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Global disease burden and advocacy: A comparative analysis of the global response to tuberculosis versus COVID-19

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Introduction

In a world that is more interconnected than ever, it is vital to understand that "global health is more than just 'public health somewhere else" [1]. Global health challenges that appear in one part of the world now have the potential to have a global impact due to the rise in globalization, where "nations, businesses, and people worldwide are becoming more connected and interdependent" through increased travel and trade [2]. As such, all nations have the responsibility to collaborate, share scientific evidence and treatment strategies to manage and implement solutions to global health challenges and ensure the health of all people worldwide. However, the widening divide between the Global North and the Global South has increased disparities in the way global health challenges are experienced and addressed.

This paper examines the differences between the burden of tuberculosis (TB) disease and the coronavirus disease 2019 (COVID-19) in the Global North and the Global South. Specifically, this paper assesses the influence of the global funding landscape and the role of health systems on the global response in disseminating scientific evidence and the nature of advocacy to address these issues.

Tuberculosis and COVID-19 are respiratory infectious diseases, both of which affect the lungs, and are the top two leading infectious

killers in the world, however, the similarities end there [3,4]. While both diseases are prevalent in countries worldwide, the burden of each disease varies in the concentration of cases by global region. While TB infections and deaths are more concentrated in low- and middle-income countries (LMICs) in the Global South, data suggests that COVID-19 deaths are more concentrated in the Global North [3,5]. Unfortunately, this regional difference in the burden of disease exposes more significant differences in the approach to the use of scientific evidence and the nature of advocacy to tackle each disease.

Burden of disease and the global funding landscape

In 2020, funding in LMICs for TB drastically decreased to under half of the global target [6]. While there was an increase in the lack of funding, the burden of TB remained high in the Global South. In 2020, approximately 10 million people were diagnosed, and 1.3 million people died of the disease globally [6]. Meanwhile, in the same year, the COVID-19 pandemic raged across the world. It was estimated, based on global excess mortality rates, that almost three million people died, with the greatest burden experienced by the World Health Organization (WHO) regions of the Americas and Europe [7].

It was estimated that 5.3 billion USD was provided in funding for TB management and elimination in 2020, and that the funding that

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was received was primarily from domestic sources [6]. Meanwhile, also in 2020, global commitment for COVID-19 funding exceeded 20 trillion USD [8]. The disparity in funding to tackle each of the two diseases and the regions with the greatest burden of disease makes it evident that the Global South often suffers disproportionate consequences of global health challenges. This is also evident through global vaccine production and equity, where TB has only one licenced vaccine available for treatment since its development over 100 years ago in 1921, as compared to COVID-19, which has 11 vaccines developed since the start of the pandemic in 2019, all granted for emergency use by the WHO [6,9].

Tuberculosis has held a significant burden of disease in global health; however, it has neither had the same level of scientific evidence to support its management and elimination strategies, nor the same level of advocacy to tackle the disease. Current strategies for its prevention, diagnosis and treatment are highly outdated and more funding is required for basic research in the Global South [10]. Advocacy for ТΒ is also significantly underfunded, especially compared to COVID-19.

Comparatively, in Global the North, governments, non-governmental organizations, and philanthropic organizations are a few donors that have contributed funding to vaccine development and health impact and outcomes research for COVID-19 [8]. Funding has also been contributed to advocacy efforts to raise awareness through scientific evidence with the support of medical experts, both through research publications and social media outlets. This level of research and advocacy for TB is lacking in the Global South.

Burden of disease and health systems

In addition to the disparity in commitment to funding in the Global North versus the Global South, the strength of health systems in the regions with the greater burden of disease impacts the scientific evidence and nature of advocacy. Within the health systems, financing, access to treatment tools, and service delivery responsiveness the and the impact population's health outcomes [11]. In the COVID-19 pandemic, there is clear evidence of the positive impact of collaboration between governmental and non-governmental sectors to bolster the health systems in the Global North to improve care for the population. The same cannot be said for TB, as the lack of external funding outside of domestic sources has raised the potential of increasing "the fragility of national health systems" in the Global South [12].

Dr. Tedros Adhanom Ghebreyesus, WHO Director-General recognized the "lack of political will" as one of the main challenges to fighting TB [13]. This lack of political commitment, specifically to transform health systems, has weakened local collaboration and dissemination of scientific evidence, thus weakening the response to tackling TB. Although the Global North and the Global South both experience challenges related to the burden of disease, the disparity in the response lies in the strength of the health systems within each region, which impacts scientific evidence and advocacy to tackle each health challenge.

Conclusion

As the world is becoming increasingly interconnected, a health challenge in one region, if not managed and eliminated, has the potential to become a challenge in all regions of the world. While disparities currently exist in

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the way diseases are tackled in the Global North and the Global South, it is essential to recognize and acknowledge these differences. By doing so, nations can work towards reevaluating strategies to manage global health challenges, and towards successful priority setting that ensures collaboration and just allocation. Political resource will and commitment to health equity can bridge the widening gap, encourage the dissemination of scientific evidence, and strengthen advocacy efforts on a global level to improve the health of all people worldwide.

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