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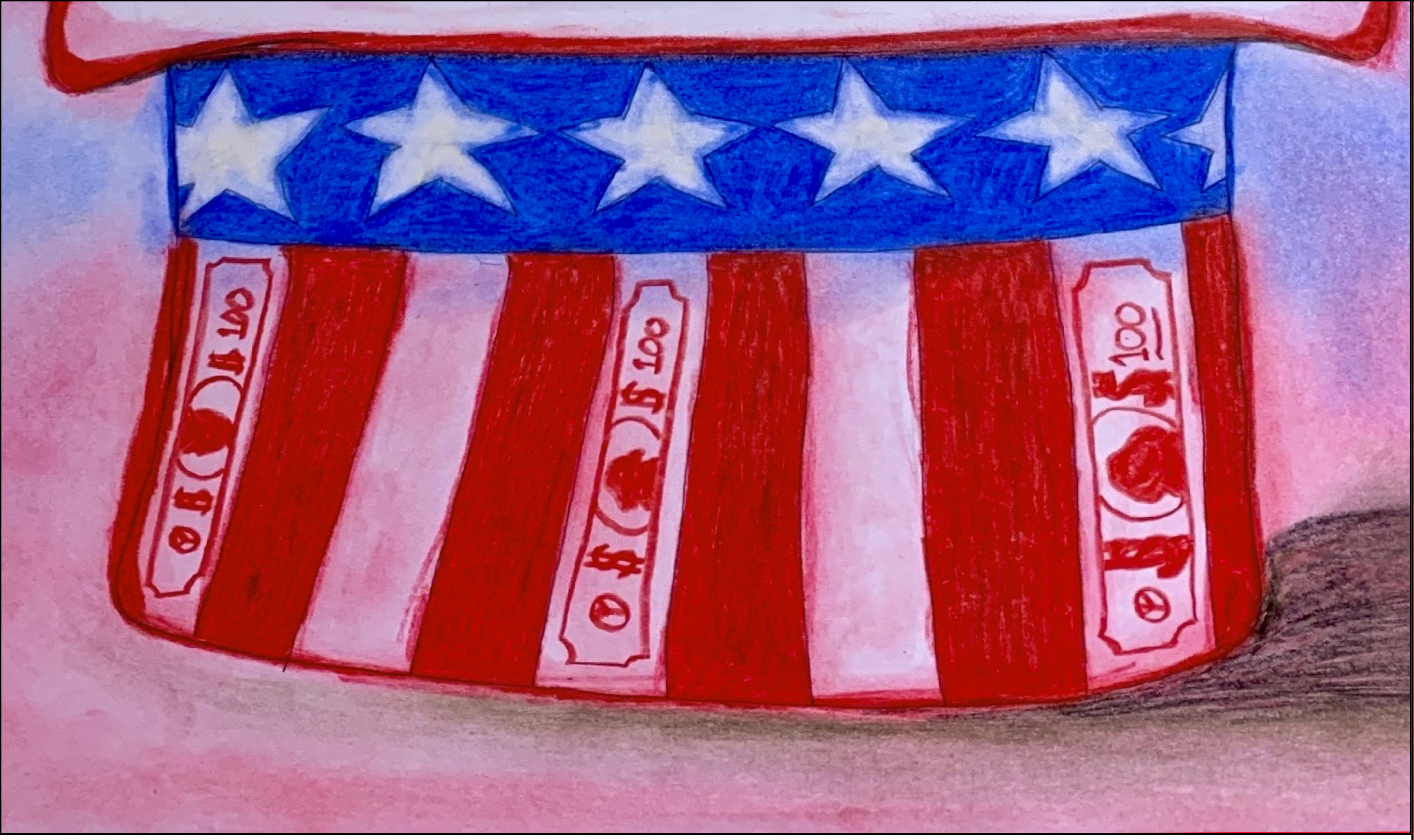

Editor’s note

Welcome to the second annual issue of the Brown Undergraduate Journal of Public Health! Over the past academic year, we have had the absolute honor of working with fantastic authors, reviewers, editors, and artists to compile these pieces. Our goal has always been to provide a platform for undergraduates to write about pertinent public health issues, and we’re so excited to be showcasing this cohort’s passion. It’s evident from the diversity of authors and submissions that there is space for everyone within the realms of public health, and it is truly heartening to see how the Brown community (and beyond) is continuously working towards enacting positive, equitable change.

It has also been a year of learning as we continue to grow as an on-campus publication. Notably, we expanded our team this year by adding new essential roles to both our editorial board and general body team, allowing for more opportunities and avenues for on-campus engagement. We are honored to have worked with such passionate peers in public health this year, and we are excited to pass the torch to the next cohort of leaders for this journal. Every member of our team has poured their heart into helping this Journal come into fruition, and we hope that you enjoy reading these submissions as much as we enjoyed leading this effort.

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Sex Binarism and the Intersex Pediatric Surgery Crisis

By Aisha Tipnis
Illustration by May Qi

Intersex variations are widely medicalized and often surgically altered to fit “male” or “female” phenotypes. These surgeries can have serious complications physically and psychologically, and because infants cannot provide informed consent, pediatric genital surgery is particularly problematic. Despite intersex activism and scientific literature indicating that these surgeries are harmful, they still occur. This paper explores why this problematic surgery continues to be performed due to the epistemologically Western, colonial, and biomedical perceptions of sex as binary form doctors’ foundational assumptions that intersex people should exist as one of two sexes, not the way they are naturally born. In doing so, this paper aims to elucidate pathways for change within a bioethical crisis.

A Background on Intersex Surgery

“Intersex” is a term used to describe anatomical, genetic, or hormonal variations in which an individual does not fit traditional definitions of neither “male” nor “female”.[1] These sexes each describe an assemblage of traits that supposedly inhabit opposing ends of a spectrum. But sexual dimorphism in humans is not absolute: primary and secondary sexual characteristics appear in a range of concentrations and combinations. When this range exceeds boundaries drawn by scientific consensus, it is described as intersex. Seminal research conducted in 2000 by Dr. Anne Fausto-Sterling quantified this diversity, finding that 1.8% of the American population hold intersex variations.[1] Intersex variations occur both frequently and naturally, rarely accompanied by health risks that require medical or surgical intervention.

Congenital adrenal hyperplasia, for instance, is a variation that produces relatively high levels of testosterone in XX carriers.[1] This genetic variation may manifest visibly with phenotypic traits like a larger clitoris and fused labia, which resemble a scrotum.[1] However, individuals with this genetic variation may simply display nonspecific traits like irregular menstruation, thicker body hair, or infertility.[1] Many individuals with congenital adrenal hyperplasia are unaware they hold an intersex variation at all. The phenotypic diversity within one single intersex variation makes it evident that sex is far more complex than the simplistic and somewhat arbitrary categories of “male” and “female.”

However, the medical community widely medicalizes and pathologizes intersex bodies. Despite the fact that infants cannot give informed consent, physicians routinely perform procedures like genital surgeries that the United Nations has condemned as “acts of intimate violence. Physicians routinely perform genital surgery on infants who cannot give informed consent.

Complications arise from these surgeries: scarring, incontinence, chronic pain, infections, sexual dysfunction, vaginal stenosis and fibrosis, neoplasia, and infertility.[3] Many surgeries further require a patient to undergo lifelong hormone therapy, future medical interventions, or daily manual upkeep of their constructed genitalia.[4] The risk of young children undergoing invasive procedures that implicitly medicalize and pathologize patients is that it enforces a self-concept that they are "not normal." Subsequent shame leads to increased rates of depression, suicidal ideation, and gender dysphoria, which may result from an infant growing up to identify with a gender not socially associated with their anatomy.[4] To determine why these pediatric surgeries persist despite their potential long-term harm, and to question what is required for them to stop, this paper identifies the foundational assumptions they are predicated upon.

Following the formation of pediatric urology in the 1940s, Johns Hopkins University psychologist John Money developed some of the first procedures for intersex genital surgery. Money claimed that gender identity could be manipulated for the first eighteen months of life and argued that parents should raise their child as whichever gender was surgically easiest to "match" with their phenotypic sex — what Money thought to be "nature's intention".[5] Along with other physicians at Johns Hopkins, he set a precedent for making decisions without the child's knowledge, without even the informed consent of parents, and with little research into patient outcomes.[6]

Contemporary physicians still follow Money's precedent, altering intersex variations surgically to fit a more "male" or "female" phenotype.[7] Certain intersex variations may result in the presence of malignant tissue or the absence of a urinary opening, both bodily conditions which do necessitate surgery. However, most intersex genital surgeries performed on infants are deemed "medically necessary" not because of legitimate health concerns, but due to a supposed psychosocial benefit. Bewildered parents often defer to the authority of surgeons who, generally acting in good faith, hope their interventions will allow patients to "fit in" among strict social norms.

Western Biomedical Thought

Prior to the Late Middle Ages, Western epistemology was largely pluralist, valuing qualitative data and subjective thought.[8] It was the emergence of discrete measurements which catalyzed a push towards the quantitative, in which the most lauded thinkers saw the world in binary terms. Scholars newly presumed that any given thing could not both be itself and something else at the same time.[8] Uncoincidentally, at this time, a protocol became enforced in Europe that required intersex individuals to "choose" a singular gender role and maintain this role or otherwise face the penalty of death.[9] Social roles with logic heralded as rational, objective, and scientific followed suit, and the human condition was designated with dichotomous relationships — right or wrong, true or false, healthy or sick.

These relationships provided a foundation for Western scientific inquiry, which categorized the natural world with discrete boundaries in the pursuit of truth. These boundaries became increasingly clear as biomedicine developed through the 19th and 20th centuries, granting physicians with rarified technical knowledge that was considered "unbiased".[10] But scientific consensus is not impartially correct so much as it is created and formed in a specific cultural context. In the "pursuit of truth," there exists a pursuer, an actor imbuing their observations with preconceived understandings of the world around them. As Charles Rosenberg describes in Framing Disease, "...disease does not exist until we have agreed that it does, by perceiving, naming, responding to it…every aspect of an individual's identity is constructed. So, also, is disease".[10] Scientists do not exist outside of cultural norms; they use the faculties at their disposal in a specific socio-temporal context to form explanations for natural phenomena.[11] These explanations then serve to shape — and often reinforce — the same context within which they function.

Modern social movements disrupt the scientific consensus that has remained unquestioned for so long, examining the authoritative power medical experts claim over the lived experiences of individuals.[12] The sex binary, foundational to Western biological sciences, is one such fixture up for debate. Veronica Sanz describes this binary as an epistemological framework itself, a "common sense" so interwoven and entrenched in Western culture that it was never first questioned as a hypothesis.[13] It has always been a given, one which is now called into question as communities begin to uplift the voices of the marginalized, moving towards a scientific authority of embodied experience.

The Colonial Creation of the "Sex Binary"

The biological sex binary was firmly rooted into the American imagination as fields like embryology, biochemistry, psychology, and endocrinology developed. These 19th century advancements enabled Western physicians to assert that sex variation was diametrically opposed with newfound authority.[14] Along with other tools of categorization claimed to be biologically grounded, most notably race, sex provided a foundation to maintain Western hegemony.[8] Before colonial rule, many civilizations held expansive understandings of sex and gender.

The Zapotec people of Oaxaca defied standards set by 18th century

Spanish colonizers through the existence of los muxes, community members assigned male at birth with traditionally-feminine social roles and gender performances.[15] Though they are often described as Mexico's "third gender," los muxes exist outside of the gender binary, similar to hijras in India. Hijras, born male or intersex, had been revered in India before 19th century British occupation.[16] Indian spiritual practices emphasize plurality and, before stigma against gender-nonconformity was generated by colonial rule, valued the coalescence of masculine and feminine energy.[16] Yoruba people in West Africa organized their communities in gender's absence entirely, with the construct holding no comparable concept in their culture.[17] It was Europeans who introduced both race-based and patriarchal violence to the Yoruba people, compounding the subjugation of newly-defined "women".[18]

Binary epistemology enabled Western colonizers to oppress populations and suppress pluralist, non-binary thinking that existed globally before — and in resistance to —colonization.[8] By claiming that white males and females were more visually distinct than sexes of other races, white people concluded that they were "more evolved" and thus justified in violently imposing their methods of social, spiritual, economic, and political relations upon "less evolved" groups.[14] Their presumptions were convenient: if one had to first be identifiable as a man or a woman to be a human, colonizers could strip those whom they colonized of their humanity by denying them access to the very gender system which they imposed.[19] Kevin Henderson explains that sex never was diametrically opposed, but instead was always "categorized along racialized degrees of difference," retroactively engineered to justify Western hegemonic dehumanization and oppression.[20] Manhood and womanhood, therefore, are political categories weaponized against populations globally.[19] Gender and sex binarism are not innate to the human condition; they are constructed by Western imperialists.

"Biological Sex": Fact or Fiction?

Scientific consensus deems sex a biological category without a clear definition for classification. The countless ones offered — anatomical, hormonal, gonadal, chromosomal, genetic, neurological — only materialized in concurrence with advancements in specific fields of biomedicine. With the prior assumption that gender is biological, researchers proved their premise of a sexual binary classification using circular logic.

Wartime gynecological and urological exams in the late 18th century illuminated the variance of humans' external genitalia.[6] Sexual classification was dictated by this visible anatomy until the development of gynecology and surgery in the 19th century, when internal reproductive organs became observable.[6] Victorian doctors consequently formulated a metric to determine the sex an intersex person was "supposed to have" based on gonadal tissue, an arbitrary metric which persists in contemporary medical thought: if someone had ovaries, they were female, if someone had testes, they were male, and only in rare cases that someone had both ovarian and testicular tissue were they intersex.[6] The turn of the century brought with it advancements in cytology, ushering in a new chromosomal theory to explain biological sex: females had XX chromosomes and males had XY chromosomes.[13] Yet under a strictly chromosomal definition, there would exist at least six sexes: XX, XY, X, XXY, XYY, XXXY.[21] Not only do chromosomal combinations fail to support theories of absolute sexual dimorphism, but chromosomes also are subject to epistatic gene interactions and mutations which can alter phenotypic sex traits such that one's chromosomal sex may be unaligned with their anatomical or gonadal sex.[1] For example, the presence of an SRY gene shifts ovarian development to testicular development regardless of the chromosome it is found on, even for XX carriers.[1]

The presence of a WNT4 gene or the DAX-1 gene actively suppresses testicular development and stimulates ovarian development, causing XY carriers to develop intersex anatomy.[1] An individual may even exhibit mosaicism, possessing different chromosomal combinations in different individual cells.[21] Chromosomal explanations for sexual dimorphism fail to account for the sheer amount of human genetic variation.

The 20th century discovery of hormones, bloodstream chemicals that produce bodily functions, gave rise to an endocrinological explanation for sex. Scientists happened to find the first messengers in testes and ovary specimens and thus associated these so-called "sex hormones" — estrogen and testosterone — with gonadal sex.[13] However, estrogen and testosterone encompass wide groups of related chemicals affecting growth and development, which include reproductive and sexual function.[12] Other hormones also affect these functions, elucidating that "sex hormones" cannot actually define "sex".[1]

There are an infinite amount of embryonic and biological reasons for sex diversity; humans are not a perfectly dimorphic species, and sex has no consistent, categorical definition.[5] Scientists used emerging biomedicine and technology to explain what they already held as true. The sex binary, then, is not rooted in biology but rather in societal preconceptions of gender and sex.

Conclusion

This paper argues that gender is not innate to the human body, instead artificially formulated by Western colonial biomedicine through promoting a sex binary. Surgeons perform pediatric intersex surgeries under the premise that nature intends every individual to be either male or female, enforcing this very binary by allowing and disallowing certain bodies to naturally exist.[7] Though emergent activism at the turn of the 21st century substantially shifted the medical treatment of intersex variation, little has changed in recent years, suggesting a more fundamental problem. To break the positive feedback loop and to produce demonstrable change, Western, colonial, biomedical paradigms themselves must shift.

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Factors Exacerbating the Physician Shortage in Hawaii: What is Hawaii Doing to Stem the Tide?

By Alison Lu

Illustration by Camilla Watson

By 2025, it is estimated that across the United States, there will be a shortage of between 124,000-159,000 physicians, and Hawaii is no exception.[1] In Hawaii, it is estimated that there was a shortage of 732 physicians in 2021, and that number is expected to continue to grow.[2] Whilethe entire United States faces many challenges when it comes to the worsening physician shortage, Hawaii, which is the only state comprised solely of islands, has additional, unique problems that exacerbate the physician shortage. These problems–Hawaii's growing aging population, doctors going into retirement, the high cost of living, and geographical diversities within the state–need to be addressed. All of these conditions have led to a growing physician shortage in Hawaii, and the Johns A. Burns School of Medicine Area Health Education Center (AHEC) is attempting to address them.[3]

Age plays a huge role in the future number of physicians in Hawaii. According to the Association of American Medical Colleges, Hawaii had the second-highest percentage of active physicians who are age 60 or older, with 37.3% of physicians age 60 or over.[4] The average age of physicians in Hawaii is 54.6 years old, with 48% of Hawaii's physicians aged 55 or over and 22% of Hawaii's physicians aged 65 or older, over the retirement age. Notably, there are five physicians who are 90 or older and still practicing.[3] These numbers underscore the aging physician population, with many of them still practicing as they near or are already past retirement age. However, the number of young physicians coming in to replace these retiring physicians is not nearly as high, one of the main reasons being wages.

