International Journal of Infectious Diseases 165 (2026) 108472

Contents lists available at ScienceDirect

International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid

Editorial

"Things Fall Apart": The Unravelling of Global Health Governance and the Imperative for Action Preserving Infectious Disease Prevention and Control

Eskild Petersen[1,*], Ben Marais[2], Marion Koopmans[3], Peter Mwaba[4], Danny Asogun[5], Moses J. Bockarie[6], Lucille Blumberg[7], Delia Goletti[8], Seif Al Abri[9], Alessandra Scagliarini[10], Lone Simonsen[1], Francine Ntoumi[11], Peter S. Nyasulu[12], David S. Hui[13], David N. Durrheim[14], Martin P. Grobusch[15], Alimuddin Zumla[16]

[1] *Department of Science and Environment, PandemiXcenter, Roskilde University, Roskilde, Denmark*
[2] *Sydney Infectious Diseases Institute (Sydney ID), University of Sydney, Australia*
[3] *Department of Viroscience, Pandemic and Disaster Preparedness Research Centre, Erasmus Medical Centre, Rotterdam, The Netherlands*
[4] *Lusaka Apex Medical University, Faculty of Medicine, Lusaka, Zambia*
[5] *Irrua Specialist Teaching Hospital, Irrua, Nigeria*
[6] *College of Medical Sciences, Njala University, Bo, Sierra Leone*
[7] *Division of Public Health Surveillance and Response, Centre for Emerging Zoonotic and Parasitic Diseases, National Institute for Communicable Diseases a Division of the National Health Laboratory Services, Sandringham, Johannesburg, South Africa*
[8] *Translational Research Unit, National Institute for Infectious Diseases Lazzaro Spallanzani-IRCCS, Rome, Italy*
[9] *Department of Infectious Diseases. The Royal Hospital, Muscat, Oman*
[10] *Dipartimento di Scienze Mediche e Chirurgiche, Università di Bologna, Italy*
[11] *Congolese Foundation for Medical Research, Brazzaville, Republic of Congo*
[12] *Division of Epidemiology and Biostatistics Department of Global Health, Faculty of Medicine & Health Sciences, Stellenbosch University, Cape Town, South Africa*
[13] *Department of Medicine and Therapeutics, Prince of Wales Hospital, Chinese University of Hong Kong, Hong Kong SAR, China*
[14] *School of Medicine and Public Health, University of Newcastle, Australia*
[15] *Center of Tropical Medicine and Travel Medicine, Department of Infectious Diseases, Amsterdam University Medical Centers, Amsterdam, the Netherlands*
[16] *Division of Infection and Immunity, University College London, NIHR Biomedical Research Centre, UCL Hospitals NHS Foundation Trust, London, United Kingdom*

ARTICLE INFO

Keywords:
Public Health Governance
Childhood immunization
Health inequality
International institutions

Introduction

In his 1958 novel *Things Fall Apart*, the Nigerian writer Chinua Achebe observes: "Age was respected among his people, but achievement was revered" [1]. Global health has likewise come to revere achievement—success stories, elimination targets, and aspirational end dates. But Achebe's novel traces how a seemingly stable society disintegrates when its organising principles erode. The tragedy is not sudden; it is cumulative, and triggered by colonial forces outside of the local culture.

The result is a world in which, piece by piece, things fall apart progressively.

Tragically, in global health, similar signs of disintegration are increasingly visible. Maintaining peace, developing friendly relationships, and promoting social progress, improved living standards and ensuring human rights has been the basis for a collaborative agreement among countries across the world and was the founding principle for the development of the United Nations (UN) after

* Corresponding author.
E-mail addresses: eskild.petersen@gmail.com (E. Petersen), ben.marais@sydney.edu.au (B. Marais), m.koopmans@erasmusmc.nl (M. Koopmans), pbmwaba2000@gmail.com (P. Mwaba), asogun2001@yahoo.com (D. Asogun), mbockarie@gmail.com (M.J. Bockarie), lucilleb@nicd.ac.za (L. Blumberg), delia.goletti@inmi.it (D. Goletti), salabri@gmail.com (S.A. Abri), alessand.scagliarini@unibo.it (A. Scagliarini), fntoumi@fcrm-congo.com (F. Ntoumi), pnyasulu@sun.ac.za (P.S. Nyasulu), dschui@cuhk.edu.hk (D.S. Hui), david.durrheim@newcastle.edu.au (D.N. Durrheim), m.p.grobusch@amsterdamumc.nl (M.P. Grobusch), a.zumla@ucl.ac.uk (A. Zumla).

https://doi.org/10.1016/j.ijid.2026.108472

World War II. UN agencies such as the World Health Organization (WHO), the Food and Agricultural Organisation (FAO), and the UN Environmental Program (UNEP) were entrusted with coordination of the global response to human-, and animal and environmental health threats.

A separate supranational organisation already in existence since 1924 focussed on animal health threats, the World Organization for Animal Health (WOAH). Two decades ago, global health appeared to be entering a golden era. HIV mortality was falling, malaria deaths were declining steeply, tuberculosis (TB) detection systems were expanding, measles and rubella eradication was considered biologically, technically and economically feasible with existing vaccines and neglected tropical diseases (NTDs) were gaining long-overdue attention through mass drug administration and elimination campaigns. Smallpox and rinderpest were eradicated, and ambitious timelines were declared: ending AIDS as a public health threat by 2030, eliminating measles and rubella in at least 5 of 6 WHO Regions by 2020, eliminating TB, eradicating malaria, and interrupting transmission of diseases such as schistosomiasis, dracunculiasis, polio and trachoma. In 2022, four UN agencies entered an agreement for collaborative action to a sustainable balance and optimize the health of humans, animals, plants and the environment, with an agenda to work on development of global surveillance for infectious diseases, specific programs aimed at reducing the global burden or even eliminate diseases and jointly address the threats to health from climate change [2].

