), which covers survey activities without identifiers or sensitive questions that could result in harm; no participants in the study were minors (less than 18 years of age). Written informed consent was obtained from participants during this phase of the initiative, since it involved meetings with a smaller group of participants and thus inputs could not be fully anonymized.

Results

Six syndromes that slow or impede progress in gender equity in DAH

The mapping and co-creation processes resulted in: 1) a series of conceptual maps of the drivers of gender inequities within the landscape of DAH, 2) diagrams describing potential change points, and 3) a graphic representing the participants’ views on priority action steps by donors. The six syndromes that emerged from the co-creation process reveal distinct yet interconnected system dynamics driving barriers to achieving gender equity and health outcomes. The term syndrome represents a set of concurrent events that form an identifiable pattern or a group...
of signs and symptoms that characterize a particular abnormality. By naming the thematic areas syndromes, we ask the reader to consider a metaphor for the system as a body in need of healing. The six syndromes highlight patterns of dysfunction in the system that are badly in need of repair.

Each syndrome is depicted visually (via a system map) and through a narrative summary. The narrative and maps should be read side-by-side to enhance understanding of the system dynamics. In the graphics, each circle represents a driver in the system. The circles are arranged spatially to show where the drivers are in one of three spaces: 1) donor (left); 2) country (right); and 3) interaction (middle) (i.e., between donors and funding recipients). The spatial arrangement of these drivers and their connections is designed to help the reader understand and explore where the drivers originate, and how they interact, for the ultimate purpose of identifying solutions. The lines between circles suggest a causal relationship in the direction of the arrow. The thicker arrows highlight important connections in the system, including feedback loops (i.e., cyclical clusters of drivers that reinforce each other, amplifying their effect and perpetuating a set of system behaviors).

While the six syndromes are depicted separately below, they are interconnected. Thus, while many syndromes touch on overlapping themes, they are explored from different angles. Overall, the syndromes should not be interpreted to reflect the behaviors of particular donors or countries, nor as manifesting in all contexts or donor initiatives. Rather, they represent the synthesis of experiences and perceptions that surfaced through the methods described above.

**Syndrome one: Insufficient input, feedback, and leadership from groups most affected by gender bias and discrimination render programs less effective (see Figure 2)**

There are limited opportunities for community-level groups or civil society organizations with gender expertise to co-create, lead, or give feedback about DAH programming. Health programs and decisions tend to be made by national-level policy makers and technocrats, or international implementers, who often lack sufficient information about gender and health inequities. Short timeframes and insufficient resources limit opportunities for co-creation or consultation with civil society or health system stakeholders with gender expertise. Furthermore, donor funding processes and national health programs lack robust citizen engagement and mechanisms to incorporate the perspectives and leadership of local groups. In particular, women and other socially marginalized groups lack awareness of and access to platforms to voice their concerns, share pertinent information, and assume leadership roles for health system decision-making. Local civil society groups that have compiled research findings, developed local solutions, or even demonstrated achievements in reducing gender inequities in their communities may be partially or fully excluded from health program planning. Without their input and participation, health programs are designed and implemented without a full understanding of local gender and health inequities and their drivers.

![Figure 2. Syndrome 1: Insufficient input, feedback, and leadership from groups most affected by gender bias and discrimination render programs less effective.](image-url)
**Syndrome two: Decision-maker privilege creates blind spots and inhibits capacity to address gender and health inequities (see Figure 3)**

Decision-makers at high levels (whether donors, national policymakers, or technocrats) may not sufficiently prioritize actions to remedy gender disparities. One contributing factor is the influence of biases. DAH decision-makers who plan, fund, implement, and evaluate health programs often come from economic or social privilege, and their unearned privilege and power can contribute to inherent bias and blinders about gender and health inequities. For instance, decision-makers may assume that they have the expertise needed to address gender. Furthermore, a biomedical worldview, which tends to under-emphasize sociological sciences, permeates DAH. Such preconceptions can lead to overly mechanistic or simplistic ways of understanding and addressing gender in programs that fail to dismantle the root causes of inequities. The assumption that high-level health experts can remedy local gender inequities also contributes to the underuse of community gender experts, whose input is needed.

