

Original Article

A Economy and Space

Neoliberal disease: COVID-19, co-pathogenesis and global health insecurities

EPA: Economy and Space 2022, Vol. 54(1) 15–32 © The Author(s) 2021

@ **①**

Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0308518X211048905 journals.sagepub.com/home/epn



Matthew Sparke

University of California Santa Cruz, CA, USA

Owain David Williams

University of Leeds, UK

Abstract

The COVID-19 pandemic has at once exposed, exploited and exacerbated the health-damaging transformations in world order tied to neoliberal globalization. Our central argument is that the same neoliberal plans, policies and practices advanced globally in the name of promoting wealth have proved disastrous in terms of protecting health in the context of the pandemic. To explain why, we point to a combinatory cascade of socio-viral co-pathogenesis that we call neoliberal disease. From the vectors of vulnerability created by unequal and unstable market societies, to the reduced response capacities of market states and health systems, to the constrained ability of official global health security agencies and regulations to offer effective global health governance, we show how the virus has found weaknesses in a market-transformed global body politic that it has used to viral advantage. By thereby turning the inequalities and inadequacies of neoliberal societies and states into global health insecurities the pandemic also raises questions about whether we now face an inflection point when political dis-ease with neoliberal norms will lead to new kinds of post-neoliberal policy-making. We conclude, nevertheless, that the prospects for such political-economic transformation on a global scale remain quite limited despite all the extraordinary damage of neoliberal disease described in the article.

Keywords

Neoliberalism, global governance, critical political economy, global health, COVID

Corresponding author:

Matthew Sparke, Professor of Politics, University of California Santa Cruz, Santa Cruz, CA 95064, USA. Email: msparke@ucsc.edu

Introduction

The COVID-19 pandemic has quickly come to represent the biggest global infectious disease crisis since the Spanish Influenza pandemic of 1918-19. Its high infection rates across borders, its diversifying variants, and its increasing contagiousness and lethality, have made it a truly planetary disaster. But the pandemic is clearly far more than just a biological or natural disaster. Its emergence and rapid globalization, its exploitation of economic inequality and social insecurity, and its exposure of the failures of resilience planning, for-profit medicine and marketized approaches to health, have highlighted the integral role of market mechanisms, market-rule and hollowed-out market-states in mediating and magnifying the damage done by the pandemic. These aggressive interactions are all interconnected with the pro-market plans and policies that critics categorize under the umbrella category of "neoliberalism". It is a term we use here with awareness of the need to consider the co-determination of pandemic vulnerabilities by other intersecting forces such as structural racism and colonialism that cannot be reduced to neoliberal political-economy (Montenegro de Wit, 2021; Sumba, 2021). It is also a term that we take-up with sensitivity to the many divergences of market-rule from the far more singular rule-sets idealized by neoliberal intellectuals as the free market basis for a wealth-generating world order (Peck, 2010). Nevertheless, our argument is that the same neoliberal plans and policies advanced around the world in the name of promoting wealth have proved disastrous in terms of protecting health in the pandemic. To explain why, we point to a combinatory cascade of socio-viral co-pathogenesis that we call neoliberal disease.

Other critical scholars of political-economy have already highlighted how COVID has revealed neoliberal transformations in governance, international relations and environmental security as well as of health systems and biopolitics. Neely and Lopez have argued that it has exposed the fundamentally uncaring features of market fundamentalism in America (Neely and Lopez, 2021). Elsewhere multiple authors have pointed to parallel patterns of pandemic neglect and failure in poorer countries where neoliberal structural adjustment has undermined health systems and where international financial institutions continue to offer little but more market discipline (Williams et al., 2021; Zhou, 2021; see also Stubbs et al., 2021). Jones and Hameiri have in turn made a compelling case that the devastating impacts of COVID in the UK can largely be explained in terms of the failure of the neoliberal regulatory state (Jones and Hameiri, 2021). And research into the neoliberalization of nature - including its wholesale commodification, privatization and financialization - has also led a wide variety of scholars to present the pandemic as a kind of 'virocene' predicated on neoliberal nature-society relations in the anthropocene (Fernando, 2020; Gatti, et al., 2021; Leven and Overwijk, 2020; Mair, 2020; Wallace et al., 2020). Such is the planetary devastation inflicted by COVID that yet others have asked whether it might in turn inspire political-economic shifts away from neoliberalism (Saad-Filho, 2020).

The common thread connecting the contributions of this burgeoning scholarship on the pandemic's political-economy is that COVID has *exposed* underlying neoliberal transformations (Giroux, 2021; Navarro, 2020). Here we further seek to argue that the virus has also *exploited* and *exacerbated* all the associated political, economic and social vulnerabilities in co-pathogenic ways. Our analysis of the co-pathogenesis of COVID and neoliberalism is informed in this way by *both* critical political economy *and* global health literatures on structural violence, bringing them together to examine COVID in terms of the embodied pathologies of neoliberal political economy (Sparke, 2017). We thereby trace how market rule, pro-market ideas and marketized societies have variously and concurrently undermined public health in the pandemic.

Far from being immune itself, the USA as a market leader among market-states has seen its own social fault lines ripped open by the pandemic, with the virus tearing-through the rifts of economic inequality and repeatedly breaking-out across the vulnerabilities of racialized capitalism and social

exclusion. The neoliberal normalizer *par excellence*, America has been found bereft of institutional and material capacities to mitigate the effects of the virus on its population, inadequacies that have only been exacerbated by avowedly anti-liberal administrations turning neoliberal appeals to freedom into especially nihilistic attacks on public health governance (Neely and Lopez, 2021). But the US has not been alone or unique in this ruinous situation. Many other neoliberalized states in both the Global North and South have found themselves without the national resources, know-how and capacities to deal with the pandemic, with the resulting vulnerabilities compounded by the actions of anti-liberal regimes systematically subordinating any remaining public health guidance to the priorities of business elites and market rule. Infection and mortality in these countries have thereby embodied neoliberal globalization, with hollowed-out states, widespread poverty, enormous inequality and social precarity all serving as pre-existing conditions of viral-vulnerability.

We also build on critical accounts that have long used viral metaphors and disease analogies to describe the ways in which pro-market neoliberal ideas – what Ulrich Beck once described as a globalizing "thought virus" – have 'infected' policies and practices around the world (Beck, 2000). Most notably, Jamie Peck has described the infectious spread of market rule as operating like a virus that evolves as it moves through the political-economic 'bloodstream', constantly mutating into context-contingent hybrids of 'actually existing neoliberalism' (Peck, 2013a). Focused on how actual processes of neoliberalization have evolved in different ways in different contexts, Peck has argued thus that "neoliberalism both occupies and draws energy from its various host organisms... but [that] it cannot, ultimately, live entirely without or outside them" (Peck, 2013a, p. 144). "Understanding the effects of such 'parasitical' infections and mutations," he underlines, "must involve the diagnostic study of many patients, not just a few of the more (or less) susceptible to the deregulatory bug." Inspired by how these sorts of viral metaphors for neoliberalism describe its infecting and mutating ways across the global body politic, we are interested in how neoliberalism has also now evolved into actual viral infections, thereby embodying neoliberal global health insecurities in actual bodies.

