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A review and analysis of accountability in global health funding, research collaborations and training: towards conceptual clarity and better practice

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ABSTRACT

Introduction Accountability is a complex idea to unpack and involves different processes in global health practice. Calls for accountability in global health would be better translated to action through a better understanding of the concept and practice of accountability in global health. We sought to analyse accountability processes in practice in global health funding, research collaborations and training.

Methods This study is a literature review that systematically searched PubMed and Scopus for articles on formal accountability processes in global health. We charted information on processes based on accountability lines ('who is accountable to whom') and the outcomes the processes were intended for ('accountability for what'). We visualised the representation of accountability in the articles by mapping the processes according to their intended outcomes and the levels where processes were implemented.

Results We included 53 articles representing a wide range of contexts and identified 19 specific accountability processes for various outcomes in global health funding, research collaborations and training. Target setting and monitoring were the most common accountability processes. Other processes included interinstitutional networks for peer checking, litigation strategies to enforce health-related rights, special bodies that bring actors to account for commitments, self-accountability through internal organisational processes and multipolar accountability involving different types of institutional actors. Our mapping identified gaps at the institutional, interinstitutional and broader system levels where accountability processes could be enhanced.

Conclusion To rebalance power in global health, our review has shown that analysing information on existing accountability processes regarding 'who is accountable to whom' and 'accountability for what' would be useful to characterise existing lines of accountability and create lines where there are gaps. However, we also suggest that institutional and systems processes for accountability must be accompanied by political engagement to mobilise collective action and create conditions where a culture of accountability thrives in global health.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ The importance of accountability to address power asymmetries in global health is widely recognised.
⇒ However, accountability is a complex concept that is challenging to unpack and has different permutations in practice.

WHAT THIS STUDY ADDS

⇒ This systematic literature review and mapping of accountability processes in global health funding, research collaborations and training identified 19 specific processes for accountability at the institutional, interinstitutional and broader system levels to address different categories of intended outcomes.
⇒ Accountability processes were characterised by internal, unidirectional, bidirectional and networks of accountability lines involving a variety of duty bearers and claims holders who foster accountability in the global health system.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ We argue that calling for more accountability in global health should be accompanied by conceptual clarity on what it entails to institutionalise more accountability processes across all levels of the global health system.
⇒ To bring power to account in global health, our findings suggest the need to assess the lines of accountability and create them when there are gaps, articulate the intended outcomes of accountability, politically engage with the duty bearers and claims holders, while combining organisational and system processes for accountability with the creation of the conditions where a culture of accountability thrives.

INTRODUCTION

"What need we fear who knows it, when none can call our power to account?"

Lady Macbeth in William Shakespeare's tragedy, Macbeth (c. 1603–1607)

There is a lesson to be learnt here from Lady Macbeth: the lack of accountability leads to abuse of power. Such is the case in

global health where power asymmetries that shape inequitable relations between actors in the system ought to be dismantled.[1] Decolonisation and accountability are among the fundamental principles to address power asymmetries and transform global health systemically. However, neither decolonising global health[2–4] nor accountability in global health[5 6] have specific definitions; both are brought to bear by global health actors in a multiplicity of ways based on what these notions mean for them.

The idea of accountability in global health is quite complex to unpack but some scholars have previously interrogated the concept to seek clarity, such as Bruen *et al*[7] who identified participation, transparency, evaluation and redress or enforcement processes as some of the features of accountability, which have become more contested in the changing dynamics of global health cooperation. Outside of global health, accountability has been discussed extensively in other disciplines, such as in political science, public administration, organisational sociology, ethics and development studies. For example, Van Belle and Mayhew[8] explored the varying interpretations of accountability in these disciplines and suggested that—in its most basic interpretation—accountability involves a relationship between one (the duty bearer) who is obliged to accept responsibility for actions towards another (the claims holder) who has a stake or is affected by the actions of the former. However, accountability has permutations far beyond a bilateral relationship especially given the current multiplicity of actors in global health that include the state, civil society networks, academia, philanthropies, multinational corporations, public–private partnerships and the media.[7–9] In the context of health systems, Brinkerhoff has sought conceptual clarity by discussing financial, performance and political accountability as three types of accountability whose purpose are to reduce abuse, assure compliance with procedures and standards and improve performance.[9] However, there is a gap between ideal accountability that is able to fulfil its purpose and accountability that is possible in practice[9] as global health governance is impacted by vague lines of accountability between'duty bearers' and 'claims holders.[10]' We only need to look at the COVID-19 pandemic as an example of the consequence of vague accountabilities that prevented agile decision-making at all levels of global health.[11] Analysing the processes of accountability as implemented in global health practice, including clarity on 'who is accountable to whom' and 'accountability for what,' could help bring the practice of accountability closer to ideal where processes make it possible for those with power to be answerable to those who demand accountability.[12]

Three areas of global health practice

Global health funding, research collaborations and training are useful entry points for illustrating manifestations of power differentials in global health and the accountability processes that address these differentials.

For example, in global health funding, influential philanthropies such as the Bill & Melinda Gates Foundation (BMGF) have become incredibly powerful in setting the global health agenda and drowned out the voice of Ministries of Health (MOHs) and civil society,[13] but have no clear lines of accountability to its beneficiary countries and communities. Bilateral donors like the USA, consistently the biggest source of development assistance for health,[14 15] have maintained their influential positions in shaping the global health agenda but are mainly accountable to their governments rather than the recipient countries and institutions in the Global South most affected by the projects they support and advance. In the sheer volume of financing needed to address global health challenges, new public–private partnerships, like the Global Fund to Fight AIDS, Tuberculosis and Malaria (ie, the Global Fund)[7] and Gavi, the Vaccine Alliance (ie, GAVI)[16] have emerged as important players yet with blurred lines of accountability in the global health system. Systemic corruption in global health is also a problem that severely affects the poor and most vulnerable when money meant to address their needs are diverted for private gains.[17] The tracking of the flows of money by academics and civil society to examine whether financing effectively benefits the Global South or only promotes the interests of the private sector and the technocracy in the North has been described as one example to make global health funding players accountable.[18–20]

In global health research collaborations, examples of power asymmetries include authorship parasitism when up to 15% of articles reporting research from sub-Saharan Africa still had no author based in the country where the study was done.[21] Power imbalances were brought to the fore when Indonesia refused to share specimens of avian influenza A(H5N1) to WHO reference laboratories on the basis that institutions in the Global North monopolise the data and develop medical technologies that countries like Indonesia could otherwise not access or afford.[22] While it is recognised that many researchers and institutions in the South have benefited from international research collaborations with the North, the accountability of partners from both sides of these collaborations would be instrumental in rebalancing power.[5] Some have suggested that funders and communities could help foster the accountability of research collaborations by assessing how the partnerships align with the needs of communities and to what extent they treat local experts on equal footing with foreign or Western-trained scholars.[23]

In global health training, concerns have been raised about the potential harm of short-term student visits from universities in the North to communities in the South, especially when students lack the skills yet are allowed to deliver healthcare to local populations, or when students are insensitive to local culture and beliefs.[24] Some have suggested that training institutions could be held to account for their global health programmes when they are evaluated based on the extent to which

they enable community participation in their student immersion programmes, or include the work of Global South scholars in their curriculum.[25 26] Reflexivity also has a role in fostering accountability through the critical examination of individual positionalities and the colonial legacies that shape how stakeholders relate in the global health space.[27] Finally, accountability in global health is not only about addressing power asymmetries between North and South, but also about the power relations within them; thus, accountability applies to global health actors everywhere.[28]

Purpose of this review

Accountability in global health, when vague, could ironically disempower the call for more accountability. There is a risk for accountability to become another buzzword,[9 29] or rhetoric that is not accompanied by changes in the practice of global health actors.[30] It is, for instance, deceiving when some actors could claim progress in rebalancing power in global health despite the absence of processes that hold themselves and others accountable for what they do in their respective spaces of practice. We consider concept and practice to be mutually reinforcing. On the one hand, the notion of accountability in global health will be clarified when there is better understanding of its different processes in practice. On the other hand, accountability processes will be better put in practice when there is clearer understanding of what accountability in global health requires.

In setting the stage for this review and conceptual analysis,[31] we argue that conceptual clarity is essential to institutionalise more accountability processes in practice and build a culture of accountability as part of transforming global health. Our objective here was *not* to answer an effectiveness question (eg, Are accountability processes in global health effective?). We also did not seek a universal definition of 'accountability in global health.' Universal definitions are elusive and, as shown by a previous attempt to define the notion of global health itself as 'public health somewhere else',[32] may achieve the opposite of intent—that is, restrict rather than expand global health's reach when the definition is inadequate,[33 34] or exacerbate inequities when the definition reinforces the privilege of an exclusive group of stakeholders who can be called global health practitioners.[35] Reflexive of our power as scholars, we also recognise that we neither facilitated stakeholder participation nor have the normative mandate to impose a 'standard' of accountability for the compliance of global health actors.