To make matters worse, it is financially unfeasible for many physicians to practice in Hawaii. Many young doctors graduating from medical school have large medical school debts. At the same time, in 2018, physician income in Hawaii was ranked as the third-lowest in the nation.[5] Not only does Hawaii have one of the lowest physician incomes, but the costs of living in Hawaii are also incredibly high. For example, transportation costs are 149% higher than the national average, while grocery bills are 169% and housing costs are 319% higher than the national average respectively.[5] These financial factors are important when young physicians are considering where they plan to live and practice medicine.

Even for physicians that have been practicing for years in Hawaii, low Medicare reimbursement rates and Hawaii's General Excise Tax means that Hawaii's doctors earn less than their counterparts in different states, such as Alaska, making it difficult to continue practicing in Hawaii.[3] Low Geographic Price Cost Indices (GCPI) quantify lower reimbursement rates for providers, and Hawaii's GCPI of 1.06 is on the lower end of the spectrum, especially when considering the healthcare delivery challenges that Hawaii's physicians also endure. When compared to Alaska, both Alaska and Hawaii face similar difficulties in providing healthcare in diverse and rural communities. Yet, Alaska's GCPI is 1.5 while Hawaii's is 1.06. This significantly lower GCPI is indicative of lower reimbursement rates for physicians in Hawaii.[5] Hawaii is also the only state to tax gross receipt private practice revenue with Hawaii's General Excise Tax, meaning that every Medicare, Medicaid, Tricare, and insurance dollar is taxed.[5] The General Excise Tax is 4.5% on gross income, but with Medicare and Medicaid patients, the 4.5% tax grows closer to 15%-20% tax on average family practices.[3] These factors lead to a large financial barrier preventing physicians from wanting to or continuing to practice in Hawaii, and they consequently lead to some Hawaiian communities facing shortages to care.

The severity of the physician shortage in Hawaii also varies significantly depending on the geographical location. Even though the entire state is facing a physician shortage, counties like Maui, Hawaii, and Kauai, which are much more rural, bear the brunt of the physician shortage. Statewide, the physician shortage in 2021 was 22%; however, that number is an average of the physician shortage for Honolulu County, Maui County, Hawaii County, and Kauai County, which have a physician shortage of 15%, 40%, 40%, and 26%, respectively.[2] Therefore, even though Hawaii as a state faces a significant physician shortage, certain counties in Hawaii are in even more dire situations. Hawaii County, Maui County, and Kauai County are among the top 15 counties in the US with the highest primary healthcare worker shortage. Hawaii County has the third-largest shortage in the nation, Maui County follows with the fifth-largest shortage in the nation, and Kauai County the thirteenth-largest.[6]

To many Oahu residents, the physician shortage has not historically been a noticeable issue. Honolulu County is the most populated county, and in 2004, about 80% of Hawaii's physicians were practicing in Honolulu.[7] The relatively large number of physicians in Honolulu County compared to neighboring island counties leads many Oahu residents to be unaware of the plight that neighboring island residents endure. As the physician shortage in the neighboring islands increases and patients are forced to fly from neighboring islands to Oahu to receive specialty care, Oahu residents are now beginning to feel the effects of the physician shortage. One example of this would be when an Oahu resident calls their doctor and is told that they need to wait weeks for an appointment due to appointments from community members on neighboring islands.[6] Because of this effect on their healthcare access, Oahu residents have become more cognizant of Hawaii's physician shortage and how it may affect everyone in the state.

The Johns A. Burns School of Medicine Area Health Education Center (AHEC) has been working on possible solutions to grow, keep, and support the physician workforce. AHEC publishes annual healthcare workforce assessments to present to state legislatures, updating and informing the public on statistics of the physician shortage as well as solutions they are implementing.[2] Multiple solutions have since been implemented: expanding pathways to health careers, expanding rural training opportunities, and expanding loan repayment.

In 2018, the Physician Workforce Assessment team interacted with over 3,000 health profession students and developed the Hawaii Health Careers Navigator, a 140-page health career resource book with information on health professions in Hawaii that was distributed to 3,500 students, counselors, and parents. Another program started with federal grant funding is the Hawaii Pre-Health Career Corps for students interested in health careers to receive shadowing, research, and mentoring experiences, and over 1,300 students are enrolled.[8] These opportunities not only allow students from Hawaii to gain exposure regarding the healthcare field, but they also more directly support and encourage students to pursue health professions.

To expand rural training opportunities, AHEC hired a rural coordinator to work with neighboring island communities to recruit and support students interested in health careers, work with community members to host and teach health profession students, and document the impact of rural activities on rural health professions training.[2] The Aloha Welcome Wagon Program and the University of Hawaii Homestay Aloha Program were created by AHEC to coordinate travel and host lodging for University of Hawaii health sciences students on clinical rotations across the state and especially in neighboring islands. These efforts remove many of the barriers that physicians experience to working in rural locations such as finding affordable short-term housing, and they also incentivize physicians to work in rural areas, where there is a large physician shortage.

Both federal and state funding have been obtained to support a doubling of the number of loan repayments given out to physicians, an effort to incentivize physicians to practice in Hawaii. Since 2012, the Hawaii State Loan Repayment Program has supported 60 providers in rural and underserved areas across the state. Physicians ranging from allopathic and osteopathic physicians to nurse practitioners to physician assistants and psychologists are also eligible for loan repayment via the Hawaii State Loan Repayment Program, and federal funding is expected to help other specialties such as pharmacists, dentists, dental hygienists, certified substance abuse counselors, and more.[8] On top of that, AHEC is working with banks in Hawaii to allow physicians financial incentives such as low-interest or low-down payment loan packages to purchase homes or practice resources.[2] By implementing several strategies to reduce the financial barriers that prevent physicians from choosing to practice in Hawaii, AHEC aims to recruit more physicians to stay and practice in Hawaii.

Although Hawaii continues to face a significant physician shortage, the state has been actively taking steps to control and improve the physician shortage. The solutions listed in this article are only some of the solutions that Hawaii has been implementing to help stem this shortage. Because of the severity and extent of the issue, many of these solutions may take a while to administer and even longer to observe their positive outcomes. The ultimate goal is that AHEC's diverse efforts to recruit physicians will be able to improve the situation in Hawaii before it gets any worse.

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The Impact of Racial Inequities on the Burden of Adverse Maternal Outcomes in the United States

By Mallory Go
Illustration by Nikitha Bhimireddy

The high prevalence of preventable maternal deaths in the United States (US) is a tragedy. The US is an alarming outlier due to higher health expenditures and maternal mortality rates (MMR) than comparable countries such as Canada, France, and Germany. The US MMR has increased despite spending significantly more per individual on health than the Organization for Economic Co-operation and Development (OECD) average.[1] Furthermore, high rates of maternal mortality—death due to pregnancy-related complications—and maternal morbidity—any adverse condition caused or aggravated by pregnancy—are both avoidable and influenced by disparities, such as racial and ethnic inequities.[2] The persistence of racial and ethnic inequities in healthcare has led to increased maternal mortality and morbidity among certain populations. A patient's racial/ethnic identity can lead to differences in access to contraceptive care, prenatal care utilization, hospital care, pregnancy-related complications, and adverse health outcomes. On top of that, persistent racial/ethnic inequities negatively impact patients' access to care and have led to significant disparities in minority maternal health outcomes compared to their white counterparts.[3] While maternal mortality has decreased on a global scale, maternal mortality in the U.S. has increased despite being a high-income country.[1] In 2000 to 2020, while the global maternal mortality rate decreased by approximately 50%, the U.S. maternal mortality rate increased by approximately 30% from 2000 to 2014.[1,2,4] This concerning trend is exacerbated by the disproportionate amount of adverse maternal and perinatal health outcomes experienced by Black individuals.[3] This paper will examine disparities in conditions that are epidemiologically correlated with adverse maternal and perinatal outcomes among Black individuals and the potential mechanisms behind these disparities. The conditions of concern are (1) obstetric hemorrhage; (2) preeclampsia and eclampsia; (3) cardiovascular events and cardiomyopathy; and (4) indirect causes and chronic conditions. This paper aims to synthesize current research regarding the specific causes, identify limitations and strengths of current research, and recommend areas of improvement based on the literature. To create a more comprehensive review of the disparity, the paper will highlight how social determinants of health impact health disparities.

Methods

The focus of this paper is adverse health outcomes in the Black maternal population in the U.S. through synthesizing studies conducted solely in the U.S.. Historically, race has been considered a biological category rather than a social concept related to cultural, political, and economic risk factors. However, for this literature review, race will be operationalized as a social risk factor with associated adverse health outcomes rather than a biological risk factor.[5] The participants of interest are referred to as "African Americans", "Black Individuals", "Black mothers", and "Black patients" in the reviewed studies. Throughout this paper, for the purpose of inclusivity, they will be referred to as "Black Individuals." While thousands of studies were found relating to maternal mortality and racial disparities, only 10 studies were selected for inclusion and discussion in this review based on the primary data source, location, data on specific conditions, assessment of bias, comparison involving Black women, and relevance to disparate outcomes.

Direct causes of obstetric death

According to the World Health Organization (WHO), direct causes of obstetric death are conditions that result from complications of the pregnant state and the interventions, or lack thereof, resulting from those complications.[4]

Obstetric Hemorrhage

Obstetric hemorrhage, including postpartum hemorrhage (PPH), is defined as abnormal uterine bleeding where 500mL of blood after vaginal delivery or 1000mL of blood after a cesarean section is lost.[6]

Research Methodology and Findings

A retrospective cohort study examining how race is associated with adverse maternal health outcomes relating to PPH found that Black Individuals were at a significantly higher risk of severe morbidity and mortality from PPH.[7] Data from the largest publicly available inpatient database, the National Inpatient Sample (NIS), was used for this study. The primary exposure evaluated was maternal race, and the primary outcome was severe maternal morbidity. The study also evaluated PPH-related measures such as death, hysterectomy, and disseminated intravascular coagulation to increase the robustness of the analysis. The study minimized missing data and bias by utilizing the NIS instead of the Healthcare Cost and Utilization Project State Inpatient Database. In 2007, another retrospective study analyzed data from the U.S. National Hospital Discharge Survey (NHDS), U.S. National Vital Statistics System, and the CDC Pregnancy Mortality Surveillance System to determine hemorrhage prevalence and case-fatality rates for Black and white women.[8]

According to Gyamfi-Bannerman et al., non-Hispanic Black Individuals were at a 24-28% higher risk for severe maternal morbidity compared to non-Hispanic white women. The study also found that Black Individuals were at approximately five times greater risk for death.[7] Similarly, the Tucker et al. study explored the disparity of increased risk of pregnancy-related mortality among Black Individuals, finding that Black Individuals did not have a significantly greater prevalence of postpartum hemorrhage than white women. However, Black Individuals experienced higher pregnancy-related mortality due to a 3.3 times higher case fatality rate as compared to white women.[8]

Limitations and Strengths

With regard to the Gyamfi-Bannerman et al. study, the database used contains approximately 20% of hospitalizations nationally. The data set did not provide information regarding hospital resources, protocols, and staffing. Estimated blood loss measurements were also unavailable. The study was also limited in the quantifying of maternal burden in regard to PPH. For example, the degree that the maternal outcome of PPH may be associated with underlying comorbidities, or multiple medical conditions, was not explored.[7] Approximately 21% of NHDS records used in the Tucker et al. study did not specify race. The study assigned records with unknown race as white, after analyzing the hospitals that contributed the incomplete records were located in areas of a predominantly white population. According to the data analysis of the study, this assumption did not significantly impact the findings. Although this assumption seems valid due to the demographic data on the location of the incomplete records, there is still potential for error. The study was not able to measure the extent patient characteristics, such as comorbidities, prenatal care utilization, and disease severity, and social determinants of health such as access to quality care and insurance status contributed to the increased case-fatality rates among Black Individuals.[8]

Preeclampsia/Eclampsia

Hypertensive disorders of pregnancy are among the most preventable causes of maternal mortality. The most common and severe disorders are preeclampsia and eclampsia.[9]

Research Methodology and Findings

A retrospective cohort study utilized National Inpatient Sample (NIS) data to assess the association between race and adverse outcomes relating to preeclampsia. The primary exposure evaluated was maternal race and the primary outcome was severe maternal morbidity due to preeclampsia. The risk for maternal in-hospital mortality for women with preeclampsia was also evaluated.[3] A similar study by Shahul et al. was conducted using NIS data from 2004-2012, observing the same primary exposure of patient race and the primary outcome was inpatient mortality during hospitalization. The study looked at potential mechanisms and risk factors in Black individuals that led to adverse health outcomes.[9] Gad et al. also recently used NIS data to evaluate the risk of adverse maternal health outcomes for Black Individuals with pregnancy-induced hypertension. The study observed outcomes and specific comorbidities associated with hypertension, along with hospital region, length of stay, primary payer, median regional income, and insurance status (which was used as a proxy for healthcare access).[10]

The MacDorman et al. study found that Black Individuals are at a higher risk for severe morbidity and mortality due to preeclampsia.

Regarding other morbidity diagnoses, non-Hispanic Black Individuals were at a higher risk for stroke, pulmonary edema, renal failure, and eclampsia compared to other races. The risk for maternal in-hospital deaths for non-Hispanic Black Individuals was 48.9 per 100,000 deliveries. This is significantly higher than the risk for non-Black Individuals of 14.8 per 100,000 deliveries.[3] The Shahul et al. study results suggest that Black Individuals are more likely to have comorbidities such as hypertension, diabetes, and obesity. Black Individuals with preeclampsia had higher rates of maternal and fetal complications and maternal mortality when compared with white women.[9] The Gad et al. study concluded that pregnancy-induced hypertension disorders such as preeclampsia and eclampsia are associated with acute cardiovascular complications such as heart failure and peripartum cardiomyopathy. Black Individuals had the highest in-hospital mortality with an adjusted odds ratio for comorbidities, socioeconomic status, and healthcare access of 1.45 compared to white and Hispanic women. Pacific Islander/Asian women are the only observed race category with a higher adjusted odds ratio of 2.00.[10]

Limitations and Strengths

The MacDorman et al. study was not able to determine if the complication occurred before hospital admission or developed during hospitalization. Another important limitation was that the study used data before the recommendation of aspirin use for preeclampsia prevention: data from post-recommendation years may lead to different results despite adjustments for comorbidities such as maternal age and hypertensive diagnoses in the analysis.[3] One strength of the Shahul et al. study is in its adjustment for potential confounding variables such as age, gestation time, delivery type, maternal comorbidities, and socioeconomic status.[9] The Gad et al. study came with limitations associated with retrospective studies such as database coding errors and vulnerability to misclassification bias. The study acknowledged that the NIS database lacked patient demographics such as education level, medications, peripartum follow-up, and readmission. However, the study found that disparities persist despite adjusted comorbidities, socioeconomic status, and access to healthcare.[10]

Cardiovascular Events and Cardiomyopathy

Cardiomyopathy in pregnancy can be categorized into two groups: peripartum cardiomyopathy (PPCM) and “other cardiomyopathy”.[11]

Research Methodology and Findings

A retrospective analysis study by Goland et al. from the University of Southern California and Louisiana State University Health Science Center compared the difference in the clinical profiles of Black Individuals with PPCM and white patients with PPCM and the consequential outcomes.[12] A similar retrospective study was performed by Whitehead using data from the CDC Pregnancy Mortality Surveillance System that examined pregnancy-related deaths due to cardiomyopathy from 1991-1997.[11] The findings of a third retrospective study investigated potential explanations for the racial disparities in cardiovascular events. This study also used the NIS database and analyzed pregnancy or postpartum-related hospitalizations. Patient demographics and medical/pregnancy-related comorbidities were identified, and hospital-related characteristics were compared between different races/ethnicities.[10]

According to the Goland et al. retrospective analysis study, Black Individuals with PPCM had a higher rate of mortality than white patients with PPCM, at 11.5% and 4.8%, respectively. The analysis also indicated a higher incidence of complications and adverse outcomes in Black Individuals compared to white patients.[12] The Whitehead retrospective study found that Black Individuals were 6.4 times as likely to die from cardiomyopathy as white women. This cause-specific pregnancy-related mortality disparity is larger than that for any other cause of death. Among patients in both cardiomyopathy groups, 22% had preeclampsia or pregnancy-induced hypertension and 6% had a pulmonary or cerebrovascular embolism.[11] The Gad study concluded that risk factors associated with adverse pregnancy outcomes are more prevalent in Black Individuals than in white women. As a specific example, the prevalence of cardiovascular disease and obesity is greater in Black Individuals compared to white women, which may be attributable to an increased risk of poor dietary habits due to the increased likelihood of being low-income and having restricted access to affordable, nutritional foods. Black Individuals exhibited a higher risk of in-hospital mortality, acute myocardial infarction, stroke, pulmonary embolism, and PPCM compared to white patients, with odds ratios of 1.45, 1.23, 1.57, 1.42, and 1.71, respectively. Racial disparities persist despite adjustments regarding education, socioeconomic factors, and healthcare access. These results indicate disparities specifically within healthcare quality and care experience. This is supported by the difference in healthcare coverage: most Black pregnant women were insured by Medicaid and earned below-median income compared with white pregnant women who mainly had private insurance and earned above-median income.[10]

Limitations and Strengths

The Goland et al. study relied on patient records and physician reports. Therefore, the data may be subject to reporting biases such as underreporting. While the study could not explain the racial disparities observed, it did provide data from the largest group of patients with PPCM.[12] The Whitehead retrospective study was conducted using data before the revision of the death certificate to include the pregnancy status checkbox. This may have led to an underreporting of pregnancy-related deaths due to cardiomyopathy.[11] The Gad study had inherent design limitations as a retrospective study. Additionally, the NIS database used by the Gad study does not include further patient demographic or follow-up, post-hospitalization information.[10]

Indirect Causes of Obstetric Death

According to the WHO, indirect causes of obstetric deaths are pre-existing conditions or conditions that developed during pregnancy and were aggravated by pregnancy.[1]

