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The Health Disparities Research Industrial Complex

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ABSTRACT

Research focused on health disparities—whether relating to one's race/ethnicity, gender expression, sexual orientation, citizenship status, income level, etc.—constitutes a large, generative, and highly profitable portion of scholarship in academic, clinical, and government settings. Health disparities research is expressed as a means of bringing greater attention to, and ultimately addressing via evidence-based implementation science, acts of devaluation and oppression that have continually contributed to these inequities. Philosophies underlying health disparities research's expansive and growing presence mirror the formal logic and ethos of the Military Industrial Complex and the Prison Industrial Complex. The "Health Disparities Research Industrial Complex," operationalized in this article, represents a novel mutation and extension of these complexes, primarily being enacted through these three mechanisms: 1) The construction and maintenance of beliefs, behaviors, and policies in healthcare, and society more broadly, that create and sustain disadvantages in minority health; 2) the creation and funding of research positions that inordinately provide non-minoritized people and those without relevant lived experiences the ability to study health disparities as "health equity tourists"; and 3) the production of health disparities research that, due to factors one and two, is incapable of fully addressing the disparities. In this piece, these and other core elements of the Health Disparities Research Industrial Complex, and the research bubble that it has produced, are discussed. Additionally, strategies for reducing the footprint and impact of the Health Disparities Research Industrial Complex and better facilitating opportunities for meaningful implementation in the field are presented.

Research that addresses health disparities corresponding to race/ethnicity, gender, sexual orientation, income, and so forth, has proven potent in efforts to better identify and characterize the nature and extent of historically entrenched inequities (Dankwa-Mullan et al., 2021; Palmer et al., 2019). Nonetheless, this scholarship has also had a consequential yield in other often underappreciated and unproblematized ways—namely, in 1) producing careers and opportunities for professional development for scholars, 2) buoying financial support and prestige for academic, clinical, and government institutions, health associations and centers, and health insurers, and 3) establishing and reinforcing pipelines for education and training of health sciences students and additional waves of research acolytes.

The "process" of health disparities research—to wit, the act of funding, supporting, and facilitating this research—is framed by its adherents as imminently necessary and fruitful in eliminating "unethical and costly" disparities, thereby aiding political and public buy-in (Vince et al., 2022). However, this process undercuts the diversification of the research field and eliminates pathways for culturally congruent scholarship that may have more fidelity and translational capacity. To this

end, health disparities research has had a singular impact on the perceived intentionality, nobility, and credibility of both the research and those conducting it (Carnethon et al., 2020; Duran and Pérez-Stable, 2019). The extrinsic and intrinsic benefits associated with health disparities research cohere in the furtherance of the *Health Disparities Research Industrial Complex*, the focus of this article. Specifically, this piece outlines the foundational elements of this Health Disparities Research Industrial Complex, along with approaches to lessening its outsized footprint and adverse impacts.

1. Defining the Health Disparities Research Industrial Complex

Broadly speaking, health disparities research focuses on illuminating factors that have contributed to persistent, cross-generational acts of discrimination, oppression, and othering of minority populations such as Black, Latino, and Indigenous people, rural individuals, individuals with mental illness, and people identifying as a sexual or gender minority (Pérez-Stable et al., 2021). Typically centered around the contextualization of specific social determinants of health—e.g., access to quality

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Abbreviations

DEIB	Diversity, Equity, Inclusion, and Belonging
NGO	Non-Governmental Organization
NIH	National Institutes for Health
PAR	Participatory Action Research

education, housing, food, healthcare, etc.—health disparities research anchors itself as preeminent in rectifying inequities that are rooted in and inextricably tied to structural biases (e.g., structural racism, sexism, classism, homophobia, etc.) (Carnethon et al., 2020). The chief issues herein correspond to health disparities researchers' failure to sufficiently translate their research into implementable policy and practice (and indeed the extent to which this is even their primary or secondary goal). Moreover, there is health disparities researchers' tendency to "over-investigate" and exoticize certain empirical questions thus adding to the field's current "research bubble" (e.g., by pursuing low-probability-of-impact studies, passion projects, and "mesearch"), this promoted by the field's lack of clarity and consistency in disease/condition prioritization, measurement, and terminology (Collyer and Smith, 2020).

In his farewell address to the nation in 1961, Dwight D. Eisenhower, America's 34th president and a fabled World War II hero, soberly warned the nation—and by extension the world—of the perils of the Military Industrial Complex. Leaving office just several years before the Cold War would reach full bloom, Eisenhower, evidently catching some of the nation's military elite off-guard, spoke of the parasitic fusion between the financial interests of the military defense industry—corporate lions such as Boeing and Lockheed Martin—and those of the state (Mayer, 2009). Speaking to what Eisenhower passively alluded to in his speech, Kaen observes (Kaen, 2011):

Between 1940 and 1944, the US government placed \$175.066 billion of prime defence contracts with US corporations. Two-thirds of these awards went to only 100 companies, and 20% to only five companies, leading to charges that the prime contractors were favoured.

With this in mind, industrial complexes are not just about the creation of wealth, but the concentration of it among certain parties to the direct or indirect detriment of others, as observed in the disproportionate share of research funds granted to a small number of elite medical and public health schools that have low levels of historically underrepresented researchers and students (Katz and Matter, 2020; Roskoski Jr, 2023). Though much of Eisenhower's anxiety was tied to the then-recent advent and utilization of the nuclear bomb, he, presaging its potential for conflict elsewhere, spoke broadly about military expansionism and nation-building that was connected to ambiguous end-points that did not serve a common good or even address short or near-term dangers—and perhaps would even stoke them. Hence creating a dubious "virtuous cycle," Eisenhower specifically lamented the hyper-active, hyper-interventionist ethos that was accompanying the militarization of the Western world, the Soviet bloc, and developing nations such as China and India.

