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Review

Unfair knowledge practices in global health: a realist synthesis

Seye Abimbola[1,2,*], Judith van de Kamp[2], Joni Lariat[1], Lekha Rathod[2,3], Kerstin Klipstein-Grobusch[2,4], Rieke van der Graaf[2] and Himani Bhakuni[2,5]

[1]School of Public Health, Faculty of Medicine and Health, The University of Sydney, Sydney, NSW 2006, Australia
[2]Department of Global Public Health and Bioethics, Julius Centre for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht 3508 GA, The Netherlands
[3]Luxembourg Operational Research and Epidemiology Support Unit, Médecins Sans Frontières, Luxembourg City L-1617, Luxembourg
[4]Division of Epidemiology and Biostatistics, School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg 2193, South Africa
[5]York Law School, University of York, York YO10 5GD, United Kingdom

*Corresponding author. School of Public Health, Faculty of Medicine and Health, The University of Sydney, Room 306, Edward Ford Building A27, Sydney, NSW 2006, Australia, Email: seye.abimbola@sydney.edu.au

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Abstract

Unfair knowledge practices easily beset our efforts to achieve health equity within and between countries. Enacted by people from a distance and from a position of power ('the centre') on behalf of and alongside people with less power ('the periphery'), these unfair practices have generated a complex literature of complaints across various axes of inequity. We identified a sample of this literature from 12 journals and systematized it using the realist approach to explanation. We framed the outcome to be explained as 'manifestations of unfair knowledge practices'; their generative mechanisms as 'the reasoning of individuals or rationale of institutions'; and context that enable them as 'conditions that give knowledge practices their structure'. We identified four categories of unfair knowledge practices, each triggered by three mechanisms: (1) credibility deficit related to pose (mechanisms: 'the periphery's cultural knowledge, technical knowledge and "articulation" of knowledge do not matter'), (2) credibility deficit related to gaze (mechanisms: 'the centre's learning needs, knowledge platforms and scholarly standards must drive collective knowledge-making'), (3) interpretive marginalization related to pose (mechanisms: 'the periphery's sensemaking of partnerships, problems and social reality do not matter') and (4) interpretive marginalization related to gaze (mechanisms: 'the centre's learning needs, social sensitivities and status preservation must drive collective sensemaking'). Together, six mutually overlapping, reinforcing and dependent categories of context influence all 12 mechanisms: 'mislabelling' (the periphery as inferior), 'miseducation' (on structural origins of disadvantage), 'under-representation' (of the periphery on knowledge platforms), 'compounded spoils' (enjoyed by the centre), 'under-governance' (in making, changing, monitoring, enforcing and applying rules for fair engagement) and 'colonial mentality' (of/at the periphery). These context–mechanism–outcome linkages can inform efforts to redress unfair knowledge practices, investigations of unfair knowledge practices across disciplines and axes of inequity and ethics guidelines for health system research and practice when working at a social or physical distance.

Keywords: Equity, justice, global health, epistemic injustice, credibility deficit, hermeneutical marginalization, knowledge practices, decolonization

Introduction

Efforts to achieve equity in health around the world—i.e. global health efforts—are prone to unfair knowledge practices (Lee, 2015; Chambers, 2017; Abimbola, 2021). A knowledge 'practice' is 'any form of activity' involved in making, using and sharing knowledge—and each knowledge practice is enacted as 'specified by a system of rules… which gives the activity its structure' (Rawls, 1958; p. 164). Knowledge practices involved in global health efforts are considered prone to being unfair because they are enacted—and the system of rules which give them their structure are governed—by people from a distance and from a position of power, on behalf of and alongside people with relatively less power. Working across physical or social distance means one may know too little about what the other person or group located across that physical or social distance knows, can know, how they make sense of the world, what they consider their place is in it, what (dis)advantages them, which efforts (including their own) can redress the inequities they experience, who should enact which efforts, why and how (Abimbola, 2023a). When such gaps in knowledge are filled with wrong assumptions or false interpretations, global health efforts are suboptimal in their impact, misguided in their approach and harmful in their effects (Nzegwu, 1995; Silva *et al.*, 2013; Chambers, 2017; Bhakuni and Abimbola, 2021; van de Kamp, 2023).

There is a long and continuing line of intellectual investment by anthropologists and ethicists of health systems and global health (especially since the early 2000s) in analysing

Key messages

- The growing complaints about unfair knowledge practices in global health efforts (all of which take place within health systems) are diverse, complex, with multiple moving parts, and made across various axes of inequity and across disciplines, locations and health systems. To further consolidate this literature, we developed a systematic way to organize the complaints, via a realist synthesis of a sample of this literature, drawing on the concept of epistemic injustice and the twin concept of pose and gaze involved in knowledge-making, use and sharing.
- We identified four categories of unfair knowledge practices, each triggered by three mechanisms: (1) credibility deficit related to pose (mechanisms: 'the periphery's cultural knowledge, technical knowledge and "articulation" of knowledge do not matter'), (2) credibility deficit related to gaze (mechanisms: 'the centre's learning needs, knowledge platforms, and scholarly standards must drive collective knowledge-making'), (3) interpretive marginalization related to pose (mechanisms: 'the periphery's sensemaking of partnerships, problems and social reality do not matter') and (4) interpretive marginalization related to gaze (mechanisms: 'the centre's learning needs, social sensitivities and status preservation must drive collective sensemaking').
- Together, six mutually overlapping, reinforcing and dependent categories of context influence all 12 mechanisms: mislabelling (the periphery as inferior), miseducation (on the structural origins of disadvantage), under-representation (of the periphery on knowledge platforms), compounded spoils (enjoyed by the centre), under-governance (in making, changing, monitoring, enforcing and applying rules for fair engagement) and colonial mentality (of/at the periphery).
- These context–mechanism–outcome linkages focus attention on conditions that (via mechanisms) create fertile grounds for unfair knowledge practices—and the need to undo them. The insights made visible by this organization of the complaints literature can inform efforts to empirically study unfair knowledge practices in health and epistemic injustice more broadly, to reform ethics guidelines on health research and practice, to challenge unfair knowledge practices (for people who experience them but struggle to articulate their experience; itself a form of interpretive marginalization) and to redress unfair knowledge practices and affirm the dignity of marginalized people—i.e. people at/of the periphery—as knowers and interpreters of knowledge.

knowledge practices in global health—see, for example, Geissler and Pool (2006), Whyte *et al.* (2002), Whyte (2012), Whyte (2015) and Benton (2015) on the need to foreground local framings and interpretations of dis-ease, interventions and programmes; Biruk (2012; 2018), Adams (2016) and Storeng and Béhague (2017) on how inequities reinforce the intricate and uncertain contours of quantitative knowledge-making; Okwaro and Geissler (2015) and Kalinga (2019) on how local researchers twist and turn to align with the demands of international partnerships; Kok *et al.* (2016), (2017) on how locally led research done primarily for local audiences makes knowledge-making locally consequential and capacity-enhancing; Kingori (2013; 2015) Kamuya *et al.* (2013), Kamuya *et al.* (2015), Brown (2015), Aellah and Geissler (2016), Aellah *et al.* (2016) and Kalinga (2019) on how local researchers, managers or fieldworkers who stand between international actors and research participants navigate their marginalized status relative to international actors and their privileged status relative to research participants; Simpson (2007), TallBear (2013) Peterson *et al.* (2015), Benjamin (2016) and Kalinga (2019) on the complications involved in informed refusal by marginalized actors to participate in or contribute to research; and Parker and Allen (2014), Allen and Parker (2016) and Okwaro *et al.* (2015) on how selective use of methods or selective attention to evidence influences the choice of intervention in ways that favour downstream (biomedical or clinical) interventions over upstream (social or political) reforms.

There is also a growing 'complaints' literature—see Ahmed (2021) on the generative potential of 'complaints'—about unfair knowledge practices in global health (Bhakuni and Abimbola, 2021; Koum Besson, 2022; Pratt and de Vries, 2023). This complaints literature builds on the anthropology and ethics literature—but it focuses primarily on international partnerships, as 'global health' is often used as a synonym of 'international research partnerships' (Garcia-Basteiro and Abimbola, 2021). As a result, unfair knowledge practices within international research partnerships—such as in authorship allocation (e.g. inclusion and position), resource allocation (e.g. for training and knowledge infrastructure) and leadership allocation (e.g. who leads study conceptualization, data interpretation and partnership governance)—receive much attention (Morton et al., 2022). Even among those practices, there is much greater focus on authorship—a visible proxy metric for equity in international partnerships, as authors' affiliation, gender and perhaps country of origin can be assessed and counted (Morton et al., 2022). As with much academic literature, the complaints literature is written mostly by academics for academics (Abimbola, 2021) and may prioritize issues concerning academic careers. But authorship allocation says too little about other, often more important, dimensions and manifestations of unfair knowledge practices.