**Syndrome three: An imbalance in power dynamics contributes to insufficient allocation of resources for and attention to gender priorities in health programming (see Figure 4)**

The imbalance of power in the funder-recipient relationship contributes to the de-emphasis of gender priorities in allocation of resources. Health institutions across the DAH landscape tend to use top-down leadership and operational models. Funding
tends to be allocated to government health entities or INGOs, with accountability requirements that incentivize implementing agencies to emphasize donor priorities over those of groups most affected by gender discrimination. Donors tend to underestimate the resources and time needed to address root causes of gender and health inequities, typically relying on a ‘check-box’ approach for integrating gender in program design and measuring progress. Recipients, afraid that resources will be withdrawn, rarely question donor assumptions about timelines and costs for gender priorities. Tensions about who is making decisions, why, and for whom, exist within and among recipient organizations and are particularly acute for those that have small budgets and struggle to survive.

**Syndrome four: Donor health funding approaches, conditions, and requirements pose limitations to addressing gender inequities effectively**

(Figure 5)

Funding structures for DAH can limit the efficacy of approaches to overcoming gender inequities in a number of ways. First, donor funding is structured to advantage large grants or contracts to reduce administrative costs and time and is tied to accountability measures for specific health outcomes. Local groups with gender expertise typically do not have access to information about availability of the funds or are unable to compete for this funding because of stringent accountability requirements. This contributes to a lack of genuine engagement and co-creation with local civil society organizations and stakeholders who have the requisite expertise. Stringent donor monitoring and evaluation mandates that focus on attribution of the funding to specific health outcomes leaves insufficient time and resources to track gender factors that contribute to social determinants of health. Health program reporting is typically structured for and provided directly to the donor. Critical gender inequity program information is seldom reported to decision-makers or used to share learning about gender issues with program participants and affected populations. This along with funding firewalls also limit the ability to adapt to emerging contextual changes. Beyond these factors, there is general insufficient allocation of time and resources to focus on gender outcomes in health programming and enable holistic, integrated approaches to gender in health system strengthening.

**Figure 5. Syndrome 4: Donor health funding approaches, conditions, and requirements pose limitations to addressing gender inequities effectively.**
**Syndrome five:** Fragmented programming contributes to a lack of coordinated and systematic attention to the root causes of gender inequities (see Figure 6)

Despite significant efforts to achieve better coordination, fragmentation is an enduring feature of health financing and programming. In general, coordinated frameworks or goals related to gender inequities among and across donor organizations are lacking, which contributes to a deprioritization of gender as a crosscutting issue. Donor-funded health programs tend to have limited resources for coordination across sector stakeholders for crosscutting issues like gender inequity, perhaps because they are more difficult for donors to administer. Large funding tranches available to a few competitors can incentivize organizations or consortium groups to work against each other or withhold information, further impeding collaboration and coordination. Government agencies and teams leading gender integration efforts across health or other sectors seldom have adequate staff or financial resources for such coordination efforts, leading to unsystematic attention to gender inequities. Despite this, DAH programs rarely focus on fixing these crosscutting and coordination challenges.

**Syndrome six:** Vicious cycles in data bias contribute to insufficient understanding of and attention to gender inequities (see Figure 7)

Donors, national policy makers, and health technocrats may rely on incomplete or overly generalizable data to make decisions, which ultimately perpetuates gender and health...
inequities. DAH programs and national health systems have common gender data weaknesses. Emphasis on siloed programs in global health that focus on singular health or disease areas hinder capacity and resources to understand and overcome system-wide challenges like gender inequity. In national health information systems, data are rarely collected and disaggregated in ways that provide nuance to reveal gender inequities (and other social inequities) and their contribution to poor health outcomes. Data relevant to explaining gender and health inequities (e.g., son preference, women’s mobility and ability to make decisions about their own bodies) may be overlooked by donors or country technocrats when making decisions about health investments. There is also a preference for and over-reliance on quantitative over qualitative data, which can limit understanding of gender dynamics. Furthermore, health programs lack input and feedback from populations affected by gender and health inequities, or other gender experts, about whom data are important for decision-making. These factors contribute to insufficient recognition of the role of gender inequities in poor health outcomes, and thus, to the perpetuation of gender and health inequities.

