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# Peruvian efforts to contain COVID-19 fail to protect vulnerable population groups

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## ABSTRACT

Peru is arguably providing a robust governmental response in the initial stages of the COVID-19 outbreak, with early lockdown measures and the implementation of relatively ambitious economic safety nets to protect families and enterprises. Despite this initial optimism, structural deficiencies in the public health system, high informality in the labor market, the new wave of migrants from Venezuela and the extremely diverse cultural characteristics of many areas exacerbate the number of potentially highly vulnerable groups that may be left out of these safety nets unless additional efforts are enforced to improve social coverage. In this discussion we aim to identify some of these groups, highlighting the main challenges they face during the outbreak and proposing certain mitigation measures to balance the social policy response.

### 1. Commentary

The political response in South America to the COVID-19 pandemic has been diverse, with some countries advocating dramatic containment measures (e.g., Argentina, Peru) and others (e.g., Brazil) implementing erratic measures with the aim of seeking a trade-off between the economy and human health [1]. In Peru, with only 71 reported cases and no deaths, the government decreed a military-enforced quarantine with a border shutdown on March 16<sup>th</sup>, 2020 for a fortnight, which was later amended to include a nocturnal curfew. This was possible, in part, thanks to the great popularity of the Peruvian President, which contrasts with a situation of political and social unrest in most neighboring nations (e.g., Bolivia, Chile or Ecuador) shortly before the outbreak [2,3].

Some benefits of the strict quarantine imposed in Peru are visible after several weeks of lockdown, although some may be deceiving. Firstly, complete shutdown of non-essential services and mandatory confinement has reduced the reproduction number of the virus ( $R_0$ ) considerably, leading to promising signs of flattening in terms of mortality and ICU patients. Secondly, the lockdown has enhanced the resilience of the public health system, especially considering the existence of a dengue fever outbreak in many regions since late 2019 [4]. Finally, early confinement has drastically reduced environmental pollution in Peruvian cities, with the subsequent benefits on the immune system of citizens [5]. However, forced confinement may neutralize these effects due to lack of exercise, access to a balanced diet [6], reduction in household income [7] and increased indoor air pollution [8].

The rapid reaction of local authorities must not be interpreted as an early victory in the fight to mitigate the outbreak. Peru only passed legislation to guarantee universal health coverage in 2019, and its health system, especially outside Lima, is fragile [9]. Local press has stressed the lack of equipment in most hospitals. In fact, only 276 ventilators, essential to attend critical patients, were available throughout ICUs at the beginning of the pandemic, 0.84 units per 100,000 people, although recent acquisitions have quadrupled this figure [10].

Beyond the precarious health system, the government is facing other challenges. On the one hand, the informality of the labor market is rampant, affecting ca. 70% of the workforce [11]. This leads millions of Peruvians to subsist on a daily basis with limited access to social security benefits, including unemployment paychecks, retirement plans or insurance. Hence, after recurrent fortnight-long extensions, many families are depending completely on aid for an undefined period of time. Informality has also led to erratic distancing measures in several sectors, such as food markets and public transportation. On the other hand, low banking penetration, below 50% [12], adds barriers in terms of financial resilience, since many micro and small enterprises (MSEs) lack the financial structure to pay employees through online banking.

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The government's economic response was immediate through an emergency release of 380 PEN (ca. 110 USD) to 3 million households that are registered in the national census as being in a situation of poverty or extreme poverty [13], which was then extended with further releases as the lockdown continued. Additional measures include subsidies for independent workers, allowances to partially withdraw private pensions, unemployment funds and succulent loans for the private sector. These represent ca. 12% of national GDP, substantially higher than in most South American nations, thanks to low public debt after years of fiscal discipline, low inflation and a stable currency [14]. Despite these efforts, we argue that there is a lack of emergency actions aimed at targeting certain highly vulnerable groups.

Firstly, emergency subsidies are yet to include migrants and refugees. This implies a huge challenge, considering that in the past 3 years nearly 1 million Venezuelan migrants and refugees have entered Peru [15], with many of them yet to finalize their migratory regularization process. Informal work is rampant among the Venezuelan community, with a vast majority receiving the minimum wage, while their access to health, adequate housing or a balanced diet is limited [16]. Moreover, remittances to their families compromise their saving capacity.