The word 'global' in global health can be a distraction (Abdalla *et al.*, 2020; Chen *et al.*, 2020; Salm *et al.*, 2021). It is easily conflated with 'international'. This conflation may be why complaints on unfair knowledge practices are primarily about one axis of inequity—between high-income countries (HICs) and low- and middle-income countries (LMICs), the Global North and Global South, the West and the 'rest' and the Minority World and Majority World. But this axis is nonetheless an important and consequential one. HICs, the Global North, the West or the Minority World exert outsize influence on how knowledge practices are structured and enacted in much of the rest of the world, an influence first procured by colonial invasion and extraction. Even then, this distinction, like all binaries, can oversimplify and obscure (Abimbola *et al.*, 2021). Other axes of inequity involved in making, using and sharing knowledge include gender (e.g. men and women; cis-gender and trans-gender), sexuality (e.g. heterosexual and homosexual), age (adult and adolescent), disability (e.g. disabled and non-disabled) setting (e.g. urban and rural), class (e.g. elite and non-elite people), indigeneity (i.e. settler and indigenous), expertise (e.g. by specialization and by experience) and proximity to action/issue (distant and proximate). These axes of inequity are even more important for people who exist at the intersections of multiple

marginalized categories (Crenshaw, 1991; Bowleg, 2012). All axes of inequity (George *et al.*, 2023) are essential considerations in efforts to ensure fairness in knowledge practices whether in HICs or in LMICs.

Each axis of inequity has its peculiar character—in terms of knowledge practices and the formal and informal rules that structure them. But the axes are all versions of centre–periphery dynamics—a metaphor for power relations (Barnes, 1991): relatively privileged or powerful locations and actors are at the physical or epistemic centre and less privileged or powerful locations and actors are at the physical or epistemic periphery. Just as locations and actors can belong to the centre or periphery, so too can knowledge platforms—i.e. platforms that are used for knowledge exchange, circulation, cultivation and curation (Smith *et al.*, 2017; Abimbola, 2023b). Knowledge platforms are therefore structures within which knowledge practices are enacted; each platform represents an embodiment of 'a system of [formal and informal] rules' (Rawls, 1958; p. 164), which specify the roles, responsibilities, relations and even rationale of actors involved in knowledge-making, use and sharing. Examples of knowledge platforms include academic journals, universities, conferences, publishers, archives, traditional media and social media—physically or epistemically located at the centre or periphery. The centre–periphery metaphor works as a stand-in for the positions that characterize unfair knowledge dynamics in many settings and situations.

The centre–periphery abstraction is necessary, especially if one is to synthesize or systematize the literature on unfair knowledge practices so that diverse axes of inequities can speak to one another. Other abstractions are also necessary. After all, knowledge practices are complex (Cilliers, 1995; 2000), with multiple components that interact in unpredictable non-linear ways. They stem from human reasoning, are shaped by human response and occur on platforms structured by human rules. Unfair knowledge practices manifest in ways that point at deeper underlying mechanisms, shaped by context (Pawson and Tilley, 1997). A synthesis of the literature on unfair knowledge practices thus requires an approach well suited to complexity—such as the realist approach which originated from critical and scientific realism (Bhaskar, 1975; Archer, 1995; Mukumbang *et al.*, 2023) as a theory-driven logic of inquiry to explain how and under what conditions social interventions or phenomena manifest or generate social outcomes (Pawson and Tilley, 1997). Its philosophical premise is as follows: shaping the actions and functioning (i.e. outcomes) of social agents are social structures (i.e. context) that enable or constrain how social agents enact social agency or how their reasoning (i.e. mechanisms) gets actioned; action that in turn influences (reinforces or undermines) the social structures that enabled or constrained it (Bhaskar, 1975; Archer, 1995).

In addition to the centre–periphery abstraction, this synthesis therefore relies on three additional abstractions: context, mechanism and outcome. The phenomena of interest are unfair knowledge practices (i.e. outcome), which are triggered by the reasoning of actors involved in those practices (i.e. mechanism), who are in turn influenced by conditions or circumstances that shape those reasoning processes (i.e. context). In realist synthesis, theoretical propositions (or hypotheses) are generated, refined or tested by identifying how structures or conditions—i.e. context (C)—influence the manifestation of social phenomena—i.e. outcomes (O)—by triggering human agency or reasoning—i.e. mechanisms (M), expressed as context–mechanism–outcome (C–M–O) linkages or configurations (Pawson *et al.*, 2004; Wong *et al.*, 2013; Mukumbang *et al.*, 2023). In this realist synthesis, we aimed to generate such theoretical propositions to explain manifestations of unfair knowledge practices by synthesizing the complaints literature. We sought to answer the question—how and under what circumstances do unfair knowledge practices manifest (as reported) in global health equity efforts?

Methods

Search strategy

We hand-searched the archive of 12 purposively selected academic journals from January 2017 to December 2021. The 12 journals were selected based on our familiarity with the global health literature and to ensure a diversity of perspectives from a broad range of physical and epistemic positions. We selected three categories of journals—two from among those that self-label as 'global health' journals (*Lancet Global Health* and *BMJ Global Health*), two social science journals that publish on global health (*Medicine Anthropology Theory* and *Social Science & Medicine*) and eight regional or local journals on public health or health ethics (*American Journal of Public Health*, *Pan-American Journal of Public Health*, *European Journal of Public Health*, *Australian and New Zealand Journal of Public Health*, *Pan-African Medical Journal*, *South African Journal of Bioethics and Law*, *Asian Bioethics Review* and *Indian Journal of Medical Ethics*). The sampling frame, 2017–21, was selected to capture a period when the complaints literature became dominant in global health discourse (Kwete *et al.*, 2022; Kunnuji *et al.*, 2023). We hand-searched archives of purposively selected journals because we were not primarily searching for research articles and to include articles published in journals not currently archived in mainstream databases. Notably, the search of dominant databases for review purposes is not optimized for identifying non-research papers such as commentaries, viewpoints and editorials.

The search was conducted by L.R. from October 2021 to March 2022 with guidance from S.A. and H.B. Articles were included if they directly raised concerns or suggested ways to address concerns about activities involved in knowledge-making (or production), use (or application) and sharing (or circulation and dissemination). The articles were on international and local knowledge partnerships, which included curriculum development and delivery; use of platforms (e.g. journals, conferences and other sites of knowledge sharing); research, training and editorial workforce (e.g. issues related to diversity, inclusion and equity); and procedures involved in using research methods and in conducting data collection, analysis or interpretation. The search began by checking the title of each article for relevance. After the initial title screening, L.R. read the abstract of articles whose title suggested content related to knowledge practices to determine if the article directly raised concerns or suggested strategies to address concerns about unfair knowledge practices in global health. Based on the abstract review, articles were categorized as 'Yes', 'No' and 'Maybe/Interesting' in an Excel spreadsheet along with reasons for placing them in those categories. L.R. shared the Excel spreadsheet with S.A. and H.B. online to review and confirm the categories, which