Eisenhower's coda was especially profound, if not ironic, given the lore surrounding his status as a five-star general who had served as the Supreme Commander of the Allied Expeditionary Force and spear-headed the fateful D-Day invasion of Normandy, still one of the world's most extensive battles in terms of both blood and treasure (Dolski, 2016). Propelled by Eisenhower's vivid and deep grasp of the financial and logistical complexities of war as brought on by his nearly 30 years of experience as a battlefield scion and respected leader in political war rooms, the Military Industrial Complex heuristic gained considerable cultural cache among antiwar activists and political pundits in the proceeding decades (Hartung, 2001). Nevertheless, Eisenhower's plea

went largely unheeded, as large-scale war, and defense industry spending, exploded and continued to climb as the Cold War accelerated up through the Vietnam War, then across various paramilitary operations in Latin America in the 1980s, and finally into the late 20th and early 21st centuries' NATO-supported wars in Iraq, Afghanistan, and the broader Middle East (Cox, 2014; Thorpe, 2020). Of note, the vast majority of these wars were waged against nation-states composed of racial/ethnic minorities who were already deeply socioeconomically and medically vulnerable.

Among the critics of the Military Industrial Complex and the militarization that it stoked—both in American foreign policy and in domestic law enforcement ranks—was Angela Davis, a Black feminist philosopher who helped give rise to the notion of a *Prison Industrial Complex*. Like its predecessor, the concept of a Prison Industrial Complex, formally theorized and coined by Davis in the late 1990s (Davis, 2000), spoke to the readily observable and durable linkage between systemic investment in the construction, staffing, and provisioning of prisons and jails across the country and the hardening of mass incarceration practices—specifically of Black, Latino, and Indigenous people for drug-related crimes (Brewer and Heitzeg, 2008). Both paradigms—the Military Industrial Complex and Prison Industrial Complex crystallize the often-subtle relationships between power, capital, and human health and illuminate the social and racial stratification that flows from and guides these relationships. Moreover, despite their stated foci on eliminating or managing known and potential threats, neither industrial complex is deeply or consistently effective, and has often rather begat or maintained these threats (Ledbetter, 2011; Wehr and Aseltine, 2013); to this end, given the depth and persistence of health disparities (Agurs-Collins et al., 2019; Artiga et al., 2020), the Health Disparities Research Industrial Complex finds considerable synergy with each.

The Health Disparities Research Industrial Complex, like the industrial "complexes" from which it is derived, largely fails in its articulated and telegraphed aims because of the variety and extent of powerbrokers involved, the conflicting paradigms and aims that they hold, and the politically, and most importantly economically, adverse consequences of disrupting the complex (Alvidrez et al., 2019). It is because of its embeddedness in this dubious virtuous cycle that health disparities research as a purposeful endeavor against "bad" health outcomes, like military intervention against "bad" nation-states or like mass incarceration of "bad" people, can plausibly and thus consistently be explicated as both a public good and a public service, thereby increasing its aperture of influence (Breen et al., 2019).

2. How did we get here, and where are we going?

United States (U.S.) Census data indicate that over a quarter of people in America identify as non-white (2020 Census Results (Preliminary), 2021), and the country is expected to be "majority-minority" by 2044 (Amaral, 2020). Similar, though not as pronounced, patterns of diversification are expected in much of Western Europe in the coming decades (Winkler, n.d.). Much of the racial and ethnic diversity in the broader Western world is being driven by comparatively higher fertility rates among racial/ethnic minorities (Mathews and Hamilton, 2019). However, additional contributions to increasing pools of diversity in the West relate to heightened patterns of migration owing to intertwined "push" and "pull" factors which include opportunities for better education and employment, accelerated patterns of globalization, and the broad impositions of community violence, domestic/civil war, and climate change (Gosnell and Abrams, 2011). This increasing diversity has generally coincided with improved quality of life and life expectancy as brought on by technocratic (r)evolution and increased scientific knowledge on—and enhanced capacity to intervene on—various social and environmental determinants of health.

A cursory glance at health disparities research's net impact over the last generation provides only a mixed picture (Artiga et al., 2020; Palmer

et al., 2019), one that becomes muddier with more deduction. Far from inconsequential though, the health disparities literature is vast and has undoubtedly provided the basis for improvement in the delivery of healthcare, adherence to evidence-based medical recommendations, etc. to disparity-prone populations. Along these lines, like the industrial complexes preceding it, the Health Disparities Research Industrial Complex is externally validated for its seemingly humanist, or at least well-meaning, aims, irrespective of the tangible outcomes that it produces, with an emphasis on its dire/urgent nature. As an example, one observes a frequent practice of health disparities researchers delivering a “call to action,” this expression often appearing in health disparity articles’ titles (S. Bell et al., 2022; Best et al., 2022; Bissell et al., 2021; Morais et al., 2022; Nadimpalli et al., 2021; Ufomata et al., 2021). Similarly, consider the urgency in which modern militaries communicate a need to protect its civilians or allies from imminent threats and the criminal justice system’s in protecting community members, property, etc., to drive often-extrajudicial intervention and further validate its continued existence (Brewer and Heitzeg, 2008; Cooper, 2015; Hari, 2015). In alignment, the Health Disparities Research Industrial Complex is framed as the most effective *and* efficient means of improving the health of those whose health has heretofore been poor and/or functionally “unprotected.”