Today, those ambitious goals appear increasingly distant. Progress has not vanished, but it has become fragile. Yet, the need has not changed: analyses from the Global Burden of Disease (GBD) Study and WHO estimates show that infectious diseases remain major causes of death and disability worldwide, increasingly intersecting with rising non-communicable diseases (NCD), burdens, climate shocks, and weak epidemic preparedness [3–5]. Gains against tuberculosis (TB), malaria, and HIV have stalled or reversed; epidemic-prone zoonoses continue to spill over; arboviral outbreaks are breaking records; countries are reeling under a global measles resurgence and NCD amplify infectious risks. The large Ebola viral disease outbreaks in West Africa, Zika in the Americas, and COVID-19 across the globe laid bare that the world is ill prepared for the changing epidemiology of infectious diseases.

But perhaps the biggest challenge is the increasing erosion of confidence in science and institutions [6–7]. The weakening of institutions is rarely abrupt. It is gradual and often predictable, when early warnings are ignored. The overlapping pressures reveal a central paradox of contemporary global health: unprecedented technical capacity coexisting with declining institutional resilience. This is visible in several thematic areas:

1. **Fragmentation of governance and solidarity**

   The fragmentation of global health governance is no longer theoretical. On 20–21 January 2025, the United States president issued an executive order and publicly announced the intent to withdraw from the WHO [8], a decision that, under WHO rules, requires a notice period and therefore initiated a process of withdrawal. The US position was confirmed in January 2026 and the WHO is faced with a major challenge in maintaining its core programs due to the loss of a once reliable and generous partner member state.

   In parallel, the United States of America initiated a 90-day review and pause of foreign assistance in early 2025, creating major uncertainty and disruption for programmes including the support for the President's Emergency Plan for AIDS Relief (PEPFAR) initiated by former USA president George Bush in 2003 and broader USAID operations [9,10]. Modelling suggests that even time-limited interruptions to HIV financing and service delivery could translate into large numbers of excess infections and deaths in sub-Saharan Africa, underscoring how quickly long-term gains can rapidly be placed at risk [11]. PEPFAR remains among the most successful global health initiatives in history. Its impact has depended not only on scientific advances, but also on sustained political commitment. Funding uncertainty now threatens gains that took two decades to build [11,12].

   Fragmentation is also evident in the growing emphasis on bilateralism. In late 2025, reporting described draft bilateral health agreements that would expand US-specified requirements for outbreak notification timelines and pathogen sample sharing in partner countries [13,14]. Regardless of the final form these agreements take, the direction of travel is clear: surveillance and response rules are increasingly contested terrain in foreign policy, not simply technical domains of public health, but embedded into an aggressive business agenda focussing on access to rare commodities needed to further expand the global demand for energy and rare minerals [15].

   These developments threaten to seriously impact the WHO Pandemic Agreement presented at the World Health Assembly on the 20th May 2025, which aims to strengthen international coordination for pandemic prevention, preparedness, and response, including commitments to data sharing and more equitable access to vaccines, diagnostics and therapeutics [16]. The agreement was developed at the request of the World Health Assembly, after the COVID-19 pandemic had made it painstakingly clear that gathering and sharing of essential information as early as possible was far from optimal, that access to diagnostics, drugs and medical countermeasures was far from equitable, and that no government or institution could address the threat of future pandemics alone.

   The agreement was reached after negotiations in which the interests of countries across the globe and particularly low-and-middle-income countries were considered. A core theme was and is the need for fairness in the global handling of pathogen data, pathogens, and outbreaks, with stiff negotiations about the need for access and benefit sharing to improve equity in Global Health [16]. The promise of the treaty depends on the underlying principle that global health is a common good, requiring broad participation and durable trust, exactly what geopolitical fragmentation threatens to erode. The agreement has not been signed by the USA. Also, the current USA administration has not requested support for the Coalition for Epidemic Preparedness Innovations (CEPI), in its 2026 budget proposal [17]. Half of databases previously maintained by the US Centers for Disease Control and Prevention, CDC, is not being maintained [18].

   Fragmentation also persists in the still debated question of SARS-CoV-2 origins although a zoonotic to human cross-species transmission events is most likely [19]. In June 2025, WHO's Scientific Advisory Group for the Origins of Novel Pathogens (SAGO) concluded that accessible evidence is consistent with zoonotic spill-over with multi-species mixing in wet markets in China as a key risk factor. However, key data particularly early genetic sequences and other information requested from China remain unavailable, limiting confidence in definitive conclusions [20,21] (Figure 1).

2. **Vaccines, misinformation, and erosion of trust**

   Vaccines remain among the most effective public health interventions ever developed. Since its launch in 1974, the WHO's Expanded Programme on Immunization (EPI) has saved an estimated 154 million lives by protecting children against diseases such as measles, polio, tetanus, diphtheria, hepatitis B, *Haemophilus influenzae* type b, and meningococcal infections [22,23]. More recently, adult vaccination campaigns against

Figure 1. Reflection on past achievements, current fragilities and strategic global public health priorities.

COVID-19 prevented tens of millions of deaths globally during the acute phase of the pandemic [24].

Yet vaccines have increasingly become targets of sustained misinformation campaigns, amplified by the change in the leadership in the USA and by social media algorithms. Renewed claims linking measles, mumps, and rubella (MMR) vaccination to autism are actively being promoted through these actors, despite robust evidence from large population-based studies demonstrating no association [25]. Vaccine misinformation has been amplified by political agendas actively intended to drive polarisation for political gains and declining trust in institutions, contributing to declining childhood vaccination coverage in several high-and middle-income countries [6,7]. The science hasn't changed; it's the politics that have changed.

In the United States, Canada and Mexico declining childhood immunisation rates have been followed by increasing measles transmission. Several multi-state outbreaks were reported in 2024–2025, reversing progress toward elimination [26]. Measles is highly transmissible, which makes it a sentinel of declining vaccine coverage. Similar declining trends have been seen in parts of Europe and elsewhere [27], reflecting a broader erosion of confidence in public health recommendations rather than isolated pockets of hesitancy.