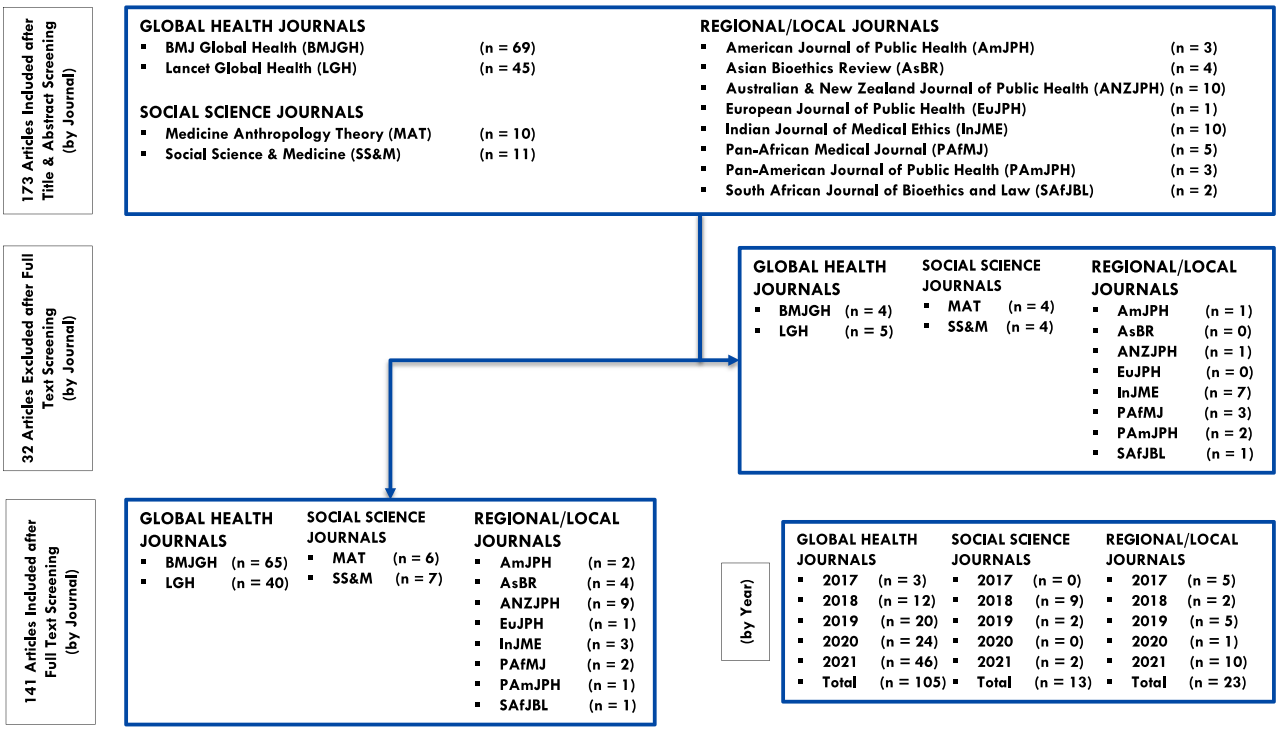

Figure 1. Identification of articles by searching the archives of three categories of journals, 2017–21

were resolved as either 'Yes' or 'No'. After title and abstract screening, 173 articles were included (Figure 1). Discrepancies in judgement between S.A. and H.B. were resolved through discussion.

The 173 articles were shared equally among five reviewers (S.A., H.B., J.v.d.K., K.K.-G. and R.v.d.G.)—34 or 35 articles for each person, for full-text screening and analysis. After the first round of screening and analysis, the articles were further shared among four reviewers (S.A., H.B., J.v.d.K. and J.L.) for a second round of screening. At the end of the two rounds, based on the inclusion criteria and the judgement of reviewers, 32 articles were excluded, leaving 141 articles which were included in the final synthesis (Figure 1). The judgement or appraisal of the potential contribution of any section of an article was based on two criteria—relevance (i.e. whether the section can contribute to our understanding of how, why or when unfair knowledge practices manifest or are exacerbated in global health) and rigour (i.e. whether the argument, evidence or experience used to generate or support each piece of insight relevant to the review is credible). Discrepancies in judgement or appraisal were again resolved through discussion between and among members of the review team. Bias was minimized in the selection of articles and their subsequent analysis through open discussion of discrepancies, through a deliberately iterative selection and analysis process and by a multidisciplinary seven-person synthesis team (combining public health, medicine, health systems, health law, human rights, health ethics, anthropology and epidemiology). In reporting this realist synthesis, we followed steps and procedures outlined in the RAMESES publication standards for realist synthesis (Wong *et al.*, 2013)—Supplementary Appendix 1.

Data extraction and categorization

Initial data extraction was conducted in tandem with full-text screening. We adapted the approach to realist analysis proposed by Danermark *et al.* (2019) in four steps. We extracted data iteratively onto an Excel spreadsheet, piloted by six randomly selected papers. The data included general information about the article, type of article (research or non-research), type of knowledge practice (e.g. authorship, curriculum design, data collection, connection or link to audience, framing, use of language, interpretation, terminology, categorization, knowledge use or application, knowledge sharing or circulation or dissemination and teaching) and 'system of rules', i.e. institutions (e.g. academia, academic publishing, ethics approval processes and funding processes) assessed or discussed in the article. In Step 1 (description), we searched passages of each article for descriptions of unfair knowledge practices and entered them on the spreadsheet along with authors' argument for why the practice is unfair using quotes that illustrate and substantiate the authors' argument—these were coded as 'outcomes'. In Step 2 (resolution), for the outcomes extracted from each article, we sought to identify conditions to which the authors had ascribed the existence of or potential for any such manifestations of unfair knowledge practices, including quotes from the article drawing these links—which were coded as 'context'.

Based on our theoretical redescription (Step 3: abduction) of unfair knowledge practices (see the section on 'Theoretical framing'), we identified the reasoning or rationale that could be imputed to individuals, groups and institutions as explanations of the manifestations of unfair knowledge practices (Step 4: retroduction) linked to and enabled by contextual conditions without which those unfair practices may not be

enacted or made manifest. The reasoning or apparent rationale was either explicitly described in the articles or implicit in the framing of the authors' arguments. Some C–M–O linkages were identified by extracting text relevant to understanding these links. But data and insights to establish these connections were not uniformly reported in each article. In some articles, 'outcome' (i.e. manifestations of unfair knowledge practices) was identified and described without a direct or implicit reference to conditions that enabled them or the reasoning or apparent rationale that made them possible—and vice versa. The list of C–M–O linkages grew as coding proceeded, and they were refined, recategorized and adjusted until there was a coherent scheme that broadly reflected accounts of unfair knowledge practices in the articles. Discrepancies in coding and their interpretation were discussed and resolved in discussion between and among the authors of this article.

Theoretical framing

The theoretical redescription—Step 3—was informed by two conceptualizations of epistemic injustice: one a modification of the other. The first was Fricker's (2007) two forms of epistemic injustice—testimonial injustice and hermeneutical (also termed interpretive) injustice. Testimonial injustice occurs when lower credibility is prejudicially ascribed to a person or group in their capacity as a knower, such that they suffer from credibility deficit. Interpretive injustice occurs when a person or group struggles to make sense of or share their experiences because of gaps in accepted ways of framing or interpretation, created through historical and prejudicial exclusion of these people and groups, such that they suffer from interpretive marginalization. The second conceptualization, by Bhakuni and Abimbola (2021), highlights two necessary modifications of Fricker's formulation. First, that there are two ways in which a person or group may experience epistemic injustice" (1) in relation to the standpoint or positionality (i.e. pose) from which they make or share knowledge or in their actual or potential role as a 'speaker' and (2) in relation to their role as audience or spectator (i.e. gaze) of knowledge that is made or shared, or in their actual or potential role as a 'hearer'; given that 'every narration places the spectator in a position of agency' (Diawara, 1990; p. 33). Second, that the epistemic agents responsible for epistemic injustice are not only individuals but also institutions. Justice or fairness is a 'virtue of social institutions' (Rawls, 1958, p. 164; Anderson, 2012, p. 163). The opposite is also true—injustice or unfairness is a vice of social institutions. The 'system of rules' (or institutions) embodied as knowledge platforms can be prejudiced in how they assign credibility or in the forms of interpretations they feature or legitimize.

The theoretical redescription produced four manifestations of unfair knowledge practices: credibility deficit related to pose and to gaze and interpretive marginalization related to pose and to gaze. We categorized unfair knowledge practices under these four categories. Complaints about the periphery being excluded from participating in knowledge-making, use and sharing (including interpretation) were grouped as 'credibility deficit related to pose'. Complaints about the periphery's interpretation being absent were labelled 'interpretive marginalization related to pose'. Complaints about interpretation being framed to suit a dominant and powerful audience at the centre were labelled 'interpretive marginalization related to gaze'. Complaints about the choice of or default to a dominant and powerful audience at the centre over the periphery were grouped as 'credibility deficit related to gaze'. Implicit in this theoretical redescription is a sense of enabling contextual conditions—i.e. pose and gaze. This allowed us to identify conditions (Step 2) that may lead to each of the four types of unfair knowledge practices. We worked out the underlying mechanisms through retroductive analysis (Step 4) which began by asking: why do unfair knowledge practices manifest as they do? (Olsen, 2010). Or, indeed, what is 'implicit in the doing' (Kim, 2021: p. 2) of unfair knowledge practices in global health? Answering this question involved 'going back from, below, or behind observed patterns or regularities [of the types of unfair knowledge practices] to discover what produces them' (Blaikie, 2004: p. 972)—or what explains identified outcomes–context linkages—by reading, comparing, re-reading and contrasting insights within and across articles. The process of identifying and refining the list of mechanisms was conducted in discussion between S.A. and J.L.