Despite an improved standard of living for the modern global population writ large, as compared at least to prior generations, the surging diversity witnessed in recent years has coincided with an elevated burden of inequity in health, as well as in the realms of education, economic opportunity, and housing. Indeed, broadly speaking, evidence indicates that as even conditions improve for *everyone* (i.e., all races/ethnicities), conditions tend to improve comparatively *more* for whites, what Assari has termed racial/ethnic minorities’ “diminished returns” (Assari et al., 2018). Against this backdrop, it is crucial to punctuate that, despite broad improvements in medical care, technology, and in sanitation and environmental conditions, racial/ethnic minorities, relative to whites, still face more severe morbidities and risks of premature mortality across most major health conditions, including burden of cardiovascular disease (Bell et al., 2018), HIV/AIDs (Bowleg et al., 2022), most cancers (Zavala et al., 2021), and substance use disorder and overdose (Farahmand et al., 2020). To this end, the question of how to address health disparities is both one concerning the genesis or root causes of inequity as well as questions on the causes of disparities’ persistence.

Considering this entrenched milieu, it can be said that the field of health disparities research has, at a minimum, reached the initial phase of the *industrial complex*: This reflects the objectively regressive or nominal impact it has in reducing racial/ethnic and other minorities’ health disparities relative to whites and/or those with greater political capital or socioeconomic status. In turn, health disparities research’s collective failure has simultaneously ensured its ability to leverage this ineffectiveness—to, in fact, double down—to guarantee researchers opportunities to implement ever more methodologically robust and increasingly more novel approaches, while reaping the financial, social, and political spoils that come from experimentation and continuation. Hence, the field’s research bubble can be said to have begun since its altruistic purpose has continued to not be objectively greater than the extrinsic benefits—i.e., accumulation of financial gain, social status, etc.—that it yields for its varied stakeholders.

In Freudian terms, many health disparities researchers are arrested in the *id* stage—they function as health equity tourists (McFarling, 2021; Nweke et al., 2022), having a raw, fungible desire to conduct health disparities research (e.g., because they generally enjoy a scientific challenge or employing specific methods irrespective of the topical area; or because the topic is “trendy” or lucrative), without attention to the vast array of systems-level risk factors involved, including their responsibility in the conduct, interpretation, and dissemination of the research. At the *ego* stage, the researcher would have a more intentional and thoughtful desire to help address disparities through research, but

would still be focused largely on individual-level risk factors and have only moderate recognition of their responsibility in advancing research that is responsive to structural determinants of health and attentive to the consequences of their positionality both on the conduct of the research and in negating the amplified involvement of minority researchers. At the *superego* stage, the endgame, the researcher would have a desire to help address disparities by thoughtfully considering structural risk factors and recognizing their positionality and prior/potential complicity in supporting the Health Disparities Research Industrial Complex.

3. Actors and benefactors of The Health Disparities Research Industrial Complex and bubble

The Health Disparities Research Industrial Complex, and its associated research bubble, are cultivated and substantiated by three inter-related processes: 1) The construction and maintenance of beliefs, behaviors, and attendant policies in healthcare (and society more broadly) that create and sustain disadvantages in minority health and thereby directly and indirectly promote the continuation of health disparities research; 2) the creation and funding of positions that inordinately support non-minoritized peoples’ ability to study and provide outreach or advocacy around health disparities as “health equity tourists” (Note: ‘non-minoritized’ refers to those who are not part of a cultural/racial group that has been systematically denied opportunities for advancement and/or who lack the lived experience of, or substantial prior exposure to, the research population); and 3) the production of research that, due to factors one and two, is incapable of fully addressing health disparities.’’

To the first point, there are three primary, interconnected factors associated with the persistence of racial disparities in health in the U.S. The first factor is the *ongoing validation and amplification of systems and structures that endorse socioeconomic and racial hierarchies* by promoting white supremacy and profit maximization over human health through extractive activities and divestment in education and social welfare. The second factor sustaining health disparities is an *exorbitant focus on individual-level risk factors* among researchers, advocates, and healthcare practitioners. The third factor is *insufficient knowledge, interest, and readiness among researchers, advocates, and healthcare practitioners*—inclusive of a dearth of cultural information, passion, desire, and capacity—to meaningfully implement changes through Diversity, Equity, Inclusion, and Belonging (DEIB) initiatives.

Health disparities result from the creation and maintenance of disadvantage. Social epidemiologists, in considering the “fundamental causes” of health (Link and Phelan, 1995), have argued that structural factors are most directly and intimately implicated in the genesis and resilience of this disadvantage. According to this logic, hegemonic structures—government, educational institutions, healthcare systems, and so forth—develop and maintain power and control through the exploitation, monetization, and marginalization of minority groups, their experiences, and the cultural and material products that they produce.

Through this control, structures can create social conditions, via targeted oppression and disenfranchisement, that both amplify minorities’ need for health-promoting resources such as healthcare (Condition A) *and* simultaneously limit minorities’ access to said health-promoting resources (Condition B). Thus, even as *Condition B* is effectively addressed—that is, access to resources is improved—the resilience of *Condition A* will cause the endurance of the inequity. Thus, an excessive focus on individual-level determinants of health (e.g., a patient’s nutritional and exercise habits, health literacy, etc.), instead of a (joint) focus on structural determinants (i.e., dynamics that contribute to these individual-level determinants), will lead to only temporary changes, with health disparities invariably recurring (Phelan and Link, 2015). As an example, a “downstream” intervention that succeeds at improving community members’ knowledge on appropriate exercise and healthy

eating habits, without a contaminant focus on “upstream” policies that attract and help sustain the development of green spaces for exercise, local markets that sell fresh affordable produce, etc. in the community, will only have short-term gains in reducing morbidities in the research population.