Considering the struggle of public policy in Peru to adapt to the new flow of migrants initiated in 2017/2018, we call for a redefinition of the criteria to access government subsidies, extending the aid to migrants and refugees in need. Peruvian authorities should take note of Portugal, where migrants and asylum seekers have been granted temporary residence [17]. In fact, a similar policy in Peru would go beyond the direct impact on the migrant community, strengthening their social distancing by reducing their need to seek for food informally and mitigating potential outbreaks among vulnerable groups. Similarly, the humanitarian crisis in Venezuela collapsed its healthcare system, leading to the re-emergence of previously-controlled infectious diseases (e.g., HIV or malaria) [18,19]. Consequently, their transmission linked to Venezuelan migrants has been reported in countries like Ecuador, Colombia or Peru [18-20]. Mass regularization of migrants and their subsequent access to healthcare may foster the traceability and screening of hidden infectious diseases [21], providing a clearer picture of those groups highly vulnerable to the pandemic.

A second group of interest, paid domestic workers, is a vulnerable group in regular circumstances: 95% of them are women, most of whom live in low-income neighborhoods and belong to lower socio-economic groups [22]. They tend to be highly exposed to labor exploitation and wrongful termination, as their average salary is far below the minimum wage, their weekly working hours above the 48-h legal threshold [23] and, until May 2020, employers were not required by Peruvian law to sign a written contract [24]. Mandatory social isolation, lockdowns and other measures adopted by authorities to prevent the spread of SARS-CoV-2 are aggravating their vulnerability.

Firstly, most domestic workers have lost their job and cannot rely on the special withdrawal from pension and unemployment funds the government has granted employees, since less than 5% are covered by unemployment benefits and over 85% are not affiliated to pension systems [25]. Secondly, they are not considered independent workers, who have been included in the special subsidy packages released by the government, despite the similarity between the two. Furthermore, live-in domestic workers are exposed to exploitation more than ever, since all household members are now present at all times, increasing their workload. They are also spending their weekly 24 h off granted by law at their workplace.

Many domestic workers are care workers, hired to look after the elderly or people with chronic illnesses, highly vulnerable to SARS-CoV-2. Considering the lack of (emergency) public policies to regulate this subsector, they depend on the willingness of the employer to purchase protective equipment (e.g., gloves or hand sanitizers). Moreover, those who need to commute during the lockdown rely on public transport. This implies a daily exposure to contagion, increasing the risk not only for them, but also for the vulnerable person they take care of and other household members.

We believe that the government should create a specific aid package for domestic workers or include them in the subsidy released for independent workers. For those who have maintained their jobs, two different lines of action should be implemented. On the one hand, being included in governmental aid would boost their capability to acquire protective equipment. On the other, parallel measures could provide employers with subsidies to ensure adequate health security conditions in the household and pay for care services they still need during the lockdown.

A final example is indigenous communities in the Amazon basin. They are more susceptible to common infectious diseases (e.g., flu or measles), although mortality rates over time have decreased substantially [26]. Lack of basic hygiene products, health professionals and hospital equipment and beds [27], poor transport infrastructure, language barriers [28] or the difficulty to enforce self-isolation are just the tip of the iceberg of the numerous setbacks they face. In terms of personal health, anemia and malnutrition among infants are common. Lung damage has also been identified throughout different age groups due to the impact that rainforest fires have had in recent years [29]. Hence, there is fear that the mortality rate across age groups could differ to what has been observed elsewhere [30].

Despite being naturally isolated from transmission hotbeds, missionaries and profit-seeking groups (e.g., illegal loggers) are likely to break confinement measures and enter their territorial boundaries. Although efforts exist by the Ministry of Culture to ban access to protected areas and to deliver information on COVID-19 in 21 indigenous languages, policies show a lack of specificity to account for certain necessary actions, including adapted access to government aid, information on how to protect the elderly and how to adapt their burial rituals to minimize infection risks.

The abovementioned social groups represent vast pockets of potentially unprotected population. Other groups, however, including artisanal fishermen or informal miners are encountering similar challenges when trying to access social safety nets, reasserting the need for public authorities to cross-check their databases and field observation to identify families in need beyond the official census. The economic downturn of the outbreak will most likely push new unidentified social groups into poverty at an unprecedented speed, especially in sectors in which preoutbreak normality will suffer considerable delays. Hence, adaptive management strategies must be designed to detect these groups as the crisis continues to evolve along unknown pathways [31].

Despite the willingness displayed by the Peruvian government during the COVID-19 crisis to protect citizens from the virus, a disaster of this magnitude inevitably exacerbates endemic social problems. We acknowledge the rapid response of Peruvian authorities to enact socialdistancing and confinement measures. However, we argue that in terms of the social policy response, authorities must seek policies that are not biased against any population group, protecting all members of the population [32]. Consequently, this situation reaffirms the importance of fostering social policies in developing nations, including, but not limited to, robust and comprehensive healthcare systems.

## Ethical approval

Ethical approval was not required for this study as no new empirical data were collected.

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The authors have no competing or conflicting interests.

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