Findings

Of the 141 articles included in this review, 14 (9.9%) were research papers, with the vast majority of included articles being comments, editorials, letters to the editor and think pieces (see Supplementary Appendix 2 for a full list which includes authors' affiliation, article type and the journal in which each article was published). Most (105, 74.5%) of the articles were published in the two 'global health' labelled journals, while 13 (9.2%) were in the social science journals and 23 (16.3%) were spread across the eight regional and local health and ethics journals. The first, last or only author of 60 (42.6%) out of the 141 articles was affiliated to an institution physically located in the Global South (Mahler, 2017; Abimbola, 2023a). Overall, included articles increased in number during the five years—more than 40% were from 2021 (58, 41.1%), each of 2018, 2019 and 2020 had 15–20% of articles and only eight (5.7%) were from 2017. We identified three mechanisms for each of the four outcome categories, making 12 mechanisms in all (see Table 1 and Figure 2 for the full list of mechanisms) Each mechanism was expressed as a generative belief—i.e. reasoning and rationale imputed or imputable to individuals and institutions that may explain the manifestations of unfair knowledge practices. We identified six categories of contextual conditions influencing how these mechanisms generate outcomes (see **Box 1** for descriptions of each one using quotes from the complaints literature, with superscripts linked to Supplementary Appendix 2). The six categories of context were mutually overlapping, reinforcing and dependent (Figure 3)—none was isolated as triggering one particular mechanism; they all work together to trigger each mechanism (Figures 2 and 3). In presenting the findings on mechanisms, we also used quotes from the complaints literature that illustrated them, with superscripts linked to Supplementary Appendix 2. The quotes are, however, only illustrative and reflect the specific complaints literature that we analysed. We present the findings of our synthesis as articulated by the authors of the complaints literature. Notably, each mechanism or contextual condition will take different forms along various axes of inequity or in various settings.

Table 1. Mechanisms that trigger manifestations of unfair knowledge practices related to pose and gaze

Unfair knowledge practice	Perspective	
	Pose	Gaze
Credibility deficit	(1) 'The periphery's cultural knowledge does not matter' (2) 'The periphery's technical knowledge does not matter' (3) 'The periphery's "articulation" of knowledge does not matter'	(1) 'The centre's learning needs must drive collective knowledge-making' (2) 'The centre's knowledge platforms must drive collective knowledge-making' (3) 'The centre's scholarly standards must drive collective knowledge-making'
Interpretive marginalization	(1) 'The periphery's sensemaking of partnerships does not matter' (2) 'The periphery's sensemaking of problems does not matter' (3) 'The periphery's sensemaking of social reality does not matter'	(1) 'The centre's learning needs must drive collective sensemaking' (2) 'The centre's social sensitivities must drive collective sensemaking' (3) 'The centre's status preservation must drive collective sensemaking'

Note: Adapted from Bhakuni and Abimbola, 2021; Abimbola, 2023a.

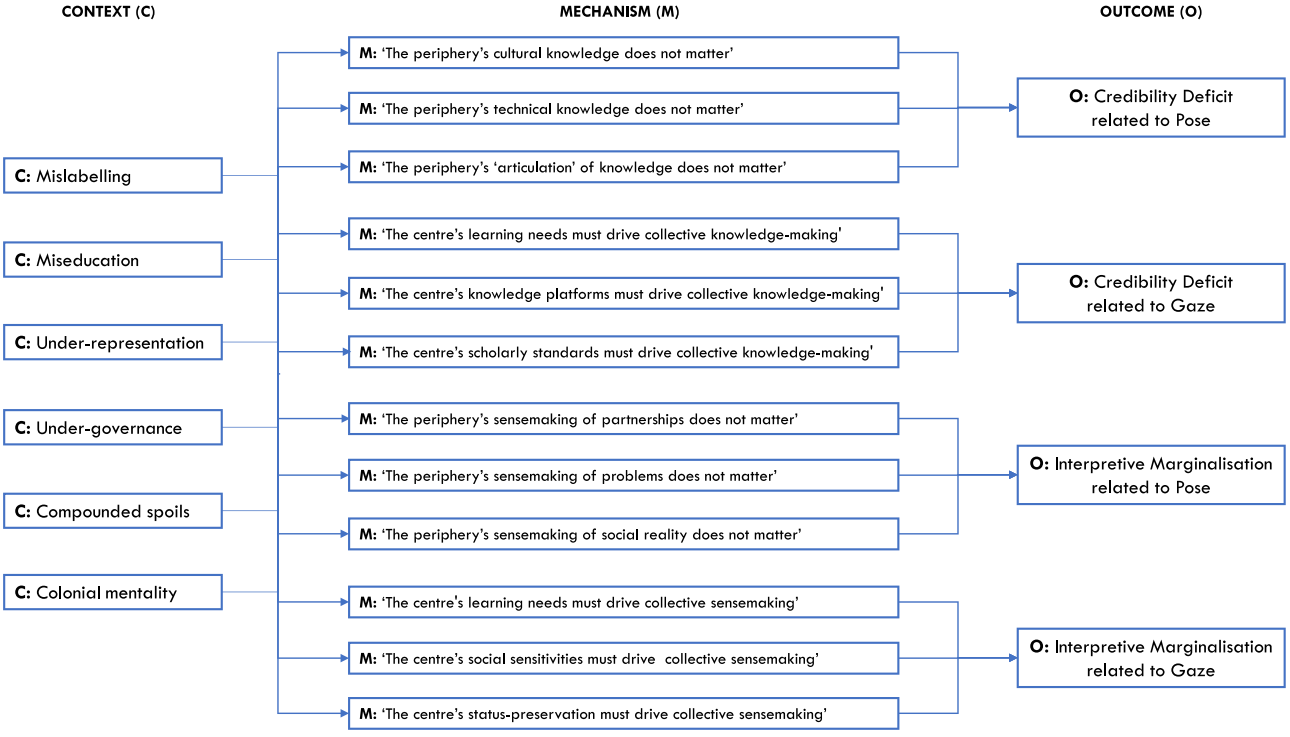

Figure 2. C–M–O linkages explaining the manifestations of unfair knowledge practices

Credibility deficit related to pose

The periphery's cultural knowledge does not matter

That is, the collective understanding of values, customs, beliefs and practices that are built and shared over time within a particular group or society at the periphery is not deemed legitimate enough to be regarded at the centre. It manifests when the centre claims universality; for example, 'that science has a uniform logic and… a universally valid methodological framework'[25] and it 'presents its approach, taxonomy, priorities, and means of knowledge production and distribution as the only way.'[26] In health systems, there is 'cultural imposition' of 'the biomedical model' on 'Indigenous Peoples' who 'have highly efficient health-care systems of their own' and whose 'ancestral medical models' which 'involve the whole community', 'the vision of necessary equity' and 'a different epistemology' should be used to expand the 'vertical medical view', but are currently 'systematically ignored in the organization of healthcare systems.'[27] It makes researchers 'select[] a research area different from the need of the locality… if someone else who is not a part of the culture or society is making the decisions.'[28] In general discourse, it leads to claims of historical precedence that ignore cultural knowledge outside the centre—for example, although 'many non-Western nations played an active role in the formation of international human rights agreements', human rights are often evoked in a way that ignores non-Western cultural knowledge such that people in the periphery 'reject [its] legitimacy… not… because the ideas have an origin in one place as opposed to another, but because they perceive something coercive is at work.'[29] Its 'pervasive force' produces 'colonial subjects

Box 1: Mutually overlapping, reinforcing and dependent categories of contextual conditions influencing the manifestations of unfair knowledge practices

Mislabelling—refers to widespread use of labels that reify false distinctions and facilitate othering or connote that what belongs to the periphery is inherently inferior; 'a symptom and outcome of the hierarchisation of humanity.'[1] Labels like '"low-to-middle-income countries" or "developing countries"' … are pregnant with assumptions, insinuate homogeneity that is unsupported, 'hamper knowledge translation between settings'[2] and 'can reinforce colonialism's "comparative paradigm", which oversimplifies identities and contexts.'[3] Mislabelling can 'make data interpretation and policy-making less effective for certain populations', 'obscure the colonial past and its impact' and 'flatten important social and cultural differences between groups, while erasing the uneven power structures within which they are situated.'[3]

Miseducation—refers to widespread ill education on the structural determination of ill health and health inequities and how to analyse these structural causes, which then creates space for 'scientific incompleteness'[4], with explanations that '"lead away from empire and push analysis away from colonial histories and in other directions."'[1] It means 'health professionals' training focuses on downstream individual intervention approaches… at the expense of upstream determinants' and that 'global health courses, almost exclusively taught in the north' is 'often missing… an understanding… that poverty in the global south is a consequence of trade and political systems that create wealth and power in the north' and that 'poor health outcomes are not merely due to chance, disasters, dictators, and fate.'[5]

Under-representation—refers to the erasure of other ways of creating, sustaining and restoring health—due to barriers of access to spaces of knowledge exchange, circulation, cultivation and curation at the centre, as such 'essential insights and perspective that can only be gained through discussions'[6] are systematically excluded. For people at/of the periphery, such as 'young people, women and racialised people'[7], 'non-English speakers… blind and deaf people'[8] there is an 'under-representation of issues that are relevant to [them] in research'[9]—because they are under-represented as the editors of academic journals ('only 4% of the editors with leadership roles being women in LMICs'[10]), authors ('inability for most scientists in Africa to afford publication fees'[11]) and the public or audience ('ordinary citizens in LMICs' are unable to engage 'in journals based in HICs.'[12]).