Research question and objective

We aimed to contribute to the conceptual clarity of accountability in global health by mapping the formal processes of accountability for institutional actors in global health funding, research collaborations and training. Discussions of accountability in global health in the literature is dispersed but also offer a strategic opportunity to analyse information on the different processes to hold power to account. We sought to explore the research question: *What are the formal accountability processes in practice in global health funding, research collaborations and training based on who is accountable to whom as described in the literature and for what outcomes?* To the best of our knowledge, this work is the first analysis of accountability processes in global health based on a systematic search of the literature. Previous reviews on accountability in global health were narrative[6 7 9 12] while another narrative review explored accountability approaches in non-health disciplines.[8]

METHODS

We referred to Koplan *et al*[36] who differentiated 'global health' from 'international health' and 'public health' by its attributes of transcending national boundaries, requiring global cooperation, combining both prevention in populations and clinical care in individuals, deploying a broad range of disciplines beyond the health sciences, with the main goal to achieve health equity for all people among nations. We also referred to the systematic review by Salm *et al*[37] that described global health as a multiplex approach that is ethically oriented, guided by justice and a mode of governance and political decision-making to solve problems across borders. These attributes of global health were used to organise our search strategy for global health in the literature.

We selected global health funding, research collaborations and training as the focus of this review because of the frequency of power asymmetries in these areas based on our familiarity with the issues and our own experience as scholars in global health. Global health funding covers the raising, allocation, management and spending of money for initiatives to improve health and well-being across national borders. Global health research collaborations cover joint health research activities involving institutions between countries, whether North-South, North-North or South-South partnerships. Global health training covers capacity strengthening efforts in global health, including the pedagogical approaches used and how trainees are selected and supported during their formation.

Review type

Our review is a conceptual analysis, which is a purpose specific type of literature review appropriate for exploring the attributes of a concept and synthesising the literature about a topic of interest.[31 38] A conceptual analysis maps a sample of the literature from which recommendations could be drawn for further research to develop a theoretical model.[31 38] Our literature search was systematic to allow for an update or an expansion of the review at a later stage. We referred to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)[39] in reporting our methods and results (online supplemental file 1). Box 1 provides the components of our methodology.

BOX 1 COMPONENTS OF THE REVIEW METHODOLOGY INCLUDING THE SEARCH STRATEGY

Research question

⇒ What are the formal accountability processes in practice in global health funding, research collaborations and training based on who is accountable to whom as described in the literature and for what outcomes?

Population-Concept-Context framework

Population

Institutional global health actors operating at global, national or community levels as intergovernmental, governmental, private for-profit or not-for-profit institutions:

⇒ Traditional global health actors (eg, WHO, Ministries of Health).
⇒ Multilateral (eg, The World Bank) and bilateral development agencies (eg, US Agency for International Development).
⇒ International and national funding agencies (eg, US National Institutes of Health).
⇒ Philanthropies (eg, Bill & Melinda Gates Foundation).
⇒ Research, training or service institutions (eg, universities, research institutes, think tanks).
⇒ Private sector (eg, pharmaceutical industry).
⇒ Non-government organisations (eg, Médecins San Frontières).
⇒ Civil society organisations (eg, Transparency International).
⇒ Public–private partnerships (eg, Gavi, the Vaccine Alliance).
⇒ Multisectoral institutional arrangements (eg, The Global Fund to Fight AIDS, Tuberculosis and Malaria).

Concept

Accountability process in practice in global health funding, research collaboration and/or training described as a formal process or interaction (ie, who is accountable to whom?) that holds institutional global health actors accountable for certain outcomes (ie, accountability for what?).

Context

Any geographical or income context (ie, either in the Global North or South) where activities involved multiple countries or transcended national boundaries in the case of activities in a single country.

Inclusion criteria

⇒ Any article type or any study design.
⇒ Published in English with no year restrictions.
⇒ Reported work in global health funding, research collaboration and/or training.
⇒ Described a formal accountability process in the text of the manuscript.

Exclusion criteria

⇒ Discussed topics apart from global health funding, research collaboration and training.
⇒ Described work only in a single country or in a purely domestic context.
⇒ Mentioned accountability only briefly.
⇒ Discussed the accountability of individual rather than institutional actors.
⇒ Discussed accountability processes only in broad terms or in purely theoretical or non-practical terms.
⇒ Discussed accountability processes that are only recommended and not yet in practice.

Search strategy

PubMed

(((accountability(Title/Abstract)) OR (accountability(MeSH Terms))) AND (global health(MeSH Terms))) AND ((financing, organized(MeSH Terms)) OR (research(MeSH Terms)) OR (information science(MeSH Terms)) OR (schools(MeSH Terms)))

Scopus

((TITLE(accountability) OR ABS(accountability) OR KEY (accountability)) AND KEY (global AND health)) AND (KEY(financing) OR KEY (research) OR KEY (information AND science) OR KEY (schools))

Population-Concept-Context

We used the population-concept-context (PCC) framework[40] to organise our search strategy. Our population included 'global health actors' as described by Szlezák *et al*[41] defined as institutions that may operate at global, national or community levels and influence the global health system as intergovernmental, governmental, private for-profit or not-for-profit institutions. We were interested in organisations rather than individual global health actors because they play a critical role in the institutionalisation and sustainability of accountability processes in global health. Institutional actors encompassed the traditional actors (eg, WHO and MOHs), multilateral (eg, World Bank) and bilateral (eg, US Agency for International Development) development agencies, national funding agencies (eg, US National Institutes of Health), philanthropies (eg, BMGF), research, training or service institutions (eg, universities, research institutes, think tanks), the private sector (eg, pharmaceutical industry), non-government organisations (eg, Médecins San Frontières), civil society organisations (eg, Transparency International), public–private partnerships (eg, GAVI) and multisectoral institutional arrangements (eg, the Global Fund).

Our concept was any formal process for ensuring accountability in global health funding, research collaborations or training. We were interested in formal accountability processes[12] already in practice because they represent 'real-world' experience rather than purely conceptual approaches. We identified an accountability process as a formal process or interaction (ie, who is accountable to whom?) that holds institutional

global health actors accountable for certain outcomes (ie, accountability for what?)[9] through formal lines of accountability between actors (interinstitutional level), or a web of several interacting actors (broader system level), or internally through self-accountability (institutional level).

Our context was any geographical or income context (ie, either in the Global North or South) involving multiple countries. In the case of activities in a single country, activities described should transcend national boundaries (eg, a programme in one country that was supported by a foreign funding source, or involved a collaboration with an institution in another country).

Search strategy

We searched PubMed (MEDLINE) to cover the biomedical and health-related literature and Scopus (Elsevier) to widen our coverage to include the social sciences literature. Based on our PCC framework, a search strategy was developed on PubMed using the building blocks approach[42] by an author who is a global health specialist with training in systematic reviews. The search query deployed the MeSH terms for accountability ("accountability") and global health ("global health") combined with the MeSH terms for funding ("financing, organized"), research collaborations, including publications ("research" or "information science") and training ("schools"). We also searched for the word "accountability" in the Title or Abstract. We converted the PubMed search strategy to a query string using keywords on Scopus. The complete search strategies are in box 1.

Inclusion criteria

We included publications:

- Of any article type or any study design.
- In English with no year restrictions.
- That reported work in global health funding, research collaborations and/or training.
- That described a formal accountability process in the text.

All article types (including commentaries) were considered to map the representation of accountability in global health in the literature. The assessment of whether an article described an accountability process was based on the authors' use of the word 'accountability' and its derivatives 'accountable,' and/or 'account' to describe an accountability process in the text. We assumed that authors who explicitly located their work, or part of their work, within the domain of accountability would use the word accountability in their text.

Exclusion criteria

We excluded publications that:

- Discussed topics apart from global health funding, research collaborations or training (eg, a conference paper on hospital accreditation as an accountability process for the quality of hospital care[43]).
- Described work in one country or in a purely domestic context (eg, a case study of primary healthcare in El Salvador without any role for international cooperation[44]).
- Mentioned accountability only briefly (eg, a mixed-methods study on how to improve research mentorship in the Global South that used the word accountability only twice in the text[45]).
- Discussed the accountability of individual rather than institutional actors (eg, a commentary on the ethics of coauthorship for individual authors[46]).
- Discussed accountability processes only in broad terms, or in purely conceptual terms (eg, a discussion of the role of justice in international genomics research in Africa[47]).
- Discussed accountability processes that are only recommended and not yet in practice (eg, a qualitative study that proposed how to strengthen the accountability of non-government organisations working in maternal and child health[48]).
- Discussed concepts related to accountability (eg, transparency, responsibility, justice) but did not explicitly use the terms of accountability in the text.

Screening process

We performed the search from inception in 2022 until 27 January 2023, which yielded 287 records (PubMed, 192; Scopus, 95). We imported records to Covidence (Covidence, Melbourne VIC, Australia), which detected 35 duplicates that were removed before screening. Two coauthors independently screened the titles and abstracts of 252 unique records using Covidence and excluded 126 articles based on the criteria. During full text screening, the reviewers located the words 'accountability,' 'accountable,' and 'account'in the text to examine to what extent accountability processes were described by the article. We further excluded 74 articles during full text screening. One article[49] not identified during the search but recommended by an expert as a relevant reference for this review was added, resulting in 53 articles for data charting and analysis. Conflicts in the inclusion or exclusion of an article during screening where discussed by two reviewers until agreement was reached.

Data charting and analysis

We abstracted textual data using a data charting form in Microsoft Excel (Microsoft, Redmond, Washington, USA) on the following items that were adapted from Van Belle and Mayhew[8] and Murthy[12]:

- Authors, year of publication, DOI and title.
- Article type.
- Research questions or research objectives.
- Accountability for what outcomes?
- Which actor is made accountable (ie, duty bearer), and by whom (ie, claims holder)?
- Accountability processes.