Discussion

Using a systems approach and co-creation with a diverse group of stakeholders, we explored and identified six syndromes impeding progress in addressing gender and health inequities within DAH, with a particular focus on the donor space.

While the drivers in the six syndrome maps do not reflect how challenges manifest in all cases, the findings are widely reflected in the global health literature. For instance, studies confirm that gender and power asymmetries affect the staffing, conceptual and operational models, decisions, and information flow in global health institutions, impeding progress in effectively addressing gender and health inequity.7,21,31. Evidence also indicates that many leaders of global health organizations represent groups with societal, historical, and educational privilege that typically lack insight into the realities of gender and other forms of discrimination in low- and middle-income countries.25,31,43. Another factor is the insufficient tracking of data about gender inequity, which contributes to gender being overlooked in health programs.21,23,31,50. Rigid funding requirements and structures, including short budget cycles and timeframes, funding thresholds that are too high or too low, and stringent audit or reporting requirements, also limit efforts to tackle gender and health inequities.21,33. These restrictions, coupled with a competitive funding environment, may also contribute to poor coordination, hinder gender mainstreaming efforts, and even contribute to harmful fractures in networks and social movements working to collectively overcome gender and health inequities.21,31,50.

Despite numerous calls for localization of aid and co-creation processes, local civil society groups and women’s organizations typically have limited leadership roles in health programs.23,60–62.

Overall, there is a fundamental ideological tension in DAH between its explicit and implicit objectives. Our findings depict how, despite an explicit goal to improve health and health equity in low- and middle-income countries, at a systems level, DAH appears to be implicitly structured to maintain power over and distance from people most affected by gender inequities—the very people it aims to serve. For instance, as reflected in syndromes one, three, four, and five, DAH funding limits engagement and leadership of those most affected by gender inequities and reinforces power imbalances that favor donors. The findings confirm that the drive toward progress on gender equity in DAH is a political project more than a technical one, requiring shifts in power and relationship dynamics at micro and macro levels.40,30,64.

The six syndromes presented in this paper offer insight into the key systemic barriers to an improved DAH model, as reflected by the critical shifts. The future model of DAH must be fundamentally reoriented to function with, for, and led by groups affected by gender inequities. Below are promising practices for disrupting the syndromes and advancing gender-transformative programs in DAH. These are presented as preliminary areas for consideration, rather than prescriptions. Co-creation of solutions that transform the system will require further coordinated analysis, dialogue, and action.

Reflect on institutional biases and move toward approaches that shift or share decision-making power

There are growing calls for global health institutions to face their own biases, shift mindsets of privilege, and adopt practices that correct power imbalances.51,65. Such processes are not amenable to checklists or prescriptive approaches, but require both safe spaces to talk about personal biases, cultural beliefs, and practices, and endorsement of the work by leadership.56–68. An integrated approach to increasing participation and engagement of underrepresented groups is essential to achieving diversity and inclusion within an organization, though other efforts are needed to complement

1Gender transformative refers to policies and programs that seek to transform gender relations to promote equality and achieve program objectives by: 1) fostering critical examination of inequalities and gender norms, roles, and dynamics; 2) recognizing and strengthening norms that support equality and an enabling environment; 3) promoting the relative position of women, girls, and marginalized groups; and 4) transforming the underlying social structures, policies, and broadly held social norms that perpetuate gender inequalities.69.
During implementation and evaluation, a country coordination mechanism that enables discriminatory health practices. To do this, donors and other global health institutions need to prioritize approaches to health that build on context-specific knowledge and values, with spaces for reflexive learning and dialogue that welcome diverse voices.

There is also a need to restructure the donor-recipient relationship. Shifting power dynamics between donors and grantees requires recognizing their complementary skills, expertise, and interdependence in achieving common objectives. Mechanisms for candid reflection and shared learning, trust-building, and mutual accountability are important components of this. One such approach is a mechanism for confidential and anonymous feedback. Some donors have implemented community advisory committees in their grant-making processes, which offer a formal platform for transparency about a funder’s plans at the country level and for members of affected populations and civil society organizations that represent them to provide input about the proposed interventions.