Under-governance—refers to (1) absence of rules that mandate equitable engagement (e.g. to ensure 'true participant collaboration and ownership by local experts and researchers'[13], 'representation of local populations in the medical literature that affects them directly'[14], that 'capacity building is tangibly prioritised'[13] including 'of community members', that 'grants… be structured… to generate' the 'knowledge needed'[15]; (2) failure to follow such rules (e.g. non-inclusive use of International Committee of Medical Journal Editors criteria which 'imposes a requirement to be comprehensively inclusive'[16]); and (3) following rules that mandate extractive engagement (e.g. that 'systematically exclude important perspectives and methodologies of communities'[17] or create 'pressure… [that] usurp time and resources for non-academic outputs of research.'[18]

Compounded spoils—refer to the compounding benefits of privilege or of previous or ongoing extraction, e.g. in that research is 'often entwined with Western funders' frames and expectations' and 'Western understandings of global health issues dominate'[19]; in that 'conferences and commissions are typically hosted in HICs, and their agendas are shaped by HIC speakers and chairs'[10]; in 'the dominance of English as an academic language and the suppression of indigenous and traditional world views' which 'coerces researchers to choose between publishing for local or global effect'[20], even if it means 'their work only touches a minority of people in their immediate environment'; in that 'publication privileges native English speakers'; and in that 'in international forums, if you don't speak English, you stay quiet.'[21]

Colonial mentality—refers to colonially induced lack of self-regard and the ceding of self-determination which is evident in the sense that excellence belongs elsewhere; or in 'the mindset of researchers from LMICs who feel compelled to seek peer approval from a foreign gaze by trying to publish their work in high impact journals as trophy publications'[22]; or in the notion that 'an African trainee must go to London or Boston'[23] to obtain 'global health degrees… largely taught from a position of assumed power'[5] ultimately 'sustaining their power structures in the process'[12]; or in retaining colonially imposed 'language policies… that almost all functions of the state including administration, education and the judiciary should be conducted solely in English' which 'adversely impact the achievement of health literacy.'[24]

Note: The description of each category is only illustrative; and each contextual category will take different forms when it influences a mechanism along various axes of inequity or in various settings.

that had internalized the belief in an inherent Western intellectual superiority'; a 'cultural inferiority complex' that says 'anything Western is good and anything local [or Indigenous] is bad.'[26] It manifests in 'the sacrifice of an ancestral tongue that could have shaped my understanding of the world in different ways, if my ancestors had not been forced to concede it for social and educational traction in a colonial context.'[20]

The periphery's technical knowledge does not matter

That is, the actual or potential contribution of actors at the periphery to academic- or technical knowledge-making is not worthy of recognition. This mechanism is at work when the credibility of knowers is judged by their 'fluency in American- or British-style English' which, in international partnerships, positions 'the "translator" rather than the "field actor"' as the person who 'tells the story.'[30] It manifests when editors of Western journals think that because 'research originating from Africa often address local problems', it is 'of little interest to international journals' and is 'automatically of lower quality.'[11] In other manifestations, 'local researchers and practitioners are thought to have everything to learn from their high-income country counterparts but nothing to teach them'[31] and are 'treated as (re)sources from which HIC health researchers gleaned information to produce knowledge…

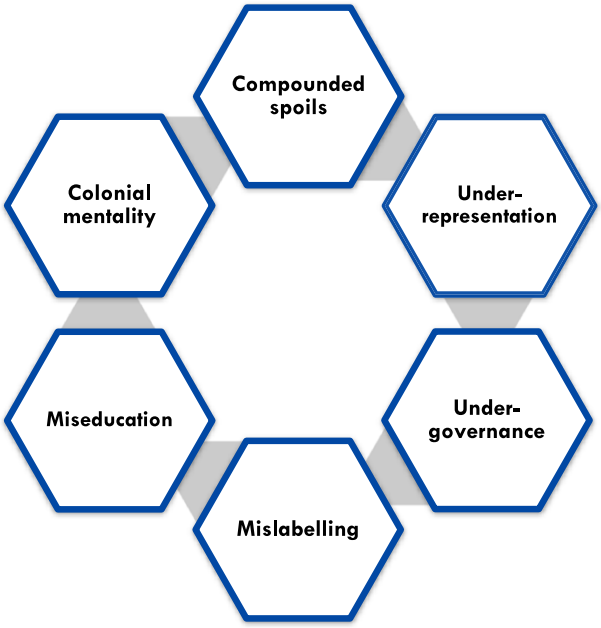

Figure 3. An illustration of the mutually overlapping, reinforcing and dependent contextual enablers of unfair knowledge practices

with scant regard for existing knowledge in LMICs.'[20] Knowers on the margin relative to researchers, e.g. 'community members are engaged to collect data or for consultancy and knowledge dissemination' but 'are not involved in… developing a research question and …analysis and interpretation'.[32] When 'translating evidence into recommendations' requires 'judgements about the balance between benefits and risks'[33], 'front-line health providers, who are the experts in low-resource clinical practice… are rarely invited to participate in such judgements and tailoring.'[33] Knowledge-making is limited to the centre, e.g. 'the researcher positions herself as a government advisor' instead of 'look[ing] at the same problem from the point of view of people who are powerless'—even though 'the advice that flows from [research] is contingent on where we stand.'[34] Methods [e.g. randomized controlled trials (RCTs)] are chosen because 'prior information… is seen as non-credible by those we are seeking to persuade' so 'we do not use those priors'—because our audience 'wants nothing to do with those priors.'[35]

The periphery's 'articulation' of knowledge does not matter

That is, advancing or building capabilities for cultivating, interpreting or sharing knowledge at the periphery is not deemed relevant. The mechanism is at work when, unlike at the centre, people at the periphery are not supported in (international partnerships) to become independent researchers: 'students and researchers from African universities' are 'excluded from being full collaborators', limiting their '"career development"' and creating 'a knowledge environment in which the voices of researchers in the North are more likely to be heard.'[36] Or when 'the Western institution leads the interpretation of the data and the dissemination of the results' so you 'find articles published in prestigious peer-reviewed journals presenting results of studies of Ebola with data and/or samples collected in Africa without any African authors'[30] or with 'women less likely to be first or last authors.'[37] It is at work when 'African institutions and investigators ensure compliance with protocols that they may not have been part of writing… leaving local staff with no option other than to implement it literally'[30] or their 'role… is restricted to securing ethical clearance from the local authority, reviewing tools for data collection, and coordinating field work' while 'advanced analyses and methodology are decided and conducted by the lead research team, with the local coordinator only reviewing the manuscript and… ensuring that it is culturally and politically acceptable.'[38] It is at work in such partnerships, when enhancing the capabilities of 'emerging scholars working with local institutions in sub-Saharan Africa' is not possible because 'career advancement opportunities are absent.'[38] It is at work for knowers at the margin (e.g. health facility staff) relative to researchers, when 'transfer of report writing to outside entities fully excludes the health facility staff from any authentic engagement with their data beyond primary documentation, leading to profound changes in how global health is practiced.'[39]

Credibility deficit related to gaze

The centre's learning needs must drive collective knowledge-making

That is, knowers at the periphery are not regarded as people whose knowledge needs should drive knowledge-making, use and sharing; locating the audience of knowledge at the centre, instead. It manifests as 'absence of a plan to disseminate and advocate for the research findings to be included in public policies'[40]; when knowledge-making is 'inappropriate for local priorities' or 'the wrong language being used, sometimes literally, …and sometimes because the language used is wrong for the target audience, owing to its technical or jargon-laden unreadability.'[41] In one example, Bangladeshi researchers who 'published a paper on barriers that researchers face in LMICs pertaining to access to resources and literature' were 'interviewed on a Bangla online platform on the impact of such barriers', during which 'one viewer rightly questioned whether such an important article could reach the Bangladeshi scientists, policy makers, and stakeholders for whom it was most relevant, when written in English.'[42] The authors later wrote: 'in our quest to cater to the Anglophone and Euro and US-centric global health apparatus, we had overlooked our local members.'[42] The mechanism is at work when researchers 'restrict their advice to the government'[34] rather than to people with less power. It manifests in 'racial bias of images… [in] medical textbooks… commonly recommended in Sri Lanka…', which, by 'over-representing light skin' are 'completely non-representative of a Sri Lankan' and 'impair acquisition of visual diagnostic skills of medical trainees'[43]. It manifests in health systems, where although only a small and often privileged minority of people who make up the centre speak English, 'administrative reports,' 'discussions during ward rounds,' 'official forms used to request investigations,' 'discharge summaries,' 'patient information' on 'drugs available in pharmacies,' 'prescriptions by doctors' and 'courses in health sciences'[24] are all in English.