The data charting form is provided as online supplemental file 2. Relevant texts from the manuscripts were

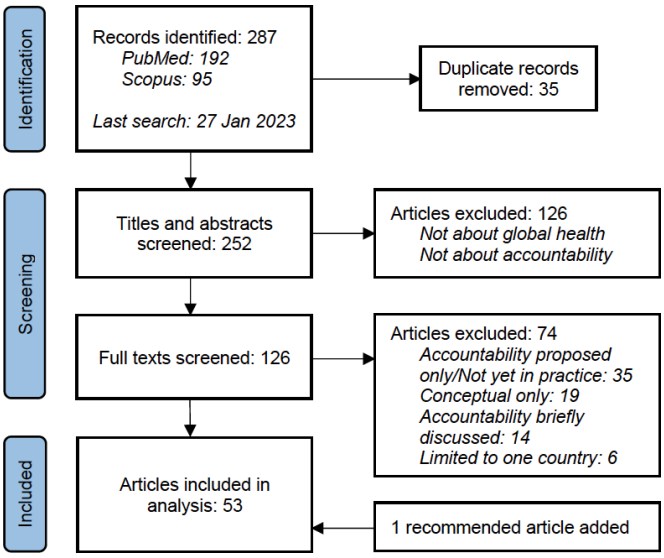

Figure 1 PRISMA flow diagram for this review.

copied verbatim and added to the data charting form independently by two reviewers. The two sets of charted data were later merged and reconciled through discussion. Our data charting was organised based on the accountability processes described by Bruen *et al*,[7] which provided an initial typology of accountability processes (deductive qualitative approach). The list of accountability processes was iterated as other accountability processes were identified (inductive qualitative approach).

We mapped accountability processes following examples from a scoping review on rehabilitation care models[50] to present results in a visual manner.[51] We visualised the frequency of accountability processes according to the levels of accountability lines and in sequential order of publication year. We also visualised accountability processes according to the categories of outcomes that the processes were intended for. Mapping was performed twice on Microsoft Excel and the outputs were compared to ensure consistency.

Reflexivity statement

We acknowledge our positions as authors all currently based in European institutions. The perspective from the Global South was included in the research process through the involvement of the first author who is originally from the Philippines and who performed the initial phase of this work while based in Malaysia.

Patient and public involvement

This literature review had no direct involvement of patients or the public.

RESULTS

The results of our screening of articles are summarised by the PRISMA flow diagram in figure 1.

Key information obtained from each of the 53 articles included in the analysis are summarised in table 1.

The articles were published between 2005 and 2022, with more than half (27, 52%) between 2018 and 2022.[49 52–77] Their titles suggest a wide coverage of topics and issues in global health, among others: the accountability of international global health actors (eg, the Global Fund, World Bank),[7 56 62 69 78–81] governance and corruption in global health funding,[67 70 71 78 82] the promotion and realisation of health as a human right,[57 83–88] accountability through rankings, countdowns and monitoring of health outcomes,[53–55 60 68 72 75 76 89–94] the social accountability of schools of health professions through networking or accreditation,[61 64 73 95–97] as well as litigation and legal accountability[49 57 84 85 98] and ethical research and community participation.[63 66 74 99 100]

About one-third (18, 34%) were research articles, specifically 12 case studies,[53 56 71 79 84 85 89 97 99–102] 3 qualitative studies,[63 72 93] 2 quantitative studies[62 90] and 1 mixed-methods study.[60] The others were commentaries (14, 26%),[55 59 61 65 73 75 76 78 83 86–88 91 98] review articles (12, 23%), specifically 10 narrative reviews,[7 54 64 69 70 77 80 92 95 96] 1 systematic review[67] and 1 scoping review,[49] and the rest were policy or practice articles (6, 11%).[57 58 66 68 74 81] There were two news articles,[82 94] one from the *British Medical Journal* and another from *Advances in Nutrition* and one correspondence[52] in *The Lancet*. Most of the articles had a global scope (27, 51%)[7 49 53 55 57–60 65 67 70 71 75–77 80 81 83 85–87 90 91 93 94 96 102] or covered multiple countries from both the Global North and South (22, 42%).[52 54 56 61–64 66 68 69 72–74 78 88 89 92 95 97–100] Only four articles focused on a single country.[79 82 84 101]

The articles varied in their objectives. Some articles reported on the accountability processes for international partnerships through interinstitutional networks. Some articles also situated their discussion of accountability in human rights, or the Sustainable Development Goals and Universal Health Coverage. In terms of which institutional actor was made accountable, more than half of articles discussed processes to bring national governments to account as the duty bearer (27, 51%).[49 53 54 56 57 60 62 65 68 70 74 75 77 79 82–90 92 93 101 102] Other articles discussed the accountabilities of research and training institutions (10),[59 61 63 64 73 95–97 99 100] multilateral or international global health institutions (9),[66 67 69 71 72 78 80 81 91] multiple institutional actors (4)[7 55 76 94] and the private sector (3).[52 58 98] On the other hand, partnerships and networks of institutions were the claims holders in almost one-third of articles (16, 30%),[54 55 61 64 66 68 75 89 91–97 102] followed by multiple institutional actors (12),[7 12 58 69 71 72 74 76 77 80 86 87 101] civil society organisations (11),[49 57 70 79 81 83–85 88 90 98] the same institutions through self-accountability or when the institution had internal processes to make itself accountable (6),[52 59 67 73 78 100] multilateral or international global health institutions (5),[53 56 60 62 82] and other actors (3).[63 65 99]

Accountability processes

We identified 19 specific accountability processes and grouped them into three levels where these processes were implemented, that is, at institutional,

Table 1 Summary of articles included in the analysis

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Eaton, 2005[82]	https://doi.org/10.1136/bmj.331.7519.718	Global Fund toughens stance against corruption	News article	Uganda	To report on how the Global Fund sees the enforcement of transparency and accountability as a vital step in ensuring results	Better governance of development assistance for health	National government of Uganda	Multisectoral institution (the Global Fund)
Bryce *et al*, 2006[89]	https://doi.org/10.1016/S0140-6736(06)69339-2	Countdown to 2015: tracking intervention coverage for child survival	Research article—case study	60 countries with the highest rates of child mortality	To present the first report of the Child Survival Countdown, a worldwide effort to monitor coverage of key child-survival interventions	Reduction in child mortality	National governments of countries with the highest burden of child mortality	International partnership of multiple actors (child survival countdown)
Gostin, 2007[98]	https://scholarship.law.georgetown.edu/facpub/480/	The 'Tobacco Wars'—global litigation strategies	Commentary	USA, Australia, Japan, Norway, Israel, Canada, Bangladesh, India, Uganda, Nepal and Continental Europe	To explore global tobacco litigation strategies with four key elements: compensation/recovery, advertising restrictions, criminal liability and public interest writ litigation	Better regulation of tobacco industry and reduction in smoking prevalence	Tobacco industry/companies	Civil society and advocates
Desmond *et al*, 2009[90]	https://doi.org/10.2307/20460106	Relative response: ranking country responses to HIV and AIDS	Research article—quantitative study or case study	Global	To support efforts to hold governments accountable their commitments to respond to HIV	Better governance and outcomes for HIV/AIDS	National governments	Civil society organisation (AIDS Accountability International)
Labonte and Marriott, 2010[91]	https://doi.org/10.1016/S0140-6736(10)60625-3	IHP+: little progress in accountability or just little progress?	Commentary	Global	To review and comment on the IHP+report	Better governance of development assistance for health	International donor agencies, bilateral donors, national governments of LMICs receiving assistance	International partnership of multiple actors (IHP+)
Marouf, 2010[78]	https://www.hhrjournal.org/2013/08/holding-the-world-bank-accountable-for-leakage-of-funds-from-africas-health-sector/	Holding the World Bank accountable for leakage of funds from Africa's health sector	Commentary	Sub-Saharan Africa	To explore the accountability of international financial institutions, such as the World Bank, for human rights violations related to the massive leakage of funds from sub-Saharan Africa's health sector	Elimination of corruption in development assistance for health	Multilateral development agency (World Bank)	Self-accountability through internal processes

Continued

Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Schrecker *et al*, 2010[83]	https://doi.org/10.1016/j.socscimed.2010.06.042	Advancing health equity in the global marketplace: how human rights can help	Commentary	Global	To analyse the relevance of the international human rights framework to the goal of the WHO Commission on Social Determinants of Health to reducing health disparities	Realisation of health-related rights	National governments	Civil society and advocacy organisations
Leinster, 2011[95]	https://doi.org/10.3109/0142159X.2011.590253	Evaluation and assessment of social accountability in medical schools	Review—narrative	Cuba, Venezuela, Canada, South Africa, Australia, Philippines	To describe processes to evaluate and assess the social accountability of medical schools	Improvement in community health	Medical schools	International partnership of medical schools (THEnet)
McKimm and McLean, 2011[96]	https://doi.org/10.3109/0142159X.2011.590245	Developing a global health practitioner: time to act?	Review—narrative	Global	To acknowledge that creating a global health practitioner requires international collaboration and places the onus of social accountability on academic leaders	Improvement in community health	Medical schools	International partnership of medical schools (Global Consensus for Social Accountability of Medical Schools)
Palsdottir and Neusy, 2011[97]	https://doi.org/10.1016/j.idc.2011.02.001	Global health: networking innovative academic institutions	Research article—case study	South Africa, Cuba, Venezuela, Canada, Australia, Philippines	To describe the Training for Health Equity Network (THEnet)	Improvement in community health	Medical schools	International partnership of medical schools (THEnet)
Gómez and Atun, 2012[79]	https://doi.org/10.1186/1744-8603-8-25	The effects of Global Fund financing on health governance in Brazil	Research article—case study	Brazil	To examine the impact of Global Fund investments at several tiers of health governance in Brazil	Better governance of TB prevention and control	Multiple levels of government in Brazil	Civil society organisations
London and Schneider, 2012[84]	https://doi.org/10.1016/j.socscimed.2011.03.022	Globalisation and health inequalities: can a human rights paradigm create space for civil society action?	Research article—case study	South Africa	To explore the seeming contradiction that globalisation is conceived as disempowering nations states' ability to act in their population's interests, yet implementation of human rights obligations requires effective states to deliver socioeconomic entitlements, such as health	Realisation of health-related rights	National government of South Africa	Parliament, civil society organisations