By studying the actually existing neoliberal features of the COVID crisis and its actual embodiment in diverse global patients it is possible to offer a new round of insights into the real-world impacts of neoliberalism's 'deregulatory bug'. But by examining how the neoliberal virus has combined with an actual biological virus we also aim at offering a 'more than metaphorical' account of the main global health insecurities created by this co-pathogenic interaction. Our argument is that COVID has had such a devastating global impact precisely because it has embodied the pathologies of neoliberalism in a profoundly material way. It has increased infection exposure and thereby magnified the unequal impact of the pandemic on the poor and marginalized. It has also systematically inhibited infection response in the name of market freedom, severely retarding mitigation efforts by already hollowed-out, market-state regimes. Moreover, as the pandemic took a new aggressive turn toward low and middle income countries in 2021, neoliberal regimes and global economic governance concerned with trade and intellectual property rights (IPRs) meant that the ability to respond to the pandemic with freely available generic vaccines was stymied by monopoly protections and their state sponsors, rather than being guided by principles of global public goods for health, or humane, scientific, and rational responses to the emerging disproportionate burden of the pandemic on poorer populations. Focusing on these co-pathogenic relationships thereby takes us beyond viral metaphors of neoliberalism to the diverse ways in which market-rule has joined forces with a biological virus to become embodied in experiences of increased mortality, morbidity and suffering.

There are already large global health and public health literatures that have documented similar dynamics as they relate to the embodied experience and outcomes of a wide variety of chronic and non-communicable diseases (NCDs) that have effectively been made globally communicable by neoliberalism and the 'vector' of global markets (Farmer, 2003; Kentikelenis, 2017; Labonté and

Schrecker, 2007; Labonté and Stuckler, 2016; Schrecker and Bambra, 2015; Wallace and Wallace, 2016; WHO 2008). More generally, accounts of neoliberalism's pathologies point as well to the socio-economic pathogenesis of ill-health outcomes through the global structural violence of structural adjustment, with disproportionate burdens mapped onto social gradients of widening economic inequalities and disappearing welfare provision (Navarro, 2007; Sell and Williams, 2020; Sparke, 2017). And the global to local geographies of these embodied outcomes have already been underlined in this journal along with a call for "a radical shift in policy priorities away from a focus on individual responsibility" (Pearce and Dorling, 2009). So far, of course, this shift has not happened despite neoliberalism's many mutations. Our own argument is that COVID can be considered another deadly result. It is, in short, a new but quintessentially neoliberal pandemic that also needs to be explained in relation to the pro-market ideology, policies, and practices that have spread and evolved globally for over four decades.

Section 1 of the paper outlines how neoliberalism has successfully evolved over four decades in ways that have created many of the fragilities that COVID has now opportunistically exploited.

Section 2 examines the social vectors of vulnerability that the COVID pandemic has exploited as it has spread. These include all the inroads for contagion created by the widespread poverty and distress that are the distinctive social hallmarks of the neoliberal inequality machine.

Section 3 concerns the distinct institutional failures of market-states that have been caused by the deliberate withdrawal of state capacity by means of austerity and privatization. Rather than merely failures the pandemic itself has generated, they are structural features of marketized health revealed as 'successful failures' by the pandemic.

Section 4 contextualizes neoliberalism's interactions with the pandemic at the level of global health security. We argue that COVID's uncontrolled spread and mutation have revealed the limitations of a system of global health security governance based on the wealth-protecting and risk off-shoring norms of neoliberal governance.

First, though, we examine how this multi-dimensional and intersectional political-economy of an actually existing virus relates to the spread and mutation of neoliberalism itself.

Section I: from viral neoliberalism To neoliberal disease

Viral neoliberalism is a useful metaphor in part because it highlights how 'actually existing neoliberalism' is in a state of constant context-dependent evolution. As Peck's work with diverse colleagues has shown, the spread of neoliberalism as a complex congeries of ideologies, policies and practices can thereby be conceptualized as viral not just in its capacity to infect political-economic regimes, but also in its ongoing forms of political-economic mutation and adaptation (Peck and Tickell, 2002; Peck et al., 2009; Peck, 2010). These mutations and adaptations can in turn be examined in terms of how neoliberalism evolves in virally 'variegated' ways in response to the various forms of resistance and reaction it inspires as well as through the adjustments made to market rule in the aftermath of the crises it so often sets in motion (Brenner et al., 2010; Leitner et al., 2007). For Peck and his colleagues, the result is a kind of uneven 'falling forward' viral process in which diverse forms of roll-back neoliberalism associated with deregulation, privatization, tax cuts and structural adjustment have led to other kinds of roll-out neoliberalism involving the deployment of market-mediated and market-making schemes to enforce pro-market behavior, enable competition, and variously discipline discontent, incentivize investment, and individualize responsibility. More recently, writing with Nik Theodore, Peck has further identified new forms of roll-over neoliberalism that, under the leadership of avowedly anti-globalist and anti-liberal leaders such as Donald Trump, Jair Bolsonaro and Boris Johnson, have advanced neoliberal tax cuts and corporate deregulation even as they have pursued policies of border-building ultra-nationalism (Peck and Theodore, 2019). To be sure, this three 'R's account of variegated neoliberalism evolving

through interrelated roll-back, roll-out and roll-over mutations still invites the question of when exactly actually existing neoliberalism stops existing as neoliberalism. This is a question to which we return in our conclusion. But first it is useful to enumerate the wider implications of the viral neoliberalism concept for work in International Relations, geographical political economy and global health, and for arguments, including our own in this article, that focus specifically on the non-metaphorical ties between neoliberalism and ill-health.

Indeed, there are some important epistemological lessons of the viral neoliberalism metaphor about the need to connect comparative case-study work on particular 'patients' (i.e. regional and national examples of neoliberalism) across both space and time relationally. Across space, as David Harvey and other critical geographers have shown, the parasitical placement of neoliberalism locally in particular places has always been related to its uneven evolution as a political, legal and ideological framework for globalizing capitalism (Harvey 2007; Sheppard and Leitner 2010). Meanwhile, across time, the evolutionary spread of actually existing neoliberalism reflects mutations and adaptations that relate back directly to past failures and path dependencies. Even some of the original neoliberal intellectuals, such as Von Hayek, understood this need to adapt by reformulating their ideas for changing contexts and political circumstances, as more nuanced intellectual histories of the neoliberal thought collective are now showing (Cooper, 2017; Slobodian, 2020; Whyte, 2019). While simplified handbook histories of neoliberalism may fixate on just the axioms of market governance issued out of Geneva, Chicago, Washington and Virginia, these other more relational histories highlight how market rule has instead had to be continually revised in the face of ongoing real-world resistance, reaction, and associated forms of crisis-driven reversal.

Beyond the epistemological insights, a second set of lessons that can be drawn from viral metaphors relate substantively to what the path dependencies can tell us about the actual pathways connecting the experience of neoliberalism with ill-health. The vast public health literatures on these connections point repeatedly to how the pathways come together intersectionally to cause diminished health outcomes and ramifying syndemic effects (Farmer, 2003; Kentikelenis, 2017; Rowden, 2013; Schrecker and Bambra, 2015; Singer et al., 2017; WHO, 2008). The structural pathogenesis of neoliberalism thereby intersects and co-evolves with other forms of structural violence such as systemic racism and sexism. More than this, it has also increasingly co-evolved with diverse compensatory efforts to address the resulting ill-health outcomes through forms of global health humanitarianism and the charity model of donation and access to health and medicine that re-write health rights in market friendly ways, with the roll-back neoliberalism of structural adjustment setting the stage for the roll-out neoliberalism of disease-specific public-private global health initiatives (Keshavjee, 2014; Mitchell and Sparke, 2016; Sparke, 2018; Sparke, 2020). Designed to repair the damage of macro-market failure by using micro-market investments in market-mediated health delivery, these are now dominant forms of global health policy-making (Hunter and Murray, 2019; Kay and Williams, 2009). In the COVID context their influence has been especially evident in the inadequacies of the charity model of vaccine response represented by COVAX, an example to which we turn in our final section on the wider failures of marketmediated global health security planning. But before turning to these ill-effects of neoliberal government, we next examine the quotidian aspects of everyday life in neoliberal societies that have made them so vulnerable to COVID in the first place.

