Global Health Disparities: A Pressing Issue and a Student-based Initiative to Help

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David Ripsman[1], Philip Chkipov[1], Kelsie Ou[1], Isabel Shamsudeen[1], and Mehr Jain[1]

[1]Faculty of Medicine, University of Ottawa, Ontario, Canada

ABSTRACT

Developing countries, such as India, suffer profound healthcare disparities compared to developed countries. This commentary explores these healthcare disparities, the barriers to improving healthcare in developing countries, and potential solutions to address these barriers. As an example of a medical student initiative, we highlight a not-for-profit organization that we started with a group of University of Ottawa students, Heart 2 Heart: International Healthcare Relief. Heart 2 Heart provides students at Ontario Universities an opportunity to support the health of low-income individuals in India, Morocco, and Bangladesh.

RÉSUMÉ

Les pays en développement, tels que l'Inde, souffrent de profondes disparités en matière de soins de santé par rapport aux pays développés. Ce commentaire explore les disparités en matière de soins de santé, les obstacles à l'amélioration des soins de santé dans les pays en développement et offre des solutions pour y remédier. À titre d'exemple d'initiative d'étudiants en médecine, nous mettons en évidence une organisation à but non lucratif que nous avons créée avec un groupe d'étudiants de l'Université d'Ottawa, « Cœur à Cœur : Aide internationale en matière de soins de santé » (soit « Heart 2 Heart : International Healthcare Relief »). Cette initiative offre aux étudiants des universités de l'Ontario l'opportunité de soutenir la santé des personnes à faible revenu en Inde, au Maroc et au Bangladesh.

One afternoon in a hospital in rural Rajasthan, India, a family rushed their 22-year-old son, Arjun, to the hospital*. A team of doctors and nurses were waiting for him at the door. Four hours earlier, his family found him paralyzed from a stroke. Arjun was rushed upstairs to the only ward in the hospital. There was a frenzy of activity around him, with healthcare staff using every intervention available in an attempt to save this young man's life. However, many healthcare services in India must be paid out-of-pocket. Arjun's family was poor and could not afford the expensive medication that would dissolve the clot in his brain. After three days of treating him with supportive measures, a doctor had a heart-breaking conversation with Arjun's family. There was sadly no longer any hope for Arjun's

recovery. There was no choice but to remove him from life support, and he tragically passed away. Arjun's tragic and preventable death is a commonplace occurrence in a system where many die from preventable or treatable illnesses (1).

THE SCOPE OF HEALTHCARE INEQUALITY IN INDIA

India has a shockingly low average life expectancy of 69 years, in contrast to 82 years in Canada (2). India's life expectancy is higher than the average life expectancy for low-income countries of 63 years (2). However, death due to preventable or treatable diseases is a major contributor to India's low life expectancy. Like Arjun, a staggering 2.4 million Indians die of preventable or treatable conditions every year (1). For example, cardiovascular disease (CVD) accounts for 25% of all mortality in India. However, the vast majority of CVD patients are not on any evidence-based secondary prevention therapies (aspirin, beta blockers, angiotensin-converting enzyme inhibitors, statins) because patients cannot afford to pay out-of-pocket for them (3). Many of the problems with the Indian healthcare system stem from a simple reason: it is grossly underfunded. India spends only 5% of its annual gross domestic product (GDP) on healthcare, a far cry from Western countries, where the expenditure is often more than 10% of GDP (4). As a result, access to healthcare services in India is extremely limited, and many services lack appropriate equipment, healthcare staff, and medications (4). Only 22% of public healthcare centers have adequate supplies of necessary drugs in India (4). Consequently, much of the burden for healthcare payments falls on individual families; more than 3.1 million households in India are forced below the poverty line each year by their hospital fees (1).