Continued

Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Meier *et al*, 2012[85]	https://scholarship.law.georgetown.edu/facpub/935/	Bridging international law and rights-based litigation: mapping health-related rights through the development of the global health and human rights database	Research article—case study	Global	To describe the Global Health and Human Rights Database	Realisation of health-related rights	National governments	Academic institutions, civil society organisations
Requejo *et al*, 2013[92]	https://doi.org/10.1371/journal.pmed.1001416	Measuring coverage in MNCH: challenges and opportunities in the selection of coverage indicators for global monitoring	Review—narrative	75 countries where >95% of all maternal and child deaths occur	To examine the process and implications of selecting a core set of coverage indicators for global monitoring of maternal and child mortality	Reduction in maternal and child mortality	National governments	International partnership of multiple actors (Countdown to 2015 for Maternal, Newborn, and Child Survival), special global monitoring body (Commission on Accountability for Women's and Children's Health)
Rosinski *et al*, 2013[93]	https://doi.org/10.1371/journal.pone.0067320	Developing a scorecard to assess global progress in scaling up diarrhoea control tools: a qualitative study of academic leaders and implementers	Research article—qualitative study	Global	To explore the opportunities for using a scorecard as a policy tool for increasing the use of key preventive and therapeutic diarrhoea control tools	Reduction in the burden of diarrhoea in children	National governments	International partnership of multiple actors (national governments, academic institutions and civil society organisations)
Yassi *et al*, 2013[99]	https://doi.org/10.1007/s10805-013-9182-y	The ethics of ethics reviews in global health research: case studies applying a new paradigm	Research article—case study	Canada, Honduras, South Africa, Ecuador	To conduct a critical analysis of three case studies of research conducted in LMICs and apply emerging ethical guidelines and principles specific to global health research	Ethical global health research collaborations	Academic institutions	Ethics review committees
Amaya *et al*, 2014[101]	https://doi.org/10.1080/17441692.2013.878957	After the Global Fund: who can sustain the HIV/AIDS response in Peru and how?	Research article—case study	Peru	To examine the transition from Global Fund support to increasing national HIV/AIDS funding in Peru by analysing actor roles, motivations and effects on policies, identifying recommendations to inform decision-makers on priority areas	Better governance and outcomes for HIV/AIDS	Multiple levels of government in Peru, non-government organisations	Multiple actors

Continued

Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Bruen *et al*, 2014[7]	https://doi.org/10.1186/s12992-014-0073-9	A concept in flux: questioning accountability in the context of global health cooperation	Review—narrative	Global	To examine the changing and distributed nature of global health cooperation and reflect on the concept and practice of accountability in the context of global health cooperation	Better governance of development assistance for health	Multiple actors	Multiple actors
McGuire, 2015[94]	https://doi.org/10.3945/an.115.008599	Actions and accountability to accelerate the world's progress on nutrition	News article	Global	To describe the content of the Global Nutrition Report 2014	Reduction in the burden of malnutrition in children	Multiple actors	International partnership (Joint Child Malnutrition Monitoring Group of the UNICEF, WHO and the World Bank)
Murphy *et al*, 2015[100]	https://doi.org/10.1007/s11673-014-9604-6	Making a commitment to ethics in global health research partnerships: a practical tool to support ethical practice	Research article—case study	Canada, Africa	To describe a process of consultation on global health research partnerships that led to a call for improved ethical conduct in research partnerships	Ethical global health research collaborations	Academic institutions	Self-accountability through the Partnership Assessment Toolkit
Thomas *et al*, 2015[86]	https://www.hhrjournal.org/2015/11/assessing-the-impact-of-a-human-rights-based-approach-across-a-spectrum-of-change-for-womens-childrens-and-adolescents-health/	Assessing the impact of a human rights-based approach across a spectrum of change for women's, children's and adolescents' health	Commentary	Global	To present a framework to measure results in a way that offers a more nuanced understanding of the impact of human rights-based approaches and their complexity, as well as their contextual, multisectoral and evolving nature	Realisation of health-related rights for women's, children's and adolescents' health	National governments	Multiple actors
Hawkes and Buse, 2016[87]	https://www.ijhpm.com/article_3166.html	Searching for the right to health in the Sustainable Development Agenda	Commentary	Global	To propose that the significance of the SDGs lies in their ability to move beyond a biomedical approach to health and healthcare, and to seize the opportunity for the realisation of the right to health in its fullest, widest, most fundamental sense	Realisation of health-related rights for SDGs and UHC	National governments	Multiple actors

Continued

Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
McDougall, 2016[102]	https://www.ijhpm.com/article_3153.html	Power and politics in the global health landscape: beliefs, competition and negotiation among global advocacy coalitions in the policy-making process	Research article—case study or qualitative study	Global	To examine how coalitions negotiate among themselves and exercise hidden forms of power to produce policy on the basis of their beliefs and strategic interests	Improvement in women's, children's and adolescents' health	National governments	International partnership (Global Strategy for Women's and Children's Health)
Moon and Omole, 2017[80]	https://doi.org/10.1017/S1744133116000463	Development assistance for health: critiques, proposals and prospects for change	Review—narrative	Global	To offer a systematic overview of problems and proposals for change in development assistance for health	Better governance of development assistance for health	International funding agencies, national governments of LMICs receiving assistance	Multiple actors
Rodríguez *et al*, 2017[81]	https://doi.org/10.2471/BLT.16.179861	Political commitment for vulnerable populations during donor transition	Policy and practice paper	Global	To argue that, for reasons linked to human rights, it is critical that governments sustain health services for vulnerable populations during and after donor transition	Better governance of development assistance for health and improved health for vulnerable groups	International funding agencies, national governments of LMICs receiving assistance	Civil society organisations
Yamin and Meleche, 2017[88]	https://doi.org/10.1186/s12914-017-0128-0	Realising Universal Health Coverage (UHC) in East Africa: the relevance of human rights	Commentary	East Africa	To apply human rights-based approaches to questions that countries undertaking efforts towards UHC and promoting women's, children's and adolescents' health, will need to face, including meaningful oversight and accountability processes	Improvement in women's, children's, and adolescents' health, UHC	National governments	Civil society organisations
Ageborg, 2018[52]	https://doi.org/10.1016/S0140-6736(18)31365-5	Transparency and accountability in AstraZeneca's access to healthcare programmes	Correspondence	Kenya, Ethiopia	To clarify points regarding AstraZeneca's access programmes	Ethical global health research collaborations	Pharmaceutical industry	Scientific journal and self-accountability
Barros *et al*, 2018[53]	https://doi.org/10.1186/s12939-018-0836-7	Towards a global monitoring system for implementing the Rio Political Declaration on Social Determinants of Health: developing a core set of indicators for government action on the social determinants of health to improve health equity	Research article—case study	Global	To describe the selection of indicators proposed to be part of the initial WHO global system for monitoring action on the Social Determinants of Health	Better governance to address Social Determinants of Health and improvement in health equity	National governments	Multilateral organisation (WHO)

Continued

Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Boerma *et al*, 2018[54]	https://doi.org/10.1016/S0140-6736(18)30104-1	Countdown to 2030: tracking progress towards universal coverage for reproductive, maternal, newborn and child health	Review—narrative	81 countries with the highest reproductive, maternal, newborn and child health and nutrition burden	To assess the progress of 81 countries in meeting outcome targets related to maternal, newborn and child health and nutrition	Improvement in women's, children's and adolescents' health	National governments	International partnership (Countdown 2030)
Clark, 2018[55]	https://doi.org/10.1016/S0140-6736(18)30428-8	Report card shows gender is missing in global health	Commentary	Global	To describe the work of Global Health 50/50 and how it contributes to gender equality	Gender equality	Multiple actors	International partnership (Global Health 50/50)
El Bcheraoui *et al*, 2018[56]	https://doi.org/10.1371/journal.pone.0203647	Advantages and disadvantages of channelling GAVI's health system strengthening funds through health partners, a case study	Research article—case study	Chad, Cameroon	To investigate the process and effect of channelling GAVI's health systems strengthening funds through health partners to inform the global health community about the added value of this solution	Better governance of development assistance for health	National governments of Chad, Cameroon	Multilateral public-private partnership (GAVI)
Johnson *et al*, 2018[57]	https://doi.org/10.1186/s12914-018-0174-2	Global Abortion Policies Database: a new approach to strengthening knowledge on laws, policies and human rights standards	Policy and practice paper	Global	To describe the Global Abortion Policies Database	Realisation of health-related rights for SDGs	National governments	Civil society organisations and human rights advocacy groups
Paschke *et al*, 2018[58]	https://dx.doi.org/10.2471/BLT.17.206516	Increasing transparency and accountability in national pharmaceutical systems	Policy and practice paper	Global	To provide a conceptual understanding of how transparency can facilitate accountability for better access to medicines	Better governance of the pharmaceutical system and access to quality medicines	National governments, pharmaceutical industry	Multiple actors
Ward *et al*, 2018[59]	https://doi.org/10.1186/s12992-017-0319-4	Good collaborative practice: reforming capacity building governance of international health research partnerships	Commentary	Global	To examine the extent to which provisions of international health research guidance and legislation promote capacity building and equitable partnerships in global health research	Ethical global health research collaborations	Research institutions	Self-accountability through guidelines or agreements

