



# Low-wage migrant workers during coronavirus disease 2019: a social determinants analysis

Amarasinghe Arachchige Don Nalin Samandika Saparamadu<sup>1,6</sup>  ·  
Albie Sharpe<sup>2</sup> · Sun Kim<sup>3</sup> · Bruna Ligia Ferreira Almeida Barbosa<sup>4</sup> ·  
Adrian Pereira<sup>5</sup>

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## Abstract

The severe acute respiratory syndrome coronavirus 2 pandemic has had disproportionate effects on economically and socially marginalized people. We explore the effects on low-wage migrant workers (migrant workers) in three countries: Singapore, South Korea and Brazil, through the lens of the social determinants of health. Our analysis shows that governments missed key opportunities to mitigate pandemic risks for migrant workers. Government measures demonstrate potential for effective and sustainable policy reform, including universal and equitable access to health-care, social safety nets and labour rights for migrant workers—key concerns of the Global Compact for Migration. A whole-of-society and a whole-of-government approach with Health in All Policies, and migrant worker frameworks developed by the World Health Organization could be instrumental. The current situation indicates a need to frame public health crisis responses and policies in ways that recognize social determinants as fundamental to health.

**Keywords** Low-wage migrant workers · Social determinants of health · Health policy · South Korea · Singapore · Brazil

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✉ Amarasinghe Arachchige Don Nalin Samandika Saparamadu  
samandika@icloud.com

<sup>1</sup> Doctor Anywhere Pte. Ltd., 30A Kallang Place, #11-06, Singapore 339213, Singapore

<sup>2</sup> School of Public Health, The University of Technology, Sydney, 15 Broadway, Ultimo, NSW 2007, Australia

<sup>3</sup> Health Policy Research Center, People's Health Institute, Sadangro 13-gil 36, 2nd floor, Dongjak-gu, Seoul 07004, South Korea

<sup>4</sup> Federal University of Espirito Santo, Marechal Campos 1468, Vitoria, ES, Brazil

<sup>5</sup> North South Initiative, A-2-7 Pusat Perdagangan Seksyen 8, Jalan Sg Jernih 8/1, 46050 Petaling Jaya, Selangor, Malaysia

<sup>6</sup> 73 Oxley Rise, The Rise @ Oxley, #10-12, Singapore 238699, Singapore



## Introduction

Migrant workers comprise a group that is highly vulnerable to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the disease it causes, coronavirus disease 2019 (COVID-19), and its socio-economic effects. We examine the effects of the COVID-19 pandemic on low-wage migrant workers (hereafter ‘migrant workers’) through the lens of social determinants of health (SDoH) based on three case studies from Singapore, South Korea and Brazil. We define migrant workers as those who move away from their places of usual residence, within a country (internal) or across an international border, temporarily or permanently, for the purpose of employment [1]. Low-wage workers are commonly defined as workers earning less than two-thirds of the median wage of equivalent full-time local workers [2].

According to the World Health Organization (WHO) Commission on the SDoH, health inequities arise as a result of the “circumstances in which people are born, grow, live, work and age and the systems put in place to deal with illness” [3]. The SDoH lie at the root of the inequities in health and are relevant to both communicable and noncommunicable diseases. These factors are shaped by political determinants—the global, national and local distribution of money, power and resources—requiring engagement of sectors other than health to improve health and reduce vulnerabilities [4].

A succession of international and regional agreements and mechanisms by the United Nations (UN) and other international organizations have been instrumental in framing migrant workers’ issues [5, 6]. The 2018 Global Compact for Safe, Orderly and Regular Migration (GCM), a non-binding agreement endorsed by the United Nations (UN) General Assembly, calls for a whole-of-government and a whole-of-society approach to all dimensions of migration including the migration cycle and migrant workers. The migration cycle can be defined as the process of migration from a country of origin to a destination and vice versa. The cycle includes pre-departure, departure, short-/long-term transit, temporary or permanent resettlement, return to the country of origin and remigration (departure) [7].