HEALTHCARE DISPARITIES WITHIN CANADA

With such overwhelming disparities present in India as well as many other countries, it may feel more constructive to focus on our own backyard first. Despite increased public awareness and advocacy efforts, healthcare discrepancies across regions and demographics in Canada still exist. 13% of Canadians are unable to access necessary healthcare, with poorer Canadians more likely to struggle with access (5). Moreover, there is a 14% higher death rate among Canadians living in the most remote parts of Canada (6). These statistics are sobering and as a result, we may feel more inclined to pass up opportunities to aid those in other countries in favour of helping our own. However, as unacceptable as the mortality rate is among the most remote populations in Canada, the average mortality rate among adults in India is almost 200% higher than these remote regions of Canada (7). The shortcomings of the Canadian healthcare system are important issues that must be addressed; at the same time, deficiencies in healthcare in developing countries that lead to millions of preventable deaths every year cannot be overlooked either.

EXISTING BARRIERS TO IMPROVED HEALTHCARE IN DEVELOPING COUNTRIES

Improving healthcare in low-income countries to reduce disparities in health outcomes does not have a simple solution. Healthcare services are resource intensive and some services are beyond the means of low-income countries. One approach to address this inequality is to raise funds for low-income countries through foreign donations. However, foreign donation is a complicated process characterized by unique rules in every donor and recipient nation. The importance and challenges associated with the use of foreign aid for funding healthcare in developing nations was highlighted in a 2018 press release by the Organization for Economic Co-operation and Development (OECD) (8). The OECD release suggested that low-income nations may be able to increase the magnitude of private donations they receive for the development of infrastructure for key sectors, including the healthcare sector, by creating an 'enabling environment' for donation (8). The OECD suggests that low- income countries adopt charitable law more consistent with Western nations, provide tax incentives for donations, and provide more detailed data about their local initiatives in order to receive more financing (8). The OECD report does not comment on the equally crucial foreign donation policies in developed nations, where most donations originate (9,10). In developed countries, like Canada, grants are primarily tailored to enriching local communities, and the Canadian government only lists a handful of foreign charities as eligible for donation (11,12). Increased ease of donating abroad for individuals in wealthier nations is crucial to help address the massive inequities that exist in countries with less access to healthcare (13).

The effectiveness of foreign aid has often been called into

question. Conventional wisdom suggests that countries should focus locally, and that foreign donation is not helpful or is even harmful (14,15). However, it is becoming increasingly clear in recent years that both government-sponsored foreign aid and private donations can be invaluable tools in the fight for improved healthcare in low-income nations. Many detractors of foreign aid have suggested that it may reduce the receiving country's domestic spending in critical industries and ultimately deprive domestic development, a phenomenon referred to as 'crowding out'. However, a recent analysis of healthcare coverage in rural Rwanda showed that foreign aid was positively associated with government investment, which refutes the claim that foreign aid crowds out domestic spending (16). Governmental foreign aid is also crucial to reduce mortality rates in resource-poor countries. In a study of 140 foreign aid recipient countries, the level of governmental aid provided to a country was associated with decreasing levels of infant mortality and increasing life expectancy (17). These associations between foreign aid and decreased mortalities have become more tightly correlated, suggesting that the governmental aid has been utilized increasingly effectively in recent years (17). Aside from governments, the other large source of foreign aid are private donors, who provide billions of dollars every year to support healthcare in lower income countries (18).

Many lower income countries rely on private donations from individuals to provide a sizable portion of their overall healthcare funding (19). Private donations have proven critical for developing life-saving healthcare initiatives in low-income countries (20,21). However, the current level of philanthropic donation for global healthcare fails to meet the World Health Organization's (WHO) funding goal for global healthcare development, given the immense need for more healthcare financing in low-income countries (22,23). In the modern era, foreign aid appears to be an unambiguous force for the betterment of humankind, which has saved millions of lives around the world (16). There is an urgent need to increase foreign donation to help meet the WHO's healthcare goals and save millions more lives (23).

THE ROLE OF MEDICAL STUDENTS IN ADDRESSING GLOBAL HEALTHCARE INEQUITIES

Within this byzantine legal and geopolitical context, the extent of healthcare disparities in low-income countries can seem like an immense issue to address. It may, therefore, seem naive to expect that medical students can play a significant role in this challenging environment. However, it is important not to discount the agency of medical students. In fact, there are many ways we can help, and the story of Heart 2 Heart is a testament to the determination of students at the University of Ottawa to improve global health, despite the entrenched barriers complicating foreign donation.