Beyond engagement, some donors are embracing participatory grant-making models that aim to shift or share decision-making power about funding. These range from building in more representation of affected groups as advisors and funding decision-making bodies to ceding decision-making power about funding strategies and criteria to the communities and groups that funders aim to serve.

Create leadership and funding opportunities for groups most affected by gender and health inequities

The leadership of grassroots civil society groups focused on gender issues in program design phases can improve the contextualization of issues that may be missed in standard gender assessments, and ensure that projects are relevant, responsive to the needs of participants, and sustainable. Donors are called on to create opportunities for consultation and leadership of these groups, enabling them to exert influence on health programming.

Where they do not exist, donors can support civil society engagement mechanisms as a foundational step. Such mechanisms can reveal issues of unintended harm or opportunities for program modifications that improve effectiveness. For example, the Global Fund to Fight HIV, TB, and Malaria established dialogues to optimize input and transparency at country level. These dialogues emphasized involvement from a wide range of civil society stakeholders, including most-at-risk populations, in the program design phase. During implementation and evaluation, a country coordination mechanism or community advisory committees provided opportunities for dialogue and feedback from local stakeholders.

Increase and restructure funding to gender and health equity advocates and stakeholder groups, including local women's organizations

Donor funding that enables collective efforts by country-based or regional health and gender coalitions has been shown to facilitate successful efforts to address gender inequities and achievement of outcomes. Donors are called on to increase accessibility of funds to local groups working to achieve health and gender equality. Mechanisms for increasing accessibility include offering different funding tranche sizes to accommodate needs and capacities of local groups; structuring funding so that it can be accessed by gender advocacy networks, coalitions, and cross-sector working groups; structuring funds in a way that supports core funding; being responsive to the needs of grantees and adaptable to a changing political context; and building in adequate timelines and resources. When unable to provide grant funding directly, donors should consider re-granting and other flexible mechanisms that allow funds to be allocated from larger institutions to smaller groups.

Furthermore, donors can structure funding for planning and exit strategies in ways that build sustainability for gender-focused civil society groups to engage with government health counterparts through specific planning, catalytic, bridge, or exit grants. Beyond greater support for local civil society actors, donors should fund crosscutting governmental institutions tasked with integrating gender.

Implement coordinated approaches to reduce fragmentation of gender efforts

Some donors have begun restructuring funding to overcome the challenge of fragmentation in gender and health efforts. For example, the government of Ireland has established standard resources for ensuring cross-sectoral linkages across partners and government sectors on gender issues. The government of Switzerland’s approach includes basket funding for gender-related activities. Other donors have opted to create pooled funding mechanisms via multi-donor collaborations that incorporate incentives for harmonized efforts in addressing gender.

Donors are also being called on to finance and convene platforms for demand-driven multi-stakeholder co-learning including groups most affected by gender and health inequities. Some donors have added resources for groups typically excluded from DAH, such as grassroots civil society organizations and activists. Other donors are providing funding that enables multi-institution efforts to address gender and health inequities, such as supporting networking and coordination across diverse social movement actors.
Generate and improve access to complete, reliable, and useful information for addressing gender and health inequities

Donors can support improved gender and health equity outcomes by enabling equitable analysis of and access to gender-specific data and information. The World Health Organization has partnered with national governments to strengthen capacity to analyze which constituents are missing from health service data and why\textsuperscript{46-49}. Such tools can help donors and health policy makers set priorities by identifying the largest health inequities within a country. However, more in-depth measures and tools are required to explain why inequalities exist. Better measures are needed to examine who has what (access to resources); who does what (division of labor and everyday practices); how values are defined (social norms); who decides (rules and decision-making); and who benefits\textsuperscript{40}. Donors are called to support research to design gender-specific measures that can be used to assess structural elements of gender (such as gender norms, policies, and institutional practices), beyond individual aspects of gender discrimination\textsuperscript{41}. Stronger collection and analysis of data on structural and systemic gender factors will facilitate a deeper understanding of how interventions work and how to evaluate system-wide efficacy\textsuperscript{20,29}.