To the second point, research has consistently shown that researchers underrepresented in the health sciences—namely Black, Indigenous, and Latino people, and individuals from low-income backgrounds—are *also* greatly underrepresented among federal grantees and in tenurable or “hard-funded” health research positions more broadly

(Erosheva et al., 2020; Mirin, 2021; Taffe and Gilpin, 2021). Such opportunities are not only crucial for the development of robust studies on the health outcomes of minoritized people and spaces to intervene, but to career stability, wealth generation, pathways for career advancement and promotion, etc. This trend has held despite relatively large increases in budgeting to support diversification including via “diversity supplements,” etc. (Hill et al., 2021; Taffe and Gilpin, 2021). The budget of the National Institutes of Health (NIH), the largest funder of health disparities-related research and programming in the U.S., ballooned from roughly \$5 billion in 1995 to \$25 billion in 2021, a five-fold

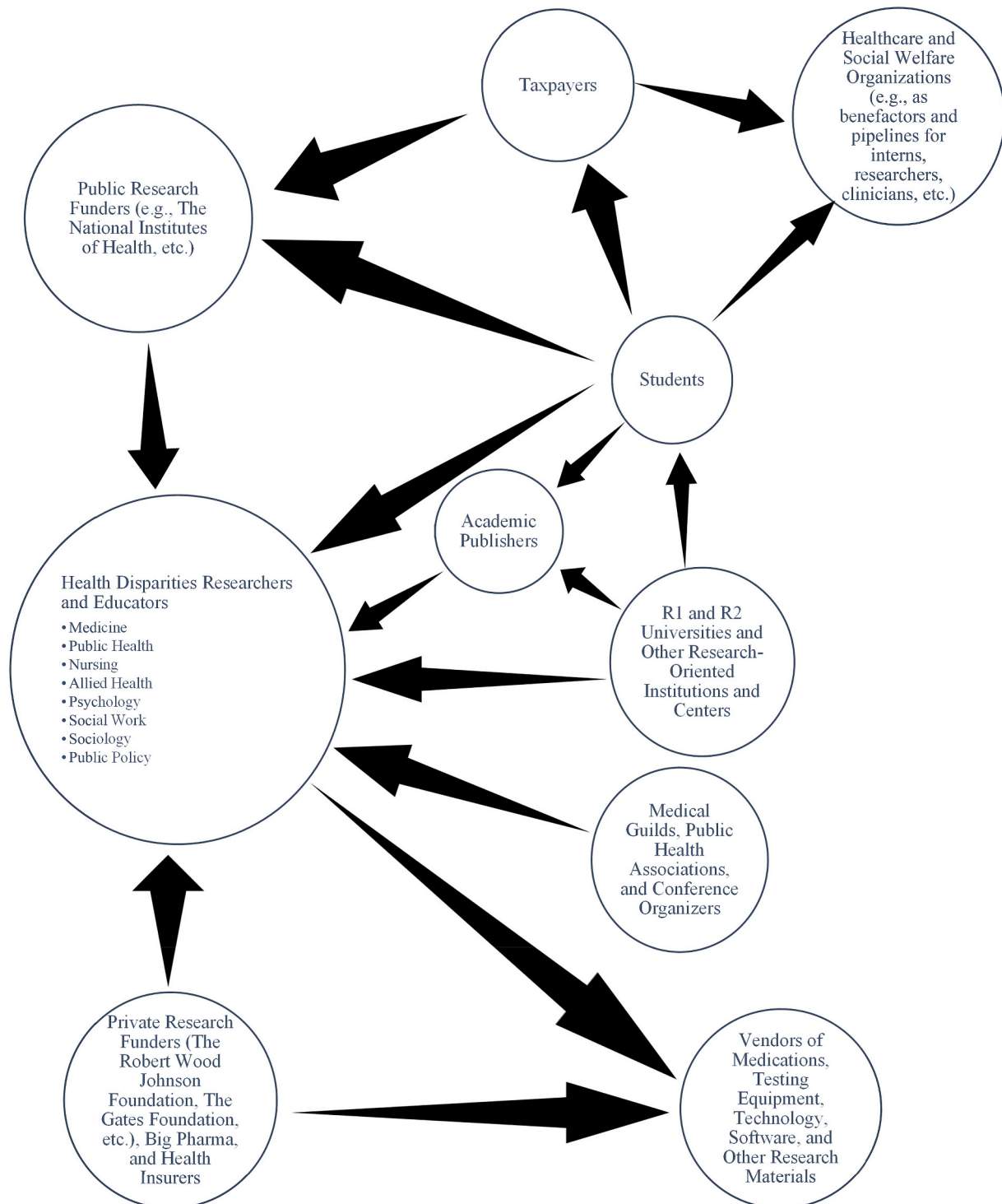


Fig. 1. Relationships between the primary stakeholders in the Health Disparities Research Industrial Complex.

increase—with the NIH, across this interim period, having arguably a much deeper interest in awarding applications focused on disparities (*NIH Budget History, 2023*). By way of comparison, the U.S. Department of Defense’s budget rose from \$296 billion in 1995 to \$801 billion in 2021, a roughly three-fold increase (*U.S. Department of Defense Budget Estimates, 2020*). Total budgets for state corrections, the largest holder of inmates in the country, was \$22 billion in 1996 and \$55 billion in 2020 (*Per Capita Total Justice System Expenditures for State and Local Governments, n.d.*). Though not representing a substantial portion of the nation’s gross domestic product, the increasing governmental investment in the NIH, other health-focused government agencies (e.g., the National Science Foundation and the Substance Abuse and Mental Health Services Administration), and nonprofits and non-governmental organizations (NGOs) that address public health, signals a growing political affinity for resources to support the redress of health disparities.