Research Methodology and Findings

In a retrospective study examining trends and disparities in US maternal mortality, Singh and Lee aimed to understand the correlation between indirect obstetric causes and chronic conditions by maternal race, residence, immigrant, marital, and socioeconomic status. The study used data from the National Vital Statistics System and area-based socioeconomic data from county-level censuses and data from the American Community Survey.[13] In another retrospective study by Singh et al., birth certificate data from the CDC's National Center for Health Statistics from 2014-2015 was used to examine sociodemographic variations and disparities in maternal hypertension.[14] Singh and Lee found that maternal mortality from indirect causes was 2-3 times greater among Black Individuals than among white women. While maternal mortality from indirect causes increased for the overall population, there was still a significant disparity between Black Individuals and white patients–maternal mortality was significantly greater for all chronic conditions among Black Individuals than among white women, except for mental health conditions.[13] In the data from the Singh et al. study, Black Individuals of all ages had the highest prevalence of maternal hypertension at 9.8%. Also, regarding sociodemographic and medical conditions associated with maternal hypertension, Black Individuals had the greatest prevalence of pre-pregnancy overweight and obesity status, at 61.8%, and 35.0%, respectively. The maternal mortality rate associated with chronic conditions, including cardiovascular disease, was approximately two times greater among Black Individuals compared to white women.[14]

Limitations and Strengths

Since the data used in the Singh and Lee study was taken from two unlinked data sources, researchers were unable to conduct individual-level analyses that may have more accurately explained severe maternal morbidity outcomes that impact maternal mortality. The study also acknowledged potential inconsistencies in the reporting of race and ethnicity, sociodemographic factors, and maternal deaths. For example, the varied adoption of the pregnancy checkbox on the death certificate may have influenced the classification of maternal deaths associated with indirect causes.[13] The main strength of the Singh et al. study was its large sample size of 8 million women and diverse subgroup comparisons. However, the study was not able to fully explain the variations and disparities observed in maternal hypertension due to the lack of data on other hypertensive risk factors such as diet, socioeconomic status, and family history. Similarly, the study was not able to distinguish between different hypertensive disorders such as preeclampsia and eclampsia, and it also acknowledged that there may have been underreporting of gestational hypertension for women who did not receive timely, consistent prenatal care.[14]

Conclusion

All of the studies reviewed in this paper were retrospective studies and therefore had limitations intrinsic to retrospective studies such as missing data, inconsistency in data reporting, and selection bias. While retrospective studies can determine association, they cannot determine causation.[15] The majority of studies reviewed in this paper acknowledged that understanding the complex interactions between social determinants, contextual factors, and racial disparities in maternal and perinatal outcomes is beyond their scope.

Social determinants of health (SDOH) are conditions and factors that impact risks, quality of life, and health outcomes.[16] Structural and institutional inequalities have likely exacerbated this health disparity. According to a survey by Lillie-Blanton et al., Black Individuals report greater difficulty than white patients in receiving consistent care and report higher rates of mistreatment during pregnancy.[17] Black Individuals are more likely to be covered by Medicaid or other public insurance than their white counterparts and are approximately twice as likely to be uninsured.[18] Due to the limitations of public insurance like Medicaid, patients often have restricted options in terms of healthcare.[17] This can result in the three major categories of delay of care that lead to maternal mortality and morbidity: delay to seek care, delay of access, and delay of provision.[16] The utilization of prenatal care, a significant protective factor against adverse maternal and perinatal outcomes, is a prime example of delay of care: Black Individuals are more likely to receive prenatal care late or not at all. Gadson predicts that this may be due to a variety of factors such as fear and mistrust of medical procedures or providers, perceived discrimination, low socioeconomic status, insurance status, and lack of social support. These determinants are often interconnected and can occur at a population or individual level.[16]

Primary examples of stress factors that Black Individuals are more likely to experience include living in economically deprived neighborhoods with less access to quality healthcare and social services and higher rates of crime and violence. Increased psychosocial stress and low social support are associated with smoking and substance use in low-income pregnant Black Individuals.[19] External stressors and detrimental coping mechanisms in response to the stressors can adversely affect preconception and pregnancy health.[20] The "weathering hypothesis" is a theory that the allostatic load of stress on physiological systems can lead to adverse effects on perinatal health and outcomes. Culhane asserts that the determinants of elevated risk of premature aging or "weathering" of Black Individuals can accumulate across the life course and can be contextual, behavioral, environmental, or social.[20] Life course perspectives recognize that current health and health trajectories are influenced by prior physical, environmental, psychological, and social factors.[21] Stressful events that occur over a life course may better explain the epidemiology and racial disparities of adverse maternal and perinatal outcomes rather than events that occur only 12 months before delivery.[18] However, the risk factors that occur over a life course are difficult to quantify due to interrelation. The delay of crucial care during pregnancy and throughout the life course puts Black Individuals at a greater risk for adverse outcomes.[19] As previously stated, the SDOH and external stressors experienced by Black Individuals are interrelated and can occur across a life course[22]; consequently, Black Individuals are disproportionately affected by structural racism, systemic racism and external stressors that can increase barriers to care and lead to adverse maternal and perinatal outcomes.[23]

Future interventions and recommendations to address racial disparities in adverse maternal health outcomes may benefit from taking a life course perspective – promoting health across a lifetime – especially during critical periods like pregnancy.[21] The underlying causes of racial disparities are primarily rooted in systemic and structural issues, and due to the intersectionality of social determinants and intrinsic limitations of retrospective studies, causation between racial differences and maternal mortality and morbidity is difficult to establish. However, it is clear that the fragmented nature of the US healthcare system and lack of public health infrastructure has exacerbated health disparities. These disparities stem from social inequities such as lack of access to healthcare, issues in insurance coverage, implicit bias in providers, delay of care, and lack of social support. As public health studies and biomedical techniques become more sophisticated, perhaps more comprehensive interventions will be developed and lead towards the elimination of racial disparities and health inequities in the landscape of maternal-child health and beyond.

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The Ethical Intricacies of Transgender Surgery

By Leyla Giordano

Illustration by Taimi Xu

Over the past decade, the transgender population has increased in visibility dramatically in the United States. The medical field has made progress when it comes to access to gender-affirming surgery; however, the progress has not rid society of discrimination and bias towards the transgender population, and access to care is still limited. Thus, it is essential to train medical professionals to care for this vulnerable population with compassion and knowledge. During the summer of 2018, I interned at the Gender Reassignment Department of Mount Sinai Hospital, where Dr. Jess Ting pioneered New York City's first surgical program dedicated to transgender surgery. I learned that he transforms bodies every day in his operating room and cares for his patients with empathy, but he also struggles with feelings of helplessness when his patients share their devastating stories and disappointment when his surgeries are unable to live up to their expectations.

The American Psychiatric Association defines transgender as "a person whose sex assigned at birth (i.e. the sex assigned at birth, usually based on external genitalia) does not align with their gender identity (i.e., one's psychological sense of their gender)."[1] Further, a subset of transgender individuals will experience gender dysphoria, defined by the American Psychiatric Association as "psychological distress that results from an incongruence between one's sex assigned at birth and one's gender identity."[1] Thus, the dysphoria refers to the psychological distress that can often result from being transgender. In response to gender dysphoria, one may seek affirmations in several areas, including but not limited to social, legal, medical, or surgical. Medical and surgical affirmations are two ways in which one's true identity can be revealed externally to society. Gender affirming surgery includes vaginoplasty, facial feminization surgery, breast augmentation, masculine chest reconstruction, and others.[3] Surgeries like these can help reduce an individual's gender dysphoria so that their physical body matches their gender identity. Overall, transgender surgery improves lives because it gives trans individuals a body in which they feel more like themselves. However, the transgender population faces significant disparities in social determinants of health. These detrimental determinants limit Dr. Ting's ability to heal this vulnerable population, frustrating him as he is ultimately unable to fix the discriminatory social context they encounter outside of the hospital. This paper will first discuss what it means to be transgender and how Dr. Ting's work improves their life experiences. It will then move into the broader traumas that transgender individuals face. Finally, this paper will discuss the limitations and frustrations of Dr. Ting's practice and how they have affected his approach.

Being transgender in our society and life-changing surgery

Since the 1900s, historians, activists, anthropologists, and many others have engaged in the debate between sex and gender. The social presentation and embodiment of one's gender can differ from the anatomy or chromosomes with which one is born. Until recently, people have assumed that females act feminine because they have a uterus, not because they identify as a "female." Society has assigned certain characteristics to what it means to be a girl, such as wanting to wear lipstick and play with Barbies. In the 1960s, a white and Western feminist theory emerged that posits that sex refers to the natural anatomical features, whereas gender refers to the culturally constructed norms that have been built based on one's sex.[2] This theory persisted into the 1990s, when Judith Butler argued that, in addition to gender, sex is also a social construct. She posited that if gender and sex are both social constructs, then these two terms are essentially the same.[2]

For decades, long-standing ideologies have informed beliefs that the trans identity is unacceptable since it runs contrary to the societally constructed connection between sex and gender. However, individuals like Dr. Jess Ting are contributing to the current shift in that dialogue surrounding the acceptance of trans identities. The Gender Reassignment Department that Dr. Jess Ting helped create at Mount Sinai Hospital gives transgender individuals the medical care that they need, changing the discourse around the transgender identity from taboo to celebrated. For example, in an interview I conducted with Dr. Ting, he recounted a memory about his oldest patient, who has stayed with him for five years. She was 77 years old and had been married to a man for many years. She told Dr. Ting that "this [surgery] is something I want to do for myself. I've wanted it since I was five years old, and I have never been able to get it." As soon as Dr. Ting began to sign her up for surgery, she began to cry. She said, "I thought you were going to tell me that I was too old for surgery." This story has stuck with Dr. Ting ever since because, as he says, "it's powerful to give someone something that they have wanted for their whole life." This patient had previously not gone to a doctor for the surgery out of fear that she herself and her identity would never be accepted. She also never had access to surgery because until 2016, no surgical programs existed in the state of New York. However, at the age of 77, the discussion around the transgender population has become significantly more welcoming and access to these operations increased such that Dr. Ting's patient was able to finally get the gender-affirming surgery for herself.

A significant number of Dr. Ting's operations are facial feminization surgeries. Facial feminization surgery, which includes shaving the male protruding forehead and brow ridge and softening the nose and jaw, are sought out by transgender individuals who identify as women and hope to have society externally view them as women. It is difficult to masculinize a face, but facial feminization surgery is extremely effective in giving a patient the stereotypical female features, such as a less-protruding forehead. Society consistently puts pressure on each gender to embody certain characteristics, as Eric Plemons points out in The Look of a Woman: "Yes, [the operating room] was the precise location in which patients' longed-for physical transformations took place. But it was also a place whose material dynamics pushed and pulled at conceptual frameworks of embodiment and selfhood that lay at the heart of trans-body projects."[3] Dr. Ting revealed to me that the most common reaction he gets from his patients post-surgery is, "I just feel like me now," as the material change in their appearance is an important part of what finally allows them to externally embody their ideal selves. Thus, the operating room becomes a place where the physical transformation makes it possible for a transgender individual to finally fit their own vision of themselves.

In a visual society such as ours, one's facial features become the most salient factor in society's recognition of one's sex. As Plemons mentions, "Facial feminization surgery is guided by hope for future phenomenological integration and social recognition the creation of a body that (re)presents the self."[3] Transgender individuals are unable to embody their ideal selves when they remain in the body they were given at birth. However, through facial feminization surgery, a transgender female can be outwardly recognized as a woman, making gendered embodiment a social phenomenon. As Rosalind expresses in Plemons' article, "'I've spent twenty-five years of my life thinking about not looking like I do now. I want that to go away. Constant thinking about that ruins the mind. After this I'll be able to think of other things, everyday things.'"[3] Rosalind's inability to embody her ideal self consumes her, as she is told every day by society that her gender identity is based off her recognizable characteristics like her Adam's apple and her "Neanderthal brow."[3]. Facial feminization surgery is, thus, a popular way to experience the world in a body that is outwardly recognizable and accepted as female.

The stereotypical facial features of a woman are what have been defined as "normal" to society. These features include a softer brow ridge and forehead, eyebrows with a slight arch, fuller lips, no facial hair, and a smaller nose. Society defines these characteristics as female, and it also defines a binary of female and male as the only acceptable genders. According to Abramowitz's three definitions of "normal,"—socially accepted or morally condoned, statistically most common, and frequently occurring in everyday life—each society determines that a specific anomaly is not "normal."[4] Using these definitions, society sees transgender individuals as not "normal." However, this is not how society should see the transgender population. This isolation is the exact disposition that leads to transphobia and a lack of transgender-specialized healthcare in the United States. Transgender individuals have reported that the most significant barrier to health care is the lack of physicians who are culturally competent and knowledgeable on the population.[5] Dr. Ting echoed this shortage when he discussed his introduction into the field: "When we started our program in 2016, there was no place in New York City to access transgender surgery." Despite the discrimination they face, transgender individuals are normal and should be considered normal by society; they are simply human beings who do not feel comfortable in their own bodies. Through his work at Mount Sinai Hospital, Dr. Ting became a pioneer in this field of medicine, making the transition to an embodiment of transgender individuals' ideal selves possible.

The broader traumas

Trans individuals' health outcomes are negatively impacted through several factors, such as intense stigma, increased harassment, and restricted access to employment, healthcare, and insurance. The detrimental effect that these factors cause can extend as far as suicide. Dr. Ting revealed, "The thing that was most impactful for me was when we first started seeing patients. One of the patients that I had interviewed and was going to schedule for surgery killed themselves. And up until that moment, I did not understand what the trans experience meant. That's how I came to understand why these surgeries can be lifesaving." Despite the beneficial impact of transgender surgery, it cannot rid the United States of its unequal structural and social determinants of health. Transgender individuals often have restricted access to employment, healthcare, and housing compared to cisgender individuals.[6] Dr. Ting mentioned in our interview, "So many of my patients are sex workers, are undomiciled, and are living in shelters. This made me realize that I was judgmental. There's not much that separates us from people who live on the streets or who are sex workers. When you have no other options, that is your only way of surviving." The lack of these fundamental resources can lead to increased stress and poor physical and mental health, such as depression, suicidality, and chronic illnesses.[6]

The othering of the transgender population leads to an intense and detrimental stigma surrounding the trans identity. Transgender individuals experience structural stigma (societal norms), interpersonal stigma (verbal harassment, physical violence, sexual assault), and individual stigma (the feelings these individuals hold about themselves that may shape future behavior such as the anticipation of discrimination). Structural stigma originates from the socially constructed gender binary, and therefore marginalizes those that are considered "abnormal." This stigma may "therefore operate as a form of symbolic violence in which structures, such as communities, institutions, or governments, [...] restrict and forcibly reshape transgender individuals in ways that ultimately serve to maintain the power and privilege of the cisgender majority."[6] For example, a lack of insurance within the transgender population may lead trans individuals to pay out of pocket for procedures, which therefore makes it more likely that they feel they have no option other than to use cheaper street hormones acquired through friends or online.[6] Secondly, interpersonal stigma refers to the increased levels of physical and sexual harassment:"It is theorized that gender nonconformity causes perpetrators of violence to become anxious and angry, ultimately enacting violence against transgender people as a means of rejecting and diminishing that which they fear."[6] Further, a national survey showed that, out of 402 transgender individuals, 47% had been assaulted and 14% of the 47% had been raped or survived attempted rape.[7] Thus, transgender individuals experience disproportionate abuse in their lifetimes, whether that be in the form of hate crimes, sexual assault, or verbal abuse. Finally, individual stigma refers to transgender individuals' negative image of themselves. This stigma makes them anxious to seek out healthcare and destroys their ability to deal with external stressors, leading to an increase in preventable deaths such as suicide.

Another crucial example of negative health outcomes among the transgender population is the increased rate of HIV. According to the Journal of Virus Eradication, "transgender women have a pooled HIV prevalence of 19.1%, [...] For transgender women sex workers, HIV prevalence is even greater, estimated at 27.3%."[8]. Researchers believe that the increased risk is multifactorial and may be "due to differing psychosocial risk factors, poorer access to transgender-specific healthcare, a higher likelihood of using exogenous hormones or fillers without direct medical supervision, interactions between hormonal therapy and antiretroviral therapy, and direct effects of hormonal therapy on HIV acquisition and immune control."[8] The fear of the medical setting that is present in the transgender population could lead to decrease testing for sexually transmitted infections, and therefore higher rates of HIV. Additionally, the stigma that surrounds the trans population leads to an alarming amount of trans individuals going into sex work due to the absence of other employment opportunities, which could also lead to increased levels of HIV.

The aforementioned factors contribute to a symbolic violence in which transgender individuals internalize the social asymmetries they experience.[9] This internalization can lead to a reactive personality and may even culminate in a personality disorder such as borderline personality disorder, since transgender individuals become used to the abuse and thus have learned to fight for themselves. As Dr. Ting reflected, "When anything goes wrong, [my patients'] reactions can be overwhelming and out of proportion to what you would expect. They blow up at me all the time. [...] Trans people have a lived experience where [...] they are subjected to abuse, and they are ignored. When you live like that, you build up your fences and you learn that you have to fight and scream for just regular occurrences." Every day, Dr. Ting sees first-hand the internalization of the stigma that the transgender population faces. Trans individuals begin to view themselves and their self-worth through how they are negatively treated, prompting the development of a personality that is programmed to protect oneself against the world.