The GCM is also consistent with the Health in All Policies approach developed by the World Health Organization (WHO) and employed in their migrant worker framework [8]. These documents provide a pathway for healthcare workers and others to engage with migration issues.

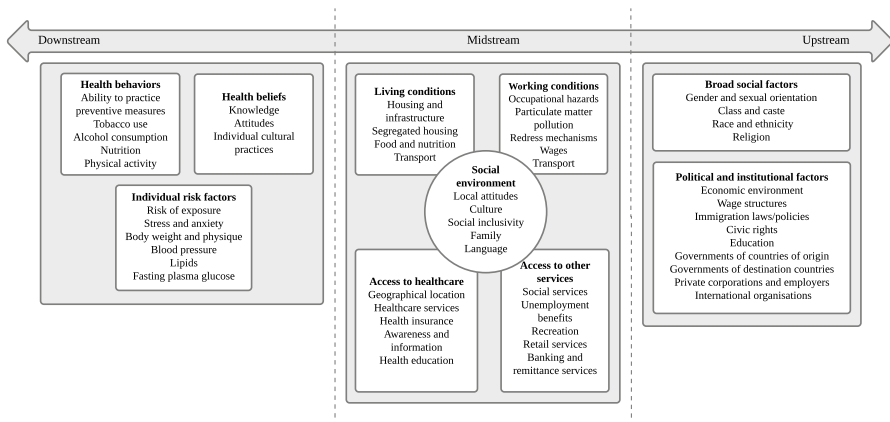
Research by Castaneda and colleagues in the last decade established the importance of migration as a SDoH [9]. They argue that migration is both a consequence of the social determinants and itself a SDoH that creates profound challenges for individuals and communities, with ongoing social, economic and health ramifications. These authors maintain that relationships between migration and SDoH are multi-causal and complex, and that more attention needs to be paid to the structural determinants. The 2018 UCL-Lancet Special Commission on Migration and Health study emphasized the lack of safety nets, safety at work, rights and social support for migrant workers, and the effects of these on their health, as well as the links between migrant workers and globalization,



supply and demand [7]. These findings highlight the implications of ‘upstream’ social and political determinants on migrant workers’ health. ‘Upstream determinants’ can be described as overarching factors that are largely beyond the control of the individual and have significant influence over more proximal or ‘downstream’ determinants of health [10]. Upstream determinants have been referred to as social disadvantage, risk exposure and social inequities that play a fundamental causal role in poor health outcomes [11, 12]. Thus, they represent important opportunities for improving health and reducing health disparities [12]. The experiences of low-wage migrant workers have been neglected in previous studies [13], a major oversight considering the increased health and other risks.

We conducted a literature review to examine the question: In what ways can the social determinants of health be used to assess effects of the COVID-19 pandemic on the health and wellbeing of low-wage migrant workers? We chose Singapore and South Korea as they are destination countries for migrant workers; we chose Brazil as both a destination and dispatch country. The choice of these cases was both purposeful and a convenience sample—for each country, there are differences in the roles of migrant workers, legal and health structures and responses to the pandemic. These countries also took different approaches to the implementation (or not) of the GCM.

We undertook a document analysis to gather information on demographics, healthcare, government policies, civil society context and working and living conditions from the three countries for use in the analysis. Sources included peer-reviewed academic journals, government documents and news articles up to the first week of September 2020. We examined data to identify relationships between broad structural determinants and migrant worker health. We used a root cause analysis with logic trees to explore some of the key relationships between the SDoH and effects of COVID-19 [14]. Based on this analysis, we offer recommendations on current global frameworks and organizations to provide long-term solutions for addressing the broader health, economic and human rights issues exposed by the pandemic. We



**Fig. 1** The model of social determinants of health related to the health and wellbeing of migrant workers during the COVID-19 pandemic



base Fig. 1 on findings from the background literature and discussions with experts in the field. It provides a visual model for exploring the situation of migrant workers that we applied in our analysis. We did not include all aspects in Fig. 1 in our analysis here, yet we suggest it for possible use in future research.