Beyond incorporating more explanatory gender measures, donors are called to improve their mechanisms for gathering and using data to make decisions. Donor funding that supports civil society advocacy groups to access and translate health information for policy makers has been shown to support improved health services\textsuperscript{42}. Models with more inclusive methods of data collection and open data sharing and sustained human capacity are showing promise in supporting a more equitable data landscape\textsuperscript{40,44}.

Limitations

The findings presented in this paper were informed by a co-creation process to develop a shared understanding of system drivers of gender inequity in DAH. The results are therefore shaped by the perspectives and insights drawn from the lived experiences of the initiative participants and are not exhaustive or representative of all contexts. For instance, we were not able to engage a wide cross-section of representatives across geographic areas or linguistic backgrounds, or to engage a wide cross-section of representatives in similar co-creation exercises. The scenarios depicted in the syndrome maps should not be interpreted as an absolute or holistic view of how gender inequity manifests, nor do they reflect the nuances of individual donor modalities or country or community contexts. Rather, the specific drivers and dynamics portrayed in the syndromes are examples of underlying factors of gender inequities in a highly dynamic and complex system.

Areas for additional exploration

This initiative explored systems dynamics affecting gender inequities in health, with a particular focus on the donor space. The six syndromes represent an overview of the drivers; each syndrome would benefit from further analysis. In the dynamic complexity of DAH and global health, a fuller conceptualization and analysis of gender and power, drawing on insights from community members, civil society organizations, implementing partners, and staff and custodians of national health systems is needed. More research on dynamics in the coordination and collaboration spaces between civil society and health system actors that drive gender inequality is needed. An analysis of institutional culture and leadership would be useful to find opportunities for more equitable and inclusive structures for grant-making and health service delivery. Modalities to understand and address gender inequities manifested in national health systems will be vital for improving gender and health equity. Further studies of efforts to improve accountability to achieve more equitable and inclusive DAH strategies are also needed.

Based on these findings, teams responsible for DAH strategies and funding can begin to overcome the barriers to gender equity by asking how their individual and institutional ideologies, practices, and structures can be shifted to advance fairer, more inclusive, and gender-transformative programs and systems (see Figure 8). The answers to these questions can inform more effective health investments.

Conclusions

Our findings present a novel perspective on systemic challenges in DAH that perpetuate or contribute to gender inequities, with a particular focus on the role of donors. The findings emphasize that many of the barriers to gender equity in DAH are embedded in unequal power dynamics that distance and disempower those most affected by gender inequity in the very programs intended to help them. Overcoming these dynamics will require more than technical solutions. To advance progress in gender equity in global health, and specifically DAH, leaders (including donors, ministry representatives, health technocrats, and those implementing health programs) must apply tools and processes that center groups affected by gender inequity in leadership and decision-making at micro and macro levels. This should include building practices and structures that enable co-creation and mutual accountability in the design, implementation, and evaluation of health programs.

An important feature of this effort was convening a diverse set of stakeholders to examine a common problem. The shared dialogue provided nuanced insights on why progress addressing gender inequity has been slower than hoped, despite attempts to do so in health programs. Such platforms for cross-stakeholder dialogue are, in themselves, promising for future gender equity endeavors.
1. How can we shift toward more equitable development partnerships, and apply the principle of *nothing about us without us* to decision-making in health programming?
   * How can we center the people most affected by gender inequities in our health program strategies and investments, honoring and building from their wisdom, expertise, and leadership? (syndromes 1, 2, and 3)
   * How can we improve our programming processes in ways that provide enough time and funds for relationships and trust to flourish? (syndromes 3, 4, 5)
   * How can we explore ceding or sharing power about funding and funding priorities (e.g., initiating participatory grant-making practices), with groups affected by gender inequity? (syndromes 3 and 4)
   * How can we build accountability for gender commitments in our practices, including greater transparency about where funding comes from, where it goes, and how decisions are made? How can we create safe spaces for candid feedback and input on health program plans from people most affected by gender inequity? (syndromes 2 and 3)
   * How can we restructure our funding mechanisms to enable flexible and long-term funding for a wider variety of local gender equity advocates and stakeholder groups? How can we restructure support for coordination and collective action among local coalitions and networks? (syndromes 4 and 5)