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Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Ajuebor *et al*, 2019[60]	https://doi.org/10.1186/s12960-019-0392-2	Are the Global Strategic Directions for Strengthening Nursing and Midwifery 2016–2020 being implemented in countries? Findings from a cross-sectional analysis	Research article—cross-sectional mixed-methods study	Global	To analyse the strengths and weaknesses in implementing the strategic directions for strengthening nursing and midwifery in the context of the SDGs, and identify opportunities for future policy reforms	Stronger nursing and midwifery workforce	National governments	Multilateral organisation (WHO)
Boelen *et al*, 2019[61]	https://doi.org/10.4103/efh.EfH_204_19	Accrediting excellence for a medical school's impact on population health	Commentary	Argentina, Australia, Brazil, Canada, China, Chile, Colombia, Egypt, France, Germany, India, Indonesia, Iran, Ireland, Japan, Mexico, Pakistan, Philippines, Russia, South Africa, Sudan, Sweden, Spain, Tunisia, Turkey, UK, USA	To advocate for stronger links between accreditation systems and health system challenges to better contribute towards health for all	Socially accountabile schools and improvement in community health	Health professional schools	International partnership of health professional schools
Kavanagh and Chen, 2019[62]	http://doi.org/10.5334/aogh.2505	Governance and health aid from the Global Fund: effects beyond fighting disease	Research article—quantitative study	112 LMICs	To describe the results of an analysis of a unique dataset on Global Fund financing alongside key indicators of governance and development over the past 15 years to empirically explore the impact of the Fund	Better governance of development assistance for health	Ministries of Health, non-government organisations (eg, Action Aid Malawi)	Multisectoral institution (the Global Fund)
Pratt, 2019[63]	https://doi.org/10.1093/heapol/czz041	Towards inclusive priority-setting for global health research projects: recommendations for sharing power with communities	Research article—qualitative study	Africa, Australia, Europe, USA, Latin America, Asia	To argue that, before moving ahead with priority-setting for global health research projects, it is vital to assess whether contextual factors necessary for meaningful engagement between researchers and marginalised communities are present or can be built in the research setting	Ethical global health research collaborations	Research/academic institutions, funding agencies	Communities

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Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Prideaux, 2019[64]	https://doi.org/10.1111/medu.13630	The global–local tension in medical education: turning 'think global, act local' on its head?	Review—narrative	Australia, New Zealand, Canada, USA, China, Latin America, Belgium, Sudan, South Africa, Nepal, Philippines	To explore the global–local tension in medical education within a context that recognises that global health is marked by inequity and a consequent need to address global health disparities	Socially accountable schools and improvement in community health	Medical schools	International partnership of medical schools (THEnet)
Yamin and Mason, 2019[65]	https://doi.org/10.1016/S0140-6736(19)30434-9	Why accountability matters for UHC and meeting the SDGs	Commentary	Global	To describes how the Independent Accountability Panel (IAP) contributes to accountability for meeting UHC and the SDGs	Improvement in women's, children's and adolescents' health	National governments	Special high-level body (UN Secretary General's IAP)
Aktar *et al*, 2020[66]	http://dx.doi.org/10.1136/bmjgh-2019-002253	How to prevent and address safeguarding concerns in global health research programmes: practice, process and positionality in marginalised spaces	Policy and practice paper	Bangladesh, India, Kenya, Sierra Leone	To share the process and practice relating to safeguarding within the Accountability for Informal Urban Equity Hub, known as ARISE	Ethical global health research collaborations	International organisations providing services to vulnerable groups in LMICs	International partnership of multiple actors (Accountability for Informal Urban Equity Hub, or ARISE)
Kohler and Bowra, 2020[67]	https://doi.org/10.1186/s12992-020-00629-5	Exploring anticorruption, transparency and accountability in the WHO, the United Nations Development Programme, the World Bank Group and the Global Fund to Fight AIDS, Tuberculosis and Malaria	Review—systematic literature review	Global	To explore how international organisations are implementing measures to promote accountability and transparency, and anticorruption in their own operations	Better governance of global health institutions	Multilateral global health institutions (WHO, UNDP, World Bank, Global Fund)	Self-accountability through internal processes
Sacks *et al*, 2020[68]	https://doi.org/10.1146/annurev-publhealth-100919-114442	Benchmarking as a public health strategy for creating healthy food environments: an evaluation of the INFORMAS Initiative (2012–2020)	Policy and practice paper	58 countries	To describe INFORMAS, an international network that monitors and benchmarks food environments and related policies that has resulted in the development and widespread application of standardised methods for assessing the characteristics of food environments	Healthy food environments and systems	National governments	International partnership of multiple actors (INFORMAS)

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Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Smits and Champagne, 2020[69]	https://doi.org/10.1186/s12961-020-0525-z	Governance of health research funding institutions: an integrated conceptual framework and actionable functions of governance	Review—narrative	Canada, UK, Australia, USA, Sweden, Netherlands, Singapore	To identify the main functions of governance for health research funding institutions	Better governance of global health funding and more ethical global health research collaborations	Global health funding organisations	Multiple actors and self-accountability
Vian, 2020[70]	https://doi.org/10.1080/16549716.2019.1694744	Anticorruption, transparency and accountability in health: concepts, frameworks and approaches	Review—narrative	Global	To summarise concepts, frameworks and approaches used to identify corruption risks and consequences of corruption on health systems and outcomes and inventory interventions to increase transparency and accountability	Better governance for SDGs and UHC	National governments	Civil society organisations
Chang *et al*, 2021[71]	https://doi.org/10.1186/s12992-021-00753-w	The Global Fund: why anticorruption, transparency and accountability matter	Research article—case study	Global	To understand anticorruption, transparency and accountability implementations and their impacts over the past decade in the Global Fund	Better governance of global health institutions	Multisectoral institution (Global Fund) and multiple levels of government	Multiple actors
Christen and Conteh, 2021[72]	http://dx.doi.org/10.1136/bmjgh-2021-006827	How are mathematical models and results from mathematical models of vaccine-preventable diseases used, or not, by global health organisations?	Research article—qualitative study	Europe, North America, Asia	To examine how research evidence on global burden of disease and vaccine impact estimates is used by global health organisations to strengthen global immunisation systems	Reduction in burden of disease	Global health institutions (eg, BMGF Foundation, GAVI)	Multiple actors
Fitzgerald *et al*, 2021[73]	https://doi.org/10.7189/jogh.11.03045	Global health and social accountability: an essential synergy for the 21st century medical school	Commentary	USA, Kenya, Canada, Ecuador	To argue that when global health and social accountability each draw on the strength of the other, these endeavours can be reinforced in a powerful synergy that enables them to realise their full potential	Socially accountable schools and improvement in community health	Medical schools	Self-accountability

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Table 1 Continued

Authors, year, reference no	DOI	Title	Article type	Geographical scope	Research question or objective*	Accountability for what outcomes?	Which actor is held to account? (duty bearer)	By whom? (claims holder)
Kiendrébéogo *et al*, 2021[74]	http://dx.doi.org/10.1136/bmjgh-2020-004273	Reinforcing locally led solutions for UHC: a logic model with applications in Benin, Namibia and Uganda	Policy and practice paper	Benin, Namibia, Uganda	To present new ways for LMICs to gain more control of their development assistance programming as they move towards UHC	Better governance of development assistance for UHC	National governments	Multiple actors
Saxena and Kline, 2021[75]	https://doi.org/10.1016/S2215-0366(21)00391-6	Data to drive action and accountability	Commentary	Global	To describe the Countdown Global Mental Health 2030	Improvement in mental health	National governments	International partnership of multiple actors (Countdown Global Mental Health)
Schaaf and Khosla, 2021[49]	http://dx.doi.org/10.1136/bmjgh-2021-006033	Necessary but not sufficient: a scoping review of legal accountability for sexual and reproductive health in low-income and middle-income countries (LMICs)	Review—scoping review	Global	To explore the links between legal accountability strategies and changes in the desired sexual and reproductive health and rights outcomes	Realisation of health-related rights for sexual and reproductive health	National governments	Civil society organisations
Thomas and Brown, 2021[76]	https://doi.org/10.1021/acs.est.0c04115	Using feedback to improve accountability in global environmental health and engineering	Commentary	Global	To propose that the application of smarter, more actionable monitoring and decision support systems and aligned financial incentives can enhance accountability between donors, implementers, service providers, governments and the people who are the intended beneficiaries of development programming	Better governance of environmental health interventions in LMICs	Multiple actors	Multiple actors
Debie *et al*, 2022[77]	https://doi.org/10.1186/s12961-022-00858-7	Successes and challenges of health systems governance towards UHC and global health security: a narrative review and synthesis of the literature	Review—narrative	Global	To synthesise the evidence and identify successes and challenges of health systems governance towards UHC and health security	Attainment of UHC and health security	National governments	Multiple actors

*Edited for brevity, clarity and correctness.
ARISE, Accountability for Informal Urban Equity Hub; BMGF, Bill & Melinda Gates Foundation; GAVI, the Vaccine Alliance; IAP, Independent Accountability Panel; IHP+, International Health Partnership Plus; INFORMAS, International Network for Food and Obesity/noncommunicable diseases Research, Monitoring and Action Support; LMIC, low- and middle-income country; MNCH, Maternal, Newborn and Child Health; SDG, Sustainable Development Goal; the Global Fund, The Global Fund to Fight AIDS, Tuberculosis and Malaria; THEnet, Training for Health Equity Network; UHC, Universal Health Coverage; UNICEF, United Nations Children's Fund; WHO, World Health Organization.

interinstitutional and broader system levels. Accountability processes at institutional and interinstitutional levels were mostly organisational or programmatic efforts to foster accountability, while the processes at the broader system level comprised multimodal approaches. We enumerate the specific processes for accountability below:

(a) Institutional level—lines of accountability within an institutional actor (ie, internal or self-accountability).