Section 2: COVID and the failings of marktized society

COVID has ripped through the societal fault lines created by neoliberalism across the world. It has thereby brought illness and death disproportionately to communities already deprived and dispossessed by market forces everywhere (Oldekop et al., 2020). Four features of societies colonized by

market rule stand out as especially effective vectors of this increased damage due to the pandemic. These are: (i) precarious market supply systems for everything from food and water to housing and education; (ii) economic inequality and its intersection with racial inequalities in intensifying vulnerability; (iii) contingent labor and its exposure of essential workers in the post-Fordist 'precariat' to heightened risks of infection; and (iv) social alienation and the biopolitical abandonment of diverse sub-populations to experiences of extreme risk in so-called petri-dish spaces such as prisons, homeless camps, slums, and overcrowded farmworker housing. All four of these features of neoliberalized societies are themselves overshadowed by the disciplinary effects of debt and austerity, a form of financialized and disciplinary neoliberalism that repeatedly elevates the interests of investors over states, labour and state social services such as healthcare (DiMuzio & Robbins, 2020). We address the devastating impacts of this leech-like neoliberal medicine for neoliberal patients of the social state in Section 3 (cf Peck, 2013b). It is the four co-pathogenic features of neoliberalized society that are the immediate focus here.

Direct disruptions due to COVID and the indirect disruptions created by lockdowns have seen a cascade of co-pathogenic effects across the market-based supply systems of neoliberal society globally. With most countries dependent on market-mediated food chains, and with shut-downs especially impacting the informal food markets for the world's urban poor, the UN's Food and Agriculture Organization has described the food system implications as 'a crisis within a crisis', and the World Food Program stated it represented a 'hunger pandemic' from which as many as 30 million people may die because of food precarity (Crush and Si, 2020). Similarly, the informal market systems providing water, toilets, sewers, drainage, and waste collection in much of the neoliberalized global south have made slum-dwellers especially vulnerable (Corburn et al., 2020). UN Habitat has highlighted how informal housing markets themselves exacerbate health risks, threatening mass displacement and further disease spread as the urban poor lose their means of subsistence (UN Habitat, 2020). More generally the informal market networks and movements so often eulogized by neoliberal planners as the urban poor's own entrepreneurial solution to corrupt market states have accelerated disease spread especially in countries such as India where they are not adequately integrated into public health planning (Patel and Shah, 2020; Raju et al., 2021).

Brazil, Ecuador, and South Africa all illustrate how the vulnerabilities created by precarious market supply systems quickly turned into excess death and increased suffering. In Brazil, poverty and COVID have interacted with the authoritarian neoliberal leadership of Jair Bolsonaro to close down health protections for the working poor in the name of keeping the economy open (Ortega, 2020). Millions in the favelas have had to continue to work in the informal labour market, with as many as 500,000 domestic servants facing choices of working or no pay, all the while bustling markets, queues for charities distributing food, and public transport are packed with people spreading infection, all too many of them heading to the mass graves being dug around Brazil's cities. In Ecuador, neoliberalism and poverty have also interacted aggressively with the pandemic, with hotspots such as Guayaquil seeing COVID corpses left abandoned in the streets after a government *cum* IMF decision to disband that country's pandemic response team in 2019 (Corkery et al., 2020; Iturralde, 2020). And in South Africa, a lack of protections for the unemployed and precarious informal sectors has combined with the legacies of apartheid and the syndemic burdens imposed by other diseases of poverty such as HIV and TB to create killer cascades of co-pathogenic COVID vulnerability and death (Bond, 2020; Bulled and Singer, 2020).

In societies such as the US and UK, where the advance of neoliberalism was once promoted with the promise of wealth bringing health, COVID has instead also indexed interconnections between increasing inequality and mortality (Collins, 2021; Dorling, 2019). These are ties that have come to embody the advance of neoliberalism through the advance of disease among the poor, notably alongside the ongoing consumption of health-related advice by the affluent (such as advice on investing in healthcare and vaccine development, as well as on health-related purchases ranging

from exercise equipment and vitamin supplements). Hyper-mobile elites and the oligarchs while profiteering from a crisis, have used private jets, private yachts and luxury enclaves for social distancing, secure in the knowledge that they can still access concierge medicine and get tested first, all the while deprived communities have seen disproportionate COVID death rates. Homeless people have endured the cruel ironies of being told to go into 'lockdown' and 'shelter in place' when they have no doors to lock. Likewise, while financial markets and investing elites fast regained riches thanks to unprecedented central bank interventions, ordinary working people have been 'let go' and furloughed in ways that created an unemployment crisis. In countries such as the US where access to health insurance is largely based on employment, the economic and employment secondary impacts of the pandemic are involving a serious breakdown in access to health services. And in the US especially, where neoliberal norms and policies also mean that quality healthcare is concentrated at the wealthy end of a particularly steep income gradient, COVID has further exposed enormous obstacles to treatment in poor and rural communities facing hospital consolidations and closures— with about half of America's lowest income communities having no access to ICU beds at all (Kanter et al., 2020).

The class divides of neoliberal societies also point to some of the pathways through which economic inequality has causally contributed to the spread of COVID globally through neoliberal social determinants of health that range from the class-contingent access to information, testing and care, to the insecurities of everyday life in deprived communities and crowded slums, to the layering of acute new stresses on top of pre-existing chronic conditions – untreated hypertension, asthma, obesity and diabetes, as well as HIV and TB - that are closely connected to poverty (Ahmed, 2020). It is critical to note, though, that these are all *intersectional* causal pathways along which economic inequality has widely compounded racialized inequality in stripping people of health rights. Thus in the UK the government has reported disproportionate death rates and hospitalizations in Black, Asian and Minority Ethnic populations (ONS.GOV.UK, 2021). And in the US the embodiment of inequality in increased risk is especially pronounced in much higher death rates from COVID faced by indigenous, African American and LatinX communities - with hospitalizations being over four times higher than that of white Americans for LatinX and African Americans, and African Americans dying at over double the per capita rate of white Americans, and at still higher rates when deaths of middle-aged cohorts are compared (CDC, 2021; Ford Riley, et al., 2021; Webb et al., 2020).

Due to the intersections of racial dispossession with market forces in neoliberal societies, much of the deadly racialization of risk posed by COVID relates back to the economic imperatives of highly stratified labour markets in which people of color tend to be over-represented in the most acutely exposed ranks of 'essential' but contingent workers (Gould and Wilson 2020). Employed in cleaning, driving, meat-packing, cooking, farming, retail and care-work, their inability to work from home during the pandemic has come together with the contingency of their contracts as part of the 'flexible' or part-time, post-Fordist neoliberal workforce to exacerbate exposure to the virus (Maxmen, 2021). Unsalaried, un-unionized, and unsupported by pension and workplace health-benefits, they are also menaced by the threat of unemployment or underemployment.

More widely, COVID has been exploiting the societal vulnerabilities created by welfare reform and the rise of a vast global informal sector of wageless life (Peck, 2001). Instead of reliable unemployment insurance and income replacement, and instead of programs designed to help employers keep workers on payroll during downturns, neoliberal workfare states and informal economies have intensified the spread of COVID by systematically removing firewalls protecting workers from precarity. Mass unemployment and the dislocation of the global informal workforce (comprising some 2 billion people) has been felt in all but the world's least neoliberalized societies. The global precariat has thereby been reduced to searching desperately for work and thus to intensifying viral exposure even as employers benefit in rich countries from government assistance, corporate tax

cuts, and the promise of liability protection. Moreover, while corporations have been protected, many have simultaneously cut costs in supplying their contingent workforce – including large numbers of nurses, hospital porters and care-workers – with adequate protective equipment. Instead, the precariat's protection has been turned in typical neoliberal fashion into a matter of personal responsibility (Foley and Gërxhani, 2020).