## Singapore: from the dormitories of migrant workers

Towards the end of March 2020, Singapore appeared to have maintained a successful record in keeping the number of SARS-CoV-2 infections low (cases per one million population) compared to the other countries [15]. The media presented the spike in cases in Singapore as a ‘second wave’, implying that relaxation of preventive measures may have precipitated the new crisis, but is more accurately understood as a continuation of the initial outbreak. Reports of the first few COVID-19 cases among migrant workers in Singapore appeared in early February, followed by a sharp increase in incidence from early April [15]. Well over 90% of all laboratory-confirmed infections from April to early September 2020 occurred among migrant workers living in dormitories.

In 2019, the total foreign workforce in Singapore consisted of 1,427,500 migrants (25% of the total population), and of these, 293,300 (20.55%) worked in construction. Migrant workers are generally hired to do the so-called ‘3D-work’—dirty, dangerous and demeaning—that is traditionally shunned by Singaporeans. These industries include construction, process (including production processes in plants in the manufacturing of petroleum, petrochemicals, specialty chemicals and pharmaceutical products) and marine shipyards. Most migrant workers are male and come from Bangladesh, India and Myanmar. Their demographic data are not available from government agencies, and few studies exist on migrant-related health or policies.

Increased incidence of COVID-19 in migrant worker communities may have resulted from economic and social disparities in Singapore’s socio-political landscape [15]. This increase was likely to have been precipitated by policy gaps related to the outbreak at its onset, at least in part. For example, a Ministry of Manpower advisory on 19 February 2020 warned employers that their work pass privileges—required for employers to employ foreign workers—would be suspended if they continued to send migrant workers to public hospitals for testing (for SARS-CoV-2). This practice had overburdened medical facilities at tertiary hospitals. Despite this advisory, reasonably accessible testing facilities and services for migrant workers, along with translated inpatient and outpatient screening questionnaires, did not become available until the first and the second weeks of April 2020, respectively.

Researchers have identified language and cultural barriers, financial insecurities (particularly from debts incurred through the recruitment process) and fear of deportations as factors hindering access to healthcare and use of services among migrant workers in Singapore [16–20]. Healthcare worker bias and suboptimal knowledge of migrant workers’ healthcare coverage and rights also created constraints [16]. Despite certain interventions, issues related to labour abuse and healthcare have continued to distress migrant workers [18, 19], suggesting inadequate policies and weak enforcement of existing legislation [18]. Housing provided for over 300,000 migrant



workers consisted of factory-converted, temporary and purpose-built dormitories well away from the rest of the population. Overcrowding in dormitories is common, with up to 20 people sharing a room, yielding an effective living area of about 4.5m<sup>2</sup> per worker [19]. Previous outbreaks among migrant workers involved air- or drop-let-borne viruses—such as varicella-zoster and rubella and the 2019 measles outbreak—attributed to densely populated living environments of migrant workers [17, 21]. These outbreaks should have served as warning signs for the authorities.

In addition to isolation, stay-at-home notices and testing, the Singapore Ministry of Manpower issued advisories on timely payment of salaries, access to remittance services, delivery of food and essentials to dormitories and assurances that healthcare costs would be covered by the government and the employers. Earlier implementation of these strategies for migrant workers might have prevented the outbreaks in dormitories.

The current increase in the number of infections, therefore, appears to be driven by a combination of SDoH, including increased risks posed by overcrowded accommodation, limited access to healthcare and insurance, low and insecure wages, social marginalisation [22], poorly targeted government policies and weakly enforced existing legislation [16–18].

While broad measures enacted by the Government of Singapore at least partly address the SDoH identified above, amendments on 1 June 2020 to the Employment of Foreign Manpower Act of Singapore imposed strict movement controls on migrant workers living in dormitories through the authority of the ‘Controller of Work Passes’. These controls raise serious concerns about the workers’ rights and health [23]. Civil society organizations (CSOs) criticized policies and regulations related to payment of salaries during the pandemic, indicating apparent loopholes in enforcement and continued injustice faced by the migrant workers [24]. In Singapore, CSOs and trade unions worked closely with the government to assist with mitigation efforts [25].