Three years ago, Mehr Jain, a medical student at the University of Ottawa, witnessed Arjun's tragic circumstances and eventual death while on an observership. She was later appalled to learn that such stories were all too common in parts of India, where patients and families frequently were unable to afford life-saving medications. Upon her return to Canada, she shared her experiences with her closest classmates and together, the group envisioned a not-for-profit organization that aimed to address healthcare discrepancies in developing countries. Motivated to interrupt this cycle of preventable tragedy, this team founded Heart 2 Heart: International Healthcare Relief (official website: http://h2hihr.squarespace.com/). Heart 2 Heart's mission is to aid in addressing global healthcare inequity while enhancing our local community in Canada. To date, Heart 2 Heart has partnered with four organizations, namely DDMM Institute of Cardiology and Cardiovascular Surgery in India, Mahavir International in India, the Pediatric Palliative Program in Bangladesh, and the Hassan II Hospital in Morocco. Heart 2 Heart raises money through local fundraising initiatives and then transfers funds overseas to their partner organizations.

In the past couple of years since it was founded, Heart 2 Heart has raised funds to purchase a multitude of vital goods and services for patients in financial need, including baby kits for new mothers to allow for a higher quality of sanitation, medications, food, and transportation for patients of low socioeconomic status to receive critical health services. Heart 2 Heart has raised approximately $4000 for these charities to date and laid the groundwork for continued support of these charities. At the same time, Heart 2 Heart has also shaped the local community by providing mock medical school interviews, student mentorship programs, educational workshops, affordable lunches, fitness classes, and leadership opportunities to

medical and undergraduate students.

Heart 2 Heart has established itself as a registered not-for-profit organization in Canada and has applied for charitable status. The organization's application for charitable status has been significantly complicated by the legal restrictions in Canada on charitable donations to foreign institutions**, an obstacle representative of the current lack of government policy supporting foreign donations discussed previously. Despite this setback, Heart 2 Heart continues to persevere to obtain official status; in fact, its application has been submitted and is currently being reviewed for approval. The organization is run entirely on a volunteer basis and one of its core principles is maximizing the amount of its proceeds, which are used to improve patient care***.

CONCLUSION

India's healthcare struggles are emblematic of a global issue. There are dozens of countries with lower life expectancies than India (2). A 2019 WHO report highlights that at least half of the world's population does not have full coverage for essential health services, with millions continuing to be pushed into extreme poverty paying for healthcare expenses (24). This means tens of thousands of lives like Arjun's are being cut short due to treatable diseases every day. Many of the treatments they need are inexpensive and otherwise accessible if not for the patients' financial barrier.

Heart 2 Heart is one example of how positive change can be enacted by a small group of medical students with passion and vision, demonstrating that one can help another's community while simultaneously supporting their own. However, Heart 2 Heart was one group of medical students' solutions and is certainly not the only feasible solution out there. It is imperative that, as members of the Canadian healthcare community, we do not allow geopolitical borders to prevent us from helping those in the greatest need.

There is a wellspring of untapped potential for medical students to shape communities and help individuals - even those that are thousands of miles away. It may simply take a bit of creativity and commitment to see it through.

*Names and locations have been changed to protect anonymity

**The legal restrictions mentioned here include the requirement that the applying organization must have direct control of all raised funds even if the money is transferred to (and therefore ultimately managed by) other organizations with charitable status in their regions, as is the case with Heart 2 Heart and its partner organizations. This poses a challenge as it requires the development of sophisticated and redundant organizational infrastructure within Heart 2 Heart to address the problem.

***Heart 2 Heart and other philanthropic organizations like it need the help of passionate individuals to continue to operate. If you are interested in working with Heart 2 Heart, please consider emailing (Heart 2 Heart at heart2heart.ihr@gmail.com). Financial support can be provided for the work Heart 2 Heart carries out through our website (http://h2hihr.squarespace.com/donate).

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