Like the NIH, private foundations such as the Robert Wood Johnson Foundation, the Gates Foundation, the Mellon Foundation, and the Ford Foundation, as well as players in Big Pharma—Merck, Pfizer, etc.—and health insurers have likewise augmented their grant-giving and research budgets on disparities in the last two decades (*Biglan et al., 2023; Maher et al., 2020*), creating a “gold rush” for funding among researchers who might otherwise be unmoved by the moral imperative associated with health disparities research (*Woo, 2022*). As public, private, and NGO budgets for health disparities research have swelled, so too has the proliferation of health disparities research, including the financial support of researchers in the space, courses and calls for papers on the subject of health disparities, disparities-oriented academic centers, and

so forth (*Li et al., 2017; Viergever and Hendriks, 2016*).

With this in mind, industrial complexes’ primacy rests in their ability to spawn and nourish various cottage industries, a kind of “multiverse,” that rely on the existence of the complex for support. For example, in order for the Military Industrial Complex to manifest and thrive, it requires not just military enlistees (e.g., sergeants, lieutenants, privates, etc.) and producers of military munitions and technology, but entities that can facilitate logistical and transportation support of combat wares, provide healthcare services, develop and maintain housing and storage facilities, provide clothing and sustenance for soldiers, etc. In health disparities research, conduits include not just the academic institutions, industry, and government entities that hire researchers. Conduits also include (*Fig. 1*): the funders who finance their projects (and often provide ample and much-needed “indirect” support to the awarded institution); associations, guilds, and consortia that establish empirical paradigms and goals for their research; the coordinators and research assistants who conduct their data collection; the academic journals, book publishing houses, and conference organizers who disseminate their work; the students who take their courses and purchase their published materials; the pharmaceutical companies that provide them with medications to test; vendors that furnish them with medical equipment and office supplies and that process and test their biological samples; and the entities that license data collection materials and analytic software, etc. Proprietors in these spaces typically come from non-minoritized groups (*Gligor, 2020; McKinney, 2021*). In effect, this web of connections imbues health disparities research with a “too-big-to-fail” (*Taylor, 2010*) countenance that advances the financial interests of

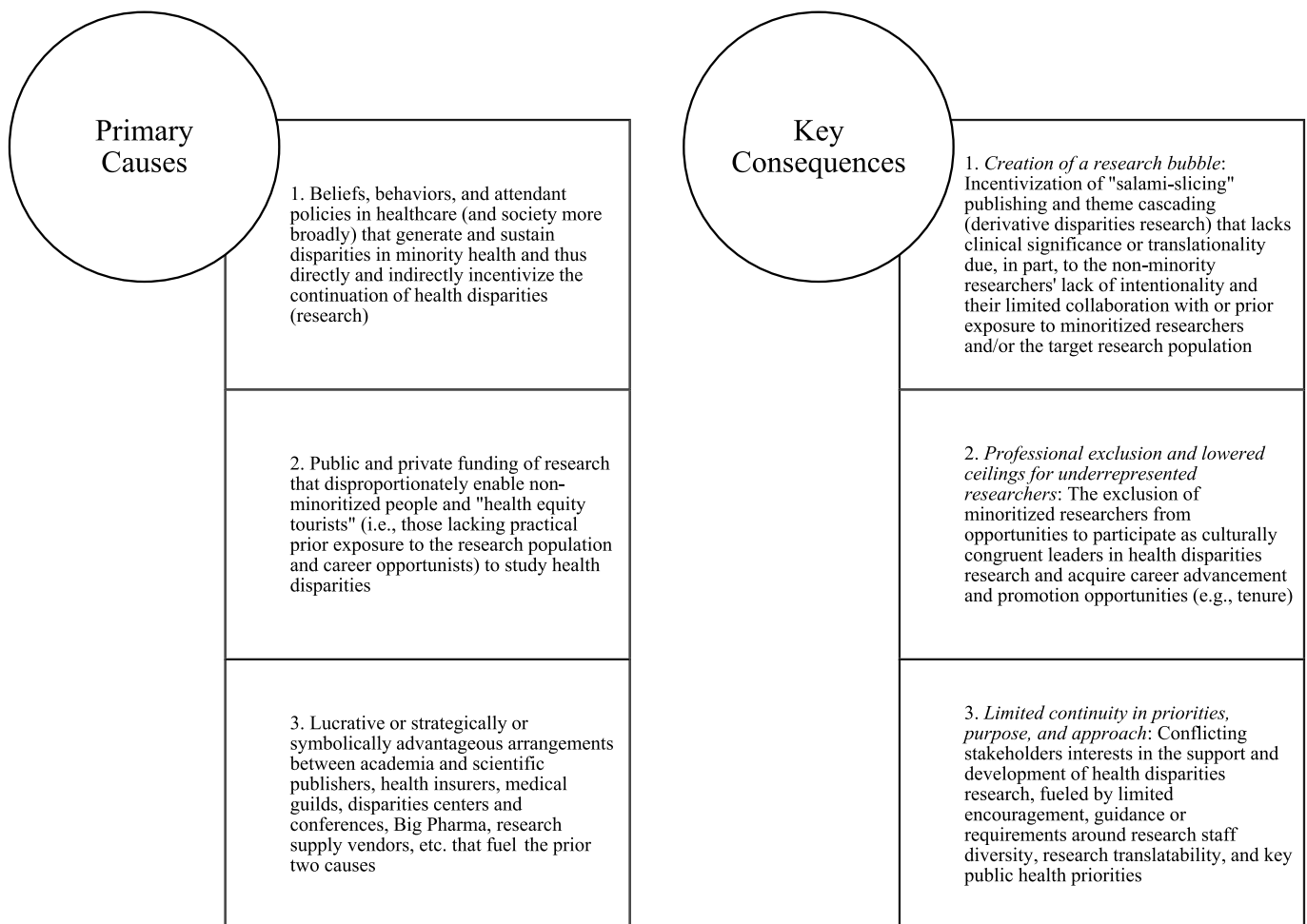


Fig. 2. Primary causes and key consequences of the Health Disparities Research Industrial Complex.

non-minoritized people irrespective of the research's scholarly value and earnest implementation potential.