2. How can we authentically engage groups affected by gender equity as co-learners, and co-generate and co-analyze data for making decisions in the local context?
   * How can we support platforms to facilitate a shared understanding of the problems and solutions among funders, recipients, and the communities most affected by gender inequity? (syndromes 1 and 3)
   * How can we expand our analytical methods, frameworks, and tools to understand the diverse experiences of people affected by gender inequity; how power and privilege play out in those experiences; and how health and wellness can be advanced? (syndrome 6)
   * How can we build stronger listening and learning skills, embrace diverse perspectives, and actively reflect on our individual power and privilege and how that affects decisions? (syndrome 2)

3. As leaders and influencers, how can we advance systemic change in how DAH is conceptualized and operationalized to be more fair and inclusive?
   * How can we influence the values, ideology, and discourse in DAH in ways that advance fairer, more inclusive, and gender-transformative health programs and systems? (syndromes 2 and 5)
   * How can we welcome alternative views, voices, and identities in the global discourse? How can we include community leaders with an array of lived experience in gender inequity in spaces for reflection and reframing? (syndromes 1, 2, 3, and 5)
   * How can we use our convening power and platforms to create accountability frameworks for achieving the critical shifts to achieve better health and equity outcomes? (all syndromes)

---


**Figure 8.** Questions to prompt donor reflection on development assistance for health strategies.
Data availability
Underlying data

This project contains the following underlying data:
• Draft Syndrome maps_compiled.pdf. (System maps of original syndromes using Miro virtual whiteboard tool to synthesize findings from first phase of data collection, i.e., co-creation workshops. Combined into one PDF page.).
• Draft Syndrome Maps_individual.pdf. (System maps of original syndromes using Miro virtual whiteboard tool to synthesize findings from first phase of data collection. Each syndrome listed in a separate map.).

References


68. Committee on Educating Health Professionals to Address the Social Determinants of Health, Board on Global Health, Institute of Medicine, & National Academies of Sciences, Engineering, and Medicine: A Framework for Educating Health Professionals to Address the Social Determinants of


88. World Health Organization: Barriers and facilitating factors in access to health services in Greece. 2015; Accessed March 30, 2022. Reference Source


Open Peer Review

Current Peer Review Status: ? ? ?

Version 1

Reviewer Report 10 February 2023

https://doi.org/10.21956/gatesopenres.14918.r32832

© 2023 Dhatt R. This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Roopa Dhatt
1 Women in Global Health, Washington, DC, USA
2 Georgetown University, Washington, DC, USA
3 Miami University, Oxford, OH, USA

1. Methodology: In the desk review, in addition to seeking articles on 'gender', was there an attempt to seek out articles about women? The majority, if not all, women are underrepresented in leadership roles, have less power in health systems, so seeking out articles than aim to support women is needed ensure complete data collection.

2. Define co-creation.

3. The word choice syndrome seems a bit odd. Although explained in the paper, including the use of the metaphor. It appears far reaching and confusing to use syndrome in this setting.

4. Each of the Syndromes - should be changed to a phenomena and have specific headings.

5. Utilize gender transformative approaches in this paper, as getting to the root causes and working to address these root causes through addressing power imbalances is what gender transformative leadership is about. Reference: https://www.devex.com/news/opinion-a-new-vision-for-global-health-leadership-93772

Is the work clearly and accurately presented and does it cite the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly
If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Are all the source data underlying the results available to ensure full reproducibility?
Partly

Are the conclusions drawn adequately supported by the results?
Yes

Competing Interests: Executive Director of Women in Global Health. Our mission is to challenge power and privilege for gender equity in health.