The wider lack of welfare and reliable income replacement in more neoliberal societies is closely related to other neoliberal norms that have systematically elevated individualized personal responsibility over collective social responsibility and risk sharing. Nutrition, education and housing are all examples of public sector program areas negatively impacted by the withdrawal of the neoliberal state from social protection. In its place has come widespread social alienation and despair, along with diverse forms of self-blame and self-harm. There are already extensive epidemiological and public health literatures on the ill-effects and 'deaths of despair' that have followed in the wake of such extensive social alienation (Case and Deaton, 2020; Dorling, 2019; Pickett and Wilkinson, 2015; Schrecker and Bambra, 2015) In the context of COVID, all of these ill-effects have come together co-pathogenically to intensify the spread of risk, fear and self-blame alongside the virus (Manderson and Levine, 2020).

Homelessness has become a planetary crisis, compounding already extensive problems of finding shelter in neoliberal contexts where land and real estate have become increasingly monopolized by the wealthy, a process that central bank bond-buying has only exacerbated by creating the easy credit conditions in which investor purchases are effectively pushing-up housing prices (Fabian et al., 2020). Socially-isolated individuals have experienced increased isolation, loneliness and depression, especially when they have been deprived of access to social workers and online social networks (Banerjee and Rai, 2020). Women have suffered increased domestic abuse due to being trapped in intimate spaces of violence with abusers (Valera, 2020). And marginalized communities such as refugees and migrants have been widely blamed as super-spreaders and scapegoats for all the political-economic crises converging with COVID (Bozorgmehr et al., 2020).

The net result of these increasing forms of social alienation has been increased social exclusion and exceptionalism too, with diverse sub-populations ranging from migrants, the homeless and slum dwellers, to farm-workers and care-home workers to prisoners all being abandoned to the virus in petri-dish spaces of extreme exposure. Their experience of heightened risk under COVID appears thus to completely capsize the picture of increasing health rights and enfranchisement into 'biological citizenship' once depicted by theorists of personalized medicine as the biomedical upside of 'advanced liberalism' (Rose and Novas, 2008). Rather, those abandoned to the pandemic have come to embody all too many new examples of the 'biological sub-citizenship' that critical scholars have tied to the diminishment of health and human rights by neoliberalism (Sparke, 2017). With an already fragile global economy being thrown further into crisis by the pandemic, and with market fundamentalist projections about wealth and health being degraded into desperate discourses about capitalist liberty necessitating sickness and sacrifice, COVID would seem to have revealed 'advanced neoliberalism' in its most degenerative stages and morbid symptoms of decline.

Section 3: COVID and the failures of marktized health

Where market-society meets the market-state of health care provision, COVID has exposed and exploited another set of failures. Privatized health care, aged care, and medical technology supply have all made apparent how the marketization of health sectors has multiplied vulnerabilities to the pandemic (Navarro, 2020; Williams, 2020; Solomon et al., 2020). These were sectors with successful market failure¹ already embedded within them, with austerity and other neoliberal reforms regularly manifesting themselves in terms of uneven access to healthcare and medicines,

poor-quality services and patient care, inattention to the social determinants of well-being, and huge inequalities in health outcomes (Benatar, Sanders and Gill, 2020). However, COVID magnified the associated problems, a co-pathogenesis that acted to retard effective pandemic response as well as escalating unnecessary infections and deaths. The core of marketized health services – providing healthcare and health technologies as commoditized goods using the allocative function of markets – has been found systemically inadequate for securing health as a public good² (Williams et al., 2021).

More marketized states that depend on models of contracting-out to provide services have also been found unprepared to coordinate effective national health system responses and ill-equipped to exercise effective command and control of fragmented national systems (Ortega and Orsini, 2020; Saad-Filho, 2020). Neoliberal norms have instead meant that many states have hollowed-out institutional and bureaucratic capacities to manage health systems. Even the systems that endure have been downgraded (Pollock, 2020; Labonté and Stuckler, 2016). Indeed, neoliberal governments have continued to outsource and subcontract as a means of plugging gaps in national capacities, and these neoliberal norms that have led to many other problems in test and trace systems and PPE supply (Hall, 2020; McCoy, 2020). Here we focus on just market-managed health and hospital services, privatized aged care, and corporatized vaccine development as illustrative indicators of these wider failures of marketized health services.

Many states have long been dependent on private sector providers and hospitals, but successive waves of neoliberal health policy have led to the expansion and financialization of the private sector alongside the systematic defunding of public systems (Labonté and Stuckler, 2016; Hunter and Murray, 2019; Mackintosh et al., 2016). Around the world, private operators have entered as the state has withdrawn from health, leaving some LMICs dependent on the private sector for up to 80% of all hospital care capacities, often leaving a thin 'regulatory state' weakly managing poorly assimilated private health providers (Mackintosh et al., 2016). This poses a key problem for health security in a pandemic: in many LMICs downgraded public systems of primary and tertiary care have been at once eclipsed by and rendered highly dependent upon parallel programs of marketized health provision and private hospital services (Williams, 2020).

The health service marketization problems have in turn generated more routine failures, as private providers and hospitals have evolved a service model based on elective procedures serving higher paying patients. This private sector business model collapsed in the first few months of the pandemic, resulting in a global crisis of private health. The pandemic rapidly multiplied financial damage to the private providers, and particularly hospitals, with rising concern over mass insolvency in many national contexts (Williams et al., 2021). A mixture of lockdown measures combined with the for-profit configuration of hospital services led to huge drop-offs in demand for services. Elective procedures have widely been cancelled and deferred. Medical tourism, accounting for some 10-30% of all hospital revenues in a swathe of middle-income countries, such as Brazil, India, Thailand, Costa Rica, and Turkey, vanished with travel bans (Williams, 2020). As a result, revenue streams dried up with hospital closures multiplying, particularly in the smaller and middle-tier hospitals and clinics. In the US there has been much the same trajectory, the health sector saw mass lay-offs and furloughs, with some 1.4 million job losses by April 2020, with only just over 50 per cent of those jobs regained in all health sectors toward the end of that year, and numerous hospitals (particularly in rural America) have shuttered permanently during the successive waves of pandemic need (Rhyan et al., 2020).

Pressure on populations multiplied the secondary economic effects of the pandemic, with, for example, with some 43 million US citizens thought to have lost or would soon lose private employment-linked insurance coverage, and sources of income for out of pocket payment for care drying up for individuals. Indian insurers were publicly stating that their basic model was not able to meet the demands of a pandemic and were in many instances refusing to cover long

stays in ICU or additional costs associated with PPE or medical oxygen. As a consequence, the pandemic saw a surge in COVID-related price gouging by private hospitals as a result of opportunity for profit or their own COVID-induced financial precarity, charging high rates for admission and treatment of COVID patients, and for associated costs of in-patient testing and PPE in many LMICs. Price-gouging by private providers for testing, PPE and hospitalizations has a feature in the United States throughout the crisis, but was also witnessed in many other countries (Barber, 2020). One way or another, there has been a crisis of service provision, insurance, pricing and access to care in the pandemic, with hollowed out state capacities further limiting effective responses (Rhyan, 2020).

In aged care similar market failures have compounded the pandemic (Darbyshire and Dwyer, 2020). Many OECD countries undertook significant public sector and social-welfare service reforms from the 1990's onwards, opening up aged-care for private firms. State provision of longterm aged care also shrank amid further waves of austerity and cuts, with private entry into this market supported by cash transfers to the budding private care industry from local authorities and patients. In the 2000's a wave of financialization impacted the aged care sector, with the entry of investment funds buying chains and providers in the UK, Canada, Australia and the USA. Aged care follows successive historical waves of neoliberal policy and processes of commodification in health. The sector in many OECD countries is also marked by a workforce made more vulnerable by the bioinequalities of racialization and feminization, and these staff are generally poorly paid, often on short-term or zero-hour contracts, rotating between sites to make up hours and money (Ehlers and Krupar, 2019). All this precarity has clearly had serious implications for infection control and the quality of care amidst the pandemic (Sparke and Anguelov, 2020). Austerity and profit maximising imposed shortages of PPE and oxygen, absenteeism, poorly trained staff unable to cope as cases went from assisted care to medical attendance need, staff shortages endemic to the low-paid sector, the shunting of the elderly infected from hospitals back to care, all played a role in this neoliberal co-pathogenesis of COVID in failing care-homes turned abandonment sites of the elderly.