Migrant workers are an under-documented pillar of Singapore’s economy, contributing to its key industries, maintaining industry competitiveness and creating jobs for Singaporeans [26, 27]. Global trade structures embodied in local Singaporean policy frameworks drive migrant workers into a negotiation disadvantage and undermine rights, leading to low-wage status [27]. If, however, provisions in the GCM were to be implemented and enforced, such measures would be well positioned to address issues related to the ‘migration cycle’, including debts incurred through the recruitment process and concerns about access to healthcare and equal rights compared to equivalent local workers.

## **South Korea: beyond the COVID-19 pandemic**

The Government of South Korea (hereafter Korea) initially appeared to manage the pandemic well. However, the rapidly changing situation of migrant workers in Singapore forced Korea to develop urgent response mechanisms to address the impending risks. As of early September 2020, Korea reported a total of nearly 21,000 positive tests for COVID-19. Government statistical reports did not disaggregate the resident



population from migrant workers. According to data from Statistics Korea and the Ministry of Justice, more than 863,000 migrants work in Korea, approximately 3.2% of its 27,154,000 total employed population (Korea's total population is 51,630,000). Of migrant workers, 46.2% work in the manufacturing industry and 11% in construction, according to census data from 2019. Most of the migrant workers come from China, Vietnam and Thailand.

On 31 January 2020, just eleven days into the COVID-19 outbreak in Korea and long before the rise in infections in Singapore, the Ministry of Justice announced that it would not collect any information on undocumented migrants' healthcare visits [28]. Between late April and early May, the government reasserted that undocumented migrants would receive free testing and treatment without the risk of being deported [29]. The government expanded existing language support for foreigners in the languages of major migrant groups, including guidance materials and hotlines, and introduced interest-free loans to pay for temporary accommodation for migrant workers requiring self-isolation [30]. Many local governments started distributing free facemasks and opened mobile testing centres at worksites and dormitories for migrant workers, including undocumented ones.

The government accorded priority for prevention and treatment of Korean nationals during the early phase of the outbreak while excluding those without National Health Insurance (NHI)—including migrant workers. Without NHI, migrant workers were unable to purchase face masks. Then, after sustained criticism from CSOs and trade unions, and in part, Singapore's experiences with the outbreak, the Korean government eased restrictions on 20 April 2020 [31]. Free SARS-CoV-2 testing for migrant workers fell short of expectations due to their lack of awareness and lack of confidence in the government [32, 33]. Besides COVID-19 testing and treatment, basic healthcare for migrant workers remains limited, and it is especially difficult to obtain care for those without documentation [34, 35]. Even now, at the national level, Korea reserves its Emergency Disaster Relief Fund for Korean nationals' households.

Due to its employer-centred design, the Employment Permit System (EPS) has further exacerbated migrant workers' vulnerabilities during the pandemic. Employers confined many migrant workers to factories and dormitories as preventive measures to mitigate the spread of SARS-CoV-2 [36]. They forced others to take unpaid leave or laid them off without Employment Insurance benefits or other compensation for economic losses resulting from the pandemic [37, 38]. EPS operated as an authority that enabled discriminatory orders that restricted rights and limited migrants' freedom of movement.

A pre-pandemic study identified potential barriers to healthcare such as language, lack of knowledge of local health services, health beliefs or attitudes and behaviours, communication barriers, and most importantly, financial barriers and time constraints [39]. These factors are likely structured by 'upstream' determinants, such as working conditions, employment security and social security, including access to healthcare. These conditions have been poor for many migrant workers in Korea since before the COVID-19 outbreak and present the government with a challenge [40].

Global economic inequalities play out in Korea due to wage differences based on the countries of origin and destination [41]. For example, despite social, economic



and political inequalities experienced by the migrants compared to local residents, the average wage in Korea exceeds that of most other Asian countries, ensuring that Korea remains a major destination country for migrant workers [42]. Even so, the employers' lack of knowledge and conformity with laws and the EPS that embodies the interests of Koreans further contribute towards inequalities [43]. Despite Korea having ratified the GCM (unlike Singapore and Brazil), wage parity with local residents has remained elusive.

