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INTRODUCTION

Health Equity

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Health equity is a state where everyone has equal ability to achieve their best health, with no disadvantage due to social status or socially determined factors. For example, many racial and ethnic minorities in the United States face more severe health outcomes that cannot be explained by underlying biologic mechanisms and are instead due to social factors that perpetuate health inequities in these populations. Questions about health equity have garnered additional attention as the COVID-19 pandemic has demonstrated how devastating disparities in access to care and numerous other factors can be to the health of underprivileged communities [1]. Although COVID-19 has brought health equity front and center in the US, health inequities are not a new problem. The disparity in HIV/AIDS diagnoses and mortality among African Americans has increased over time – in 1987, Black individuals diagnosed with HIV/AIDS had three times the mortality rate of White individuals. However, by 2011, the mortality rate among Black individuals had increased to eight times that of Whites [2]. Health inequities are not unique to the United States either. The *YJBM* September 2021 focus issue attempts to explore the breadth and complexity of health inequities research in the US and abroad. The work included in this issue explores how different factors – race/ethnicity, gender, place, access to care – are related to health inequities as well as discussions of how different systems can improve or perpetuate these inequities.

An oft discussed facet of health equity is how different access to healthcare and differential interactions with the healthcare system can perpetuate inequities. Mirza et al. explore this in their manuscript studying the dermatologic health needs of uninsured peoples in New Haven, Connecticut. Lack of insurance or inadequate insurance can lead to extreme difficulty in accessing healthcare, particularly specialty and preventative care like dermatologic screenings and treatments. Mirza and colleagues demonstrate the feasibility of addressing this gap among the uninsured through a partnership between a student-run free clinic in New Haven and the Department of Dermatology at the Yale School of Medicine. Unfortunately, even when patients are able to interact with the healthcare system, underlying biases can perpetuate inequities. In a reflection on his own experience, Arkfeld explores how implicit and explicit biases can influence provider perceptions of how "sick" or "well" patients are and how that perception can lead to inequities in patient care.

A key area of research in health disparities is identifying risk factors – we may observe inequities based on factors like those listed above but in order to address these we must first understand why we are observing these inequities. Archibald observed that there are racial disparities in rates of work-related stress and post-traumatic stress disorder (PTSD) in the US, with Black adults experiencing higher rates of both. While work-related stress is a known risk factor for PTSD, through a cross-sectional analysis of nationally representative data, Archibald found that depression, alcohol use, and discrimination may mediate this relationship among Black adults. The author calls

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Abbreviations: PTSD, post-traumatic stress disorder.

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for culturally informed interventions and policies for Black adults to address the higher rates of work-related stress and PTSD in this population. Astutik et al. further demonstrate how the risk factors for a given disease can differ by population, perhaps perpetuating inequities. In their study, Astutik et al. found a higher prevalence of hypertension among elderly women in urban areas compared to rural areas in East Java, Indonesia, but that the risk factors associated with hypertension were different in these two populations. Understanding how and why the prevalence of disease differs in different populations is key to understanding how to improve health for all.

Health disparities are rarely driven by a single factor and untangling these complex webs often involves looking across the body of literature. The high prevalence of lung disease in Central Appalachia in the Eastern United States is predominantly attributed to occupational exposures and environmental exposures as a consequence of the centrality of coal mining in these communities. However, in a review of lung disease in Central Appalachia, Debolt et al. demonstrate how worse pulmonary health outcomes in this population is influenced by a number of other social and economic factors, such as educational disparities, poverty, and access to healthcare and how these factors are intertwined with the environmental exposures to produce health disparities. The variety of factors that contribute to COVID-19 health inequities may be better understood through the lens of historical inequities present among other viral infectious diseases. This is the approach that Bazan and Akgün take to sift through the racial and ethnic health disparities among COVID-19 vaccination rates. In their narrative review, Bazan and Akgün use evidence of racial and ethnic disparities in seasonal influenza vaccination rates to provide recommendations for improving COVID-19 vaccine uptake in Black, Indigenous, and Latinx communities.

Understanding and combating health inequities is not just the domain of health researchers and healthy systems – just as the factors that lead to health disparities are many and varied, so too must be the actors who contribute to achieving health equity. There is a role for many different fields – policy, government, education, etc. and at the *Yale Journal of Biology and Medicine* we believe that academic journals can also play a role. We hope through this focus issue as well as future issues of the journal highlight important research being done to address health inequities both in the United States and abroad. We aim to address and reduce biases and inequities in our own publishing practices and promote equity in health research and beyond by making our articles available open-access, encouraging new researchers to publish, and prioritizing research that addresses the importance of health equity across scientific disciplines.

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