- *Transparency in process or information*
  For example, the institution gives the public access to information about its performance to hold itself accountable.
- *Oversight by an independent body*
  For example, the institution taps an external independent body to review its performance and make itself accountable.
- *Monitoring by an internal body*
  For example, the institution creates an internal body to monitor its performance and bring itself to account.
- *System for filing complaints/whistleblowing*
  For example, the institution has a process in place for filing complaints or requesting for investigations to hold its staff accountable.
- *Participatory decision-making in the organisation*
  For example, the institution ensures that different stakeholders participate in decision-making within the organisation to make itself accountable.
- *Clear accountability lines or rules*
  For example, the institution has clearly outlined the procedures and rules on 'who reports to who' to hold its staff and partners accountable.

(b) Interinstitutional level—lines of accountability between institutional actors (ie, unidirectional or bidirectional accountability).

- *Stakeholder participation or engagement*
  For example, a group of institutions ensure the participation of stakeholders in their activities to bring one another to account.
- *Peer evaluation or monitoring or accreditation*
  For example, institutions agree to hold one another accountable by reviewing one another's performance.
- *Adoption of guidelines, framework or shared principles*
  For example, a group of institutions adopt a set of principles to guide their activities to which they agree to hold one another accountable.
- *Networks or consortia with shared commitment*
  For example, a group of institutions formalise a network and agree to abide by a set of targets and assess one another based on their commitments to hold themselves accountable.
- *Conditions for funding*
  For example, a donor holds the recipient accountable through the grant (or withdrawal) of funding based on performance.
- *Clear accountability lines or rules*
  For example, two institutions have clear rules on how one holds the other accountable for performance.

(c) Broader system level—lines of accountability among several interacting institutional actors in the broader system (ie, web or network of accountability)

- *Setting and monitoring targets or indicators*
  For example, multiple global health actors set targets and monitor outcomes to hold one another accountable for performance.
- *Multisectoral collaborations, vibrant civil society, advocacy*
  For example, civil society, advocates and other stakeholders make global health actors accountable for outcomes.
- *Enabling policy environment*
  For example, global health actors in the system have an enabling policy framework to facilitate the attainment of outcomes and hold one another accountable for performance.
- *System for litigation or taking legal action*
  For example, global health actors use the procedures in the legal system to bring other actors to account for their failures.
- *Declared commitments to shared outcomes*
  For example, multiple global health actors declare their commitment to a set of outcomes and hold one another accountable for performance.
- *Moral suasion or investigation by special bodies*
  For example, a special body is constituted to assess global health actors in the system and hold them accountable for certain outcomes.
- *Power to grant or withhold funds*
  For example, Congress or Parliament uses its power to grant or withhold funds based on performance.

Figure 2 is a map of accountability processes described in each article in order of publication year. The most common accountability process among the articles was the setting of targets and monitoring of indicators (24, 45%) followed by multisectoral collaborations (20, 38%) and stakeholder participation (14, 26%). The least reported accountability processes included participatory decision-making (4, 8%), clear accountability rules within (4, 8%) and between institutions (4, 8%) and the power to grant or withhold funds (4, 8%). Overall, there were more accountability processes at the broader system level followed by processes at the interinstitutional level and at the institutional level.

Figure 3 presents a map of accountability processes clustered according to the categories of outcomes they were meant for (ie, accountability for what) based on how the authors discussed accountability. Good financial management and zero corruption in global health institutions was the most common target outcome of accountability processes in the articles (11, 21%), followed by maternal and child health outcomes (8, 15%), realisation of health as a human right (7, 13%), socially accountable schools (6, 11%) and ethical global health research collaborations (5,

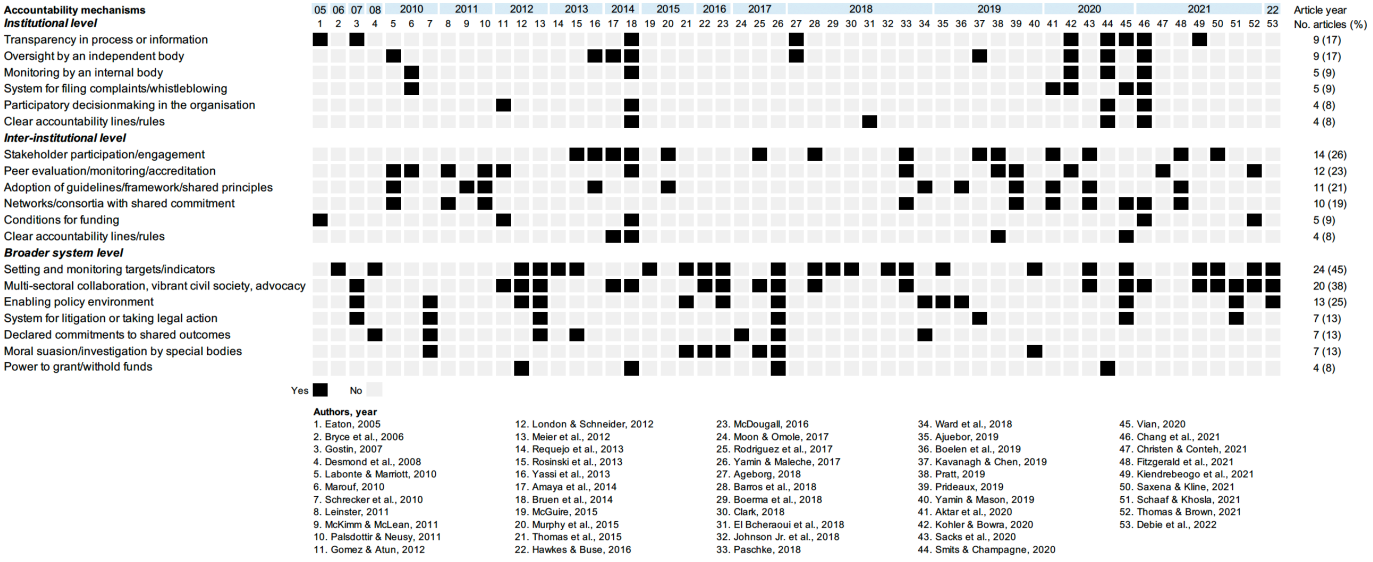

Figure 2 Accountability processes described in each article by publication year.

9%). The categories of outcomes could also overlap. For example, the category 'maternal and child health outcomes,' which draws on a human rights perspective, was grouped as distinct from the broader 'realisation of health as a human right,' depending on how the authors framed their discussion of accountability. We observed a pattern in the frequency of accountability processes such that most of the processes described for good financial management and zero corruption were at the institutional level. Maternal and child health and health as a human right had accountability processes located mostly at the broader system level. Socially accountable schools and ethical global health research collaborations had accountability processes mostly at the interinstitutional level.

DISCUSSION

The objective of this review was to explore accountability in global health by analysing formal accountability processes in practice in global health funding, research collaborations and training based on 'who is accountable to whom' and 'accountability for what.'