Limitations of Dr. Ting's practice and their effects

The discrimination and abuse that Dr. Ting's patients experience often exceed the medical realm, so an approach that focuses on narrative medicine and listening to his patients' personal stories is important.[10] In "Narrative Medicine: Attention, Representation, Affiliation," Rita Charon moves past the narrow focus on her patients' physical bodies and approaches her patients with a dedication to their stories.[11] As Charon writes about a patient, "It was not just a matter of my having to know which section of his brain infarcted in his stroke but also what his stroke made of him, what it did to him, how he fought back from it, [...] whether he will be the person he once was. It mattered to him and to our future clinical relationship that I know these things, that I have heard his fears and rage and grieving."[11] Similarly, Dr. Ting is committed to listening to his patients' personal stories about their experiences as transgender individuals. In our interview, he emphasized how important it was to him to listen to his patients and their concerns, as his patients often lack a support system. In this way, similarly to Dr. Charon, Dr. Ting acts as an empathic witness for his suffering patients.[10]

However, physicians can only open themselves up to others' suffering to a certain extent, and this balance has been difficult for Dr. Ting. When his patients come to his office, they have looked forward to their gender-affirming surgery for years, putting immense pressure on the outcome. This pressure can also lead to a dependency on the physician after a successful surgery for further help; however, Dr. Ting can only accept so much responsibility. During our interview, Dr. Ting reflected on a close relationship he built with one of his patients that caused him a large amount of grief: "One of my patients killed himself. He didn't have a very smooth postoperative course. During Thanksgiving, he was texting me and meeting with a urologist. The urologist didn't like the way that this patient was speaking to him. He can be a little rough, and the urologist [denied him care]. He then texted me saying, 'What am I going to do now?' I remember that I was out of town, and I responded 'Don't worry, we'll find you someone else. It's going to be okay.' And he texted a few more times on Thursday or Friday, and then over the weekend, I noticed that I hadn't heard from him in a while. I texted him on Monday to ask how he was doing, and I never heard back. A few days later, I found out that he had killed himself on the Monday after Thanksgiving." With this news, Dr. Ting blamed himself, thinking that it was the complications from his surgery that made his patient commit suicide.

Physicians around the country experience burnout from job demands such as an overwhelming workload and emotional demands. Research on the mental health of psychologists and other physicians shows that these occupations aim to help people in need, leading to a high level of responsibility and increased emotional and interpersonal stressors for the physicians themselves.[12] Dr. Ting could not help but assign blame to himself for his patient's suicide. In the process of doing so, the high level of compassion and empathy required of him negatively affected Dr. Ting. For psychologists, emotional exhaustion is the most commonly reported cause of burnout.[12] Although Dr. Ting is not a psychologist, his patients often depend on him for matters that extend past his office due to their lack of a support system. Dr. Ting provides life-changing surgeries to a very vulnerable population and deeply cares about his patients, and that type of work requires high levels of involvement, which can lead to burnout. As a consequence of burnout, research has shown that physicians then "seek an escape or distance themselves from their work both emotionally and cognitively, and [the burnout] is thought to lead on to feelings of cynicism."[12] Dr. Ting felt himself burning out from the emotional burden he experienced while forming close relationships with his patients, and it forced him to place distance between him and his patients.

Thus, especially after his patient's suicide, Dr. Ting decided to set a boundary between him and his patients by strictly keeping his relationships to his office. It was necessary for Dr. Ting to adopt a medical gaze to take care of himself.[13] In the process, he lamented the loss of the personal relationships he had built:

> In the beginning, I would find myself getting very close to patients, sharing lots of details of their lives. In a way, that was really gratifying and rewarding for them to share emotionally fraught things. That's why you become a healer. You want to heal people, and part of that is the positive feedback you get back from patients. Over time, I found

that 99% of patients would be great, but the one complication would take so much out of me mentally. I could feel myself burning out a lot, so now, I am much more careful with patients in terms of creating boundaries. I don't get as close to patients, which is sad, but it is necessary to protect myself. When I go see patients after surgery, and they tell me that I changed their lives, [saying] "How can I ever thank you?", I feel like I have become a little numb to that, and I put up the boundaries where I'm afraid to let myself get close with patients.

Dr. Ting struggles between his commitment to his patients on a personal level and protecting himself from extreme responsibility for his patients' distress. This complicated experience unfortunately limits the extent of his care. Despite the loss of many relationships that he values and his commitment to his patients past their physical bodies, Dr. Ting finds himself having to take a step back to separate himself from the burden of his patients' trauma.

Overall, Dr. Ting changes his patients' lives by giving them a body they can finally love and claim as their own. However, this responsibility brings a lot of pressure, as Dr. Ting expressed in our interview: "There is this tendency to idealize what's going to happen or to feel like this surgery will cure everything - it will cure 'all my ails.' It doesn't do that, it doesn't cure all the ails of society – it makes your body align better with your internal identity, but you still have to go out into the world, and the world is not a better place." Dr. Ting's contributions to the transgender community supersede all expectations and grant so many the bodies and comfort they so desperately need, but he himself cannot change the society that transgender individuals enter back into when they leave the hospital. Despite the intense grief that Dr. Ting conveyed when he talked about the suicide of a patient and close friend, he ended our interview by relaying an encouraging conversation he had with his late patient's partner: "She told me that the patient loved the body that I made for him, even with the complications. She told me that if he hadn't had that surgery earlier, he would've died even sooner. He would not have even lived this long. For me, that lifted a heavy burden. I realized that maybe it wasn't my fault, and that I did help him." It's clear that to Dr. Ting, the complicated moral experience that he faces within and beyond his office is worth it when he can aid individuals that are so desperately in need of his care.

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Maternal Mortality in Sierra Leone

By Amy Qiao
Illustration by Punnava Alam

As Isata Dumbuya, the director of reproductive, maternal, neonatal, and child health at Partners in Health in Sierra Leone, states, "Every time we cannot give a pregnant woman what she needs, it's a tragedy." However, it is an unfortunately common tragedy in Sierra Leone, the third deadliest place in the world to give birth. While most of these deaths are fully preventable, an under-equipped healthcare system leaves many in peril.[1] Maternal mortality has long been an issue in Sierra Leone, but that is not to say it is unsolvable. By transforming the maternal healthcare system and reducing teenage pregnancy rates, Sierra Leone can address this long-standing, dangerous public health issue.

Before we can explore solutions to maternal mortality in Sierra Leone, we must first understand the severity and leading causes of the issue. In 2017, the modeled estimate of maternal mortality ratio (MMR) in Sierra Leone was 1,120 per 100,000 live births. For perspective, the global modeled estimate was 211, and the modeled estimate in the United States was 19.[2] Maternal mortality is caused by the "three delays": a delay in deciding to seek care, identifying and reaching a medical facility, and receiving appropriate care. These delays are exacerbated by several causes, most notably a lack of access to high-quality maternal healthcare and high teenage pregnancy rates, both of which are significantly prevalent in Sierra Leone.[2] Tackling these three delays at their root causes is the key to addressing maternal mortality.

At the root of the three delays is a lack of access to high-quality maternal healthcare. The aftermath of the Sierra Leone Civil War (1991-2002) left three-fourths of the nation's health centers in ruins and many without any healthcare access, worsening the prevailing maternal mortality problem.[1] The problem is even worse for pregnant people in rural areas where hospitals are harder to get to and transportation is less prevalent. The issue is not limited to a lack of healthcare facilities but also a lack of resources within those facilities. The leading cause of maternal mortality in Sierra Leone is postpartum hemorrhage, which can be treated by a blood transfusion.[4] However, many hospitals are not equipped with blood banks. Some physicians advise pregnant people to prepare their own emergency supply of blood during the third trimester, but this is an unrealistic expectation for many.[1] In addition, healthcare facilities in Sierra Leone often lack critical resources such as electricity, running water, and delivery beds.[3] A lack of healthcare facilities coupled with a shortage of resources is a significant contributor to the three delays.

Beyond inadequate access to maternal healthcare, maternal mortality is aggravated by high rates of teenage pregnancy fueled by child marriage. In 2020, Sierra Leone had an adolescent fertility rate of

107 per 1,000 live births, more than double the global rate and over six times the US rate.[2] Child marriage is a significant issue in Sierra Leone, with recent data estimating that nearly 40% of girls in Sierra Leone get married before the age of 18.[5] Child brides are much more likely to experience teenage pregnancy, leading to a higher risk of pregnancy and labor-related complications. Child marriage also prevents young girls from continuing their education, which can be a valuable foundation for empowering futures, promote family planning, and ultimately reducing teenage pregnancy and maternal mortality.[5]

While the problems that contribute to maternal mortality seem incredibly daunting, there are several solutions Sierra Leone can turn to. Regarding health sector solutions, Sierra Leone must expand the number of healthcare facilities available to pregnant people as well as improve the quality of maternal healthcare within those hospitals. Sierra Leone has made tremendous strides in healthcare accessibility with the introduction of the Free Health Care Initiative (FHCI) in 2010, which made healthcare free for children under five and pregnant/breastfeeding people. This was a crucial step in increasing access to maternal healthcare, with the proportion of women giving birth in a hospital growing from 25% in 2008 to 83% in 2019.[1] However, many pregnant people in rural areas never make it to a hospital and instead receive services from Traditional Birth Attendants who are not trained to treat certain medical complications.[6] To effectively reduce MMR, UNICEF recommends Sierra Leone establish at least five Basic Emergency Obstetrical and Neonatal Care centers and one Comprehensive Emergency Obstetric and Neonatal Care center in each of its sixteen districts.[6] Ensuring that each district is adequately equipped to care for its pregnant population is essential to dismantling the three delays.

The quality of care in these hospitals is equally if not more important. The Wellbody Clinic in Sierra Leone, established by Partners in Health, prioritizes the mentorship of maternity staff and provides maternal waiting homes where pregnant people can be monitored 24 hours before their due date.[7] Although it is only one of two healthcare facilities in the Kono district, it has paved the way for high-quality maternal healthcare. In the past four years, the clinic has had no maternal mortality.[7] Using the Wellbody Clinic as a blueprint, Sierra Leone must continue to establish comparable high-quality maternal healthcare facilities throughout the nation.

Along with health sector solutions, Sierra Leone must prioritize non-health sector solutions to address the high rates of teenage pregnancy, specifically through delaying child marriage. Child marriage is a major obstacle to reducing maternal mortality and is rooted in firmly established gender norms. However, Sierra Leone can take multiple measures to address these obstacles. From 2016-2019, the country implemented Phase I of the UNFPA–UNICEF Global Program to End Child Marriage which promoted girls' empowerment and engagement, created vital discussion surrounding gender equity and child marriage, and coordinated studies on child marriage to better inform policy development. These measures were taken in accordance with the National Strategy for Reduction of Adolescent Pregnancy and Child Marriage, which recognizes the connection between child marriage and teenage pregnancy. Altogether, the program led to significant results: over 57,000 young girls aged 10-19 in Sierra Leone participating in at least one intervention to equip them with skills and information to prevent child marriage, and almost 9,000 were able to enroll and continue with their education.[8] For Phase II of the program, Sierra Leone must build upon important lessons learned in Phase I, incorporating important lessons learned. This involves increasing the reach of the program to young girls throughout Sierra Leone, ensuring schools provide comprehensive sexual education, and promoting positive social norms throughout communities while eliminating harmful gender norms.[8]

Maternal mortality is a daunting public health challenge, but prioritizing these solutions will ensure every pregnant person receives the care they need. Some of these solutions require funding and others a cultural shift, but a need they share in common is a global commitment to improving healthcare and gender equality in low- and middle-income countries. With the proper global support, Sierra Leone can embrace the solutions needed to tackle one of the biggest public health challenges in the world.

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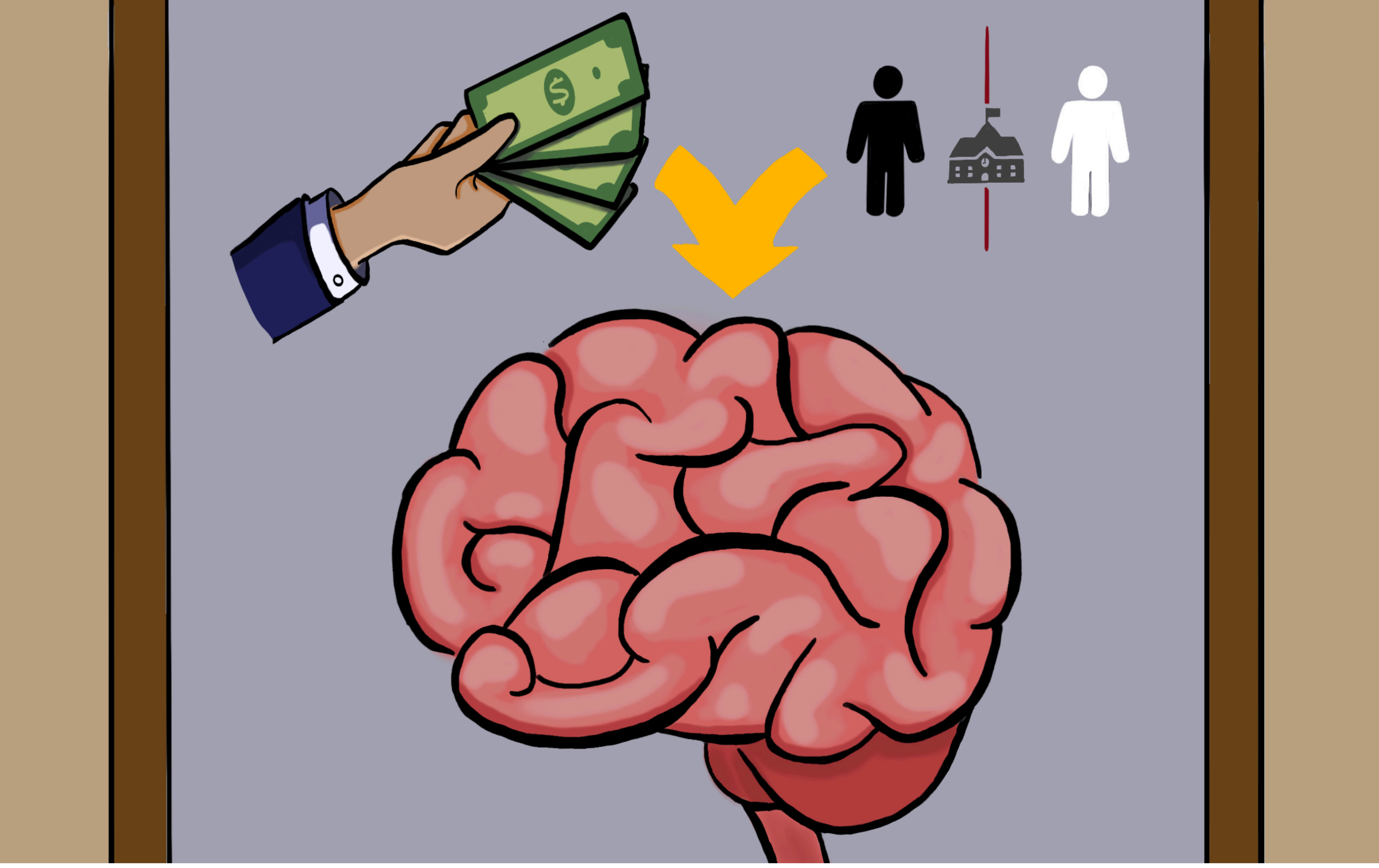

Framing Learning Disabilities and Disproportionality: Medicalization as an Obstacle of Progress

By Olivia First

Illustration by Katie Gu

Black students have been overrepresented in learning disability diagnoses for almost two decades. This places a disproportionate population in restrictive, stigmatized learning environments that teach derivative curricula, produce higher dropout rates, and can affect individuals across their life course. The educational community has attempted to address this disproportionality for years, but overrepresentation persists. This paper shows how an enduring psychopathological framing of learning disabilities has misguided interventions intended to address disproportionality. The medicalized conceptualization premises the narrative of overrepresentation as a product of misidentification and demands interventions that better distinguish between those with cognitive learning disabilities and those who are casualties of extrinsic circumstances. Despite these attempts to isolate a biological condition, academic achievement and socioeconomics are the best predictors of learning disabilities. As a result, a revised, social framing of learning disabilities would prompt more effective interventions that address the socio-demographic variables correlating with diagnoses and ultimately producing disproportionality. Through a historically rooted analysis, this paper attempts to highlight the inadequacy of the current response while also suggesting the expansive and intersectional causes and effects of educational inequity.

Introduction

Black students are overrepresented in learning disability diagnoses and have been since the Organization for Special Education Programs began recording race demographics in 2004.[1,2] The educational community, however, has been concerned about this pattern since 1982.[3] A disconnect between the cognitive, psychopathological conceptualization of learning disabilities and their social reality has maintained this disproportional representation. Socioeconomics and academic achievement are the best predictors of learning disabilities, indicating that a diagnosis reflects social difference rather than biology.[4,5] Nonetheless, interventions attempting to address this disproportionality have focused on narrowing the diagnostic population to an objective group of learning disabled rather than addressing the responsible socio-demographics. As with any disease or disability, the treatment strategy is not random but instead reflects the historic and contextual framing of the condition.[6] In the case of learning disabilities, neurological genesis and resulting cognitive conceptualizations premised a concern for minority overrepresentation. As a result, the legislative and diagnostic action to address this inequality both reflected and reinforced this physiological understanding. Deconstructing the history of learning disabilities and disparity reveals how their medicalized context and framing produced the ineffective intervention profile that maintains overrepresentation today.