The centre's knowledge platforms must drive collective knowledge-making

That is, platforms for knowledge exchange, circulation, cultivation and curation at the periphery are not deemed worthy of engagement. The mechanism manifests 'when the collation,

analysis, and use of data' in international partnerships are not done 'within the purview of local health workers and managers' but instead done with the aim of 'meeting the goals and benchmarks set by wealthier countries', such that 'the use of data to improve health care delivery dissipates.'[39] It manifests in the 'publishing abroad syndrome' as 'researchers and academics in Africa have been made to feel that they will gain worldwide recognition and reputation when their papers are published outside the continent' and 'have been brain-washed to feel that works published outside Africa are better than locally published ones.'[11] It manifests in that 'researchers [at the periphery] continue to submit their best work to elite journals only to… receive a nicely worded rejection… that only less than 10% of articles can be published' rather than go 'to their national journals, in which they stand a more than 90% chance of getting published and their peers and fellow stakeholders in global health can access their published work more easily.'[22] It manifests in the notion that 'the way to improve science in… the Global South is to concentrate the intellectual gravitas, the resources and the opportunities into the Global North' and that 'the concentration will produce the best science which will trickle methods, theories, and insights down to the Global South.'[44] It is at work when knowledge-making is not conducted primarily 'for impact' in situations in which impact 'will not happen through the pages of an academic journal'[40] or when 'inappropriate media' is 'used to communicate research findings to the public; for example, digital media being used when analogue should be, television used when radio should be, telephone being used when communication should be face-to-face and so on.'[41]

The centre's scholarly standards must drive collective knowledge-making

That is, the periphery's scientific standards and expectations of quality are not what knowledge-making seeks to fulfil. The mechanism manifests when knowledge makers at the periphery have to impress the centre: 'for knowledge produced in postcolonial countries to be published in influential journals it must… reflect Western standards of excellence' and 'take[] its cues from the West' and 'rather than being grounded in local objectives, a large proportion of… [research] employ scientific mimicry.'[26] It manifests when to impress academics and funders at the centre, knowers 'shift toward "playing the numbers game"' with 'the development of, and adherence to, uniform indicators or targets', thus 'influencing how medical and public health research is conceptualized, carried out, understood, and disseminated.'[39] It manifests as 'Northern ventriloquism', that is 'researchers mimicking foreign poses for foreign ratification, thus strengthening HIC dominance while extinguishing the LMIC episteme'; or 'when LMIC scholars enunciate HIC ideas to access globally competitive grants and publish in high-impact journals'; or when 'HIC scholarship uses its position to dictate structures and set priorities for the content, relevance, and timing of publications'; or when 'LMIC researchers "westernise the voice and the arguments" to ensure publication in HIC journals.'[20] It manifests when one's 'scholarship intersects with identity and is the everyday reality of working life' but one has to appeal to 'the objectivity that HIC science venerates' with 'aversion to the emotional and deeply personal in academic health scholarship'—'a decidedly male, HIC perspective', which is 'nonetheless presented as universal truth.'[20] It manifests in the 'impression that most forms of health-related knowledge are created in the Western cultures thus reinforcing a Eurocentric view of knowledge creation' which 'could lead to a form of intellectual inferiority complex'[43] at the periphery.

Interpretive marginalization related to pose

The periphery's sensemaking of partnerships does not matter

That is, interpretations at the periphery of what constitutes knowledge partnerships and how they should be constituted are not what shape engagement. The mechanism manifests in the centre's dominating how partnerships are set up instead of being 'grounded in the experiences of partners who, by virtue of their positions in the Global South, experience vastly different access to resources and power than the researchers they partner with from the Global North.'[18] It manifests in that 'most global health research funds are spent in HICs, and HIC experts dominate advisory boards of major funders and global health agencies.'[10] The mechanism manifests in the kind of the evidence that partnerships are set up for or optimized to produce: for example, when 'evidence' gets 'widely confused with randomized controlled trials (RCTs)' and 'held to be the paragon of rigour… [while] other forms of evidence' are 'certainly devalued.'[34] It manifests in not having 'ethics training' in partnerships 'from the outset… be designed and implemented by the communities', and in not structuring partnerships and their knowledge practices using 'ethics guidelines', the 'development' of which has been 'led by the people most affected by them'.[45] The mechanism also manifests in how, although 'there is a growing body of literature within global health that highlights the importance of thinking actively about how research partnerships should function', this literature remains short on 'practical and real-world examples of factors contributing to partnership development,'[46] especially based on the experiences and interpretations of people and organizations at the periphery.

The periphery's sensemaking of problems does not matter

That is, interpretations at the periphery about the challenges at the periphery are not what shape understanding, analysis or solutions to those challenges. It reflects in calls to 'name, acknowledge, and understand …Indigenous framing of… health as a valid, sovereign, and useful means of interventive knowledge production.'[47] It manifests in 'focusing on deficits' which 'draws attention from strength-based solutions… and reinforces a dominant narrative that white people/outsiders have the solutions to Aboriginal problems' and 'devalue[es] alternative culturally embedded ways of knowing, being and doing.'[48] It is at work in the reality that 'top-down approaches where the researchers and policymakers "prescribe" solutions are more common than community-engaged approaches where community members and researchers work hand-in-hand… to identify the problems, codevelop solutions and recommend policy changes.'[32] It manifests in the persisting need to test 'the validity of social theories' against 'historical context' that 'is a pivotal part of the [] experience and context of Africans… over the past four centuries… fraught with exploitation, discrimination and racism.'[25] It manifests in 'capacity-building workshops in Africa… focused on training… to perform internationally standardized protocols'

although 'improvisation, that dreaded departure from "standard operating procedures", is an almost inevitable feature in life after partnerships.'[49] It manifests when 'the drive to export and generalize RCTs results' which 'aims for universal reach' drives the quest for 'what works'[35], rather than marginalized experts' interpretation of what works for them.

The periphery's sensemaking of social reality does not matter

That is, interpretation at the periphery about the social systems within which people at the periphery live their lives is not what shapes the understanding or analysis of those systems The mechanism manifests in 'deficit narratives that frame cultural knowledge as an impediment to Western health care measures.'[47] It manifests in the reality of 'relying exclusively on Western epistemologies and methods' which 'result in interpretations entangled with hierarchical frameworks that… uphold notions of individualism, secularism, positivism, patriarchy, and fragmented, rather than holistic, understandings of self and kin relations.'[47] It manifests as 'importing the unchecked parochial assumptions of Western scientific medicine wholesale to communities which may hold vastly different conceptions of what it means to suffer or to be healed' which 'is not only culturally imperialistic and insensitive but also a clunky and inefficient way to go about improving global health in any measurable sense.'[29] Or indeed in that, 'regardless of how well intentioned, respectful, and reflective a researcher is in a foreign space, acting there imposes a researcher's world view and obscures local perspectives.'[20] Or in that what 'Indigenous people worldwide have recognised' is ignored: that 'the limits of current concepts of non-Indigenous systems on health, particularly in addressing the link between specific sociocultural realities and health outcomes.'[50] It is there when 'evidence synthesis… paradoxically… counteract[] the influence of end-users, by predominantly focusing on evidence generated through experimental study designs, which control for the essential contextual factors.'[33]

Interpretive marginalization related to gaze

The centre's learning needs must drive collective sensemaking

That is, issues and ideas are framed to align or fit with the prior knowledge and understanding of people at the centre. The mechanism manifests in the preference for the 'development and adoption of… indicators… driven by donors… primarily to ensure that countries achieve donors' programmatic priorities, rather than strengthen the health system's ability to manage itself.'[39] It manifests when 'narratives justify the donors' putting first their home countries' concerns' and in the 'prioritization of reporting requirements that align with their own political structures, often at the expense of what is feasible and ultimately best for under-resourced health systems'[39] It manifests when to be accepted on central platforms, researchers at/of the periphery 'are pre-emptively silenced', as they 'smother their own testimony' and 'lactify their scholarly offerings.'[20] The loss that comes with playing to the centre's needs include thinking in the framing and language of the centre, with important 'conversations… taking place primarily among academics based in HICs, and LMIC participation is limited to researchers who have built their careers within the current colonial global health structure.'[12] It means that the 'English-speaking academic has little incentive and restricted capability to engage with scientific advances being published in… other widely spoken languages'[51] and that non-English-speaking academics at the periphery 'who publish in their own language remain invisible even to their own [] audience'[21] because, paradoxically, what gets promoted in the local media at many peripheral sites is often what had already been featured in the foreign English language media.