Accountability processes at all levels

Our analysis showed that monitoring of indicators[53 54 60 68 75 76 89 90 92–94] was the most common accountability process in our sample of articles. Many global health actors who advocate for accountability often talk about target setting and tracking as processes to make global health organisations accountable for their commitments to attain a set of outcomes. However, other accountability

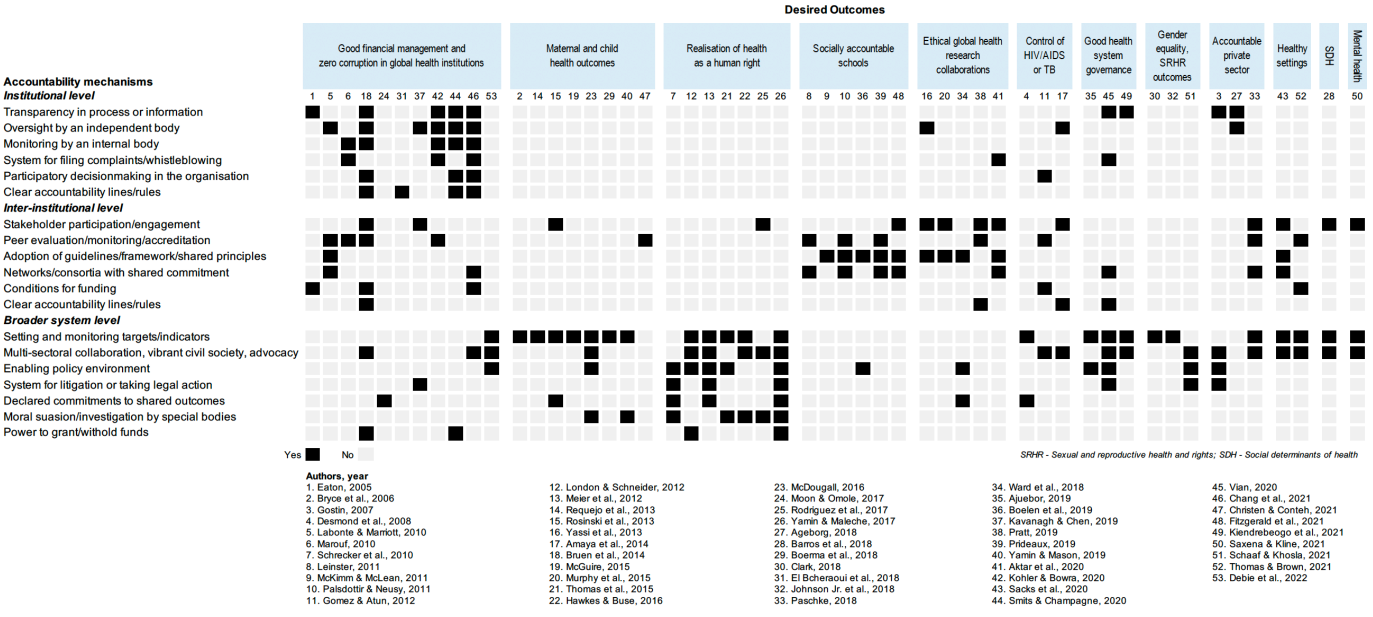

Figure 3 Accountability processes described in each article and clustered according to their desired outcomes.

processes in practice were less described in the articles, such as the use of legal procedures and litigation strategies which were reported to be useful in bringing the tobacco industry to account,[98] reducing health inequities,[83] minimising corruption in global health,[70] and promoting health-related rights,[85] including maternal and child health[88] and sexual and reproductive health and rights.[49] The establishment of formal networks or consortia of global health organisations that commit to shared principles and provide a platform for institutional 'peer-checking' was an accountability process described as useful, such as the International Health Partnership that makes donors accountable for the harmonisation and effectiveness of development assistance,[91] Global Health 50/50 that brings organisations to account for gender equality in the workplace,[55] and the Training for Health Equity Network that makes medical schools accountable for improving the health of the communities they serve.[61 64 95–97] It is interesting to note that our review identified a number of articles on medical schools' social accountability, defined in this context as 'the obligation of schools to direct their education, research and service activities towards addressing the priority health concerns of the community, region or nation they have a mandate to serve.[61]' Other processes for accountability reported to be useful include the creation of special bodies that mobilise support and ensure accountability at the highest levels, such as the United Nations Independent Accountability Panel for women's, children's and adolescent's health.[65] Self-accountability to keep organisations in check was also noteworthy, such as the internal procedures for accountability in the Global Fund.[7 62 71 82] Our review also found that scientific journals[52] and a vibrant civil society working with multiple actors in the system[49 57 58 70 74 77 79–81 83–88 90 92 93 98 101] play critical roles as claims holders in fostering accountability.

Our mapping showed the frequency of accountability processes across institutional, interinstitutional and broader system levels in our sample of articles. The articles on good governance and zero corruption in global health institutions (see figure 3) focused mostly on accountability processes at the institutional level (eg, organisational policy on transparency, process for investigating complaints, internal monitoring of performance) with few processes described at the broader system level. On the basis of this finding, more accountability processes at the broader system level could be considered to ensure good financial management in global health, for example, through a global system to monitor corruption in global health organisations, or utilisation of the legal system to sue organisations for financial misconduct, or civil society mobilisation to demand good governance in global health. Conversely, accountability processes for attaining maternal and child health outcomes and the realisation of health-related rights at the broader system level could be complemented by additional accountability processes at the institutional and interinstitutional levels. The social accountability of schools, which had accountability processes mostly at the interinstitutional level, could also be complemented by implementing accountability processes at the institutional and broader system levels.

Drawing and rethinking accountability lines

At least 26 articles described multipolar accountability lines involving a web of linkages among various institutional actors that make one another accountable.[7 54 57 58 66 68 69 71 72 75–77 80 83–87 89 91–94 98 101 102] Brinkerhoff[9] has previously suggested that there is no ideal amount of accountability linkages. However, he also cautioned that too few linkages make it easier to evade responsibility, while too many linkages confuse the lines of accountability. It would not have been possible to ascertain the locations, directions and frequency of the lines of accountability without examining the processes of accountability, as we have demonstrated in our analysis. Our review has shown that analysing information from existing accountability processes described in the literature regarding 'who is accountable to whom' and 'accountability for what' is a useful approach to characterise existing lines of accountability and create the lines where there are gaps. There is also a risk that the direction of accountability lines would favour those that already hold the power in global health and, thus, do not sufficiently promote accountability towards communities and the people,[9] which is similar to elite capture or when power becomes concentrated in the hands of the few during decentralisation.[103 104] Thus, it is also important for any analysis of accountability to rethink the directions of the lines of accountability to avoid reinforcing power asymmetries and instead put more pressure on duty bearers by shifting power towards the claims holders.

Creating the conditions for a culture of accountability

Our analysis of accountability processes was mainly based on an institutionalist paradigm[8] to understand formal institutional and programmatic processes to identify accountability deficiencies across the levels of the global health system.[12 105] Interrogating formal organisational procedures and instruments as well as organisational social norms and culture could help influence institutional actors to make accountability a core element of strategic management to gain public trust.[106 107] However, we also acknowledge that the issue of accountability in global health is not a purely technocratic exercise to be addressed by organisational and systems thinking alone. Accountability processes do not lead to their intended outcomes without the appropriate context.[108] There is a need to create the conditions for a culture of accountability to thrive in global health and it will require critical engagement with the broader social and political dimensions of accountability. This article is primarily intended to engage the readership of *BMJ Global Health*, which includes researchers, policymakers, funders, clinicians, frontline healthcare workers and other global health stakeholders. We see our role as scholars to engage readers to think about how to strengthen accountability in

their respective spheres of influence in global health. The accountability processes identified by our review may serve as entry points for meaningful debates on how to compel powerful institutional actors to answer for their actions.

Limitations and future research

Our search strategy would have missed articles that discussed concepts related to accountability, such as monitoring, transparency, policy fidelity and implementation, compliance, quality assurance, etc, but did not use the word 'accountability.' However, we were interested in articles where the authors located themselves explicitly within the accountability discourse, signalled by the authors' use of the word accountability in their text. A future scoping review could expand from our work by searching more databases and the grey literature and including non-English articles for consideration. The question of the effectiveness of accountability processes was beyond our scope, and our findings do not provide evidence to support the suggestion that more accountability processes lead to better accountability. Our hypothesis is that multiple accountability processes may act synergistically in a multipronged accountability strategy. This hypothesis could be empirically tested in future studies that assess accountability processes based on their ability to deter power abuse[6] and enable answerability and enforceability[12 105] in the event of wrongdoing.

CONCLUSION

Accountability in global health has numerous permutations in practice and is an elusive concept to unpack. It must be interrogated to serve as a better instrument to address power asymmetries in global health funding, research collaborations and training. We hope to meaningfully engage in thinking about accountability through our analysis of accountability processes in the global health literature. Global health actors who call for reforms in global health should refrain from using 'accountability' loosely without ensuring that processes to foster accountability are *de* facto put in place. Global health is evolving in the postpandemic era; there is a window of opportunity to strengthen accountability and rebalance power. In the end, Lady Macbeth's allusion to a culture of impunity in our Introduction should be proven wrong! Institutional and systems enhancement, rethinking the lines of accountability and politically engaging with the duty bearers and claims holders are necessary steps towards creating the conditions where a culture of accountability thrives in global health.

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Contributors HJL conceptualised the study, developed the methodology and performed the literature searches. HJL and OJ performed article screening and data charting. HJL led data analysis and interpretation with inputs from AF. AF provided the infrastructure for the completion of this work. HJL wrote the first draft of the manuscript with inputs from OJ and AF. OJ and AF contributed revisions to the manuscript. HJL acts as the guarantor of this work. All authors hold themselves accountable for the final version of the manuscript.