Thus, in Korea, the COVID-19 pandemic reveals several legal, social and economic blind spots. These present opportunities for Korea to tackle the broader fundamental rights of migrant workers.

## **Brazil: a tale of origins and destinations**

Brazil's confirmed cases of COVID-19 per one million population are high compared to other countries [44]. As of early September 2020, the recorded daily average reached more than 1000 deaths, more than 4 million confirmed infections, low testing rates, growing numbers of cases in smaller cities and doubts about the reliability of the data released by the federal government. Political rumours and manoeuvrings predominated [45].

Brazil is both an origin and a destination country for migrant workers, including many low-wage migrant workers. By May 2020, 22,500 of the 3.5 million Brazilians residing overseas had returned home on flights financed by the Brazilian government [46]. Driven by socio-political, economic and environmental vulnerabilities in their home countries, almost 800,000 migrant workers from Haiti, Venezuela and Colombia live in Brazil [47]. Yet limited demographic and epidemiologic data on these subpopulations have hampered evidence-informed policymaking [48].

Following conflicts with the President, two health ministers resigned in as many months, throwing Brazil's COVID-19 response into chaos. Despite the return of large numbers of citizens to Brazil, the government introduced basic screening programs at airports in Brazil only in April 2020, when the number of COVID-19 cases was already on the rise. Even then the government did not implement comprehensive screening or mandatory quarantine [49].

Documented migrant workers have guaranteed access to the Brazilian universal health system (SUS), as well as short-term financial help for unemployed and informal workers. Undocumented migrants have been systemically excluded from this financial assistance scheme. Lack of information, often aggravated by language barriers and discrimination, makes use of health services challenging [50, 51]. Brazil does not permit undocumented migrant workers to use public primary health care services, and testing and treatment at private clinics is prohibitively expensive.

Recent outbreaks of measles and tuberculosis in some municipalities that disproportionately affected migrant workers were associated with their precarious living and working conditions; these outbreaks should have served as warning signs for health authorities [47, 52]. Lack of monitoring and regulation of the migratory flow of workers in Brazil, both in relation to the greater risk of spreading SARS-CoV-2





and the economic and social vulnerability of this population, shows how Brazil has neglected public policy debates and action on migration policies.

Migrant workers in Brazil are frequently employed in industries that do not require specific qualifications and are often considered to be ‘unskilled’, with many working as informal workers in micro- small- and medium-sized enterprises [53, 54]. Despite being a significant population, ‘unskilled’ migrant workers are proportionally small within the Brazilian population, and their marginalized status diminishes the attention paid to their issues by stakeholders and undermines their bargaining power [55]. Moreover, recent changes to labour laws and lack of social dialogue between the state, industries and migrants reinforce a sustained attack by the political leadership on policy changes related to workers’ rights and undermine the financial and organizational capacity of trade unions [56]. This situation affects all workers in Brazil, but the impact on migrant workers, particularly undocumented ones, is likely to be harsher.

Following the COVID-19 outbreak, many migrant workers from Venezuela chose to return home rather than remain in Brazil [57, 58]. Information on the circumstances of Brazilian workers who returned home from abroad remains scarce. The current situation in Brazil indicates the need for constructive discussions between civil society groups and authorities with the aim of ensuring basic human rights, access to healthcare and social inclusiveness for migrant workers [50, 54].

## Focussing the lens

Applying our social determinants of health lens, we argue that overcrowded dormitories in Singapore, insecure living and working environments in Brazil, and precarious working conditions in Korea are likely to have increased exposure of migrant workers to SARS-CoV-2. Poor social protection, including restrictions related to healthcare, made it obligatory that Singapore and Korea implement special provisions during the COVID-19 outbreak; Brazil, plagued by poor leadership, mounted an inadequate response. Neglect of ‘red flags’—alerts that should have been apparent based on experience from previous outbreaks in Singapore and Brazil—may have limited opportunities for prevention and effective mitigation of the health crisis. Our analysis demonstrates that economic and social marginalization, language barriers, lack of information, lack of legal protection and fear of deportation comprise widespread direct and indirect barriers to healthcare in all three settings. We identified, in relation to Singapore and Brazil, a scarcity of data on migrant workers from government agencies and academic research. This has undermined opportunities for evidence-informed policymaking based on quality translational research focussed on the SDoH and health policy [59].