As previously indicated, industrial complexes have a distinctive “cascading” feature that allows them to retain sufficient legitimacy and government and public support even following ongoing failure to achieve, or even reach the point to curating and articulating, precise translational goals (Fig. 2). This constant ability to justify its existence and its continued expansion is achieved by articulating ever-evolving permutations of risk and benefit. In health disparities research, this dynamic is characterized by myriad analytic dissections of the same core topic, thereby contributing to the current research bubble. As an example, an individual may choose to conduct disparities research on Hurricane Katrina, a Category 5 hurricane that decimated the Gulf Coast in the U.S. in 2005 (Brunkard et al., 2008). Whereas one researcher might focus broadly on the total drownings tied to the hurricane based on state death certificate records in Louisiana, which was hardest struck, assessing trends according to race/ethnicity, another might use network data to assess social support trends among those who fled the New Orleans, Louisiana's most populous city, according to race/ethnicity (Pina et al., 2008); another scholar might assess heat-related stroke among Spanish speakers in (only) New Orleans' Ninth Ward, a particularly hard-struck community in the city; another may conduct a randomized study of patterns of posttraumatic stress disorder in low-income Black youth between 13 and 21 before and after the hurricane in southeastern Mississippi (Hensley and Varela, 2008); and yet another might carry out a purposive qualitative study of suicidality in single white elders between 65 and 80 in southern Alabama 20 years following Hurricane Katrina, in 2025, and so forth. And then, the researcher who finds that each of these baseline topics has been sufficiently covered—perhaps independently, perhaps in the form of a rejection from a grant reviewer or article peer reviewer—may then seek out an adjacent “gap” to fill. For example, the health disparities researcher may instead explore total drownings of LGBTQ+ individuals, or heatstroke among Creole speakers, of substance use patterns among Black women between 2011 and 2015, or perhaps between 2013 and 2018, etc., each with a slight spatial temporal wrinkle sufficient to scientifically justify its creation.

In each case, the theme cascade allows for ongoing customization in six primary areas: 1) the health issue (e.g., drowning, heat stroke, posttraumatic stress disorder, etc.); 2) the population's race/ethnicity (e.g., Black people; white people; etc.); 3) the population's age range/gender type or other “secondary” identity traits connected to disparities such as income level, marital status, primary language, etc.; 4) period of time/measurement (e.g., right before or after a certain point, or right both before and after, or longitudinal follow-up); 5) the location where the participant was/is at when the “event” or phenomenon takes place; and 6) research design and sampling techniques (survey, chart review; randomized, cross-sectional, etc.). As seen in the lineage of racial oppression in the U.S., where oppression via enslavement was replaced by Jim Crow laws, then redlining, and then finally mass incarceration (Bailey et al., 2017), as one vehicle for dominance is eventually found untenable and thus its practical (or moral) justification exhausted, another vehicle is quickly introduced, ensuring continuity.

The researcher need not be particularly creative here. Like a slot machine, a pull of the lever—or perhaps several pulls if the research theme is particularly saturated—produces a potentially new, if only slight, iteration of the core research topic. This new version is either complementing or cannibalizing prior versions; in either case, the theme cascade is furthered. Indeed, the simple additional of qualifiers like “social,” “cultural,” or “racial,” to the title of a project, course, center, or manuscript, transform and co-op any object that is, at least on the surface, disparities-focused, acting as a kind of seasoning. For example, a graduate-level course called “Artificial Intelligence and Health in the 21st Century” gains more cultural cache as a course called “The Racial Aspects of Artificial Intelligence and Health in the 21st Century,” although both courses could presumably speak to the same topics.

Likewise, a grant titled, “Examining factors associated with air pollution in the rural South” does not have the same allure as one titled “Examining the socioeconomic correlates of air pollution in the rural South.” This semantic *by-any-other-name* kind of dexterity projects the orchestrator as having a sincere interest in disparities whilst allowing them to accumulate the resources necessary to build cache, clout, and axiomatically escape any initial criticism of ignoring culture, race, class, etc. Despite the name, United Nations' *peacekeepers*, as a frame of reference, frequently use extensive physical force (Williams, 2023), and have been frequently implicated in sexual violence towards civilians (Freedman, 2018; Kovatch, 2016), like their military counterparts, but their circumscribed role as conjured by their labeling as “peacekeepers” gives them at least initial political and public favor—even among those intervened upon—as well as extrajudicial protection and immunity (Rawski, 2017).

Modification of one or more of the six theme cascade features helps justify further work on the topic, irrespective of the objective necessity and merit and irrespective of if the most central topics have been researched and made translational. While funders and medical and health journals often use “priority scoring” to attempt to weed-out submissions based on their timeliness, empirical rigor, etc., academia and industry steadfastly incentivize researchers' filling epistemological gaps via “salami-slicing” (Collyer, 2019)—the creation of multiple derivative or otherwise frivolous publications from one set of data or from one general thematic category. Beyond this, health disparities research, like other forms of positivist inquiry, can more broadly be said to be transfixed by a ceaseless, vague, and colonialist pursuit of scientific knowledge, irrespective of the potential utility, translatability, impact etc. of said scientific knowledge, as part of what we may call *empirical manifest destiny*, accelerating the theme cascade.