Disproportionate Representation

While special education provides resources that are not available in general classrooms, it also teaches derivative curricula that can hinder students' academic achievement.[7,8] Across the country, students in special education graduate at a significantly lower rate than those in general education.[9] Furthermore, the stigma of a learning disability diagnosis lowers teacher and parental expectations and contributes to lower academic achievement.[10,11] Educators have paid particular attention to the representation of marginalized groups in learning disability diagnoses with the understanding that inappropriate representation can compound existing disparity.[12] In 1975, The Center for the Study of Families and Children produced a report for the US Department of Health, Education, and Welfare; its opening lines read, "Classification, or inappropriate classification, or failure to get needed classification–and the consequences that ensure–can blight the life of a child, reduce opportunity, diminish his competence, and self-esteem, alienate him, from others, nurture a meanness of spirit, and make him less a person then he could become."[13] That same year, Congress enacted The Education of All Handicapped Children Act, which formalized a data collection and reporting process for the demographics of special education. Its language acknowledges the complexities highlighted in the US Department of Health, Education, and Welfare report, stating that this practice intended to both ensure that "handicapped children receive[d] special education and handicapped services" and to identify patterns of "erroneous classification."[14] More recent studies have reinforced fears of misidentification, revealing associations between a history of special education instruction and poor mental health, substance use disorders, reports of emotional or sexual abuse, and risk of contracting sexually transmitted infections (STIs).[15,16,17] Determining the standard of appropriate representation, however, is complex and subjective. Deconstructing the historical and contextual framing of learning disabilities reveals how medicalized conceptualizations of the conditions have shaped this understanding and generated regulatory action that has failed to address the primary concern of compounded disparity for minority populations.

Foundations of Learning Disabilities

Doctors and psychiatrists were the first to study learning disabilities, establishing the condition's conceptual foundation in ophthalmology and neurology. In 1877, German physician Adolph Kassamual coined the phrase "word blindness" to describe "complete text blindness…although the power of sight, the intellect and the powers of speech are intact."[18] Shortly after, two other doctors defined the term "dyslexia" to characterize a milder case of "word blindness" that created a "very great difficulty in interpreting written or printed symbols."[15] In both instances, the physicians cited ophthalmological pathology.[19] In the early twentieth century, neurologist Alfred A. Strauss introduced a generalized psychopathological understanding of learning disorders, contesting that they were the product of some "minimal-brain injury" rather than optical impairment specifically.[20*] Finally, in 1963, psychiatrist Samuel A. Kirk coined the term "learning disability" to describe children with "disorders in development in language, speech, reading, and associated communication skills needed for social interaction."[21] Kirk remained a major contributor to the field of learning disabilities, serving as the leader of the National Advisory Committee of Special Education and continuing to produce literature on the condition. Throughout his writing, he consistently argued that learning disabilities were "intrinsic, cognitive or perceptual difficulties interfering with a child's learning", and attempted to distinguish them from general underachievement due to external factors.[22**] In 1968, Kirk and the National Advisory Committee of Special Education produced the first official definition of learning disabilities.[23†] Congress closely replicated this definition in the 1969 Specific Learning Disability Act and the 1975 Education of All Handicapped Children Act, which were the first federal documents responsible for regulating this condition.[14,24] Their legislative language reflects and reinforces an intrinsic understanding of learning disability, stating that they are "psychological" and not a product of "environmental disadvantage". Ultimately, the medical history of learning disabilities laid the groundwork for a biological understanding of the conditions.

Learning Disabilities as Intrinsic, Cognitive Conditions

These psychopathological conceptualizations shaped the interpretation of disproportionality in learning disability diagnoses. Demographic studies employed analytical techniques which assumed that appropriate diagnoses should reflect equivalent biologies rather than diverse socio-demographics. In 1982, The National Research Council published a foundational report on minority representation in special education.[3] Summarizing 12 years of national surveys by the Office of Civil Rights, it found "an overrepresentation of minority children and males in special education." Within the category of learning disabilities, however, it reported "proportional"

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* At this conference, Samuel A Kirk stated, "Recently, I have used the term 'learning disabilities' to describe a group of children who have disorders in development in language, speech, reading, and associated communication skills needed for social interaction. In this group I do not include children who have sensory handicaps such as blindness or deafness because we have developed methods of training the deaf and the blind. I also excluded from this group children who have generalized mental retardation."

** In his writing, Samuel A. Kirk highlights the confusion surrounding the definition of learning disorders, which he says leads to "underachieving becoming synonymous with learning disabilities."

† The report provides the following definition of learning disabilities: "Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written languages. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental phasia, etc. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage."

representation among ethnic groups. To distinguish between proportionality and disproportionality, researchers employed bivariate analysis to compare the diagnostic rates of learning disabilities between ethnic groups. They defined disproportionality as an inconsistency in the frequencies of diagnosis between different ethnic groups and quantified this inequality using log odd indexes with white students as the reference population. Using newer data but the same methodology, recent reports have found an overrepresentation of black students within the learning-disabled population.[25, 26] In each case, the allegation that proportionate means equal representation reflects a medicalized understanding of learning disabilities: if these conditions are biological, then diagnostic rates should be equally distributed across ethnic groups. In contrast, a social conceptualization might suggest that these rates are proportional to the socio-demographics of the different populations. Accordingly, psychopathological conceptualizations of learning disabilities premise the narrative of disproportionality.

Bivariate reports not only reflected cognitive conceptualizations of learning disabilities, but they also reproduced them. Their findings demanded techniques and strategies to better distinguish between those with intrinsic learning disabilities and those who were victims of referral racism or sociodemographic disparities.[27,22] They framed the diagnostic and legislative action intended to address the apparent disproportionality. As a result, the interventions reflected and reinforced the idea that learning disabilities are intrinsic.

In response to reports of minority overrepresentation, Congress enacted numerous legislative amendments to create a narrower definition of learning disabilities that excluded social variables. Between when Congress provided the first definition of learning disabilities in 1969 and their authorization of the Education for All Handicapped Children Act in 1975, officials redefined the exclusion criteria for diagnosis. The 1969 definition stated that the term learning disability "does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental disadvantage."[21] The 1975 Act, however, added cultural and economic disadvantage to the exclusion criteria.[14] In the 2004 reauthorization of this law, which was renamed the Individuals with Disabilities Act, Congress added a disproportionality clause. This amendment required states to record and report rates of disability diagnoses by race.[28] Similar to the statistical reports, this legislation implies that one can determine disproportionality using a single variable. It does not request any other socio-demographic information, reinforcing that "proportionate" diagnoses are equivalent diagnoses and should not reflect social conditions. In 2016, the Obama administration introduced the Equity in IDEA (Individuals with Disabilities Education Act) regulations, which provided guidelines for identifying significant disproportionality.[29] According to the US Department of Education's summary of the legislation's goals and implications, the disproportionate representation of minority students in special education provoked these new guidelines intended to ensure that "overrepresentation was not the result of misidentification."[30] In every case, the amendments to disability legislation have attempted to narrow the diagnostic population and pursue sociodemographic-blind equality as a remedy for alleged minority overrepresentation.

The other major intervention, a shift in diagnostic techniques, also intended to address disproportionality through an improved identification process. In 1965, Barbara Batemen, Samuel Kirk's research partner, reintroduced Marion Monroe's discrepancy model to diagnose learning disabilities.[31] It quickly emerged as the dominant diagnostic tool and framed learning disabilities as "educationally significant discrepancy between apparent capacity for language or cognitive behavior and actual level of language or cognitive performance." To determine this "discrepancy," evaluators compared IQ tests to academic performance, intending to differentiate between students with generalized intellectual disabilities and those with learning disabilities. In 2002, the President's Commission on Excellence in Special Education produced a report with recommendations for addressing the overrepresentation of Black students in special education.[24] They concluded that almost half of children diagnosed with a learning disability were casualties of poor teaching rather than actual disabilities. Furthermore, they emphasized that cultural biases in the IQ tests employed by the discrepancy model can misdiagnose students. To address this, they introduced the Response to Intervention (RTI) method. RTI emphasizes early intervention in the general classroom, with gradual increases in support if the child does not respond, and ultimately leads to psychological assessment and learning disorder diagnosis. It attempts to eliminate cultural IQ bias while distinguishing between students who have learning disabilities and those who are victims of poor generalized education. Congress officially recommended RTI as the diagnostic technique in the 2004 amendments to the Individuals with Disabilities Act, and it made financial resources available for early intervention practices.[25] While recognizing that extrinsic variables currently contribute to learning disability diagnoses, RTI once again attempts to remove them: it seeks to distinguish the intrinsically disabled from those who are the victims of their circumstances.

Reconceptualizing Learning Disabilities and Disproportionality

Recent studies have found that socioeconomics and academic achievement are the best predictors for learning disability diagnosis.[4,5] While neurological impairment may underlie some conditions, these findings indicate that learning disabilities currently function as measures of social difference rather than biology.[32] Reconceptualizing learning disabilities as (principally) social conditions will encourage more productive strategies for addressing unequal minority representation in special education. It challenges the narrative of disproportionality, suggesting that diagnoses are proportionate to the sociodemographic disparities between races. This does not imply that the overrepresentation of black students in special education is unproblematic, but it reframes this gap as symptomatic of larger inequality in the United States rather than a separate phenomenon of racism. As a result, it encourages wider-scale interventions that centralize the role of social conditions, rather than education-specific ones that actively exclude them: if learning disabilities reflect students' academic achievements and socioeconomics, then correcting diagnostic disproportionality requires addressing the factors that contribute to the racialized disparities within these demographics. This reframing demonstrates a distinct public health-minded approach to disability whereby we move away from simplistic, neurological understandings and instead consider the impact of social variables on disability conceptualization and identification. Adopting an intervention strategy that addresses academic achievement gaps, however, requires deconstructing the sources of knowledge production that reinforce and permeate the medicalized conceptualization of learning disabilities.

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Health Beyond Lockup: Alabama Inmates, Re-entry, and Medicaid Expansion

By Caleb Ellis

Illustration by Stella Tsogtjargal

Incarcerated individuals are more likely to experience chronic and physical conditions such as HIV/AIDS, serious mental illnesses, and substance use disorders compared to the general population Tuberculosis is four times higher among inmates than the general population.[1] Hepatitis is over eight times higher among inmates than in the general population.[1] HIV/AIDS is two to seven times more prevalent among inmates than the general population.[2] Mental illness is two to four times more prevalent in state prisons than in the community.[3] Despite these conditions, many inmates do not have access to medical care upon release into the community because they do not have health insurance. Roughly 80% of the inmates who re-entered the community are uninsured.[4] Prisoners and jail inmates with these conditions are more likely to be homeless, less likely to have been employed, and more likely to report a history of physical or substance abuse.[5] These findings are more pressing when coupled with data detailing that 43% of Alabama's jail population and 54% of Alabama's prison population are Black individuals.[6]

The scale of the problem

- More than 95% of prisoners eventually return to the general population, and 80% percent are without health insurance when re-entering into the community.[4]
- Alabama housed 37,151 incarcerated individuals in 2015 and 22,066 prisoners in 2018.[6]
- 68% of people in jails and over 50% of people in prisons have diagnosable substance abuse disorders, which is 7-8 times higher than the general population.[7]
- About 14.5 percent of men and 31 percent of women in jails have a serious mental illness. The prevalence of mental illnesses is two to four times higher among state prisoners than in community populations.[6]

The Affordable Care Act allows states to approve Medicaid expansion, which can make inmates eligible for Medicaid.[8] However, under the Medicaid Inmate Exclusion Policy, Medicaid funds cannot be used to pay for inmate health services.[1] This leads to Medicaid termination upon incarceration, which can create gaps in Medicare coverage and healthcare access upon release.[9] Within the first two weeks of release, inmates are 12.7 times more likely to die compared to state residents without carceral system involvement.[10] Additionally, inmates are 2.5 times more likely to be hospitalized within 7 days of release.[11] The period of release and lack of health insurance has also been linked to disruptions to HIV treatment, decreased viral suppression, and decreased retention in care.[12] Data has also shown that release is a period where inmates experience high risks of overdose and other substance use disorders.[10]

Current Alabama Policy on Medicaid and Inmate Eligibility

Alabama is one of 12 states that has not adopted Medicaid expansion.[13] Citizens of Alabama only qualify for Medicaid if they are at or below 18% of the federal poverty level, which is low compared to the threshold of 138% experienced by states who approved Medicaid expansion.[14]

This policy leaves inmates and many other groups without Medicaid coverage.[14] The state pays for all medical services provided to inmates.[1] Under the Affordable Care Act, Alabama has an uninsured rate of 11.2%, which is estimated to drop to 6.2% if Medicaid is expanded.[15] Additionally, Alabama is a state that currently has Medicaid suspension for inmates in jails but not prisons.[16] With Medicaid expansion and suspension for prisoners, Alabama could decrease criminal justice spending and inmate recidivism while increasing community health and increasing Medicaid coverage by at least 25 percent.[15]

Other benefits of Medicaid expansion:

Savings from Drug and Mental Health Courts: Drug and mental health court treatment under court supervision has been common in jurisdictions.[17] Jail diversion programs in New York City saved an average of $7,038 per person, while Massachusetts saved approximately $1.3 million in emergency health services.[17]

Increased Treatment Coverage: Data shows that overdose from opioids was the leading cause of death for former prisoners in their first week after release.[23] Medicaid expansion allows Medication Assisted Treatment (MAT) to be covered under the Affordable Care Act.[24] MAT has been associated with decreased mortality and continued drug use associated with Opioid Use Disorder.[24]

Policy Recommendations

Approval of Medicaid Expansion

The first major policy recommendation would be to expand Alabama's Medicaid program. Medicaid expansion has been associated with positive benefits to criminal justice challenges like inmate Medicaid enrollment, criminal justice spending, inmate health care costs during and after release, and many others.[17] Pre-Affordable Care Act research illustrates that Medicaid can reduce state spending by decreasing low-income adult interactions with the criminal justice system and increasing their access to substance abuse and mental health services.[17] Medicaid expansion allows justice-involved populations to move beyond the label "criminal" and establish a new identity.

Significant State Savings:

Many states that have expanded Medicaid have also experienced large reductions in state expenditures. In Ohio, Medicaid expansion has been associated with a $10.3 million decrease in spending on inmate inpatient care.[17] Medicaid expansion allowed Ohio to make inmates eligible for Medicaid and receive federal reimbursement for certain inpatient procedures.[17] Kentucky, Michigan, Colorado, and Washington have also reported savings greater than or equal to $10 million.[17] These large savings have the potential to be reinvested in establishing more efficient and available health care services in prisons and jails. Additionally, these funds could go towards increasing educational opportunities for industry, trade jobs, and professional careers.

The financial savings from Medicaid expansion also decreases the cost of housing justice-involved populations. Washington experienced a savings of $9,000 to $18,000 saved for each person given treatment through Medicaid: this adds up to a total of $100 million.[17] Increasing Medicaid eligibility to inmates allows Alabama to divert carceral system funds to create inmate rehabilitation and improve inmate and community health. Moreover, this initiative opens funding that can be utilized to enhance the lives of justice-involved populations, their families, and their communities.

Effects on Inmate Recidivism and the Community:

Medicaid expansion has also been correlated to decreased inmate recidivism.[18] After Medicaid expansion, then Ohio governor John Kasich reported a recidivism rate of 10 percent.[18] Additionally, Washington found that arrests declined by 17 percent, 18 percent, and 33 percent across three groups of low-income adults who had alcohol and drug treatment.[19] In interviews of inmates in Ohio's Medicaid pre-release program, two-thirds of respondents attributed Medicaid as the reason behind their decreased recidivism.[20] Inmates told reporters that Medicaid provided them with "balance and stability" by providing them relief from health costs and access to care that can manage their health.[20] Majority of program respondents stated that having Medicaid made it easier to continue working or search for work.[20] The data above demonstrates that when inmates are given access to health resources, they are more likely to remain stable within communities and experience longer periods without carceral system interaction. Through a decrease in recidivism and improved access to healthcare, inmates become largely integrated with the community. Additionally, the community experiences longer periods of public safety.

Approval of Medicaid Suspension for Prisoners

For many justice-involved individuals, access to Medicaid is a major barrier to receiving medications and healthcare upon release. After individuals encounter the carceral system, their Medicaid benefits can either be terminated or suspended based on state legislation.[21] Termination often leads to inmates being completely removed from Medicaid rolls, requiring inmates to submit new Medicaid applications upon release.

Eligibility determinations can take up to 45 days, which is a long time for someone who has limited possessions, funding, and transportation.[22] Within this waiting period, inmates are unable to access necessary health services like medications, preventive screenings, or appointments due to cost, barriers to housing, and jobs.[25] Medicaid suspension offers faster reinstatement of Medicaid coverage upon release through its ability to maintain inmate eligibility while limiting access to inpatient service payments.[26] Medicaid suspension provides releasees with a baseline of services required to continue some of the health routines they may have had while in prison.

Reimbursement for Inpatient Services and State Savings:

Medicaid suspension has also been linked to increased savings on inpatient services in penal facilities. States like New Mexico, Ohio, and Rhode Island suspend Medicaid coverage and allow full Medicaid coverage upon release.[27] This suspension policy has allowed states to receive Medicaid payments for all inpatient care provided to incarcerated inmates.[27] Implementation of Medicaid suspension saved Arizona a reported $30 million in 2015 by reducing capitation payments to managed care plans during inmate incarceration. In 2015, Massachusetts experienced savings of at least $4.2 million due to Medicaid coverage of inmate care.[28] Through Medicaid suspension, these states have earned back some money and increased inmate access to healthcare upon release.