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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

***Template downloaded from http://www.prisma-statement.org and adapted for a Conceptual Analysis**

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REMARKS
TITLE			
Title	1	Identify the report as a scoping review.	Title refers to this work as a review and analysis.
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	*Abstract was structured according to the requirement of the journal.*
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	*Rationale for the review and choice for a conceptual analysis was articulated in the Introduction.*
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	*The research question was presented in the Introduction, while the PCC framework was elaborated in Methods.*
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	*A review protocol was not registered as this was not a scoping review.*
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	*The inclusion and exclusion criteria were well explained in Methods.*
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	*The two databases searched for this work were explained in Methods, including the last date of the search.*
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	*The complete search strategies for PubMed and Scopus were presented in Box 1.*
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	*The screening process was explained in Methods.*
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	*The data charting process was also explained in Methods.*

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REMARKS
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	*The list of items for which data were charted was outlined in Methods as well as in Supplementary File 2.*
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	*It was not necessary to perform critical appraisal of the publications, as explained in Methods.*
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	*The use of mapping to synthesise results was also explained in Methods.*
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	*The PRISMA flow diagram was presented as Figure 1 in Results.*
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	*A summary of the included publications and their key information in Table 1 in Results.*
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	*See remarks in item 12.*
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	*See remarks in item 15.*
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	*Synthesis of results were presented as Figures 2 and 3.*
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	*The Discussion was written following this guidance.*
Limitations	20	Discuss the limitations of the scoping review process.	*A Limitations section was provided in Discussion.*
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	*The Conclusion was written following this guidance.*
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	*Describing the sources of funding for the included publication was beyond the scope of the review, but the source of funding for the review and the role of funders were explained in a funding statement.*

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).
‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.
§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

Authors	Year	DOI	Title	Article type	Research Objectives/Questions	***Accountability for what outcomes?***
Bruen et al.	2014	https://doi.org/10.1186/s12992-014-0073-9	A concept in flux: questioning accountability in the context of global health cooperation	Commentary	We examine the changing and distributed nature of global health cooperation, and consider this with respect to some of the primary constituencies involved. Our aim here is to reflect on the concept and practice of accountability in the context of global health cooperation, and to identify and chart some of its defining features. We then discuss these features in relation to one of the newer public-private partnerships to claim accountability as a core value, the Global Fund.	Good financial management in global health cooperation

		Accountability Mechanisms	
Which actor is made accountable?	***By whom?***	**Transparency in process or information**	**Oversight by an independent body**
The Global Fund, recipients of Global Fund support	The Global Fund and other actors The accountability structure of the Global Fund resembles a chain of technical Principal-Agent relations, from sub-recipients to donors. But while donors are certainly the most powerful set of actors, the 'political theatre' and inter-organisational dynamics across the finance, programme and governance subfields ensures this is more than a simple Principal-Agent system of control and compliance.	The Global Fund has been described as one of the most open and transparent, rated sixth in the 2013 Aid Transparency Index of donors. The Global Fund Board decided at its 31st Meeting in March 2014 that all external and internal reports of the Office of the Inspector General (OIG) will be made public from now on. Once investigative reports are finalised, they are publically posted to the Global Fund website in pursuance of its transparency goal, and redress mechanisms are instigated to retrieve lost finances.	Established as an independent expert advisory panel, the Technical Review Panel assesses requests for funding from countries, presents its recommendations to the Board for final decision, and thus starts a financial relationship between the organisation and those receiving funds... Once submitted, proposals are reviewed by the TRP, which plays a particularly powerful role in influencing what can be funded. Participation on the TRP is determined by the Strategy, Investment and Impact Committee, itself comprised of representatives from the different donor and implementer blocs on the Board. The Comprehensive Reform Working Group was established by the Global Fund Board to develop a reform agenda for the organisation. Presenting its report to the Board in May 2011, the Working Group recommended that the Board improve oversight of partnership objectives, review the approach to funding technical assistance, and highlighted the need for formalising agreements and the accountability of partners to the Global Fund and in-country actors.

Monitoring by an internal body	System for filing complaints/whistleblowing	Participatory decisionmaking in the organisation (institutional)
By July 2005, the Global Fund Board agreed to establish an independent inspector office, with the Charter of the Office of the Inspector General approved at the 13th Board meeting in April 2006.		In terms of governance, the Global Fund has sought to develop a different structure to many other organisations, particularly regarding who participates in its governance activities. The governance of the Global Fund works at two inter-related levels, globally through the Board, and at country level through the CCMs. At the global level, this involves Board membership for a wide spectrum of actors from the public and private sector, some of whom have large delegations to support the work of their representatives, while others do not. The organisation is particularly noteworthy for having given voting rights to NGO delegations and for opening up opportunities for deliberative-decision making. Initially without a vote, the delegation of NGOs representing communities affected by the three diseases gained voting rights on the Board by 2004, giving them the same rights as the two other NGO delegations, states, private sector, and private foundations.

Clear accountability lines/rules (institutional)	Stakeholder participation/engagement (inter-institutional)	Peer evaluation/monitoring/accreditation
Figure 2 highlights this vertical arrangement to illustrate who reports to whom, and who is vested with the authority to demand reports and information internal to the organisation. Primary reporting lines denote required and regular reporting (solid lines), and are usually contractually bound in grant or hiring agreements, or are built into the terms and conditions of engagement. Secondary reporting (dotted lines) is less regularised, and is usually in response to investigations or requests for information. Only some actors are empowered to request or demand information. The Secretariat, for instance, is not in a position to request reports on the operation of the Office of the Inspector General (OIG), while the OIG is only charged with reporting to the Audit & Ethics Committee of the Global Fund Board. The OIG on the other hand can investigate or audit the operations of any number of actors, including the Secretariat, and has the authority to access all books and records maintained by the Global Fund, and to seek any information from people involved in the organisation's projects.	Country Coordinating Mechanisms (CCMs) are the preferred mechanism for proposal development and entering into contractual relationships with programme implementers. The CCM is the central governance mechanism at country level, and is envisioned as a country-level mirror of the public-private Global Fund Board. The CCM is primarily responsible for coordinating the development of proposals and submitting them to the Global Fund, as well as being responsible for submitting funding requests after each evaluation period. At country level, the Global Fund has tasked CCMs with being the primary mechanism with responsibility for in-country governance, decision-making and coordination. Ideally, CCMs should include a broad representation of state and non-state actors. To this end, the Fund promotes wider participation than many other initiatives at country level, and has exposed participatory weaknesses in existing structures like National AIDS Councils. In opting for having no country presence or office, the Global Fund delegates responsibility to country mechanisms in an effort to promote country ownership for setting priorities and implementing policy, albeit within the confines of the priorities established at the global level of the organisation. The legitimacy of CCMs is therefore dependent on their inclusivity, as well as their performance.	Once applications have been approved, grant recipients are monitored as part of a performance-based financing model, an incentive-based mechanism that aims to establish a new standard of accountability. As a technical tool, performance-based financing ties future funding to measurement and quantification of results, with countries expected to define the targets and recipients expected to reach them. This model has been viewed as a way for strengthening country management and information systems, as well as creating incentives to scale up programmes and delivery of services. The Local Fund Agent (LFA) represents an extension of the assurance function, verifying financial and programmatic reports submitted by the primary recipients (PRs) to the Global Fund. LFAs are selected through competitive bidding, and generally include global auditing companies such as KPMG and PricewaterhouseCoopers. PRs are legally responsible to the Global Fund, and must cooperate with LFAs and CCMs. PRs report to the Global Fund Secretariat via the LFA and the CCM, while LFAs report directly to the Global Fund Secretariat. From time to time, the OIG may review activities in countries for the purposes of identifying misuse of funds and detection of fraud, waste or mismanagement in grants.

Adoption of guidelines/frameworks/shared principles	Networks/consortia with shared commitment to goals	Conditions for fundinig
		The second stage is onward accountability to donors, where withholding or withdrawing financial support provides a powerful sanctioning and redress tool and can be employed to change the behaviour of the organisation to meet the demands of its donors. Barnes and Browne see in this model of accountability an inbuilt tension and potential imbalance of political influence: the Global Fund, they argue, shares with traditional business models a process of vertical prioritisation of accountability upwards to donors, rather than horizontally to the multisectoral partners involved. The US Congress authorised withholding 25% of its contribution to the Global Fund until it took steps to implement conditions Congress deemed essential for improving the organisation's accountability. The primary condition was the establishment of a full time, professional, independent office which reports directly to the Global Fund Board regarding, among other things, the integrity of processes for consideration and approval of grant proposals, and the implementation, monitoring and evaluation of grants made by the Global Fund.

Clear accountability lines/rules (inter-institutional)	Setting and monitoring targets/indicators	Multi-sectoral collaboration, vibrant civil society, advocacy
Once approved, grant agreements between the Global Fund and the PRs establish the terms and conditions for accountability in financial disbursement and use, procurement requirements, as well as financial and programme reporting. Financial and programme reporting are handled separately, though are linked at certain points along the process. The Global Fund Framework Document interprets accountability in a specific way, as requiring “sound processes for specifying, tracking and measuring programme results to ensure a sufficient level of accountability.” Crucially, it notes that the “future financial viability of the Global Fund will depend on being able to demonstrate results, initially in terms of coverage of activities and subsequently in terms of outcomes," whereby a system of accountability is “needed to provide incentives to grant recipients to achieve more, faster, and better results.” Grantees are thus charged with delivering results, and need to be “accountable to government, private sector and foundation donors (for the use of funds, achievements of results).		The Global Fund Board includes representatives from donor and recipient governments, NGOs, affected communities, multilateral organisations, the private sector, and philanthropic organisations. As the supreme governing body, the Board develops organisational strategies, oversees governance and finance activities, as well as assesses performance and risk. Concerns raised by the OIG on losses to the Fund were picked up by the media in mid-2011. This triggered a suspension of funding from donors, the establishment of the High Level Independent Review Panel, and a series of substantial reforms following the Panel’s recommendations. An evaluation conducted by the Panel confirmed that the system of fiduciary control developed in the founding years was inadequate and had not worked as well as intended.

Enabling policy environment	System for litigation or taking legal action	Declared commitments to shared outcomes

Moral suasion/investigation by special bodies (e.g., watchdog)	**Power to grant/withhold funds (power of the purse)**