Finally, in the corporate-dominated pharmaceutical sector, vaccines have long been a moribund area of research and development. Corporations have avoided investment in developing vaccines because a wide range of highly infectious viruses are mainly associated with low-income populations and regions where a lack of 'effective economic demand' translates for business into a lack of potential profits (Williams, 2012). As a result, many pharmaceutical companies have withdrawn from vaccine development. Where public investments have been committed, they have been on the basis of short-term and narrow national biosecurity efforts, not linked constructively to tackling infectious disease burdens globally and collaboratively through multilateral agencies such as the WHO (Mackey, 2016) The investments tied to vaccine nationalism have also suffered from peaks and troughs of political attention following epidemic outbreaks, with government financing for vaccines quickly falling off after outbreaks have passed, as was the case following SARS in 2002-4 (Billington et al., 2020).

To be sure, since the first genome sequence of the SARS-COV2 virus was released by Chinese labs in January 2020, we have witnessed a staggering race to develop a vaccine. However, despite progress and optimism, and notwithstanding all the stock market excitement surrounding the announcements of the results from clinical trials, global access to the successful vaccines remains terribly limited (Moon et al., 2021). Bound up in a system governed by IPRs, the pricing of the vaccines by controlling firms, and the close associations between these firms and the governments that represent their core markets, are creating a new (yet depressingly familiar) paywall and other exclusions for populations living in countries that cannot afford or negotiate high-cost pre-purchase agreements ('t Hoen, 2021; Phelan et al., 2020) Added to the costs associated with the cosy state-firm co-dependencies and patent monopoly regimes protected by

wealthy countries, we have seen the additional problems caused by the assertion of national security and national biosecurity agendas in the form of vaccine nationalism (Sell, 2020). Pre-production advanced purchasing agreements were quickly signed between manufacturers and governments to secure guaranteed access to doses even before efficacy was proven or approvals received. Thus, despite ongoing high profile advocacy of patent waivers and vaccine technology sharing (Moon et al., 2021), the priorities of vaccine nationalists, and the breakdown of efforts to govern global health security as a global public good, mean that efforts to 'free the vaccine' look unlikely to prevail over enduring neoliberal interests in freeing the market and empowering monopolists simultaneously. In these ways too, therefore, COVID has highlighted how a reliance on market actors has undermined more collaborative and viable pandemic responses at the global scale.

Section 4: COVID and the failings of global governance

At the level of global governance, multilateral organizations and their member states have provided an uncoordinated response to COVID-19 (Patrick, 2020). This co-pathogenic problem of global governance is also tied to the spread of neoliberal norms into global health security plans, even if it is not wholly reducible to neoliberal imperatives. As well as accommodating international trade liberalization, global health security planning has also increasingly accommodated corporatized health markets and the private sector, as is clearly the case with the development of medical countermeasures to pandemic threats and the global system of viral sample collection and sharing. To be sure, COVID-19 did at least initially produce unusual restrictions on the normal circulation of the global economy. But over time concern with the continued functioning of markets has clearly come to be elevated by more neoliberal governments over public health measures.

Along the way, COVID has also revealed capacity problems that take us far beyond simple technocratic, institutional, rules-based and regulatory explanations of governance failure, or something that can be attributed solely to global health security governance, as narrowly understood. Although WHO governance and rules have been predictably blamed as a primary source of institutional failure in the COVID crisis, such critiques are best read as a form of scapegoating that obscures the damaging roles played by neoliberal norms and transformations (Benvenisti, 2020). The failure to respond, contain and mitigate the virus represents more than a synchronic, once-off, and technical set of institutional and rule-based failures in global health security. Instead, governance failures in the COVID crisis have stemmed from underlying neoliberal mutations in the governance regimes where the rules are enacted.

By late March 2020, a number of Western governments began to frame governance failure in the response to the pandemic solely in terms of a compromised WHO and the weak global health security regime. But this was not the main problem, the weakness of the WHO-managed International Health Regulations (IHRs) governing state responsibilities for preparing for pandemics notwith-standing (Paul, Brown and Ridde, 2020). Instead, due to the historical trajectory of global health security under neoliberalism, the WHO and associated global health security apparatus responded to COVID within the parameters of a market friendly and market disciplined approach that have compromised coordination at every step. The WHO's shrinking discretionary budgets from the compulsory contributions of member states have cut capacities and made program areas beholden to donor preferences (Katz, 2008; Sridhar and Gostin, 2011). Other global institutions, such as the bond-driven Pandemic Emergency Financing Facility (PEF), the Global Health Security Agenda (GHSA), and the One Health approach (targeted at holistic responses to combat zoonotic diseases), remained inert and now disbanded (as with PEF), undersubscribed and limited in focus (the GHSA), and woefully underfunded. As soon as COVID-19 hit, all the associated epidemic planning and programming was found wanting (Paul, Brown and Ridde, 2020). The externalizing emphasis

placed by wealthier western nation-states on containing infectious disease outbreaks to the traditional 'hot zone' outbreak areas of the Global South was useless in the face of COVID's border-crossing virulence. It had already been critiqued in relation to the developing states living under neoliberal austerity, but COVID also showed it to be flawed with respect to the capacities of wealthier so-called 'advanced' liberal states themselves.

The other aspect of neoliberal market rule that looks set to be even more devastating over the long run is the complex global patent regime now curtailing access to vaccines across the Global South. The reasons run far beyond the pay-walls created by patent-protected monopoly pricing, extending to the ways in which the WTO's neoliberal TRIPS rules wall-off opportunities for putting vaccine manufacturing capacity in poorer countries into action to create desperately needed vaccine doses (Labonté and Johri, 2020; Le et al., 2020). As the pandemic progressed through 2021 the change in US administration signalled a unique fissure in the OECD state and firm cartel that has dominated the governance of medicines for some four decades, with the Biden administration committing to a TRIPS waiver. Nonetheless the EU, Switzerland, the UK continued to hold on to the IPR model, refusing to shift position in the WTO, and supporting Pharma's recalcitrance over technology transfer that would permit generic production of vaccines. All this despite the deadly consequences of global vaccine apartheid for the relentless spread and mutation of COVID.

Making matters worse, a parallel philanthrocapitalist neoliberal regime has compounded the problem by simultaneously failing to deliver an adequate supply of vaccines to poor countries while successfully delivering a form of compensatory moral fig-leaf to cover-up the enormous inequalities in global vaccine access. This is the market-friendly charity regime of vaccine distribution orchestrated under the umbrella of COVAX. Administered by GAVI (the Global Alliance for Vaccines and Immunizations) on behalf of an ad hoc assemblage of global health agencies and public-private partnerships, it represents the kind of global health institutional assemblage that has elsewhere been critiqued as the 'Trojan Multilateralism' (Sridhar and Woods, 2013) of the 'New Washington Consensus' (Mitchell and Sparke, 2016). It did at least begin with the solidaristic promise of addressing global vaccine access inequalities, but according to one of its own architects this "beautiful idea" has since been undermined by the "nightmare" of rich country vaccine nationalism (Gavin Yammey, quoted in Usher, 2021). More than this, by immunizing against alternatives to the neoliberal rules protecting pharmaceutical patents COVAX has undermined the case for compulsory licensing, technology transfer and the mass production of a generic 'Peoples Vaccine' (Levy and Sparke, 2022). It has also made it harder for pro-access advocates to push for a TRIPS waiver while effectively buying time for wealthier countries to use their own market privilege to pre-order doses and push to the front of the global supply queue (Labonté et al. 2021). Poor countries stayed out of the pre-purchase line-up because of assurances that COVAX would deliver instead, but it has failed to do so. "COVAX was not set up to succeed," explained Kate Elder of MSF, summing-up the successful market failure it represents. "It was constructed to work within the current parameters of the pharmaceutical market, where you see how much money you can raise and then see what you can negotiate with industry for it' (Elder, 2021).