With this in mind, those who benefit most from, and have the most vested interest in, the Health Disparities Research Industrial Complex, are those whose extrinsic and intrinsic values are most satisfied by its perpetuation. Along these lines, the benefits of the Health Disparities Research Industrial Complex are chiefly cultivated and rendered through academic pass-throughs—R1 and R2 universities with schools of medicine, schools of public health, schools of nursing, schools/programs for allied health, etc. The popularity—and profitability—of these programs, particularly master's level public health and medical programs, has soared over the past two decades (Beck et al., 2020; Jeffe et al., 2019). The steepening of tuition costs for these programs—where annual costs typically range from approximately \$15,000 to \$70,000 USD a year for elite R1 institutions (Beck et al., 2020; Kinslow, 2020) has produced considerable debt for students from underrepresented and low-income backgrounds. This financial incline has coincided with a decrease in graduates' interest in work with medically underserved populations, which is often underpaid (Elma et al., 2022; Jeffe et al., 2019). Hence, tuition costs have the dual impact of both suppressing applications from students from low-income backgrounds and, due to graduates'—or would-be graduates'—accumulation of debt, also chills low-income students' interest in pursuing research, outreach, and clinical practice with underserved populations (Rodríguez et al., 2015).

In 2022, 62,443 individuals applied for medical school in the U.S., compared to 37,088 in 2000 (Data & Reports, August 1, 2022), with only a fraction coming from underrepresented backgrounds (Morris et al., 2021). And to accommodate growing interest in health research, policy, and administration, the number of schools of public health accredited by the Council on Education for Public Health has rapidly grown. Presently there are 67 accredited schools of public health—this represents a three-fold increase in the span of just 15 years (Accreditation Statistics, 2023), though the field has formally existed for over a century. Like medical schools, schools of public health confront similar though not as extensive barriers in recruiting and retaining underrepresented students (Goodman et al., 2020; Merino, 2019). Broadly speaking, it is individuals in these academics pass-throughs—largely non-minoritized educators, clinicians, researchers, and students in the health sciences

(Broom et al., 2023; Brotherton et al., 2021; Morris et al., 2021; Nguemeni Tiako et al., 2022)—who most directly oxygenate the Health Disparities Research Industrial Complex via dual acts of settler colonialism and monopolization of health disparities research opportunities.

Beyond the intrinsic satisfaction of addressing human health through clinical care, administration, policy, or research, the higher-than-average salaries commanded in the health sciences are a primary reason for the pursuit of an education in the field (Skatova and Ferguson, 2014; Yeager et al., 2016). Out of 32 classified academic disciplines, professors in the health sciences are ranked fifth in salary (and second when focusing solely on those in medicine), after professors in business, engineering, law, and computer/information sciences (2019-20 Faculty in Higher Education Survey, 2021). Though teaching and research expectations differ according to the institution and one's seniority, many professors in the health sciences are likely to be "soft-funded" (i.e., needing to acquire external funding to maintain employment for themselves and supporting staff) and are arguably, relative to other disciplines, much more likely to be expected to focus on disparities and inequities (broadly speaking). This both directly and indirectly incentivizes health equity tourism (Lett et al., 2022; Nweke et al., 2022), due to the preponderance of funders and research distributors keen on the topic of disparities, and other forms of opportunistic, superficial, and voyeuristic engagement in health equity research from non-minoritized researchers.

With this in mind, despite the observed benefits of diversification and cultural concordance in the health sciences and health research (Ahmed et al., 2022; Crooks et al., 2021; Fryer et al., 2016)—e.g., the professor/researcher matching the primary racial/ethnic identity of their research population—there has been insufficient and underpowered efforts to address the chasms, a dynamic discussed in the final section below.

4. Into the research multiverse: disrupting the Health Disparities Research Industrial Complex

To help disrupt the Health Disparities Research Industrial Complex and redress its damages, several strategies are recommended. The first pertains to the continued importance of diversification of health disparities research leaders and facilitators, with the specific aim of generating diverse representation at the level of investigator and research project manager. Cultural concordance allows professionals to directly leverage their identity and lived experiences towards better connecting with research participants, amplifying the likelihood of mutual trust, support, and increased research fidelity (Fryer et al., 2016; Wallerstein et al., 2020). As previously noted, the lion's share of government-funded health disparities research projects have been crafted and led by non-minoritized peoples (Buchanan et al., 2021; Chen et al., 2022; Parson, 2019). Though trainings on cultural competence and cultural humility serve as a way to lessen the inherent disconnects that come from this asymmetry, these modalities, if not backed by firm expectations of having diversity in both research leadership and research support (i.e., data collection and analysis), will at best reflect forms of scholarly cultural appropriation and at worst will directly aid research space dispossession and empirical gentrification. In short, professional development of non-minority researchers via diversity trainings can supplement, but not replace, the value of culturally concordant research.