Unwarranted and negative attitudes expressed towards migrant workers in communities create a perception that migrant workers may have a higher chance of carrying infections compared to local residents and become a burden on health services [7], as in Korea. Such negative attitudes may intensify a lack of trust among migrant workers, governments and local citizens.

Thus, many SDoH identified in studies before the COVID-19 outbreak have been realized, if not exacerbated by the pandemic. Efforts of the Korean and Singapore





governments demonstrate potential for effective action and emphasize a need for long-term sustainable changes to address inequities that undermine the health and wellbeing of migrant workers. Necessary changes, we argue, include universal and equitable healthcare, social safety nets and labour rights for migrant workers. Addressing labour rights will require a collective response to reform labour markets by international organizations and the states. Organizations such as the International Labour Organization, tasked with the protection of all workers including migrant workers, face challenges in balancing the demands from sovereign states over immigration restrictions with the economic need for flexible, mobile labour forces [60].

Thus, it is imperative for those in the health to sector support political measures to adopt a broader, whole-of-government approach to revising regulations and policies on health and employment, closing existing loopholes and developing mechanisms for better implementation, as called for in the GCM. By implication, this means reducing structural determinants as part of addressing the health needs of migrant workers.

Singapore abstained from voting on the GCM, while Brazil withdrew from it less than two weeks after the incumbent president assumed power in early 2019. These actions demonstrate the reluctance of both countries to implement GCM recommendations. Highly restrictive and discriminatory laws, such as those recently introduced in Singapore, show how vulnerable such agreements are to domestic political agendas and local constraints [23]. While the GCM calls on governments to enact and enforce laws related to labour rights violations and to cooperate with the private sector to prevent labour abuse and exploitation, there are few incentives or benefits for governments and companies to do so, particularly within inequitable global trade structures, including global labour supply chains. Global trade structures are manifested through predominant economic ideologies that prioritize market forces, creating the circumstances in which low-wage labour and poor working conditions can thrive. Therefore, real change in policies towards migrant workers and norm-building among states to improve conditions for migrant workers will require committed political engagement and advocacy from civil societies, trade unions, human rights groups and migrant workers themselves.

## Conclusion

The circumstances of the migrant workers during SARS-CoV-2 pandemic expose social weaknesses and demonstrate how the public health crisis is exacerbated by those weaknesses. It highlights the need to frame public health policy in ways that show structural determinants—inequality, poverty and lack of rights—as fundamental to health as governments manage prevention and mitigation efforts during a crisis. We draw four key conclusions from this analysis:

- the SDoH framework, and recognizing migration within this framework, is necessary for a full understanding of and comprehensive approach to managing the effects of health crises on migrant workers;



- the ‘upstream’ application of the SDoH approach requires a broader range of political and economic reforms to address the health, economic and social inequalities that migrant workers face;
- evidence-informed public health policymaking, through wide application of translational research, is necessary for successful application of a SDoH approach in health crises;
- the underlying determinants of health vulnerabilities are rooted in fundamental economic inequalities that drive global capital and labour.

This prompts the question of why there are low-wage workers at all.

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#### Declarations

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

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**Amarasinghe Arachchige Don Nalin Samandika Saparamadu** MBBS, DipIBLM, is a General Practitioner at Doctor Anywhere Pte. Ltd., Singapore.

**Albie Sharpe** MHID, Ph.D., is a Lecturer at the School of Public Health, The University of Technology Sydney, Australia.

**Sun Kim** M.S., Ph.D., is Director, Health Policy Research Center, People's Health Institute, Seoul, South Korea.

**Bruna Ligia Ferreira Almeida Barbosa** MNS, Ph.D., Postgraduate Program of Collective Health, Federal University of Espírito Santo, Vitoria, Brazil.

**Adrian Pereira** B. Eng, is Executive Director of the North South Initiative, Selangor, Malaysia.