The centre's social sensitivities must drive collective sensemaking

That is, issues are framed to preserve the comfort or feeling of superiority of people at the centre. The mechanism manifests in the 'active oppression by powerful structures to displace the marginalised from… knowledge-creating institutions to suppress their political voices'[20] and in the 'lack of a power-specific lens… stemming from the political economy of research funding and agendas, and reluctance among institutions and individuals to examine their own role in perpetuating existing power dynamics.'[52] It is 'reflected in the tendency to blame Aboriginal people for their poorer health at the expense of examining health system, socio-economic, historical and political factors' and 'reluctance/inability on the part of some health practitioners to acknowledge structural inequities, or to talk more deeply about poverty and its structural causes' or in 'focusing on [] behaviour change [which] is seductively easier than focusing on broad causes of disease states.'[48] It manifests in 'measuring the impact of "race" rather than the impact of "racism" on health outcomes' which means '"the impact of structural racial inequities" [] then, hide "in plain sight".'[53] It manifests in 'the modernization narrative' which 'shift[s] the responsibility for successful "development" onto the postcolonial subject rather than addressing structural challenges.'[26] It manifests in the hiding of failures of initiatives by the centre, which 'lead to the fabrication of achievement'[54] and in hiding 'numerous success stories emerging from the "Global South" [that] counter false narrative of Eurocentric superiority', focusing instead on the Global South's 'assumed inevitable failure.'[55]

'The centre's status preservation must drive collective sensemaking'

That is, issues are framed to align with the need to preserve the power of people at the centre. The mechanism manifests in assumptions in models used to explain inequities that 'serve protected affluence by uncritically reifying inequitable social relations… and making them appear commonsensical.'[56] It manifests in 'the tendency to individualise and depoliticise causes of and solutions to ill health and health inequities'[57] and in 'prioritiz[ing] technological "silver bullet"-type interventions designed to address specific diseases and deemed practical, financially feasible, measurable, and politically unthreatening.'[39] It manifests in that 'much effort to respond to inequities focuses on superficial symptoms of inequities rather than their causes' even though 'health inequities are… rooted in the unfair distribution of resources and power globally' and require 'disrupting.'[18] It manifests in that 'technological solutions… attract[] most funding, most publications and most recognition… limits multiplicity of viewpoints… and legitimises concentrating resources and privileges within individuals and institutions that are most aligned with and

benefit from advancing the dominant approaches.'[57] It manifests in how that 'global health has also represented a venue for some of the world's most powerful political and economic institutions to advance their interests.'[58] Or when people at the periphery avoid developing or expressing certain ideas, for 'fear of retaliation or feelings of powerlessness' such that, for example, 'the voices of global health institutions and practitioners based in the Global South have largely been absent amidst the calls for decolonisation.'[59]

Discussion

This synthesis of complaints about unfair knowledge practices in global health suggests that such practices may be triggered by a broad range of generative mechanisms (i.e. beliefs, assumptions, reasoning and rationale) attributable to individuals or institutions involved in knowledge-making, use and sharing. We identified 12 such generative mechanisms. We also identified six contextual conditions that enable them, all six of which are mutually overlapping, dependent and reinforcing. For example, the context of 'miseducation' on the structural determination of health inequities is closely related to 'mislabelling' of people at the periphery or issues that affect them in ways that obscure the structural determination of their marginalization. When the structural causes of marginalization are obscure, 'under-representation' of people at the periphery in shaping education or labelling is also obscure, which may further marginalize them. As such, people at the centre are over-represented, adding to the 'compounded spoils' they enjoy, including being in a position to govern—i.e. make, change, monitor, enforce and apply rules for equity. That people at the centre are typically spared the effects of inequities means 'under-governance' for equity is a default position. Over time, marginalization can lead to 'colonial mentality' or a sense of inferiority—at the periphery—which may entrench existing 'miseducation' when people, especially at the periphery, are taught to think that the origins of marginalization are not structural.

The vicious cycle of context may start with any of the contextual conditions; together, all six of them may influence any of the 12 mechanisms. Take, for example, the three mechanisms that manifest as interpretive marginalization related to pose: that the periphery's sensemaking—of partnerships, of problems and of social reality—does not matter. What might lead to (acting in) such a belief? It may be widespread 'mislabelling' of the periphery by the centre as inferior or the 'miseducation' of people at both centre and periphery about the existence or legitimacy of interpretive tools at the periphery. At the periphery, mislabelling and miseducation reinforces 'colonial mentality'. It may be the 'under-representation' of people at the periphery on platforms where interpretive tools are recognized and legitimized or the 'under-governance' of the processes involved for fairness. At the centre, 'under-representation' of people at the periphery and 'under-governance' of the processes for recognizing and legitimizing interpretive tools reinforce 'compounded spoils'. Rather than one contextual condition influencing one mechanism to trigger one outcome, all six, each to varying extent (depending on the knowledge practice and platform), influence one mechanism to generate a particular outcome which may manifest, differently, given the location or knowledge practice and the platform on which it is enacted.

Previous reviews of the literature on knowledge practices in global health have focused on specific issues, for example, on authorship (Schneider and Maleka, 2018; Hedt-Gauthier *et al.*, 2019; Mbaye *et al.*, 2019), partnerships (Faure *et al.*, 2021; Voller *et al.*, 2022; Johnson *et al.*, 2023) and education (Pitama *et al.*, 2018; Godwin *et al.*, 2023; Perkins *et al.*, 2023). The anthropology and ethics literature have also focused on issues related to interpretive marginalization (Benton, 2015; Adams, 2016; Biruk, 2018), credibility deficit (Adams, 2016; Aellah *et al.*, 2016; Kalinga, 2019), pose or positionality (Kamuya *et al.*, 2013; Brown, 2015; Okwaro and Geissler, 2015) and gaze or audience (Kok *et al.*, 2016; 2017; Kalinga, 2019); also on conditions that worsen or reverse unfair knowledge practices such as attitudes towards colonial histories (TallBear, 2013; Peterson *et al.*, 2015; Aellah *et al.*, 2016), representation (Aellah *et al.*, 2016; Storeng and Béhague, 2017), governance (Biruk, 2012; Brown, 2015; Peterson *et al.*, 2015), education (Biruk, 2012; Kingori, 2013; Peterson *et al.*, 2015) and labelling (Biruk, 2012; Parker and Allen, 2014; Benton, 2015). With the current analyses, we went further, systematically mapping these elements, to explain what underpins their various manifestations. For example, each of the three mechanisms that trigger credibility deficit related to pose may manifest as authorship imbalance, but the authorship imbalance caused by each has different underpinning generative triggers. With 'the periphery's cultural knowledge does not matter', marginalized people may opt out of authorship if their cultural knowledge is erased or disregarded in a project or manuscript. With 'the periphery's technical knowledge does not matter', marginalized people may be systematically uninvited to co-author. With 'the periphery's "articulation" of knowledge does not matter', marginalized people may be systematically excluded from authorship training. Our findings show how to explain authorship imbalances in terms of mechanisms that lead to them and to reach deeper into contextual conditions that may have enabled these mechanisms, thus also showing potential ways to right the wrongs.

If 'global health' means efforts to achieve equity in health everywhere (Koplan *et al.*, 2009), then its knowledge practices about which complaints are made will include more than just international partnerships between HIC and LMIC researchers—or what authorship distribution within those partnerships can assess. Complaints will include unfair knowledge practices within health and care systems more broadly (George *et al.*, 2023; Abimbola, 2023a)—such as in local research partnerships (e.g. between researchers or academic institutions on the one hand and community groups or health and care practitioners on the other hand), in local health and care systems (e.g. between everyday people and the systems they use and are a part of) and in local advocacy partnerships (e.g. the relations between researchers and activists or between researchers and policymakers)—in HICs and in LMICs. That complaints about knowledge practices in global health focus primarily on partnerships between HIC and LMIC researchers and reflect the sometimes valid understanding of global health as 'public health somewhere else' (King and Koski, 2020), i.e. public health when done by people from HICs far away in LMICs. While international research partnerships were the dominant axis of complaint in the literature that we synthesized, our findings reflect various axes of inequity along which unfair knowledge practices are

enacted. However, our synthesis does not reflect the state of all knowledge practices in global health—such a review will feature both fair and unfair knowledge practices in their various manifestations.