Increased Inmate Enrollment and Access to Care:

Inmate Medicaid enrollment has increased drastically due to Medicaid suspension. Connecticut reported that 60% of its inmate population is enrolled in Medicaid upon release.[28] Massachusetts stated that over 70% of individuals released from prison in 2015 had a MassHealth application submitted and over 75% of applications were approved.[29] Medicaid eligibility upon release has also had strong implications for inmate usage of health resources. Data from Connecticut shows that inmates who had Medicaid coverage before release connected to outpatient care more quickly than those who were not pre-enrolled.[30] Inmates enrolled in Medicaid were also more likely to use outpatient care than inpatient care and more likely to use the emergency room than inmates who were not enrolled.[28] Massachusetts data shows that among former prisoners with Medicaid coverage in the year after release, 84% of releasees used any covered service, including 50% of releasees who had behavioral health visits.[31] Additionally, more than half of those with medical or behavioral health visits were seen within the first 60 days post-release.[28] Medicaid coverage provides inmates with access to services that address their physical and behavioral health needs and support recovery for opioid use disorder, other substance use disorders, and preventative health services.[27]

Elimination of Gaps in Healthcare Upon Release:

Expanding Medicaid eligibility for inmates also can eliminate the gaps in healthcare coverage that justice-involved populations experience upon release. These gaps in healthcare manifest in chronic disease management, medication access, and clinic visits. Studies reveal that long-term care for HIV is very low after release. For instance, at 14 days post-release, only 21% of inmates accessed care, and only 34% by 30 days after release.[12] Within the first 10-30 days of release, up to 80% of inmates released from prison do not access antiretroviral therapy, which is used for HIV and Hepatitis C treatment.[32,33] Overall, these numbers demonstrate that the post-release period is a critical intervention time for justice-involved populations. The post-release period is when releasees are unable to continue to treat chronic diseases like HIV and Hepatitis C to the same extent they were treated during their time in the carceral facility. The lack of treatment for these diseases puts releasees, their families, and communities at risk through the possible exposure to unknown conditions and the worsening of known conditions.

The post-release period experience is more promising in states where inmates were linked to community care before release. Inmates who were able to link to care within 0-30 or 30-60 days experienced suppressed viremia (presence of virus in the blood) compared to the inmates who received care within 60-90 days.[34] Additionally, studies in Rhode Island and North Carolina reveal that around 50% of releasees were having their first medical appointment at least 90 days post-release.[34] Those inmates also experienced a larger detectable viral load compared to inmates with earlier service dates.[34] In other words, linkage to care and the length of time between release and clinic visits is strongly correlated with detectable viral load and inmate health. Though there is very little data on conditions like Hepatitis C, tuberculosis, and other chronic conditions, the data on HIV implies that inmate care could worsen upon release for those conditions. Justice-involved populations in Alabama are more than likely experiencing these effects during the 45-day Medicaid eligibility period post-release. This period is critical for sustaining the health of releases and enhancing their reintegration into the communities and lives they had before being sentenced. Additionally, this research implies that mental health, substance use, and similar disorders could also worsen during the Medicaid eligibility and post-release periods. Medicaid expansion ensures inmates can fully integrate into their communities and have a full chance at establishing a new life.

Final Conclusions

The current State of Alabama policy, which fails to make inmates and those over 18% of the federal poverty level eligible for Medicaid and terminates Medicaid for prisoners, is inadequate.[13,14] To date, 39 states have approved Medicaid expansion, and 34 states have some form of Medicaid suspension in place.[13] States like Ohio, Washington, Kentucky, and Michigan have benefited greatly from expanding Medicaid eligibility to inmates.[17]

- Medicaid provides inmates with access to health services for conditions like HIV, AIDS, hepatitis C, severe mental illnesses, and other health conditions.[23,24,27]
- Medicaid protects the families of inmates by providing releasing inmates with healthcare coverage that will avoid the spread of certain conditions and trouble in the immediate environment.
- Medicaid decreases inmate recidivism and prevents inmates from dying in the immediate weeks following their release.[11,18,19]
- Medicaid reimburses Alabama legislatures for inpatient care provided to inmates. This saves millions of dollars that can be invested in community health centers and better care within prisons and jails.

By expanding Medicaid, the State of Alabama improves its coverage gap, increases inmate and low-income citizen Medicaid enrollment decreases inmate recidivism and regains millions of dollars.[11,18,19] Medicaid suspension ensures prisoners have healthcare coverage upon release and supports their re-entry efforts.

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Immigrant Entrepreneurship in Healthcare

By William Borges
Illustration by Salma Eldeeb

It was the early 2000s at the University of California-San Francisco (UCSF). In the first year of her graduate work in medical sociology, Jennifer Nazareno was summoned by her senior faculty advisor. He wanted to see her in his office. It was time to talk about Jennifer's Ph.D. thesis topic selection. Nazareno recalls that her advisor was an older white gentleman, clearly learned with an aura and presentation screaming "Ivory Tower." His bookshelf was filled with classics from the western tradition. Nazareno was nervous; this meeting could very well determine the rest of her career. If she didn't end the meeting with a thesis topic she was genuinely interested in, that could mean disaster for her future.

However, the meeting surprised her. Rather than shutting her down, as Nazareno had feared he would do, her advisor was very open-minded. "He asked me: 'What is the fire in your belly?' and 'Why is this important to you?'" Nazareno recalls.

She thought hard for a moment, she says, and then confidently answered.

"I think the story of immigrant labor in healthcare has never been told at the level of academia," she said. "In the Ivies or the elite universities, we don't hear the stories about how immigrants contribute to our US economy and our healthcare industry."

Nazareno is the daughter of an immigrant Filipino nurse who became an entrepreneur and built long-term care businesses. She felt compelled to capitalize on this scholarly opportunity to tell her story and the story of many others like her. She says this kind of academic research matters because of the soft power that academia holds in society in determining right from wrong–what is acceptable and what is not. If societal groups are not properly represented within the discourse in these circles, it can perpetuate discrimination, resentment, and fear.

Since deciding on the focus of her dissertation, Nazareno has become recognized globally as a pioneer in the study of immigrants in healthcare entrepreneurship. In particular, she studies Filipino women immigrants who create and run long-term care businesses in the US. She is tenure-tracked at Brown in Public Health and is an innovator in the field: in April 2019, Nazareno founded the Filipino Health Institute at the Brown University School of Public Health, which supports research and advocacy for Filipino health and has a partnership with a university in the Philippines.

Working on the thesis

Nazareno chose to follow a path different from others in her class, who at the time mostly studied either Alzheimer's or breast cancer because these were two well-funded areas at UCSF. She had rejected spending four or more years of her life studying something she wasn't passionate about.

"I was taking a chance because nobody funds this kind of research; it's not like the NIH [National Institute of Health] is funding immigrant labor research. It didn't matter. I just said, 'You know what? I'm just going to do it,'" says Nazareno. Like many Filipino women before her, Nazareno was now following an entrepreneurial path–only this time, it was in academia. Her Ph.D. thesis, the first of its kind, helped define an academic area of focus within immigrant studies.

At the time, Nazareno found the project both exciting and daunting. She first turned to a book by Catherine Ceniza Choy, one of Nazareno's academic advisors, called Empire of Care. The book chronicles the colonization of the Philippines by the United States from the early 1900s.[1] The U.S. built medical hospitals throughout the Philippines, which spurred the creation of a skilled Filipino nursing labor force. Over time, the U.S. recruited these trained nurses for use as cheap care labor in America, even creating special visa programs for registered Filipino healthcare workers called EB3 visas.[2] According to the largest nursing union in the United States, National Nurses United, Filipinos make up approximately 4% of registered nurses in the United States.[3]

Nazareno decided to write about the inequities and history of these nurses that came as a cheap labor force during a time in the U.S. in the 1950s and 60s when the U.S. faced nursing shortages.[4] With the medical industry booming, immigrants filled the gaps.

"What happens afterward?" Nazareno asks. Nazareno argued in her thesis that Filipino women have "gone on to build businesses in the healthcare industry, particularly in long-term care." Filipino nurses, particularly in coastal areas like California, New York, and Texas, went on to build home healthcare spaces, nursing homes, and assisted living facilities because these women were disproportionately responsible for taking care of those in long-term care. This trend was mostly spurred by Filipino women's experience in administering care, friendships in the long-term care industry, and passion for caring for those in long-term care settings.

"If you think about the hierarchy of healthcare, long-term care is like the step-sister of healthcare. You have the immediate healthcare system and long-term care is for aging adults and they're not in serious need of healthcare; they're not in the emergency room; the system is not as focused on these folks," Nazareno said. Due to the unattractive nature of long-term care, an opportunity structure was created and immigrants stepped in and became entrepreneurs.[4] In addition to this, healthcare policies in the United States at this time, including the passage of Medicare and Medicaid in 1965, created a deficit in long-term care funding.[5] These conditions allowed small, private, immigrant-owned long-term care businesses to fill the gaps. "When you do these interviews with women, there are spaces of agency. Even though these women were working late-night shifts at a hospital, they were thinking: 'I want to become an owner and operator of something. I want to be able to use the education that I got in the Philippines from a westernized hospital to become a nurse,'" said Nazareno. The unique opportunity structure allowed these Filipino women to create businesses, which would lead to social mobility for themselves and their families. According to Nazareno, many of the women she interviewed felt they were following the "American Dream" to build businesses and help fix a fractured national system. Picture this: an immigrant Filipino nurse is forced to work the night shift in an American long-term care facility. She keeps hearing about how people she knows have started businesses in the long-term care space. She asks around for help and soon she is on the path to starting her own long-term care business. According to Nazareno's interviews, this was the story of countless immigrant Filipino nurses in the US.

In her dissertation, Nazareno identified fifty Filipino women who owned healthcare businesses around Southern California. Nazareno worked to build trust within the community she sought to study, finding subjects through word-of-mouth. She conducted in-depth interviews. The community came to trust that she would represent their stories in a way they would see as accurate.

"There was this ethnic economy of nurses sharing resources, helping each other to build businesses and healthcare organizations so they could better support their families," Nazareno says. Instead of competing internally, members of the community embraced one another and built on the success of others to forge new opportunities. Together, they were able to overcome financial and social limitations and rise as an entrepreneurial class.

"It is not just a story of inequity and injustice and oppression. There is also space for opportunity, mobility, and this sense of pride in being an owner. I wanted to bring that to light," Nazareno says. Through her experience interviewing these founders, Nazareno learned that the women were very proud of what they had managed to build. They did not want to be portrayed as people to be pitied.

The culmination of the thesis

Nazareno realized the impact of her work when she went to her first academic conference, the Asian American Studies national conference. She was a young Ph.D. student and presented one of her chapters on a panel. She was pretty nervous, she says.

“The moment I will never forget was when someone from the back came up to me and said: ‘This is my history. I have never heard someone talk about it and break it down the way you did. You brought to light the history of my family that I just have never read about. I have never really thought about it as complex as you have’,” Nazareno recalls.

She says she saw that her work was validating for some Asian-American students in the audience. Students mentioned that they had always known about Filipino healthcare entrepreneurship because of their mothers and aunts. But they’d never learned about it in academic settings.

“Even if I am speaking to that one person, I want to shed a light on this topic and say, ‘I see you. I am documenting the history that has brought us to this country and the contributions your family members have provided for this country. It is documented and talked about. I teach about it at Brown University, an Ivy League institution,’” Nazareno says.

Brown University

Nazareno is now the Barrett Hazeltine Assistant Professor of the Practice of Entrepreneurship and Associate Director of the Online Masters’ of Public Health Program at Brown University. Her journey has been an inspiration to many students and families who see her as a symbol that their stories matter in academia. Students randomly email her from all over the world, telling her “‘I read your paper and I want to build on it’ or ‘I quoted your work.’” “That always means a lot to me,” Nazareno says. At Brown, she teaches a class on immigrant entrepreneurship and classes in public health. Soon, she will teach a new class in healthcare entrepreneurship to highlight future issues in healthcare and how entrepreneurs can work to solve these issues.

“I’ve brought together researchers and grad students to talk about Filipino healthcare and immigrants. I am proud of that. We have a partnership with one of the universities in the Philippines,” Nazareno says, referring to the Filipino Health Institute that she helped build at the School of Public Health.

A nervous graduate student became an Ivy League professor and entrepreneur. In doing so, she told her community’s story and followed the “fire in her belly.” Her work has included immigrant entrepreneurs in the conversation within elite academic circles. She has highlighted the entrepreneurial hustle of Filipino founders in healthcare and provided a voice to generations of women who fought for their futures.

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Beyond the Food: How Prison Nutrition Policy Contributes to Lasting Chronic Disease

By Parisa Afsharian
Illustration by Punnava Alam

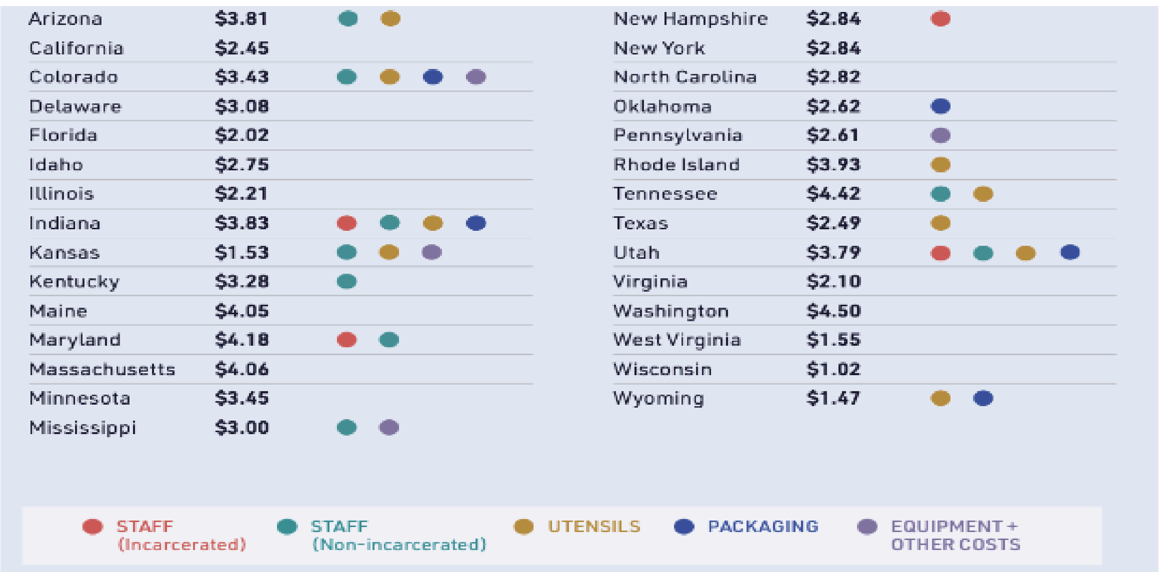
The United States is facing an epidemic of chronic disease both inside and outside of its flawed carceral system. A 2011-12 study of state and federal prisoners reported that half of those who are incarcerated have a chronic health condition—including cancer, high blood pressure, stroke-related problems, diabetes, heart-related problems, kidney-related problems, arthritis, asthma, and cirrhosis of the liver—and this number has only increased in the last decade.[1] Furthermore, there are higher rates of incarceration for Black and Hispanic populations—and on top of that, racial and ethnic minorities are about two times more likely to have chronic diseases.[2,3] Thus, the epidemic of chronic disease and incarceration directly relates to the failure to abate health disparities. The first step to improving the health of prisoners of those within the carceral system and breaking cycles of chronic disease upon release is to improve the food that they eat each and every day. However, the current legal, economic, and political infrastructure for the enforcement and deployment of proper prison nutrition is lackluster and insufficient. The absence of proper nutrition in prisons is a human rights issue exacerbated by the inadequate and discriminatory policies governing access to nutrition both within the carceral system and upon release.

The legal system governing nutrition standards at state and local carceral facilities is an amalgamation of state and local policies, along with a myriad of court decisions. Thus, there exist few all-encompassing prison food laws. Namely, the American Correctional Association offers accreditation to the nation's correctional facilities, but the program is completely voluntary.[4] To meet their standards for accreditation, a facility must allow "each offender the opportunity to have at least 20 minutes of dining time for each meal," and it mandates that state meals should not be spaced more than 14 hours apart—about 10 hours longer than common guidance on healthy meal spacing.[5] Furthermore, all carceral facilities must have a licensed dietician on staff to review menus in order to receive ACA accreditation.[4] These dieticians, in practice, "are called to figure out ways of achieving states' minimum calorie counts and vitamin and nutrient intakes via tubs of margarine and fortified mineral powders and supplements".[6] However, other regulations have been made policy through lawsuits filed by prisoners who feel that their human rights have been violated by the food fed to them during their incarceration.

Countless lawsuits have been filed against correctional facilities—yet time and time again, courts uphold the policies that are causing myriad mental and physical trauma and health complications. The primary governing law for prison food is the Eighth Amendment—namely that correctional facilities must not deprive prisoners of the "basic necessities of life" in order to align with the prohibition of cruel and unusual punishment of convicted prisoners.[7] Furthermore, Rhodes v. Chapman, 452 U.S. 337 (1981) established that the administration of carceral facilities must be compatible with the evolving standards of decency that mark the progress of a maturing society".[8] Nevertheless, Gardner v. Beale, 780 F.Supp. 1073 (E.D.Va. 1991), upheld that a “two meal policy” in prisons was not in violation of the 8th Amendment after a prisoner complained of only being fed in 18-hour increments because only “mental damages” were suffered.[9] Furthermore, in 1995, the Supreme Court ruled that “prison regulations do not give prisoners an affirmative right under the Constitution,” and prisoners may no longer sue for the enforcement of prison policy.[10]

The Bureau of Prisons’ Food Service Manual (FSM), which governs policy at federal prisons, states that “inmates will be provided with nutritionally adequate meals, prepared and served in a manner that meets established Government health and safety codes,” but nowhere in the FSM do they expand upon what “nutritionally adequate” entails.[11] There are also specifications for Daily Recommended Intake—including a caloric recommendation of 2,816 calories per day—but no requirements to follow them or to provide this information in an accessible way to people who are incarcerated.[11]

Notably, there exists no nationwide mandate for state and local prisons on the cost of a meal, or on the minimum amount of calories or nutrients they must contain. States must comply with their own standards, but there is no guarantee that these standards are in line with well-studied dietary recommendations. The United States Department of Agriculture releases an official “Thrifty Food Plan” yearly, outlining the average cost to feed a United States citizen “a nutritious, practical, and cost-effective diet” based on Dietary Reference Intakes and the Dietary Guidelines for Americans, 2020-2025.[12] This year, the weekly cost to feed a 20-50-year-old male (also the age and sex of the average incarcerated American) was $69.30, or about $10 a day.