The consequences of vaccine misinformation extend beyond childhood immunisation. Analyses of COVID-19 mortality in the United States found that a substantial proportion of deaths occurring after vaccines became widely available were preventable, with refusal or delayed vaccine uptake strongly associated with exposure to misinformation, scepticism of science and political identity [6,7]. This is not simply a failure of individual decision-making, but a systemic breakdown in the relationship between science, governance, and public trust and lack of political leadership [7,28]. The decision to almost completely stop investments in mRNA vaccine research for respiratory viruses by the US government may threaten investments by pharmaceutical companies, given the uncertainty of future markets [29], and the global ability to rapidly produce sufficient vaccine doses to mitigate the impact of a future "Disease X" scenario.

In response, independent initiatives have emerged to counter disinformation and restore confidence in science and public health. The Center for Infectious Disease Research and Policy (CIDRAP)'s Vaccine Integrity Project, for example, seeks to provide transparent, evidence-based assessments of vaccine science and policy, insulated from political influence [30]. Such efforts are necessary but insufficient on their own. Trust cannot be rebuilt solely through fact-checking if political leaders are engaging in disinformation; it depends on consistent political leadership, credible institutions, and a social contract that treats public health as a shared good rather than a partisan battleground.

The erosion of vaccine confidence is therefore not an isolated phenomenon. It is an indicator of a deeper vulnerability in national and global health systems: when trust in science and public institutions fractures, even the most effective tools lose their power [7] (Figure 1).

Neglected tropical diseases (NTD): promise and precarity

Over the past two decades, coordinated international action, anchored by the WHO's NTD Road Map, has delivered measurable success [31]. Several countries have achieved elimination of diseases such as Guinea worm, lymphatic filariasis, and trachoma as public health problems, demonstrating what sustained political

commitment, donated medicines, and community-based delivery can accomplish [31,32].

These achievements are substantial, but they are also extremely fragile. Most NTD programmes depend heavily on external financing, pharmaceutical donations, and a functioning primary health care systems for delivery, surveillance, and verification. COVID-19–related disruptions exposed these vulnerabilities. Recovery has been uneven, and in some countries, programmes have yet to return to pre-pandemic operational capacity [33].

Reduced international funding and domestic fiscal pressures, coupled with climate-sensitive expansion of vectors and intermediate hosts, has increased the risk of resurgence in many low- and middle-income countries. Weak health information systems mean that early signals of renewed transmission are often delayed or missed. Surveillance for NTDs is frequently among the first casualties of budget cuts, rendering disease re-emergence invisible until transmission is well established [34].

High-burden NTDs, including schistosomiasis, Chagas disease, leishmaniasis, and onchocerciasis—continue to impose substantial disability, particularly among the poorest and most disadvantaged [35]. Diseases of the poor and marginalised are persistently underfinanced relative to their contribution to morbidity and long-term economic loss. The mismatch between burden and investment reflects a deeper political economy of neglect: diseases that primarily affect marginalised populations generate limited urgency once elimination targets appear within reach similar to the plateau of malaria control investment and the withdrawal of funding for leprosy elimination. NTDs are at risk of a quiet slide back into neglect after initial success. Indeed, NTDs are a stress test of whether long-term commitments can be maintained once initial success is declared (Figure 1).

Beyond Africa: epidemic-prone zoonoses

Deep concern about global health regression and lost gains is not confined to sub-Saharan Africa, even though many African countries bear a disproportionate burden of epidemic-prone diseases. Recurrent outbreaks of zoonotic infections illustrate how ecological disruption, urbanisation, and weak surveillance systems converge to produce repeated public health emergencies [36]. Lassa fever alone is estimated to cause tens of thousands of infections annually in West Africa, with substantial underascertainment due to limited diagnostic capacity and surveillance gaps [36]. In recent years, outbreaks of Ebola virus disease, Marburg virus disease, mpox, and Rift Valley fever have re-emerged across multiple countries [37,38]. Although outbreak detection and response have improved compared with the early 2000s, surveillance remains fragmented across human, animal, and environmental health sectors, limiting timely risk assessment and coordinated action.

A One Health perspective helps explain why these outbreaks continue to occur. Land-use change, deforestation, agricultural intensification, climate stress, and expanding wildlife–human interfaces are accelerating zoonotic spill-over at a pace that increasingly outstrips global response capacity [39,40], including more integrated prevention, early warning and control of emerging infections at the human-animal interface[39]. These drivers are not regional anomalies but manifestations of anthropogenic planetary change, linking outbreaks in West and Central Africa to broader global patterns of environmental degradation and economic development.

The consequences of this disconnect are evident. With the increasing pressures on natural systems, spill-over outbreaks can occur across the globe, increasing the demand for strengthening of surveillance in an already underfunded and understaffed health system in many parts of the world. As a consequence, surveillance systems often detect outbreaks only after sustained transmission is occurring, and response mechanisms remain heavily dependent on emergency mobilisation rather than embedded preparedness. The circulation of clade IIb mpox among humans had already been ongoing for several years Nigeria before the virus spread globally in a MSM network since May 2022 [40].

Even in high resource countries, investments in zoonotic disease control remain skewed toward reactive measures, while upstream drivers—environmental governance, land-use planning, and climate mitigation—receive far less attention within global health strategies. In the USA, the introduction of highly pathogen avian influenza into cattle had been going under the radar for several months before the cause of the disease was identified [41]. With the lack of transparency from the US government about this it is unclear what is going on with this widespread cattle outbreak, both with respect to animal and human health and the evolution of the emerging virus.

Epidemic-prone zoonoses therefore expose a fundamental tension in global health architecture: the mismatch between the transboundary nature of emerging infectious threats and the largely national or bilateral frameworks used to address them. The moral obligation to protect the health of our children and future generations gets very little attention in global health [42] (Figure 1).

Arboviruses in a warming, urbanising world

Arboviral diseases have become emblematic of a warming, rapidly urbanising world. Once framed as episodic or geographically contained, infections such as dengue, Zika, chikungunya, West Nile and yellow fever are now persistent threats across large parts of the globe [43,44].

In 2024, the Americas experienced the largest dengue epidemic on record, with more than 11 million suspected cases across the region [45]. Similar trends have been observed in parts of Asia and the Western Pacific, where dengue and chikungunya circulate in densely populated, climate-stressed urban environments.