Reviewer Expertise: health workforce, women's leadership in health, gender equality in global health, gender transformative leadership, health in all policies, political economy

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 02 February 2023
https://doi.org/10.21956/gatesopenres.14918.r32841

© 2023 Steege R. This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Rosie Steege

1 London School of Hygiene & Tropical Medicine, London, UK
2 Liverpool School of Tropical Medicine, Liverpool, UK

I would like to thank the authors for their innovative and comprehensive analysis of the barriers to gender equity in DAH. It is a unique angle and a valuable contribution to the literature on structural gender inequities. The paper is well written, engaging and I enjoyed the metaphor of syndromes. With each syndrome I found myself nodding along in recognition of these barriers, which I have seen reflected time and time again. The diagrams and visuals are nice (though each bubble is hard to read so the authors may wish to consider laying these out in full size as a supplementary file). I like the inclusion of solutions and recommendations and practical questions for donors to consider.

I am in support of this paper and its contribution to the literature, there are however, three key points I would like to see addressed to strengthen the paper:
- The paper discusses the need for co-creation and inclusion of community voices ‘nothing about us without us’. This wasn't done as part of this research which makes it seem disingenuous, although it is briefly mentioned in limitations. I do appreciate the limits of conducting this type of research and the value of this paper remains. Perhaps you could
more explicitly address why this wasn't done and be more upfront about it. Including the voices of those communities you wish to centre is obviously key, so perhaps the authors could consider a validation exercise with these groups, or a follow on co-creation workshop, considering it's centrality to your argument?

- Secondly, the issue of donor power in financing as highlighted in syndrome 3 is critical and links to accountability. How individual donors have the power/resources to shape the DAH landscape is also remarkable (and there are links here to the literature on equitable partnerships and funding streams). I would like to see this acknowledged within the paper given the authors' links to the Gates Foundation. Maybe there are unique initiatives that the Gates Foundation are employing here that the authors could draw upon and share as examples of ‘best practice’ or if not, why not? Also considering the topic of the paper and given these links it would be critical to include some reflection on the positionality of the authors within the methods and even, at the end as per Morton et al.'s consensus statement – see Morton et al. (2022).

- Finally, the methods are innovative and novel and I'm sure will be of interest to many. Having just been involved in running a similar co-creation workshop approach myself I am interested to learn more about the methodology. Currently, however, I don't feel it is well enough described for those who wish to employ these methods themselves. When systems acupuncture is first mentioned there is a small footnote to help explain that you may wish to bring into the body of the text and then again in the methods set out more clearly what the approach is. If I wanted to employ the method, how might I go about it? It reads like a desk review and then co-creation workshop but with maps making it distinct - were the maps created live during the workshop and then synthesised after by core study team, or were sub-groups involved in this process? I also interpret it that the challenges were identified in the workshop, and the recommendations by authors, but please clarify.

Specific other points by section:

**Introduction:**
- I would say that the terms female/male relates to sex, but that women/girls/men/boys relates to gender.

**Methods:**
- Ethics for the KIIIs isn't made clear in the methods – please include information on the ethics, and how these experts were recruited.
- The validation was done via key informant interviews – was there also validation exercise done with the other workshop participants?
- How did the workshop participants contribute to the analysis or synthesis?

**Results:**
- Were there any findings on the proliferation of men in decision making roles limiting progress? Evidence has shown that gender is often conflated with women's issues – so for example in the SASA! Intervention to reduce IPV they purposefully avoided the word gender so that men remained engaged, I wonder if these things are being replicated at higher
levels of the health system and donor space?

Discussion:
○ You call for local CSOs and women’s organisations to be included, were these included in your co-creation workshops?
○ You discuss the important need for data for decision making. I would argue we also need indicators that support an intersectional analysis. This data is limiting tailored and equitable approaches to gender transformation as axes of inequity come together to shape marginalisation in different ways.

Limitations:
○ The literature review was non-systematic, do you feel this was a limitation? What languages were included in your review, seeing as knowledge generation is often skewed to global north?

○ It would be good to include reflection on how the virtual process of co-creation workshops have excluded or included perspectives in knowledge generation? See Egid et al. (2021) for interesting reflections.