Conclusion: global dis-ease with neoliberalism?

Through every section of this paper we have made clear how COVID has exposed, exploited and exacerbated global health insecurities co-produced by neoliberal policies and practices. From the vectors of vulnerability created by unequal and unstable market societies, to the reduced response capacities of market states and health systems, to the constrained ability of official global health security agencies and regulations to offer effective global health governance, the virus has found

weaknesses in a market-integrated and market-transformed global body politic that it has used to viral advantage.

None of what has unfolded should be a surprise to observers of health under neoliberal capitalism. We already had ample knowledge of the structural transformations neoliberalism had engendered in the global political economy of health, including how it had created and evolved through successive crises to colonize and infect new sites. Based on this knowledge, COVID's revelations can clearly be understood as being pre-conditioned by market-made global health insecurities that work co-pathogenically with the virus to create ill-health. This also helps explain why the pandemic has had such a disproportionate effect on the poor and dispossessed, and why states were not prepared to deal with it in so many cases. Neoliberal states and societies have instead been revealed as having been deeply transformed, as elites and governments that have placed faith in the market have also preconditioned their populations both to viral vulnerability and quotidian ill-health. It is in these ways that COVID has become a global biomarker of neoliberalism and its biopolitical role in generating necropolitical insecurities. Neoliberal biopolitics has failed in the places where it has advanced the most. And in all these contexts the promise of 'making live' in market ways has now come to be damagingly shadowed by processes of 'letting die'.

Notwithstanding all the revelations about neoliberal transformation laid bare by COVID, we should finally return to the question of whether the crisis also signals any form of systemic transformation or inflection point in neoliberalism. In answer we submit that while neoliberal disease may be leading to growing dis-ease with neoliberalism, it seems far less likely to be leading to the end of market rule despite passing pandemic-inspired enthusiasm about 'building back better' (Šumonja, 2020). We do not therefore conclude that COVID is bringing us to a point when actually existing neoliberalism is going to stop actually existing. Instead, looking back in order to look forward, we are reminded again of the salience of the viral metaphor for neoliberalism in underlining its capacity for mutational evolution.

When other global crises have generated opportunities for moving beyond neoliberalism in the past, we have seen neoliberal thinking and policy-making re-emerge and re-evolve reinvigorated. It has been extremely opportunistic in the crises it has created, and, as both an ideology and policy platform, it has been able to mutate and re-infect new sites. While COVID has certainly destabilized traditional neoliberal norms of governance, it is equally clear that huge secondary economic effects of the pandemic are already producing national and multilateral framings of the need to return to fiscal prudence and austerity. Even during the worst surges of infection in 2020 and 2021, leading economic governance agencies have seemed set on pursuing the same old market driven policies of the past with respect to the future of health and the means of economic recovery more widely (Engels et al., 2020; Kentikelenis et al., 2020). Going forward most leaders of global economic governance in the core neoliberal states are most likely to respond to the COVID recession with the same pro-market policy templates of the past: fiscal prudence, austerity, and market-led growth will probably be their preferred prescriptions. Meanwhile, actual prescriptions of medicines, including for the vaccines needed to secure real herd immunity on a global scale, look set to be limited anew by neoliberal IP protections being enforced again on a global scale. As we look ahead to the global roll-out of vaccination programs by for-profit pharmaceutical companies such post-neoliberal possibilities seem even more unlikely. Instead, anti-liberal regimes appear only to have distinguished themselves during the crisis by relentlessly subordinating public-health security measures such as stay at home orders and quarantines to economic liberty. Their especially enthusiastic appeals for sacrifice in the name of liberalizing capitalism will therefore most likely appear in retrospect as so many egregious examples of neoliberal herd thinking. And far from delivering us herd protections, it is precisely such thinking that we have shown here to be so effectively co-pathogenic with COVID as a neoliberal disease.

Acknowledgements

We would like to thank the reviewers for their extraordinarily thoughtful and constructive feedback on an earlier draft of this article.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship and/or publication of this article.

Notes

- 1. We here deliberately problematize the use of the term 'market failure' in neoclassical economics to describe inefficient outcomes that result from such factors as imperfect information and high transaction costs. We are instead referring to markets working successfully in neoliberal economic terms but nevertheless failing societally, biomedically, and morally to protect people from sickness and premature death. The presumption that neoclassical economic understandings of 'market-failure' describe the only failures that matter is itself an example of what Gayatri Spivak deconstructs as 'successful cognitive failure' an argument about 'success-in-failure [as hegemonic] sanctioned ignorance' that inspires our own critical approach (Spivak, 1987: 199).
- 2. Following the preceding footnote on market failure, we want to avoid reducing 'public goods' to just the economic meaning of being a service or commodity that is non-rivalrous and non-excludable. We are interested in more expansive meanings of the public good that include comprehensive care for well-being and public health protection, and we are mindful of how even curative biomedical care has itself been repeatedly subordinated in the pandemic to the priority placed on positional private goods (commodities that display personal wealth) in neoliberal societies (Hemenway, 2021).

References

Ahmed F, et al. (2020) Why inequality could spread COVID-19. The Lancet Public Health 5(5): e240.

Banerjee D and Rai M (2020) Social isolation in covid-19: The impact of loneliness. *International Journal of Social Psychiatry* 66: 525–527.

Barber C (2020) COVID's Other Toll: Unnecessary Tests and Huge Hospital Bills. Scientific American. October 24. https://www.scientificamerican.com/article/covids-other-toll-unnecessary-tests-and-huge-hospital-bills/

Beck U (2000) What is Globalization? Cambridge: Polity Press.

Benatar S, Sanders D, Gill S, et al. (2020) The global politics of healthcare reform. In: McInnes C (eds) *The Oxford Handbook of Global Health Politics*. Oxford: Oxford University Press, pp.445–468.

Benvenisti E (2020) The WHO—destined to fail?: Political cooperation and the COVID-19 pandemic. American Journal of International Law 114(4): 588–597.

Billington J, et al. (2020) Developing vaccines for SARS-CoV-2 and future epidemics and pandemics: Applying lessons from past outbreaks. *Health Security* 183: 241–249.

Bond P (2020) Covid-19 Attacks the Down-and-Out in Ultra-Unequal South Africa, Counterpunch, April 23, accessed at: https://www.counterpunch.org/2020/04/03/covid-19-attacks-the-down-and-out-in-ultra-unequal-south-africa/.

Bozorgmehr K, et al. (2020) COVID And the convergence of three crises in Europe. *The Lancet Public Health* 5(5): e247–e248.

Brenner N, et al. (2010) Variegated neoliberalization: Geographies modalities pathways. *Global networks* 10(2): 182–222.