Zika virus imported to the Americas from Oceania caused an explosive epidemic in Brazil in 2015-2016 and pregnant women transferred the virus to their fetuses, causing a substantial outbreak of microcephaly. Sustained mosquito-borne transmission has now been documented in more than 90 countries and territories worldwide [46]. Urban poverty and rapid, unplanned urban expansion accelerate transmission by increasing mosquito breeding. These forces have transformed arboviral disease from a sporadic public health concern into a structural feature of global health risk [47]. In Europe, the incidence of arboviruses is on the rise, with geographic expansion of viruses, and the increasing establishment of *Aedes* vectors and sandfly vectors.

Despite growing recognition of these trends, access to diagnostics and preventive tools remains deeply unequal. Diagnosing and monitoring arboviruses in endemic regions remains challenging for lack of suitable multiplex assays, hampering our understanding of the epidemiology [48].

Dengue vaccines have been licensed and introduced in some settings, but deployment has been constrained by cost, supply limitations, and the need for careful risk–benefit assessment. Vector control strategies continue to rely heavily on insecticides, even as resistance spreads and community acceptance declines. Arboviruses thus expose the limits of global health narratives that prioritise short-term containment over structural prevention. In a warming and urbanising world, vector-borne disease control cannot succeed without addressing the social and environmental conditions that allow transmission to flourish [48] (Figure 1).

Syndemics: infectious diseases and NCDs in a shared body

Global Burden of Disease (GBD) analyses and WHO mortality estimates show that non-communicable diseases (NCDs) now account for the majority of global death and disability [49]. Yet NCDs have not replaced infectious diseases; they coexist with, and amplify, them. During the COVID-19 pandemic, mortality was disproportionately concentrated among individuals living with obesity, diabetes, hypertension, and other NCDs, exposing how chronic disease burden magnifies epidemic risk [49].

Tuberculosis risk and outcomes are strongly influenced by undernutrition, diabetes, smoking, and alcohol use. Measles disease is devastating in undernourished children. HIV infection increases the risk of cardiovascular disease, chronic kidney disease, and certain cancers, even in the era of effective antiretroviral therapy [50].

In many low- and middle-income countries, individuals simultaneously face HIV, TB, Malaria and one or more NCDs while navigating health systems organised into rigid, disease-specific silos [50–53]. Funding streams, clinical guidelines, and surveillance platforms remain vertically structured, requiring patients to move between uncoordinated services. Access to healthcare and susceptibility to misinformation are unevenly distributed [54]. The result is inequality in care, inefficiency, loss to follow-up, and missed opportunities for prevention and early intervention.

This syndemic reality underscores a central limitation of current preparedness strategies. Approaches that focus narrowly on pathogen-specific countermeasures—vaccines, antivirals, diagnostics—without sustained investment in fundamental research, one health prevention programs, primary health care, chronic disease management, nutrition, and social protection will continue to leave populations exposed. Recognising syndemics requires a shift in how success is defined in global health. Reductions in single-disease mortality, while important, are insufficient indicators of resilience if underlying vulnerabilities persist [55]. Preparedness that fails to address NCDs alongside infectious threats is preparedness in name only (Figure 1).

War and the breakdown of public health

Armed conflict represents one of the most direct and destructive assaults on public health systems. In war settings, health infrastructure collapses, routine services are interrupted, supply chains fractured and populations are displaced, creating ideal conditions for the resurgence of infectious diseases and the spread of antimicrobial resistance.

The consequences are visible across multiple conflict zones. In Yemen, prolonged conflict has been accompanied by large outbreaks of diphtheria and cholera, reflecting the breakdown of immunisation programmes, water and sanitation systems and disease surveillance [56,57]. Similar dynamics are unfolding in Sudan, where ongoing conflict and mass displacement have been associated with surges in cholera, malaria, measles, rabies, and other communicable diseases. Health services in Darfur and other affected regions are overwhelmed, under-resourced or inaccessible, compounding already severe humanitarian needs [58].

Forced displacement further amplifies health risks. Among Rohingya refugees in Cox's Bazar, Bangladesh, one of the world's largest refugee settlements— overcrowding, limited water and sanitation and constrained health services have fuelled recurrent outbreaks of scabies and cholera, despite substantial humanitarian engagement [59,60]. These conditions illustrate how even well-supported emergency responses struggle to contain disease when displacement becomes protracted rather than temporary.

Among war-wounded populations in Ukraine and Gaza, high rates of colonisation and infection with multidrug-resistant Gram-negative bacteria, including carbapenemase-producing Enterobacterales, have been documented [61–63]. AMR emerging in war zones does not remain confined; it travels with patients, healthcare workers, and humanitarian evacuations. In Gaza, the ongoing conflict has further degraded infection prevention and control capacity, increasing the risk of healthcare-associated transmission and regional spread including polio [64,65].

In Somalia, where conflict, climate shocks, and weak governance intersect, communicable disease outbreaks continue to recur. As of late 2025, thousands of suspected diphtheria cases and over a hundred deaths had been reported, underscoring how fragile immunisation and surveillance systems are affected during protracted crises [66].

In Eastern DRC, the emergence of a novel mpox variant was not brought under control due to challenging conditions as a consequence of military conflict. The clade Ib mpox strain, first identified in South Kivu, now appears to have set foot outside of the African region as well with sexual contacts driving the transmission [67,68].

Modern-day war also uses (mis)information as a weapon, which may further undermine trust in institutions. After the Russian invasion of Ukraine, a security council meeting was called to discuss allegations of a bioweapons program 'discovered'. The work described with visuals in the UN council meeting was an avian influenza virus surveillance program, an essential component of the global monitoring of bird flu [69].

How prepared are we?

The post–COVID-19 period has produced an unprecedented proliferation of preparedness frameworks, indices, road maps, and action plans [70]. However, without sustained financing, political commitment, manufacturing capacity, technology transfer, and governance mechanisms that treat vaccines, diagnostics, and therapeutics as global public goods, preparedness risks becoming performative, highly visible in documents, weak in delivery [71]. As the next pandemic virus emerges locally and then spreads globally, the world is no better prepared than the weakest link in the chain.