References

Is the work clearly and accurately presented and does it cite the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Are all the source data underlying the results available to ensure full reproducibility?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

Competing Interests: No competing interests were disclosed.
Reviewer Expertise: gender equity; intersectionality; health systems; co-production; equitable partnerships

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 30 January 2023
https://doi.org/10.21956/gatesopenres.14918.r32843

© 2023 Hay K. This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Katherine Hay

Center on Gender Equity and Health, Division of Global Public Health, University of California, San Diego School of Medicine, La Jolla, CA, USA

This is a thoughtful and creative paper from a diverse and interestingly placed set of authors. It explores how relationships and dynamics in donor assistance perpetuate and reinforce power and gender asymmetries and inequities. It is detailed, well written, includes multiple perspectives, and adds value and richness to the field and discussion. It uses novel methods and is a call to action.

The majority of my questions are around clarifying methods and analysis. As some of these methods seem fairly novel I hope by adding in a little more detail it will also help others who may be interested in exploring some of these approaches in the future.

I am very supportive of this paper and hope the authors can easily address my comments.

1. As I understand it, their primary data (the development of the syndromes) is based on key insights from 6 key respondents. It would be helpful to clarify that none of these key informants are also the authors.

2. It would also be helpful to include in the discussion some analysis on how the perspectives of these particular 6 informants was triangulated and used to form the maps. For example was each word bubble the statement of one person or a set of triangulated statements?

3. Please clarify the role of the 6 informants in the analysis, creation of the syndromes, and role (if any) in the discussion, and creation of recommendations.

4. I suggest the discussion section be reworked. For example the statement, "the maps do not reflect how challenges manifest in all cases". Which cases? From cases described in the literature review? This is not clear. I think what this section is attempting to do (and would be helpful) is to point out how the insights from the 6 key informants map against findings from the literature review, and speak to the similarities and differences. I think that could be done more clearly. What was similar, what was different?
5. It is not always clear whether the discussion is referencing the primary data (laid out in the Syndromes) or the literature review. I suggest using the discussion section to analyze the new insight they have derived from this research and from using "Systems Acupuncture"; what has it added to our knowledge, what do they see as the limitations or strengths?

6. The discussion section then moves into a set of recommendations. Please clarify how these recommendations were generated. In the paper you indicated that the methodology used, Systems Acupuncture, is unique because it “identifies opportunities for system level transformation.” It was not clear to me if the 5 recommendations that were generated were done so using that methodology (and if so – please describe how, and whether the same 6 key informants were involved), or whether here we pivot, and the recommendations are generated from the authors, who have weighed the analysis and are now jumping off based on the data and their expertise and knowledge. If the latter, I suggest separating out your discussion of findings from your recommendations. That way the reader can see where you move from your analysis of the data, to your own interpretation and reflections on solutions.

7. On the recommendations, I found myself going back to the original Figure 1 to try to map back what was new or different in the recommendations from the original call to from the IAWG. I suggest you consider this as well. This feels left unconnected.

8. Smaller point. I note that Fig. 1 does not have an original citation in the text. The text suggests it was an earlier (and broader?) set of contributors who developed this so please check on the correct referencing and authors for this visual.

9. **Other points to consider:** The Syndrome maps are not readable in the print outs or the power point versions. To read one has to expand the pdf on screen to 400% and read them essentially 1 bubble at a time. That is a barrier for most readers. As this is the bulk of your new data I would encourage you to try to think about how to share this data in a way that is more easily readable and accessible.

10. I really liked the metaphor of the Syndrome. I found it told a story about the behaviors you were trying to explain while not overstating any particular behavior within the set. However, for the same reason I found the use of driver confusing, given that I considered your sample of 6 to be more about generating patterns then drawing casual connections. While I recognize this is disciplinary, drivers for many of your readers have a causal and relational meaning that the behaviors described in the bubbles did not have. You used many descriptors for your model. I thought "dynamics, behaviors, and characteristics," worked better to describe the content of the bubbles than drivers. Just something to consider.

---

**Is the work clearly and accurately presented and does it cite the current literature?**
Yes

**Is the study design appropriate and is the work technically sound?**
Yes

**Are sufficient details of methods and analysis provided to allow replication by others?**
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Are all the source data underlying the results available to ensure full reproducibility?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Gender equity and health

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.