- Bulled N and Singer M (2020) In the shadow of HIV & TB: A commentary on the COVID epidemic in South Africa. *Global Public Health* 15: 1231–1243.
- Case A and Deaton A (2020) Deaths of Despair and the Future of Capitalism. Princeton: Princeton University Press.
- CDC (2021) Health Equity Considerations and Racial and Ethnic Minority Groups at https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html.
- Collins C (2021) Updates: Billionaire Wealth, U.S. Job Losses and Pandemic Profiteers. Inequality.org Retrieved from: https://inequality.org/great-divide/updates-billionaire-pandemic/.
- Cooper M (2017) Family Values: Between Neoliberalism and the new Social Conservatism. Boston: MIT Press.
- Corburn J, et al. (2020) Slum health: Arresting COVID-19 and improving well-being in urban informal settlements. *Journal of Urban Health* 97: 348–357.
- Corkery A, et al. (2020) Austerity is killing Ecuador. The IMF must help end this disaster. The Guardian 29 August: https://www.theguardian.com/commentisfree/2020/aug/29/ecuador-austerity-imf-disaster
- Crush J and Si Z (2020) COVID-19 containment and food security in the global south. *Journal of Agriculture Food Systems and Community Development* 9(4): 1–3.
- Darbyshire P and Dwyer D (2020) Monetising your mum: The industrification of aged care. *Journal of Clinical Nursing* 30: e16–e20. DOI: 10.1111/jocn.15525.
- DiMuzio T and Robbins R (2020) Capitalized money, austerity and the math of capitalism. *Current Sociology*, 68(2): 149–168.
- Dorling D (2019) Inequality and the 1%. New York NY: Verso.
- Ehlers N and Krupar SR (2019) *Deadly Biocultures: The Ethics of Life-Making*. Minneapolis: University of Minnesota Press.
- Elder K (2021) Ahead of Gavi's board meeting MSF urges critical look at COVAX shortcomings https://msfaccess.org/ahead-gavis-board-meeting-msf-urges-critical-look-covax-shortcomings.
- Engel S, et al. (2020) The World Bank's Response to COVID-19. https://jubilee.worldsecuresystems.com/.
- Fabian L et al. (2020) Care and homelessness in the shadow of planetary crisis. LockdownReport 19.
- Farmer P (2003) Pathologies of Power: Health Human Rights and the new war on the Poor. Berkeley: University of California Press.
- Fernando JL (2020) The virocene epoch: The vulnerability nexus of viruses capitalism and racism. *Journal of Political Ecology* 27(1): 635–684.
- Foley W and Gërxhani K (2020) Hands-off? Laissez-faire policies on covid-19 may exacerbate health inequalities. *International Journal of Sociology and Social Policy*. DOI: 10.1108/IJSSP-06-2020-0220.
- Gatti R, et al. (2021) Diversity lost: COVID-19 as a phenomenon of the total environment. *Science of The Total Environment* 756: 144014.
- Giroux H (2021) The covid-19 pandemic Is exposing the plague of neoliberalism 1. In Denzin N and Giardina M eds. *Collaborative Futures in Qualitative Inquiry*. New York: Routledge, pp. 16–27.
- Gould E and Wilson V (2020). Black workers face two of the most lethal preexisting conditions for coronavirus—racism and economic inequality. *Economic Policy Institute*. Accessed at https://www.epi.org/ publication/black-workers-covid/
- Hall D, et al. (2020) *Privatised and Unprepared: The NHS Supply Chain*. London: University of Greenwich. Harvey D (2007) A brief history of neoliberalism. Oxford: Oxford University Press.
- Hemenway D (2021) Positional goods and the underfunding of public health. *Journal of Public Health Policy* 42: 522–524.
- Hunter BM and Murray SF (2019) Deconstructing the Financialization of Healthcare. *Development and Change*, 50(5): 1263–1287. DOI: 10.1111/dech.12517.
- Iturralde P (2020) The IMF's role in the devastating impacts of Covid-19 the case of Ecuador https://www.brettonwoodsproject.org/2020/07/the-imfs-role-in-the-devastating-impacts-of-covid-19-the-case-of-ecuador/
- Jones L and Hameiri S (2021) COVID-19 and the failure of the neoliberal regulatory state. Review of International Political Economy: 1–25. DOI: 10.1080/09692290.2021.1892798.
- Kanter G, et al. (2020) Income disparities In access To critical care services. Health Affairs 38(8): 1362–1367.

- Katz A (2008) 'New global health': A reversal of logic history and principles. Social Medicine 3(1): 1–3.
- Kay A and Williams O (2009) Global Health Governance: Crisis Institutions and Political Economy. Basingstoke: Palgrave Macmillan.
- Kentikelenis A (2017) Structural adjustment and health: A conceptual framework and evidence on pathways. Social Science and Medicine 187: 296–305.
- Kentikelenis A, et al. (2020) Softening the blow of the pandemic: Will the international monetary fund and world bank make things worse? *The Lancet Global Health* 8(6): e758–e759.
- Keshavjee S (2014) Blind Spot: How Neoliberalism Infiltrated Global Health. Berkeley: University of California Press.
- Labonté R and Johri M (2020) COVID-19 drug and vaccine patents are putting profit before people. *The Conversation* 5.
- Labonté R and Schrecker T (2007) Globalization and social determinants of health: Introduction and methodological background (part 1 of 3), *Globalization and Health* 3(1): 5.
- Labonté R and Stuckler D (2016) The rise of neoliberalism: How bad economics imperils health and what to do about it. *Journal of Epidemiology and Community Health* 70(3): 312–318.
- Labonté R, et al. (2021) Canada Global vaccine supply and the TRIPS waiver. *Canadian Journal of Public Health* 112: 543–547.
- Le T, et al. (2020) The COVID-19 vaccine development landscape. *Nature Reviews. Drug Discovery* 19(5): 305–306.
- Leitner H, et al.(eds.) (2007) Contesting Neoliberalism: Urban Frontiers. New York: Guilford Press.
- Leven B and Overwijk J (2020) We created this beast: The political ecology of COVID-19 *Eurozine* https://www.eurozine.com/we-created-this-beast/.
- Levy O and Sparke M (2022) Immunizing against access? Philanthro-capitalist COVID vaccines and the preservation of patent monopolies. In: Mitchell K and Pallister-Wilkins P (eds) *The Routledge Handbook of Critical Philanthropy and Humanitarianism*. New York: Routledge.
- Manderson L and Levine S (2020) COVID-19, Risk, Fear, and Fall-Out. *Medical Anthropology*, 1–4. DOI: 10.1080/01459740.2020.
- McCoy D (2020) After PPE and testing contact tracing looks like the next government shambles. *The Guardian*. May 28, accessed online at https://www.theguardian.com/commentisfree/2020/may/28/ppetesting-contact-tracing-shambles-outsourcing-coronavirus
- Mackey T (2016) The Ebola Outbreak: Catalyzing a "Shift" in Global Health Governance?. *BMC Infect Dis* 16, 699. DOI: 10.1186/s12879-016-2016-y.
- Mackintosh M, et al. (2016) What is the private sector? Understanding private provision in the health systems of low-income and middle-income countries. *The Lancet* 388(10044): 596–605.
- Mair S (2020) Neoliberal economics planetary health and the COVID-19 pandemic. *The Lancet Planetary Health* 4(12): e588–e596.
- Maxmen A (2021) Inequality's Deadly Toll. *Nature*. https://www.nature.com/immersive/d41586-021-00943-x/index.html.
- Mitchell K and Sparke M (2016) The new Washington consensus: Millennial philanthropy and the making of global market subjects. *Antipode* 48(3): 724–749.
- Montenegro de Wit M (2021) What grows from a pandemic? *Toward an abolitionist agroecology The Journal of Peasant Studies* 48(1): 99–136.
- Moon S, Ruiz A and Vieira M (2021) Averting future vaccine injustice. *New England Journal of Medicine* 385: 193–196.
- Navarro V (2007) *Neoliberalism Globalization and Inequalities: Consequences for Health and Quality of Life.* Amityville: Baywood Publishing Company.
- Navarro V (2020) The consequences of neoliberalism in the current pandemic. *International Journal of Health Services* 50(3): 271–275.
- Neely AH and Lopez T (2021) Fundamentally uncaring: The differential multi-scalar impacts of COVID-19 in the US. *Social Science and Medicine* 272: 113707.
- Oldekop J, et al. (2020) COVID-19 and the case for global development. World Development 134: 105044.
- ONS.GOV.UK (2021) Updating ethnic contrasts in deaths involving the coronavirus (COVID-19), Accessed online at. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/

deaths/articles/updatingethniccontrasts in deaths involving the coronavirus covid 19 england and wales/24 january 2020 to 31 march 2021

Ortega F and Orsini M (2020) Governing COVID-19 without government in Brazil: Ignorance neoliberal authoritarianism and the collapse of public health leadership. *Global Public Health* 15(9): 1–21.