		STAFF (Incarcerated)	STAFF (Non-incarcerated)	UTENSILS	PACKAGING	EQUIPMENT + OTHER COSTS
Arizona	$3.81		●	●		
California	$2.45					
Colorado	$3.43		●	●	●	●
Delaware	$3.08					
Florida	$2.02					
Idaho	$2.75					
Illinois	$2.21					
Indiana	$3.83	●	●	●	●	
Kansas	$1.53		●	●		●
Kentucky	$3.28		●			
Maine	$4.05					
Maryland	$4.18	●	●			
Massachusetts	$4.06					
Minnesota	$3.45					
Mississippi	$3.00		●			●
New Hampshire	$2.84	●				
New York	$2.84					
North Carolina	$2.82					
Oklahoma	$2.62				●	
Pennsylvania	$2.61					●
Rhode Island	$3.93			●		
Tennessee	$4.42		●	●		
Texas	$2.49			●		
Utah	$3.79	●	●	●	●	
Virginia	$2.10					
Washington	$4.50					
West Virginia	$1.55					
Wisconsin	$1.02					
Wyoming	$1.47			●	●	

Figure 1: State spending per day on one incarcerated person’s meals. *Impact Justice*

In 2020, the Oklahoma Department of Corrections spent $2.26 a day to feed a “prisoner.”[13] Other states’ reported amount spent per incarcerated person is shown in Figure 1.

The USDA, the nation’s premier source for information on food safety and optimal nutrition, determined that approximately $10 a day is needed to adequately feed and nourish a 30-year-old man, yet this same health guideline is not extended into the carceral system. This trend does not stop with the economics of prison food—a myriad of other commonly accepted and well-established federal guidelines on nutrition are abhorrently ignored and violated within the carceral system, as there exists no law mandating that prisons and jails must follow the same guidelines that govern how every other population in the United States eats.

The USDA’s Dietary Guidelines for Americans and the Dietary Reference Intakes, issued by the National Academy of Sciences, are synthesized into MyPlate, the widely publicized guidelines for the American diet. MyPlate emphasizes “vegetables, fruits, whole grains, seafood, eggs, beans and peas, nuts and seeds, and some dairy and meat products—prepared with little or no added solid fats, sugars, refined starches, and sodium”.[14] In contrast to these national guidelines, in a month-long study of Georgia prisons, the average cholesterol intake was 156 percent of the recommended amount, sodium was 303 percent of the recommended amount, and total calories for female inmates were 121 percent of the daily recommended amount.[15]

It is virtually impossible to overstate the dehumanizing, humiliating, and disgusting nature of prison food. Meals served in “chow halls” have been compared to “food intended for livestock” by some formerly incarcerated people.[16] A breakfast served in an Alabama jail included one scoop of unsweetened grits, one slice of bread, and less than half of an egg.[17]

Figure 2: A photograph of food from North Fork Correctional Facility in Sayre. *The Frontier*

Three-quarters of formerly incarcerated national survey respondents said they were served spoiled or rotten food while in prison.[18] Some of the incarcerated are starving—94 percent of formerly incarcerated people surveyed by Impact Justice said they could not eat enough to feel full—whereas others are exhibiting trauma-induced eating behaviors that cause rapid weight gain like binging and hoarding.[18] Aside from tasting like “a ground-up gym mat” and being so scarce that some prisoners resort to licking syrup packets, the food in prisons and jails models a diet that is a one-way ticket to chronic disease.[19,17]

It would be an understatement to simply say that studies have shown that nutrition is linked to better health outcomes. Almost half of the deaths in the US due to cardiometabolic diseases (heart disease, stroke, type 2 diabetes, hyperlipidemia, or hypertension) can be directly linked to suboptimal nutrition.[20] Decreasing the amount of sodium, increasing omega-3-fats and nuts/seeds, limiting processed and red meats, and reducing sugary beverages are all associated with positive health benefits like a lower risk of coronary heart disease, type 2 diabetes, cancer, obesity, aggression, and ADHD.[21-25] Almost one in three prisoners have hypertension, 7.2 percent have diabetes (almost double the rate in the general population), 10 percent have heart problems (10 times the rate in the general population), 25 percent have diagnosed ADHD (five times that of the general population), and one in four prisoners are in serious psychological distress—all diseases that are significantly and consistently associated with poor nutrition.[26-28] Thus, the lack of adequate outside economic and legal policies enforcing the proper nutrition and nourishment of the incarcerated is creating an epidemic of physical and mental illnesses for those inside.

The mere experience of incarceration leaves an indelible imprint on the health of an individual. The average time spent in prison is 29 months according to a 2016 Prison Policy Initiative study—ample time for daily consumption of nutrient-poor, high-calorie diets to leave lasting impacts on cholesterol levels and body fat, as it takes only four weeks for diet to have a long-term impact on these metrics.[29,30] Thus, the health impacts of diet sustained within the walls of the carceral system are carried back into communities, where they impose a financial burden on already stretched-thin local, urban health systems.

Furthermore, the legal policies governing food access for the formerly incarcerated compound upon the atrocious policies within the system to create cycles of chronic disease that directly intersect with cycles of incarceration hyper-prevalent in Black and Brown communities. The Supplemental Nutrition Assistance Program (SNAP), formerly food stamps, has been associated with improved dietary quality and increased food security—along with measurable improvements in children's health, academic performance, and generally lifting people out of poverty.[31] However, some states have historically imposed a lifetime ban on SNAP and/or TANF (Temporary Assistance for Needy Families) for those with previous drug felony convictions. Many states have modified this ban (though South Carolina maintains a total ban on SNAP) by allowing more individuals to regain access to these public assistance programs with the completion of their sentence or concurrent fulfillment of a probation sentence.[32] Currently, seven states maintain complete bans on TANF access for those formerly incarcerated for drug charges.[32]

Public assistance programs like SNAP and TANF are essential to those who were formerly incarcerated and their families. The main benefit of these public assistance programs pertains to accessing low-cost meals, which is of essential importance to the 91 percent of those released from carceral facilities who experience food insecurity.[33] Furthermore, with over 35.5 million children with a formerly incarcerated parent, the denial of a family's access to SNAP or TANF, among other public assistance programs, negatively impacts the health of the child, which contributes to the perpetuation of health disparities in communities disproportionately impacted by hyperincarceration.[34]

The structural and systemic racism embedded into the United States carceral system, evident through the demographics of hyperincarceration, has created communities that are facing higher rates of chronic disease and food insecurity spawning from their time spent behind bars. The lack of coherent, cohesive laws on food quality and quantity, including a lack of enforcement of federal guidelines at a state and local level, allows for unappetizing, unsatisfying, unhealthy, and inhumane portions of food to be served day in and day out to those in prisons and jails. The mental and physical health impacts of this poor diet create a hyper prevalence of cardiometabolic disease—and these problems are only intensified as the formerly incarcerated are denied access to public assistance and live in areas designated as "food deserts", where food insecurity is the norm. It becomes highly evident when examining the relationship between incarceration and food that the incarcerated are treated as second-class citizens in the United States in a way that contributes to lasting health disparities both inside and outside of the pejorative walls of a carceral facility.

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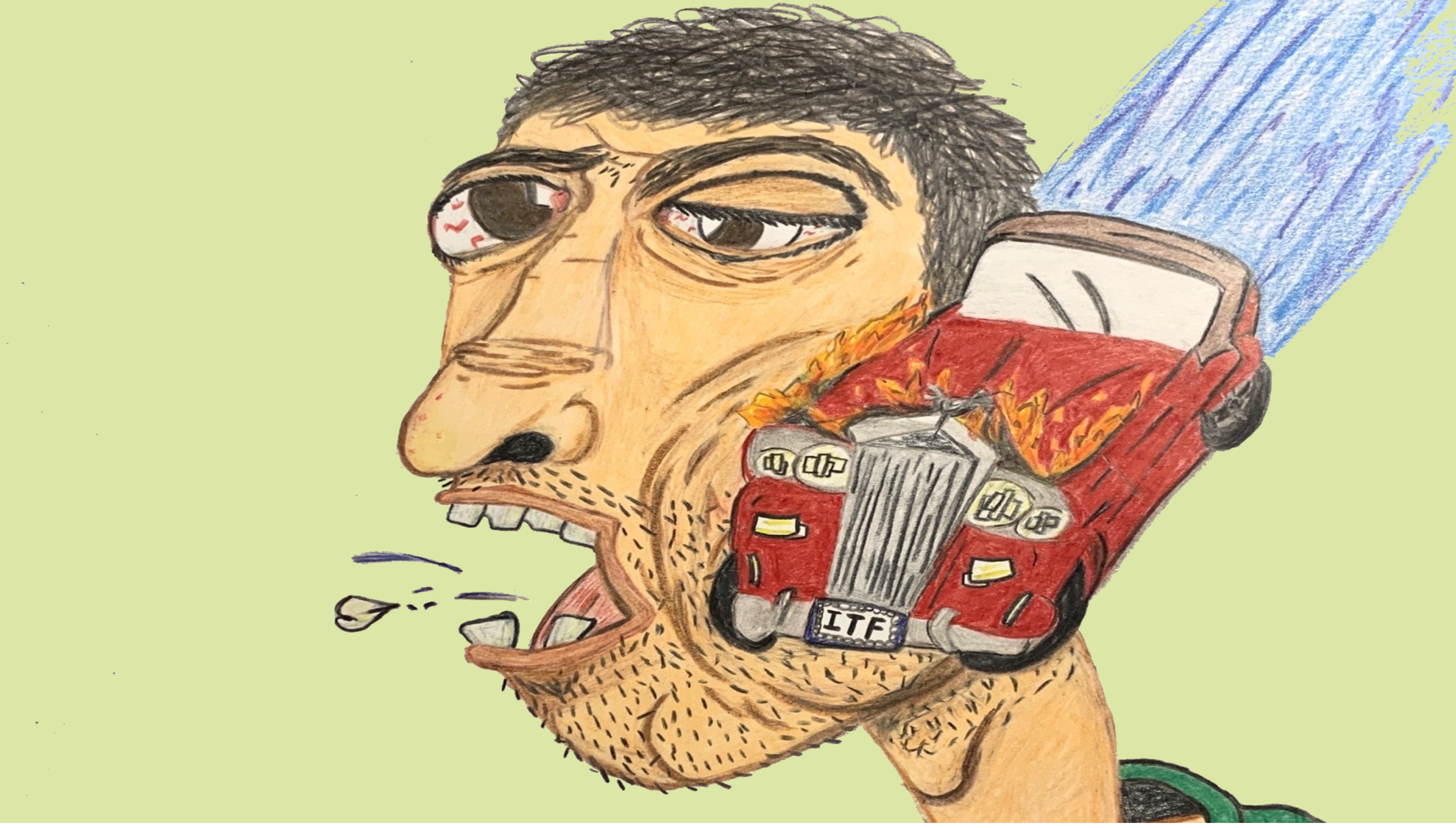

The Road to Better Health: Road Traffic Deaths and Injuries

Transportation as a Social Determinant of Health

By Arenal Haut

Illustration by Raphel Awa

About 1.35 million lives are cut short every year due to road traffic injuries, "the leading killer" of people between 5 and 29 years old.[1] An additional 20 to 50 million people suffer injuries every year.[2] Death on the Roads, a data visualization tool by the World Health Organization (WHO), provides a sobering perspective. The center of the web page showcases a countdown clock, reading "A road user will die in: ". Every 23 seconds, the timer restarts, and the death totals for today, this month, and this year rise with the latest casualty. It's impossible to watch these real-time updates and not feel compelled to do something.[3] Road traffic systems, described as "the most complex and the most dangerous" system impacting people's daily lives, are treacherous, but they don't have to be.[4] These deaths and injuries are inequitable, overlooked, and preventable.

Inequity due to socioeconomic status, both between and within countries, is a significant source of road traffic disparities. Worldwide, 93% of road traffic deaths happen in low- and middle-income countries, yet these countries have only 60% of the world's vehicles.[2] Rates are highest in Africa and Southeast Asia, at 26.2 and 20.7 deaths per 100,000 respectively, and the rates have only been increasing. From 2013 to 2018, 27 out of 28 low-income countries saw an increase in road traffic deaths.[1] Even within countries, people with lower socioeconomic statuses are the most likely to be involved in traffic incidents.[2]

Oftentimes, low-income populations are put at risk by their mode of transportation. The cheapest modes of transit relied on by many poorer communities are the highest risk. Pedestrians, cyclists, and motorcyclists are particularly vulnerable road users, and they make up more than half of all road incident deaths.[2] Public transport is also perilous. Buses in Lagos, Nigeria are known by locals as danfos, 'flying coffins', or molue, 'moving morgues', but the poorest people have no other options.[5] Ojo Iwonseyin, who commutes via the Lagos bus system, said, "Many of us know most of the buses are death traps, but since we can't afford the expensive taxi fares, we have no choice but to use the buses."[6]

Transportation is a social determinant of health, and public health should be addressing it within that framework. Despite the fact that road traffic injuries kill more people than HIV/AIDS, tuberculosis, or diarrheal diseases, public health efforts continue to ignore the impact traffic deaths have on our world and our communities.[1] Described as "the neglected epidemic," the pattern of traffic-related fatalities and injuries garner minimal media attention, despite their significant health impacts.[5]

The worst part of these fatalities is that the vast majority are preventable. Research has clearly shown that targeted efforts, such as enacting and enforcing traffic legislation, have positive health benefits.[7] Yet globally, policy efforts on this topic have been minimal.[5] The WHO has identified five key legislative categories for road safety action: speed, drunk-driving, motorcycle helmets, seat belts, and child restraints.[1] Many countries lack laws that meet these minimum safety standards. and even when such laws exist, they are often poorly enforced due to "inadequate resources, administrative problems, and corruption."[5] Inadequate licensing, both of drivers and their vehicles, is also common due to systemic failures.[5] In Lagos, Nigeria, for example, most bus drivers drive unroadworthy buses and regularly break traffic laws.[6]

After a crash occurs, poor health infrastructure and inaccessibility of healthcare contribute to worse outcomes. Medical costs remain exorbitant, and these costs are an additional barrier to care, particularly for the low-income populations most vulnerable to road-traffic-related injuries and death. In Ghana, for example, only 27% of people injured in traffic incidents used hospital services, which is in large part due to the financial barriers.[5] We must continue to strengthen healthcare systems in every country with the goal of making healthcare affordable and accessible for all. Though not a solution in isolation, this work can minimize one of the barriers facing global citizens today.

Transportation is just one sector where we can employ the Health in All Policies (HiAP) approach. With collaboration and a focus on structural determinants of health, we can understand and address the societal factors that contribute to inequities. By strengthening systems, particularly those frequently perceived as irrelevant to health, we can minimize the impacts of traffic crashes and improve outcomes across the world. Road traffic deaths disproportionately impact those with lower socioeconomic statuses, and we must act in the interest of health equity.

This isn't a new conversation. In 2004, the UN Road Safety Collaboration (UNRSC) was created, and the establishment of projects such as the Global Road Safety Initiative (GRSI), the Global Road Safety Facility (GRSF), and the Bloomberg Philanthropies Initiative for Global Road Safety followed soon after.[8-11] Community organizing around road safety has been going on for much longer. Protests such as "parent and baby-carriage blockades" were documented as early as 1949 and remained common through the 1950s and 60s.[12] This organizing intersected with other activist movements, and groups like the Black Panthers and various disability rights groups were involved in road safety actions.[13] Road safety has always been a social justice issue.

Today, we are two years into the Decade of Action for Road Safety 2021-2030, developed in collaboration by the World Health Organization, the UN Regional Commissions, the UN Road Safety Collaboration, and other partners.[14] In less than a month (May 15th-21st), the UN is holding its 7th biennial Global Road Safety Week.[15] But these efforts have garnered minimal attention within the public health field, let alone any broader media coverage in the public eye.

So let's return to the timer mentioned at the beginning of this piece.[3] At an average reading speed, this article has taken you less than four minutes to read. In that time, an estimated ten people have died due to a road traffic accident. Road safety and legislation may seem dull, but safer roads save lives.[1] Investing in traffic systems, particularly in low- and middle-income countries, has the potential to have a major positive impact. The most vulnerable members of our global community are suffering, and their deaths are preventable. Our action is required to work towards health equity.

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Using Novel Telemedicine Interventions to Tackle the Diabetes Epidemic Crippling the Navajo Nation in the Southwestern United States

By Wesley Peng
Illustration by Nikitha Bhimireddy

Diabetes is a treatable and preventable disease, but it is still the fourth leading cause of death in the Navajo Nation.[1] It is one of the leading factors contributing to disability-adjusted life-years (DALYs), and the prevalence has been on the rise ever since 1965.[2] In the Navajo Nation, the percentage of individuals with either prediabetes or diabetes has skyrocketed to nearly 50% in 2020 as opposed to the national average of just 9.4%. This increase in the prevalence of diabetes has been especially dramatic over the last decade, with costs now accounting for nearly 37% of all adult treatment expenses within the Indian Health Service.[3] Even with a high proportion of cost allocated to diabetes treatment, it still remains poorly managed, and its prevalence does not seem to be decreasing anytime soon.[4,5] With the problem of diabetes only becoming worse, finding initiatives to tackle diabetes must be of utmost priority in the Navajo Nation.