In recent years, there has been a reckoning against non-minoritized public officials, journalists, and artists who create or lead efforts—e.g., policy, books, films, etc.—that focus expressly on or leverage the knowledge and cultural experiences of minorities. Famously, in the mid-1990s, Black, Oscar-winning director Spike Lee ("Do The Right Thing") successfully petitioned white, Oscar-winning director Norman Jewison off as director of "Malcolm X," an eponymous film on the Black Civil Rights icon. In the last decade, other prominent Black filmmakers have lambasted the choice of white directors for films such as "42," a biopic

about pioneering Black baseball player, Jackie Robinson, and "The Help," a film focused on Black women servants supporting white women in Jackson, Mississippi circa 1960 (a project which the film's Black star, Viola Davis, later said she regretted due to the filmmakers' racially tone-deaf delivery (Murphy and Harris, 2018)). As a referent, to address push back at concerns about ineffective and disproportionate policing as brought on by racial bias and cultural misalignment, police departments in minoritized communities now routinely hire leaders and practitioners who phenotypically or culturally resemble and are natives of the policed area, which has enhanced community satisfaction and outcomes (Donohue Jr, 2021). This pivot is also part of an increasing trend in standalone clinics in "minority-majority" communities (Jetty et al., 2022; Takeshita et al., 2020).

While the entertainment world, public services, and other sectors have increasingly understood and responded to calls to diversify their pools of leaders and facilitators (Karniouchina et al., 2023), the response in academia and public health research specifically has been far more tame. The field of public health research remains one of only a few with such a naked and persistent emphasis on minoritization that lacks a corresponding expectation of operational and thought leadership from the minoritized populations. To this end, it is not the case that non-minoritized people are unable to effectively lead health disparities research. However, supplemental training in cultural responsiveness, specifically in terms of Participatory Action Research (PAR), is vital, and yet no such standards from the field's institutional standardbearers (NIH, American Public Health Association, etc.) exist. PAR, an evidence-based research modality focused on the co-development of research aims and data collection and dissemination processes by researchers and community members, has proven effective in bolstering community members' feelings of being meaningfully included in the research process and in augmenting the fidelity of findings (Salimi et al., 2012; Wallerstein et al., 2020). PAR has not been widely adopted in the health sciences owing to concerns around its methodological rigor, costs, and researchers' various racial, cultural, and intellectual biases (Wiggins and Wilbanks, 2019). With this in mind, the health disparities research field should more fully embrace PAR and follow broader societal trends in ensuring that minoritized populations are included in leading and co-leading research projects. Such a transition would forge a transfer of power—to underrepresented researchers and to research communities—that would be highly disruptive to the many exclusionary, profit-driven mechanisms that undergird the Health Disparities Research Industrial Complex.

Next, there is a critical need to recalibrate expectations for the publication of health disparities-related content, recognizing that publications are the primary currency fueling the Health Disparities Research Industrial Complex. One recent large study published in *Proceedings of the National Academy of Sciences* found that non-white researchers spend more time under review and receive fewer citations despite textual similarities with white researchers' manuscripts (Liu et al., 2023). Another large study published in *Nature Human Behavior* found that only 26% of authors in their dataset of over 1000 journals were women, and only 14% and 8% were editors or editors-in-chief, respectively (Liu et al., 2023). With this in mind, there must be more deliberate efforts to recruit underrepresented minorities—not just minorities—into the publication process, and to field more underrepresented peer reviewers (and editors). This might be achieved by targeted calls in *Special Issues* for researchers, guest editors, and reviewers from underrepresented backgrounds, similar to requests in funding notices that encourage underrepresented applicants (Nguyen et al., 2023). Moreover, journals should more thoughtfully screen for salami-slicing, and work with researchers and clinicians to more clearly establish public health/health disparities (research) priorities. These are approaches that will not only increase representation but will likely lead to contributions that improve the work's cultural salience and implementation feasibility.

Illuminating the incongruence in stated purpose and actual behavior

that typifies the Health Disparities Research Industrial Complex, many top medical and public health journals—ranging from *Journal of the American Medical Association*, *The Lancet*, *Social Science and Medicine*, and the *American Journal of Public Health*—expect or now require that studies possess a diverse sample or focus on or at least meaningfully acknowledge potential racial or social stratifications in data and theoretical modelling (Bokor-Billmann et al., 2020; Escobar et al., 2023)—as have many major funders of health research. Presently, it is extremely rare to find an original research article addressing the health of individuals in the U.S. that does not report on statistical differences in outcomes based on the racial/social identity of the participants; indeed, not capturing and reporting such differences may mark the work effectively unpublishable (Boyd et al., 2020). It is recommended that these expectations around reporting stratification be made more explicit by editors and reinforced during peer review. Moreover, positionality statements that focus on the race/ethnicity, etc. of the primary researchers/data collectors and potential biases and knowledge/lived experience gaps that may result, should also be encouraged (Savolainen et al., 2023).

5. Conclusions

In conclusion, health disparities research is a growing and increasingly necessary field of scholarly study that has enriched the lives and opportunities of a variety of populations, namely researchers, students, and their institutions, but the research has had mixed results in terms of addressing the needs of minoritized, medically vulnerable populations. This article highlighted key dynamics contributing to the establishment and sustaining of the Health Disparities Research Industrial Complex and the research bubble that it is producing, focusing on inequities in staffing on health disparities research projects and the limited clarity and consistency in public health/health disparities research priorities and on what constitutes meaningful, translatable scholarship. A robust, more nuanced focus on the recruitment and retention of diverse research investigators, more intentional screening of publications for their attention to potential racial/social stratifications and translatability, and co-development toward a consensus around health disparities research priorities, will help limit the potency of the Health Disparities Research Industrial Complex. Moreover, it will allow for purposeful and readily translatable studies in this space to be designed, implemented, and flourish by the research populations most intimately impacted by their conduct.

Declaration of competing interest

The author has no conflicts, financially or otherwise, to report.

Data availability

No data was used for the research described in the article.

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