Yet beneath this activity lies an uncomfortable truth: the world remains dangerously unprepared for future pandemics. WHO-led initiatives such as the R&D Blueprint and priority pathogen lists remain essential components of global preparedness architecture [72,73].

The Global Health Security Index (GHSI), which assesses countries' capacities to prevent, detect, and respond to infectious disease threats, reports an average global score below 40 out of 100 and concludes that no country is fully prepared for pandemics [74]. More revealingly, countries with higher preparedness scores did not consistently achieve better outcomes during the COVID-19 pandemic[75]. Subsequent analyses demonstrated that technical capacity alone, laboratories, plans, legal authorities was a poor predictor of mortality, trust, or equity in response [75]. This disconnect exposes the limits of checklist-based preparedness divorced from political context.

Governance, public trust, social cohesion, and equity proved as important as diagnostic capacity or stockpiles. Where leadership is fragmented, communication inconsistent, and trust low, formal preparedness measures fail to translate into effective action.

Preparedness must be judged by whether medicine reaches hospitals, health workers are protected and paid, laboratories function during crises, supply chains remain intact, public health protection and primary prevention is functioning well, and whether communities trust public institutions enough to follow their guidance. On these measures, preparedness remains uneven and, in many places, illusory (Figure 1).

Conclusions

Things Fall Apart is not only a story of collapse, but of leadership failure and denial. Achebe describes a society unable to adapt when its foundational assumptions are challenged, mistaking rigidity and belief in unscientific narratives for strength - until disintegration becomes inevitable. Global health now faces a comparable reckoning. Decades of progress have produced remarkable achievements, but too often without the institutional, political, and social foundations required to sustain them. The result is a system rich in technical solutions yet increasingly poor in resilience.

Several lessons follow:

First, global health financing must be treated as long-term investment in infrastructure, not episodic charity or part of a business model. Chronic underfunding of TB, malaria, HIV, neglected tropical diseases, primary health care, strengthening of surveillance, diagnostic capacity and health systems preparedness for outbreaks is not an accident; it is a political choice. Fragile gains are the predictable consequence of short funding cycles applied to long-term problems.

Second, preparedness must move from paper to practice. Indices, road maps, and action plans cannot substitute for trained health workers, functioning laboratories, reliable supply chains, and trusted institutions. Preparedness that cannot deliver diagnostics, epidemiological intelligence, drugs, therapeutics, vaccines, and community care under stress is preparedness in name only.

Third, global health governance must resist fragmentation and recommit to multilateralism. Bilateralism, selective data-sharing, increased geopolitical tension and disengagement weaken surveillance, erode trust, and undermine collective security. Pandemic risk is transboundary by nature; governance that is not regional and global, and genuinely cooperative, will fail. This is what the WHO, with all its faults and limitations, helps to provide, and why it is such an important institution for all countries to support.

Fourth, epidemic prevention is a global health challenge, recognising the multiple syndemics and climate change that fuel disease emergence and spread. Infectious diseases do not operate in isolation from non-communicable diseases, urban poverty, food systems and conflict. A narrow focus on biomedical countermeasures, will continue to leave populations vulnerable.

Fifth, trust must be recognised as core public health infrastructure. Vaccines, surveillance systems, and emergency powers depend on public confidence in science and institutions. When trust erodes, even the most effective tools lose their power. Rebuilding that trust requires consistent bold political leadership, robust and transparent evidence-based approaches, and a renewed social contract around collective health. It also includes taking a serious look at regulating the global spread of mis- and disinformation through a small number of extremely powerful tech companies.

Sixth, we need to strengthen science education in schools with curricula that teach critical appraisal of scientific information including critical evaluation of sources of information.

Seventh, the USA is withdrawing support for multilateral institutions and programs, China is reluctant to share data and fake news is spread for political purposes. Countries that continue to believe in and support multilateral institutions, programs and share values must collaborate and ensure funding and leadership.

The question is whether the global health community will heed Achebe's warning. Things fall apart, not because we lack knowledge, but because we fail to act on what we already know. The time to act is now, for governments, supernational organisations, health experts and all citizens.

Contributors

AZ and EP conceptualised the manuscript and wrote the first draft. All authors contributed comments, suggestions and expanded references to data sources.

Data sharing

Not applicable.

Declaration of generative AI and AI-assisted technologies in the manuscript preparation process

The figure was generated using a table provided by the authors and processed with the assistance of an AI-based language model (ChatGPT, OpenAI) for formatting and visualization.

Declaration of competing interest

We declare no competing interests.

References

[1] Achebe C. *Things Fall Apart*. London: Heinemann; 1958.

[2] Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), the UN Environment Programme (UNEP) and the World Health Organization (WHO Quadripartite Memorandum of Understanding (MoU) signed for a new era of One Health collaboration. https://www.who.int/news/item/29-04-2022-quadripartite-memorandum-of-understanding-(mou)-signed-for-a-new-era-of-one-health-collaboration (Accessed 28 January 2026).

[3] GBD 2021 Causes of Death Collaborators. Global burden of 288 causes of death and life expectancy, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *Lancet* 2024;**403**:2100–32.

[4] GBD 2023 Causes of Death Collaborators. Global burden of 292 causes of death in 204 countries and territories and 660 subnational locations, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023. *Lancet* 2025;**406**:1811–72.

[5] World Health Organization *Global health estimates: leading causes of death 2019–2022*, Geneva: WHO; 2023. Accessed 28 January 2026. https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death.

[6] Hotez PJ. Health disinformation—gaining strength, becoming infinite. *JAMA Intern Med* 2024;**184**:96–7. doi:10.1001/jamainternmed.2023.5946.

[7] Mann ME, Hotez PJ. *Science under siege*. New York: Public Affairs; 2025.

[8] Yazdi-Feyzabadi V, Haghdoost AA, McKee M, Takian A, Bradley E, Brugha R, et al. The United States withdrawal from the World Health Organization: implications and challenges. Int J *Health Policy Manag* 2025;**14**:9086. doi:10.34172/ijhpm.9086.

[9] The White House *Reevaluating and realigning United States foreign aid*; Jan 20, 2025. Washington, DC Accessed 29 January 2026. https://www.whitehouse.gov/presidential-actions/2025/01/reevaluating-and-realigning-united-states-foreign-aid/.