A previous conceptual depiction of axes along which knowledge practices occur (Abimbola, 2021) argued that knowledge makers, users and sharers are either primary (i.e. practitioners and activists) or subsidiary (i.e. academics and policymakers). The knowledge or learning needs of primary actors ought to take a central focus, but are often treated as peripheral (Burgess, 2022). Our findings suggest that the system of rules that shape knowledge practices privilege subsidiary actors over primary actors. Even the complaints literature has a greater focus on inequities experienced by subsidiary actors (i.e. academics and policymakers) than by primary actors (i.e. practitioners and activists). This pattern can be explained with the three mechanisms that manifest as interpretive marginalization related to gaze: i.e. when the centre's learning needs, social sensitivities and status preservation drive our sensemaking. A default to the gaze of subsidiary or powerful actors implies a systematic skew—for example, the complaints may be selective or framed in ways that understate and deflect responsibility. The complaints literature has been criticized for being authored largely by people at the physical centre and by people located in the physical Global North (Kunnuji *et al*., 2023; Rees *et al*., 2023). But it should be criticized, perhaps more, for how its audience or gaze (including its placement on central platforms) influences what authors choose to complain about, how they frame or deliver complaints and who gets to complain in the first place—given the gatekeeping role of journal editors, peer reviewers, article processing fees, linguistic barriers and career insecurity. After all, complaints tend to evoke disapproving or defensive responses.

Even then, it may still be reductive to criticize the complaints literature based on its authors' physical location only, without considering their epistemic location. It risks dismissing or erasing the unique contributions of the 'outsider within' (Collins, 1986: p. S14) who combines the ability to speak and listen 'from the outside in and from the inside out' (Hooks, 1984: p. vii). These 'outsiders within' include people from the physical Global South who live or work in the physical Global North or people of the epistemic Global South (who are structurally marginalized everywhere). The periphery/outsider knows more than the centre/insider—by knowing how to function in/at the periphery in relation to the centre and how to speak and listen from both places and navigate the differences. The complaints we synthesized speak not only to experiences of being at the periphery but also to the mechanisms that reinforce that marginalization—for example, the three mechanisms that manifest as credibility deficit related to gaze: that is, the centre's learning needs, knowledge platforms and scholarly standards drive our knowledge-making. The complaints show that the periphery is neither natural nor necessary, but structurally imposed via discrimination, and so can be undone. An important line of critique may be to ask whether, by taking place on platforms at the centre, the complaints literature reinforces the marginalization of the periphery or whether its authors ought to focus more on what it would take to turn a peripheral platform into a central platform.

The complaints literature reflects the physical and epistemic location of its authors and of its host knowledge platforms. For this synthesis, we sampled from 'global' and 'local' platforms. We identified more articles per journal and in total on global versus local platforms. This may mean that authors in/of the physical Global South focus on complaints they wish to direct at the physical Global North—such that unfair knowledge practices that are 'local' are under-represented. Even then, they identified the 'colonial mentality' of their fellow people at the physical Global South as an enabler of unfair knowledge practices—and whatever their location, authors may define 'global health' in ways that focus their complaints on international partnerships anyway. The pattern may also mean that complaints about the unfair knowledge practices that occur within the physical periphery are on knowledge platforms other than academic journals—say in the local traditional media. The pattern may also reflect the diffuse nature of Global South or peripheral platforms: global North or central platforms attract many more submissions per platform, no matter the topic. After all, there are many more peripheral platforms than there are central platforms. Even then, having people in/of the periphery on platforms at the centre (as authors and editors) can reverse 'under-representation' and other enablers of unfair knowledge practices.

The strengths of this synthesis are in deliberately prioritizing non-research articles and 'local' journals, in using (and modifying) a philosophically informed framework of unfair knowledge practices and the use of a realist approach allowing for conceptual (centre–periphery) and theoretical (C–M–O) reframing, such that insights can aggregate and be rendered transferable. Realist syntheses rely on the judgement of those involved—in the choice of frameworks, concepts or theories and how they analyse and present findings inevitably reflect their pose and assumed gaze—and so are, by design, not reproducible. There are limitations in synthesizing only articles published in academic journals, given their reputation of gatekeeping the contributions and interpretations of people at the periphery (Murray *et al*., 2019; Luke *et al*., 2022). The wide range of articles from different sources and standpoints may reduce the impact of this limitation. Except for the *Pan-American Journal of Public Health* (which publishes in Spanish and English), all the journals included publish primarily in English. This may have introduced bias, but including articles from local journals may have reduced the impact. Nonetheless, regular updates of the synthesis may be necessary, say every 5 or 10 years, to keep up with the complaints literature and incorporate a broader range of journals—and other platforms.

This synthesis provides a foundation for empirical analyses of manifestations of and complaints about unfair knowledge practices. These may include analyses to test and refine the C–M–O linkages we already identified, to identify new mechanisms and contextual conditions using evidence and experience in specific settings, literatures or fields; to refine how each mechanism is influenced by combinations of context, comparing across fields, time, settings and axes of inequity; to examine how the audience of complaints influences its delivery, given its potential to reinforce 'compounded spoils' and worsen interpretive marginalization; and to explore how mechanisms in turn reinforce the contextual conditions that had enabled them in the first place—and how complaints

might vary with the extent of physical and social distance. This synthesis has implications for efforts to promote justice in health research and practice, by incorporating ethics considerations about working at a distance, knowledge platforms, interpretive marginalization and manifestations of unfairness related to gaze. These considerations are all currently not reflected in widely used health ethics guidelines [e.g. World Medical Association (WMA), 2013, Council for International Organizations of Medical Sciences (CIOMS), 2016] or principles (e.g. Beauchamp and Childress, 2019). Our findings not so much necessitate adding a new paragraph on epistemic injustice—or unfair knowledge practices—to existing moral frameworks, but require rethinking existing ethics frameworks from an epistemic justice perspective: which poses and gazes have thus far been ignored in the construction of ethics principles and guidance?

Conclusion

Complaints about unfair knowledge practices in global health are diverse, complex, with multiple moving parts, and made across various axes of inequity and across disciplines, locations and health systems. We developed a systematic way to organize the complaints, via a realist synthesis of a sample of this literature, drawing on the concept of epistemic injustice and the twin concept of pose and gaze involved in knowledge-making, use and sharing. This synthesis suggests that unfair knowledge practices manifest as credibility deficit related to gaze and to pose and as interpretive marginalization related to gaze and to pose (outcomes) generated by individuals' reasoning and institutions' rationale whether explicit or imputable (mechanisms)—which are in turn influenced by contextual conditions that give knowledge practices their structure (context). These C–M–O linkages focus attention on conditions that (via the mechanisms) create fertile grounds for unfair knowledge practices—and the need to undo them. The insights made visible by this organization of the complaints literature can inform efforts to empirically study unfair knowledge practices in health and epistemic injustice more broadly; to reform ethics guidelines on health research and practice; to challenge unfair knowledge practices (for people who experience them but struggle to articulate their experience; itself a form of interpretive marginalization); and to redress unfair knowledge practices and affirm the dignity of marginalized people—i.e. people at/of the periphery—as knowers and interpreters of knowledge.

Supplementary data

Supplementary data is available at *HEAPOL Journal* online.

Data availability

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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Author contributions

S.A. and H.B. conceived and designed the work. L.R. conducted the literature search, guided by S.A. and H.B. S.A., H.B., J.v.d.K., K.K.-G. and R.v.d.G. conducted data extraction alongside the first stage of the analysis. S.A., H.B. and J.v.d.K. conducted the second stage of the analysis, by coding using the epistemic injustice and pose-gaze framework. S.A. and J.L. conducted the final stage of the analysis, by coding with the realist framework. S.A. wrote the first draft of the article. All the authors critically revised the article and approved the final version.

Reflexivity statement

This work was done by a team of seven researchers—only one of whom is male, four of whom are early career researchers and three of whom (including the first and last authors) originate from the Global South (one from Africa and two from Asia). All the authors of this paper are currently based in the Global North. This work addresses an issue—unfair knowledge practices—which poses a challenge for marginalised groups globally, but which affects the Global South in particular, but not exclusively. Unfair knowledge practices are not geographically bound; they are global. But as with all things global, they affect the Global South more. The three authors (including the first and the last authors) who originate from the Global South have all lived in the countries of their origin more than anywhere else. Their background and experiences of being from, growing up and having spent the majority of their lives in the Global South influenced the conception, framing, analysis and interpretation of the work reported in the paper. The work was conceived as part of the first author's ongoing work on epistemic injustice (or unfair knowledge practices) in global health and on dignity-based (knowledge) practices in global health.

Conflict of interest: S.A. was the Editor in Chief of *BMJ Global Health* during the period covered in this synthesis, and was author/co-author, peer reviewer or handling editor of some of the articles included in the synthesis.

Ethical approval. Ethics approval for this type of study is not required by our institute.

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