Causes of High Diabetes Prevalence

One of the main challenges in managing diabetes for the Navajo Nation comes from the fact that it is remotely situated and its health system is heavily under-resourced.[6,7] The Navajo Nation reservation mainly sits in rural Northeast Arizona, with the nearest major hospital system located around 208 miles away. Instead, the population relies on the Navajo Area Indian Health Service (NAIHS). In an area that is over 27,000 square miles, the NAIHS houses only 5 main service units.[8,9] Not only are services far away, but the NAIHS also faces a chronic shortage of physicians, especially when it comes to primary care physicians (PCPs). PCPs are the main providers of diabetes management, and the Navajo Nation is well below the 1:3000 PCP per capita threshold that designates a region as a PCP shortage area.[10,11] This problem has been further exacerbated during the pandemic as more physicians move away from the Navajo Nation. A lack of both health infrastructure and staffing means that individuals often need to travel long distances, at times over 50 miles, to receive basic diabetes care.[12,13] Further, if it is already hard to get to one diabetes appointment, it becomes nearly impossible to consistently access care in a system that is far away and overburdened. Studies have attributed this lack of access to physicians as a major reason for poor diabetes management.[1] Diabetes management in the Navajo Nation has improved with increased access to care through community health outreach. However, these programs were only temporary and lacked consistent funding.

The second major problem that leads to this high prevalence of diabetes is the lack of health literacy in the Navajo Nation.[14] Many individuals often do not understand when or where to get their treatment, resulting in their diabetes deteriorating before they seek or receive care. Many Native people are also unaware of the major risk factors leading to diabetes, including physical activity, diet, and weight.[15] In recent years, Navajo natives, especially children, have adopted a more Western diet in lieu of their traditional, more healthy diets like boiled mutton and corn.[16-18] This shift is due to not only limited environmental resources, but also comes about as the adverse effect of cultural assimilation.[17] These unhealthy habits have led to increased obesity and lethargy. Attempts at trying to solve this problem include enforcing a 2% "unhealthy food" tax within the Navajo Nation.[19] However, these efforts have not been significantly fruitful in changing behavior and still do not tackle the fundamental challenge of poor health literacy surrounding diabetes.

How Telemedicine Addresses The Diabetes Epidemic

This is where telemedicine, a low-cost alternative, can be a helpful intervention to combat the diabetes epidemic, as it has been shown to provide consistently high-quality, high-value primary care while tackling both disease management and prevention.[20,21] Telemedicine provides better continuity of care for individuals of all ages and particularly those that come from underserved backgrounds, which fits the demographics of the Navajo Nation. Not only does telemedicine improve access to care by eliminating distance barriers and providing availability to providers, but it has also been shown to improve health literacy.

Focused telemedicine that improves PCP access can significantly improve diabetes outcomes in the rural Navajo Nation. With chronic diabetes management focused on evaluative and management (E&M) services instead of procedural services, telemedicine is positioned perfectly to address chronic diabetes. Though there are some in-person tests for diabetes such as an HgbA1C (hemoglobin A1C) test, these tests can often be performed with home test kits and results can be interpreted over the phone.[22] Many studies have shown a significant improvement in continuity of care of up to 50% for diabetes management with the use of telemedicine.[20,23-25] Meanwhile, other studies indicate a 15% reduction in baseline HgbA1C levels with telemedicine. Moreover, a well-designed telemedicine system can compensate for the acute shortages of physicians, especially as we see the PCP-per-capita ratio dipping to record lows in the Navajo Nation.[26,27] It can efficiently provide diabetes management services to many patients since visits can be shorter, and this allows existing physicians to have a greater bandwidth.[28,29] Meanwhile, physicians can care for their patients at any geographical location, including across state lines. This way, the Navajo Nation can access physicians in neighboring states such as Arizona, Utah, Colorado, and New Mexico.[30] This new influx of PCP availability will allow for quality care of diabetes at a significantly lower cost than traditional visits.[31] Finally, health literacy can dramatically improve when providers include the topic in these new PCP telemedicine visits which can address both disease management and prevention.[32] For example, health education integrated into telemedicine can improve disease recognition, symptom management, and appointment cadence.[31] Through teaching about risk factors such as a healthy diet, exercise, and weight loss, doctors can instill significant behavioral changes to address diabetes risk factors. Studies have shown an uptake of preventative behaviors with the adoption of telemedicine in rural areas, which may greatly abate the issue of diabetes in the Navajo Nation.[33]

Conclusion and Implications

Overall, PCP-focused telemedicine that includes diabetes management and preventative health literacy measures will vastly benefit the Navajo Nation in tackling the diabetes epidemic. Investment and continual funding of telemedicine should prove fruitful, and further studies should be implemented to analyze the effect. Ultimately, similar practices can and should be implemented in other Native reservations across the nation that face a similarly disproportionate burden of diabetes.

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Staff Writing *Highlights*

Deadnaming: A Detriment to Modernized Medical Care

A Billionaire's Attempt to Tackle to Prescription Drug Cost Crisis America

The Reality of Maternal Health in Post-Roe America

Deadnaming:
A Detriment to Modernized Medical Care

By Jackson DeBorde

The United States is recognized as having one of the world's most advanced and personalized healthcare systems; however, the nation severely lacks in many fundamental areas of modernized medical care. While physical outcomes of health care are certainly important to determining a person's overall health, mental and environmental health components of medical care are equally important.[1] As the nation continues to move forward to support the accommodation of these aspects of everyday life, healthcare providers will need to as well. Recently, it has become evident that certain groups of patients are not receiving equitable treatment from their healthcare providers, which is causing some patients to delay or even avoid seeking care altogether.

"Deadnaming" is the act of referring to a transgender or non-binary person by the name they used prior to transitioning.[3] Deadnaming can be very harmful, even if it happens accidentally, as it can give the impression that a transgender or non-binary person is not respected. The act can also cause extreme stress for a transgender or non-binary person, as it can remind them of a traumatic time in their life before they could express their true gender identity. This feeling, known as gender dysphoria, has been known to be associated with depression and anxiety in transgender and non-binary patients.[4,5] For these reasons, many transgender or non-binary patients avoid seeking medical care for fear of being deadnamed by their healthcare providers.[2]

I spoke with Skye Baker, a young transgender man from Texas, about his experiences with deadnaming in healthcare settings:
"I am constantly deadnamed [in healthcare settings] as I don't have my name legally changed, and I fear that this will cause me some trouble in getting care. If it wasn't for me being chronically ill, I would have contemplated not seeking healthcare for the sake of the dysphoria of my deadname being shouted across the room."

For those who possess a deadname, a major issue arises at healthcare centers when their updated name or appearance does not match the name on a government-issued ID. According to the 2015 U.S. Transgender Survey, 33% of individuals that visited healthcare centers with IDs that did not match their gender presentation reported being verbally harassed, denied services, and even refused treatment by healthcare providers.[6] Some respondents even reported that they had to educate their healthcare provider about transgender people in order to receive appropriate care.[6] The survey additionally found that 23% of respondents did not see a doctor when needed due to fear of being mistreated.[6] As a result of this hesitancy towards healthcare settings, transgender patients report having higher rates of "fair" or "poor" physical health compared with cisgender patients.[6] Additionally, nearly 40% of transgender people have been found to experience serious psychological distress, which is almost eight times the average rate of the U.S. population.[6] This evidence suggests that the discrimination that transgender people encounter when attempting to access healthcare may contribute to their increased susceptibility for both physical and mental health conditions.[6]

To eliminate the disparities suffered by the transgender and non-binary communities, the United States must prioritize policies that enable these groups to feel safe and welcome when seeking medical care. This can begin with legislation that allows patients with a deadname or preferred name to make this information immediately known to their healthcare providers, and it can specifically require that their providers only use the patient's preferred name from that moment forward. The legislation should also include requirements that a patient's preferred name must be updated on all medical records, with a note for the patient's healthcare providers that the individual has an updated name that differs from the one used previously–the patient's deadname. Intentional and continued failure from a provider to use a patient's preferred name should result in a medical malpractice violation, as the intentional refusal to respect the wishes of a transgender or non-binary person can lead to the aforementioned detrimental impacts on physical and mental health.[6]

Of course, this would be a tiny step in the efforts to abolish the discrimination suffered by transgender and non-binary patients in healthcare.[7]

However, if policies supporting transgender and non-binary patients are prioritized, the country may soon see a positive change in healthcare outcomes for these communities. This policy would allow many patients to feel much more comfortable in seeking care and allow for the repairing and building of the relationships between providers and transgender and non-binary patients. If the United States is to truly become a modern and equitable place to receive health care, then our leaders must ensure all of its communities are given the opportunity to feel as though they are safe and respected.

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A Billionaire's Attempt to Tackle to Prescription Drug Cost Crisis

By Yatharth Sharma

With its launch earlier this year, billionaire Mark Cuban's Cost Plus Drug Company has attracted widespread attention. Some researchers have claimed that the startup could save Medicare, the government insurance program mainly targeting the elderly, billions of dollars per year.[1] In its current state, the United States drug market holds many drugs that are unaffordable to consumers.[2] Many critical, life-saving drugs for illnesses like diabetes are sold at outrageously high prices due mainly to patents that large drug manufacturers hold over their drug's production process.[3] The extremely inelastic nature of those drugs' demands ensures that those manufacturers make a hefty profit at the expense of the consumers, many of whom are either uninsured or under high deductible insurance plans.[3] The Cost Plus Drug Company seeks to solve this problem of exorbitantly high out-of-pocket costs for consumers by eliminating excess marginal costs, cutting profits, and selling the drugs at more affordable prices.[1]

Selling a drug normally priced in the hundreds of dollars to something under fifty dollars requires the company to cut costs creatively. To start, unlike many other private corporations, the venture has not spent any money towards advertising, using the saved money towards keeping the cost of their drugs low.[6] The lack of advertising comes with consequences, with the company relying heavily on word of mouth and personal testimonials on social media, hindering its outreach to many, especially those in underserved areas. Furthermore, the company sells the generic version of many types of medications, which are much cheaper and chemically the same as their branded counterparts.[5] According to the US Food and Drug Administration, generic drugs are about eighty percent cheaper than the brand name versions. Currently, Cost Plus is selling more than 700 generic drugs across a span of illnesses.[4]

The pricing scheme of Cost Plus is fairly straightforward and aims to limit the nuances that often result in increased prices. For all drugs sold, the company charges the cost to manufacture the drug plus a fixed fifteen percent to compensate for company costs and then any pharmacy fee.[6] In contrast, pricing for drugs has historically been incredibly intricate, with consumers having little knowledge of how companies decide cost.[3] For instance, pharmacy benefit managers, an intermediary between the consumer and the drug manufacturer, with their rebate system, contribute to increased drug prices for consumers.[3] In working to be transparent in their pursuit to lower costs, Cost Plus's example is a jarring juxtaposition to the otherwise convoluted practices of the drug industry.

The American drug industry with all its outrageous price hikes and monopolistic characteristics has provoked the private sector to take charge in correcting the shortcomings in the quintessential American way: a competitive market. While Cost Plus is unlikely to suddenly give all Americans access to necessary, life-saving drugs at an affordable price, it is widely seen as a step in the right direction as it may disrupt the United States drug pricing by inspiring more private ventures to enter the market, allowing Americans to purchase necessary drugs at affordable prices.

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The Reality of Maternal Health in Post-Roe America

By Simran Singh & Nina Faynshtayn

In the wake of the Supreme Court Dobbs v. Jackson Women's Health Organization decision to overrule Roe v. Wade and Planned Parenthood v. Casey, there has been a significant shift in the landscape of abortion in the United States. At least 13 states implemented "trigger laws" to make abortion illegal or inaccessible once Roe was finally overturned.[1] Six months later, this decision continues to have long-standing consequences for people, disproportionately impacting low-income, disabled BIPOC and LGBTQ+ communities.[2,3] In a country that constantly lags behind its peers in maternal mortality, what does this decision mean for pregnant people and our fragile healthcare system?

Access to safe and quality abortion care is just as essential as any other basic maternal health service. As student leaders of Brown Students for Saving Mothers, we operate a chapter of an international nonprofit organization of physicians, midwives, community health workers, and other allied health professionals working with governments and local organizations toward eradicating preventable maternal deaths and birth-related complications in low-resource settings.[4] Our student organization focuses heavily on understanding and improving maternal health outcomes, which is inextricably tied to improving reproductive health decisions concerning one's body. Hence, we recognize the devastation of the Supreme Court's decision on the U.S. maternal health crisis and, therefore, the importance of raising awareness of abortion and maternal health, particularly at an elite, privileged institution like Brown.

First and foremost, it is crucial to understand the impact of abortion bans on the physical and social conditions of pregnant people. Following the decision to overrule Roe, researchers predicted that maternal mortality would increase by 24% overall, with a 39% increase among non-Hispanic Black people.[5] Black women are three to four times more likely to die from pregnancy complications than white women, and Indigenous women are more than two times more likely to die from pregnancy complications, such as eclampsia, than white women.[6,7] In states with high abortion rates and maternal mortality rates, maternal deaths are projected to increase by 29%.[5] These increases are likely due to increases in forced high-risk pregnancies, unsafe abortion, and intimate partner violence, not to mention a decrease in abortion providers due to fear of criminal liability.[5] Further studies show that women who were denied abortion care and gave birth instead were more likely to have poor physical health (i.e., chronic migraines, joint pain, and gestational hypertension), suffer from elevated anxiety levels, and remain trapped in poverty.[8] Carrying a pregnancy to term is markedly more dangerous–14 times riskier–than a wanted abortion.[9] The verdict is clear: being pro-abortion is the only way to care for pregnant people.

Healthcare providers are also undoubtedly struggling with the effects of a post-Roe world. As of In October 2022, about 100 days since Roe v. Wade was overturned, over 66 clinics across 15 states have stopped providing abortion care, and this number continues to rise.[10] As some clinics are shutting down, others are overflowing. Before the overturning of Roe v. Wade, Dr. Katie McHugh, an OBGYN, saw 15 to 20 patients for abortions every day. After the Supreme Court decision, however, she had seen up to 50 patients before Indiana's abortion ban was set to take effect.[11] Abortion clinics are seeing an increase in out-of-state patients from states with abortion bans, causing increases in wait times and delaying care. Patients are forced to delay their abortion to later in their pregnancy when costs are higher and treatment is more complicated.[12] To put it simply, abortion providers and clinic staff are overwhelmed.

While knowledgeable of the medical aspects of abortion and reproductive care, healthcare professionals are unsure how to interpret the corresponding laws. During a House subcommittee meeting on the overturning of Roe, Dr. Nisha Verma–an OB/GYN and a fellow of Physicians for Reproductive Health–discussed that she was unsure whether she would be able to provide abortions in the case of pregnant people with pulmonary hypertension, those with a 50% death risk if the pregnancy is pursued.13 Furthermore, when considering medications such as methotrexate that can treat ectopic pregnancies, it is crucial to recognize that this drug is also used in treating cancer and autoimmune diseases; the future of its usage is unclear.[13] Some forensic nurses who perform rape kits and care for people who have experienced sexual assault have stopped providing emergency contraception, fearing it would be considered an abortion medication.[14] With threats of felony charges now present, many doctors and healthcare professionals are unsure how to help their patients. Their anecdotes clearly demonstrate how abortion restrictions in the law have altered the medical landscape. In what cases can abortion truly be considered a right? Medical professionals must grapple with these questions, both in terms of abortion as a right and as an accessible procedure. At the core of the issue is the chasm between having the right to perform an abortion and having the means to perform one.

In theour state of Rhode Island, the Reproductive Privacy Act of 2019 codified the right to abortion in state law.[15] However, exercising the right to abortion in the state is a different story. Many harmful laws–even in states where abortion is still legal–restrict insurance coverage of abortion care. The Hyde Amendment passed in 1976 prohibits using federal funds for abortion; this ultimately prevents people on state employee insurance or Medicaid from using their insurance to cover the costs of abortion.[16] In Rhode Island, nearly 1 in 3 residents are prevented from using their insurance to cover abortion.[17] Low-income people of color with the fewest resources pay the steep price of abortion inaccessibility.

As Brown students who have an impact, we must better understand local politics and healthcare. In the new legislative session, the Equality in Abortion Coverage Act (EACA)–introduced by Senator Valverde and Representative Liana Cassar–will add abortion coverage to the state Medicaid program, if enacted by the State of Rhode Island General Assembly.[18] Now is a better time than any to act. The cause for equitable abortion access is one that any student–from any background–can champion. For some, this may look like testifying in the upcoming legislative session or joining Brown-affiliated, and non-Brown-affiliated, organizations focused on reproductive and racial justice. Students with financial means can also focus their efforts on supporting local abortion funds. Abortion funds–independent, grassroots organizations–work tirelessly to fill in the gaps in abortion care, primarily by providing financial and logistical assistance, including the cost of abortion pills, travel, and lodging.[19]

Ultimately, we envision a world where cost and strict laws are not barriers to basic care, and we hope others will start to do so too. While Saving Mothers may appear to be confined within the realm of public health or medicine, it spans numerous sectors and fields that students actively pursue, including but not limited to politics, sociology, economics, and gender studies. Regardless of what field or career one decides to pursue, Brown students have the power to support pregnant individuals and abortion seekers in the country.

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