[10] UNAIDS *How the shift in US funding is threatening both the lives of people living with HIV and the global HIV response*, Geneva: UNAIDS; Feb 18, 2025. Accessed 29 January 2026. https://www.unaids.org/en/resources/presscentre/featurestories/2025/february/20250218_us-funding-people-affected-hiv-community-groups.

[11] Kaiser Family Foundation *The outlook for PEPFAR in 2025 and beyond*, San Francisco: KFF; 2025. Accessed 29 January 2026. https://www.kff.org/global-health-policy/the-outlook-for-pepfar-in-2025-and-beyond/.

[12] Hontelez JAC, de Vlas SJ, Goymann H, Bhattacharjee P, Bor J, Chabata eST. Impact of the PEPFAR funding freeze on HIV deaths and infections: a mathematical modelling study. *eClinicalMedicine* 2025;**83**:103233. doi:10.1016/j.eclinm.2025.103233.

[13] Gale J, Taggart K, Zhang RC. State Department plans new framework to advance America First global health strategy. *Bloomberg News* Nov 7, 2025 Accessed 28 January 2026. https://www.bloomberg.com/news/articles/2025-11-07/leaked-documents-show-us-plan-to-expand-oversight-in-global-health-deals.

[14] Rigby J, Farge E. *US seeks pathogen data in exchange for foreign health aid, document shows*. Reuters; Nov 7, 2025. Accessed 28 January 2026. https://www.reuters.com/business/healthcare-pharmaceuticals/us-seeks-pathogen-data-exchange-foreign-health-aid-document-shows-2025-11-07/.

[15] US Department of State. Record-Breaking U.S.-Africa Business Summit Yields $2.5 Billion in Deals and Commitments. https://www.state.gov/releases/office-of-thespokesperson/2025/06/record-breaking-u-s-africa-business-summit-yields-2-5-billion-in-deals-and-commitments. (Accessed 28 December 2025).