Patel A and Shah P (2020) Rethinking slums cities and urban planning: Lessons from the COVID-19 pandemic. Cities and Health: 1–3. DOI: 10.1080/23748834.2020.1790252.

Patrick S (2020) When the system fails. Foreign Affairs 99: 40.

Paul E, et al. (2020) COVID-19: Time for paradigm shift in the nexus between local national and global health. BMJ Global Health 5(4): e002622.

Pearce J and Dorling D (2009) Tackling global health inequalities: Closing the health gap in a generation. Environment and Planning A 41(1): 1–6.

Peck J (2001) Workfare states. New York: Guilford Press.

Peck J (2010) Constructions of Neoliberal Reason, Oxford: Oxford University Press.

Peck J (2013a) Explaining (with) neoliberalism. Territory politics governance 1(2): 132–157.

Peck J (2013b) Austere reason, and the eschatology of neoliberalism's end times. *Comparative European Politics* 11(6): 713–721.

Peck J and Theodore N (2019) Still neoliberalism? South Atlantic Quarterly 118(2): 245-265.

Peck J and Tickell A (2002) Neoliberalizing space. Antipode 34(3): 380-404.

Peck J, et al. (2009) Neoliberal urbanism: Models moments mutations. SAIS Review of International Affairs 29(1): 49–66.

Phelan AL, et al. (2020) Legal agreements: Barriers and enablers to global equitable COVID-19 vaccine access. *The Lancet* 396(10254): 800–802.

Pickett K and Wilkinson R (2015) Income inequality and health: a causal review. *Social science & medicine* 128: 316–326.

Pollock A (2020) The End of the NHS. London: Verso.

Raju E, et al. (2021) COVID-19 in India: Who are we leaving behind? *Progress in Disaster Science* 10: 100163.

Rhyan C, et al. (2020) Tracking the US health sector: The impact of the COVID-19 pandemic. *Business Economics* 55: 267–278.

Riley A, et al. (2021) Excess Deaths among Latino People in California during the COVID-19 Pandemic. Social Science and Medicine. doi 10.1016/j.ssmph.2021.100860

Rose N and Novas C (2008) Biological citizenship. In Ong A & Collier S eds. Global assemblages: Technology, politics, and ethics as anthropological problems, Oxford: Wiley, 439–463.

Rowden R (2013) The Deadly Ideas of Neoliberalism: How the IMF has Undermined Public Health and the Fight Against AIDS. New York: Zed Press.

Saad-Filho A (2020) From COVID-19 to the end of neoliberalism. Critical Sociology 46: 477-485.

Schrecker T and Bambra C (2015) *How Politics Make us Sick: Neoliberal Epidemics*. Basingstoke: Palgrave Macmillan.

Sell S (2020) What COVID-19 reveals about twenty-first century capitalism: Adversity and opportunity. Development (Cambridge, England) 63: 150–156.

Sell S and Williams O (2020) Health under capitalism: A global political economy of structural pathogenesis. *Review of International Political Economy* 27(1): 1–25.

Sheppard E and Leitner H (2010) Quo vadis neoliberalism? The remaking of global capitalist governance after the Washington consensus. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 41(2): 185–194.

Singer M, Bulled N, Ostrach B, et al. (2017) Syndemics and the biosocial conception of health. *The Lancet* 389(10072): 941–950.

Slobodian Q (2020) Globalists: The end of Empire and the Birth of Neoliberalism. Cambridge: Harvard University Press.

Solomon M, et al. (2020) Scarcity in the covid-19 pandemic. Hastings Center Report 50(2): 3.

Sparke M (2017) Austerity and the embodiment of neoliberalism as Ill-health: Towards a theory of biological Sub-citizenship. *Social Science and Medicine* 187: 287–295.

Sparke M (2020) Neoliberal regime change and the remaking of global health: From rollback disinvestment to rollout reinvestment and reterritorialization. *Review of International Political Economy* 27(1): 48–74.

- Sparke M and Anguelov D (2020) Contextualising coronavirus geographically. *Transactions (Institute of British Geographers* 45: 498–508.
- Sparke M (2018) Globalisation and the politics of global health. In: McInnes C (eds) *The Oxford Handbook of Global Health Politics*. Oxford: Oxford University Press, 37–58.
- Spivak GC (1987) In Other Worlds: Essays in Cultural Politics. New York: Routledge.
- Sridhar D and Gostin L (2011) Reforming the world health organization, Jama, 305(15): 1585–1586.
- Sridhar D and Woods N (2013) Trojan multilateralism: global cooperation in health. *Global Policy* 4(4): 325–335.
- Stubbs T, et al. (2021) Whatever it takes? The global financial safety net Covid-19 and developing countries. *World Development* 137: 105171.
- Sumba E (2021) Necropolitics at large: Pandemic politics and the coloniality of the global access gap. *Critical Studies on Security* 9: 48–52.
- Šumonja M (2020) Neoliberalism is not dead: On political implications of Covid-19. *Capital and Class* 45: 215–227.
- 't Hoen E (2020) Coronavirus: The Latest Problem Big Pharma Won't Solve. *Barron's* https://www.barrons.com/articles/coronavirus-the-latest-problem-big-pharma-wont-solve-51581078600.
- UN Habitat (2020) UN-Habitat COVID-19 Response Plan https://unhabitat.org/sites/default/files/2020/04/final_un-habitat_covid-19_response_plan.pdf.
- Usher AD (2021) A beautiful idea: How COVAX has fallen short. The Lancet 397(10292): 2322-2325.
- Valera E (2020) When pandemics clash: Gendered violence-related traumatic brain injuries in women since COVID-19. *EClinicalMedicine* 24: 100423.
- Wallace R, et al. (2020) COVID-19 and Circuits of Capital. *Monthly Review* May, 72(1) unpaginated and online at https://monthlyreview.org/2020/05/01/covid-19-and-circuits-of-capital/
- Wallace R and Wallace R (eds) (2016) *Neoliberal Ebola: Modeling Disease Emergence From Finance to Forest and Farm.* Geneva: Springer International Publishing.
- Webb R, et al. (2020) COVID-19 and racial/ethnic disparities. JAMA 323(24): 2466-2467.
- WHO (2008) Closing the gap in A Generation: Health Equity Through Action on the Social Determinants of Health. Geneva: WHO.
- Whyte J (2019) The Morals of the Market: Human Rights and the Rise of Neoliberalism. New York: Verso Books.
- Williams O (2012) Access to medicines market failure and market intervention: A tale of two regimes. *Global Public Health* 7(2): 127–S143.
- Williams O (2020) COVID-19 and private health: Market and governance failure. *Development (Cambridge, England)* 63: 181–190.
- Williams O, et al. (2021) The failure of private health services: COVID-19 induced crises in low-and middle-income country (LMIC) health systems. *Global Public Health* 16: 1320–1333.
- Zhou A (2021) Limits of neoliberalism: HIV COVID-19 and the importance of healthcare systems in Malawi. *Global Public Health* 16: 1346–1363.