[16] World Health Organization *World Health Assembly adopts historic Pandemic Agreement*, Geneva: WHO; May 20, 2025. Accessed 28 December 2025. https://www.who.int/news/item/20-05-2025-world-health-assembly-adopts-historic-pandemic-agreement-to-make-the-world-more-equitable-and-safer-from-future-pandemics.
[17] Kaiser Family Foundation. The independent source for health policy research, polling, and news. Administration Releases Additional Details of Fiscal Year 2026 Budget Request. https://www.kff.org/global-health-policy/administration-releases-additional-details-of-fiscal-year-2026-budget-request/. (Accessed 27 December 2025).
[18] Jacobs JW, Booth GS, Brewer NT, Freilich J. Unexplained Pauses in Centers for Disease Control and Prevention Surveillance: Erosion of the Public Evidence Base for Health Policy. *Ann Intern Med* 2026 Jan 27. doi:10.7326/ANNALS-25-04022.
[19] Pekar JE, Magee A, Parker E, Moshiri N, Izhikevich K, Havens JL, et al. The molecular epidemiology of multiple zoonotic origins of SARS-CoV-2. *Science* 2022;**377**:960–6. doi:10.1126/science.abp8337.
[20] World Health Organization *WHO Scientific Advisory Group for the Origins of Novel Pathogens issues report on the origins of COVID-19*, Geneva: WHO; June 27, 2025. Accessed 29 January 2026. https://www.who.int/news/item/27-06-2025-who-scientific-advisory-group-issues-report-on-origins-of-covid-19.
[21] Bloom JD. The data are insufficient to confidently root the SARS-CoV-2 phylogenetic tree. *Mol Biol Evol* 2025;**42**:msaf118. doi:10.1093/molbev/msaf118.
[22] Shattock AJ, Johnson HC, Sim SY, Carter A, Lambach P, Hutubessy RCW, et al. Contribution of vaccination to improved survival and health: modelling 50 years of the Expanded Programme on Immunization. *Lancet* 2024;**403**:2307–16. doi:10.1016/S0140-6736(24)00850-X.
[23] World Health Organization. Immunization Agenda 2030. https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/ia2030. (Accessed 1 February 2026).
[24] Watson OJ, Barnsley G, Toor J, Hogan AB, Winskill P, Ghani AC. Global impact of the first year of COVID-19 vaccination: a mathematical modelling study. *Lancet Infect Dis* 2022;**22**:1293–302. doi:10.1016/S1473-3099(22)00320-6.
[25] Hviid A, Hansen JV, Frisch M, Melbye M. Measles, mumps, rubella vaccination and autism. A Nationwide cohort study. *Ann Intern Med* 2019;**170**:513–20. doi:10.7326/M18-2101.
[26] Centers for Disease Control and Prevention *Measles cases and outbreaks*, Atlanta: CDC; 2025. Accessed 28 January 2026. https://www.cdc.gov/measles/data-research/index.html.
[27] Kurpas D, Stefanicka-Wojtas D, Soll-Morka A, Lomper K, Uchmanowicz B, Blahova B, et al. Vaccine Hesitancy and Immunization Patterns in Central and Eastern Europe: Sociocultural, Economic, Political, and Digital Influences Across even Countries. *Risk Manag Health Policy* 2025;**18**:1911–34. doi:10.2147/RMHP.S519479.
[28] Califf RM, von Eschenbach AC, Friedman MA, Giroir BP, Gottlieb S, Hamburg MA, et al. A Threat to Evidence-Based Vaccine Policy and Public Health Security at the FDA. *N Engl J Med* 2026;**394**:4–6. doi:10.1056/NEJMp2517497.
[29] Department of Health and Human Services *HHS Winds Down mRNA Vaccine Development Under BARDA*. Accessed 29 January 2026 . https://www.hhs.gov/press-room/hhs-winds-down-mrna-development-under-barda.html.
[30] Center for Infectious Disease Research and Policy *Vaccine Integrity Project. Minneapolis: CIDRAP*. Accessed 29 January 2026 . https://www.cidrap.umn.edu/vaccine-integrity-project.
[31] World Health Organization *Ending the neglect to attain the SDGs: a road map for neglected tropical diseases 2021–2030*, Geneva: WHO; 2021. Accessed 29 January 2026. https://www.who.int/publications/i/item/9789240010352.
[32] World Health Organization *Global update on implementation of the NTD road map*, Geneva: WHO; 2024. Accessed 29 January 2026. https://www.who.int/teams/control-of-neglected-tropical-diseases/global-report-on-neglected-tropical-diseases-2024.
[33] Editorial. Strengthening genomic surveillance for neglected tropical diseases in the Americas. *Lancet Regional Health Americas* 2025;**52**:101338. doi:10.1016/j.lana.2025.101338.
[34] World Health Organization *Neglected tropical diseases further neglected due to ODA cuts*; 4 June 2025. Accessed 29 January 2026. https://www.who.int/news/item/04-06-2025-neglected-tropical-diseases-further-neglected-due-to-oda-cuts.
[35] Mitra AK, Mawson AR. Neglected Tropical Diseases: Epidemiology and Global Burden. *Trop Med Infect Dis* 2017;**2**:36. doi:10.3390/tropicalmed2030036.
[36] Koua EL, Njingang JRN, Kimenyi JP, Williams GS, Okeibunor J, Oka S, et al. Trends in public health emergencies in the WHO African Region: an analysis of the past two decades public health events from 2001 to 2022. *BMJ Glob Health* 2023;**8**:e012015. doi:10.1136/bmjgh-2023-012015.
[37] Africa CDC *Health Emergencies in Africa. No. 64 weekly press briefing*. Accessed 30 January 2026 . https://africacdc.org/news-item/weekly-special-press-briefing-on-health-emergencies-in-africa-21/.
[38] Sikkema RS, Koopmans M. Viral emergence and pandemic preparedness in a One Health framework. *Nat Rev Microbiol* 2026;**24**:29–44. doi:10.1038/s41579-025-01243-1.
[39] World Health Organization, Food and Agriculture Organization of the United Nations, United Nations Environment Programme, World Organisation for Animal Health *One health joint plan of action (2022–2026): working together for the health of humans, animals, plants and the environment*, Geneva: WHO; 2022. Accessed 30 January 2026. https://www.who.int/publications/i/item/9789240059139.
[40] O'Toole A, Neher RA, Ndodo N, Borges V, Gannon B, Gomes JP, et al. APOBEC3 deaminase editing in mpox virus as evidence for sustained human transmission since at least 2016. *Science* 2023;**382**:595–600. doi:10.1126/science.adg8116.
[41] Peacock TP, Moncla L, Dudas G, VanInsberghe D, Sukhova K, Lloyd-Smith JO, et al. The global H5N1 influenza panzootic in mammals. *Nature* 2025;**637**:304–13. doi:10.1038/s41586-024-08054-z.
[42] Coleman M, Khan PY, Linde L, Williams PCM. Marais BJ. Transgression of planetary boundaries and the effects on child health through an infectious diseases lens. *Curr Opin Pediatr* 2025;**37**:124–36. doi:10.1097/MOP.0000000000001442.
[43] Kasbergen LMR, de Bruin E, Chandler F, Sigfrid L, Chan XHS, Hookham L, et al. Multi-antigen serology and a diagnostic algorithm for the detection of arbovirus infections as novel tools for arbovirus preparedness in southeast Europe (MERMAIDS-ARBO): a prospective observational study. *Lancet Infect Dis* 2025;**25**:678–89. doi:10.1016/S1473-3099(24)00654-6.
[44] Kasbergen LMR, Sikkema RS, Chandler F, van Beek JHG, Halabi Y, Lourents N, et al. Estimating Zika Virus Seroprevalence in a Dengue Virus-Endemic Population: The Use of Blood Donors and Multiplex Serology to Monitor Arbovirus Outbreaks in the Dutch Caribbean. *J Infect Dis* 2025;**232**:e507–17. doi:10.1093/infdis/jiaf281.
[45] Pan American Health Organization *Epidemiological update: dengue in the Americas*, Washington, DC: PAHO; 2024. Accessed 30 January 2026. https://www.paho.org/en/documents/epidemiological-update-increase-dengue-cases-region-americas-18-june-2024.
[46] World Health Organization *Zika epidemiology update*, Geneva: WHO; May 2024. Accessed 30 January 2026. https://www.who.int/publications/m/item/zika-epidemiology-update-may-2024.
[47] World Health Organization *Managing epidemics: key facts about major deadly diseases*, Geneva: WHO; 2018. Accessed 30 January 2026. https://www.who.int/publications/i/item/managing-epidemics-key-facts-about-major-deadly-diseases.
[48] Brady OJ, Bastos LS, Caldwell JM, Cauchemez S, Clapham HE, Dorigatti I, et al. Why the growth of arboviral diseases necessitates a new generation of global risk maps and future projections. *PLoS Comput Biol* 2025;**21**:e1012771. doi:10.1371/journal.pcbi.1012771.
[49] World Health Organization. Noncommunicable diseases. https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases. (Accessed 30 January 2026).
[50] The Global Fund *Results report 2024*, Geneva: The Global Fund to Fight AIDS, Tuberculosis and Malaria; 2024. Accessed 30 January 2026. https://www.theglobalfund.org/media/oszhi0yw/archive_2024-results_report_en.pdf.
[51] World Health Organization *Global tuberculosis report 2025*, Geneva: WHO; 2025. Accessed 31 January 2026. https://www.who.int/teams/global-programme-on-tuberculosis-and-lung-health/tb-reports/global-tuberculosis-report-2025.
[52] Coleman M, Calderwood CJ, Magee S, Marais B. The Tuberculogenic Environment. *Lancet Global Health* 2026 In Press.
[53] World Health Organization *World malaria report 2024*, Geneva: WHO; 2024. Accessed 31 January 2026. https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2024.
[54] Marais BJ, Williams S, Li A, Ofrin R, Merianos A, Negin J, et al. Improving emergency preparedness and response in the Asia-Pacific. *BMJ Glob Health* 2019;**4**:e001271. doi:10.1136/bmjgh-2018-001271.
[55] Vernaccini LM, Bell C, Gribble R, Nguni R, Samhouri D, Chamla D, et al. The dynamic preparedness metric: results from a global and regional analysis of health emergency preparedness. *BMC Public Health* 2025;**25**:3482. doi:10.1186/s12889-025-23294-y.
[56] Badell E, Alharazi A, Criscuolo A, Almoayed KAA, Lefrancq N, Bouchez V, et al. Ongoing diphtheria outbreak in Yemen: a cross-sectional and genomic epidemiology study. *Lancet Microbe* 2021;**2**:e386–96. doi:10.1016/S2666-5247(21)00094-X.
[57] Al-Herwi E, Al-Kainai H, Alshoaibi M, Thabet H, Farhan MA, Morshed E, et al. Outbreak of multidrug-resistant *Vibrio cholerae* in Yemen, 2018–2024. *Int J Infect Dis* 2025;**161**:108134. doi:10.1016/j.ijid.2025.108134.
[58] Siddig EE, Azhary A, Ahmed AE, Muvunyi CM. Darfur's humanitarian emergency: a call for immediate action. *Lancet* 2026;**406**:2919. doi:10.1016/S0140-6736(25)02383-9.
[59] Alhaffar BA, Islam S, Hoq MI, Das A, Shibloo SM, Hasan M, et al. High caseload of scabies among Rohingya refugees in Cox'sBazar, Bangladesh. *PLOS Glob Public Health* 2025;**5**:e0003981. doi:10.1371/journal.pgph.0003981.
[60] Wilson H. Drivers and determinants of extreme humanitarian needs among Rohingya refugee households. *PLoS One* 2025;**20**:e0331727. doi:10.1371/journal.pone.0331727.
[61] Gebreyohannes EA, Wolde HF, Akalu TY, Clements ACA, Alene KA. Impacts of armed conflicts on tuberculosis burden and treatment outcomes: a systematic review. *BMJ Open* 2024;**14**:e080978. doi:10.1136/bmjopen-2023-080978.
[62] Kondratiuk V, McGann P, Jones BT, Fomina N, Nazarchuk O, Kovalchuk V. Antibiotic resistance characteristics in *Klebsiellapneumoniae* isolated from wounded individuals in Ukraine. *J Hosp Infect* 2025;**167**:232–7. doi:10.1016/j.jhin.2025.10.016.
[63] Pérez-López A, Sharma A, Sundararaju S, Suleiman M, Mohamed R, Altrmanini D, et al. Comparison of carbapenemase-producing Enterobacterales colonizing war-affected children from the Gaza Strip and hospitalized children from a national reference center in Qatar: an observational cohort study. *Clin Microbiol Infect* 2025;**31**:2041–7. doi:10.1016/j.cmi.2025.08.026.
[64] Boussaa S, Dardona Z, Amane M. Challenges and risk factors for infectious dis-

eases in Gaza due to the current conflict. *East Mediterr Health J* 2025;**31**:127–33. doi:10.26719/2025.31.2.1.

[65] Gupta N, Grobusch MP, Jokelainen P, Wyllie AL, Barac A, Mora-Rillo M, et al. Poliomyelitis in Gaza. *Clin Microbiol Infect* 2025;**31**:154–6. doi:10.1016/j.cmi.2024.10.003.

[66] ReliefWeb. *Somali Health Cluster Bulletin* November 2025 Accessed 1 February 2026. https://reliefweb.int/report/somalia/somali-health-cluster-bulletin-november-2025.

[67] Masirika LM, Udahemuka JC, Schuele L, Ndishimye P, Otani S, Mbiribindi JB, et al. Ongoing mpox outbreak in Kamituga, South Kivu province, associated with monkeypox virus of a novel Clade I sub-lineage, Democratic Republic of the Congo, 2024. *Euro Surveill* 2024;**29**:2400106. doi:10.2807/1560-7917.ES.2024.29.11.2400106.

[68] Tang EC, Haw M, Kulkarni S, Johnson E, Gigante CM, Balanji N, et al. Detection of Community Transmission of Clade Ib Mpox Virus in the United States. *NEJM Evid* 2025:EVIDpha2500319. doi:10.1056/EVIDpha2500319.

[69] Permanent Mission of the Russian Federation to the United Nations. Statement by Permanent Representative Vassily Nebenzia at UNSC briefing on biological laboratories in Ukraine. https://russiaun.ru/en/news/110322n_u. (Accessed 1 February 2026).

[70] World Health Organization *Pandemic preparedness and response: lessons from COVID-19*, Geneva: WHO; 2024. Accessed 1 February 2026. https://www.who.int/publications/i/item/9789240086531.

[71] The independent Panel *Pandemic readiness in an uncertain world – actions for leadership, finance, access, and insight*. Accessed 1 February 2026 . https://theindependentpanel.org/documents/pandemic-readiness-in-an-uncertain-world/.

[72] World Health Organization *WHO R&D Blueprint: priority diseases*, Geneva: WHO; 2024. Accessed 1 February 2026. https://www.who.int/activities/prioritizing-diseases-for-research-and-development-in-emergency-contexts.

[73] World Health Organization *WHO bacterial priority pathogens list, 2024: Bacterial pathogens of public health importance to guide research, development and strategies to prevent and control antimicrobial resistance*; 2024. Geneva Accessed 1 February 2026. https://www.who.int/publications/i/item/9789240093461.

[74] Nuclear Threat Initiative, Johns Hopkins Center for Health Security, Economist Impact 2021 *Global Health Security Index Finds All Countries Remain Dangerously Unprepared for Future Epidemic and Pandemic Threats*; 2021. Washington, DC Accessed 1 February 2026. https://centerforhealthsecurity.org/2021/2021-global-health-security-index-finds-all-countries-remain-dangerously-unprepared-for-future-epidemic-and-pandemic-threats.

[75] Pellejero-Sagastizábal G, Bulescu C, Gupta N, Jokelainen P, Gkrania-Klotsas E, Barac A, et al. Delayed correct diagnoses in emerging disease outbreaks: historical patterns and lessons for contemporary responses. *Clin Microbiol Infect* 2025;**31**:1298–306. doi:10.1016/j.cmi.2025.04.007.