



# Never Thought I was Going to be Placed in a Situation Like This: In the Shoes of the Doctor Responsible for Municipal Health, Back in My Country, Perú

Rocio Morante-Osores<sup>1</sup> · Fernando M. Runzer-Colmenares<sup>2,3</sup> ·  
Jose F. Parodi<sup>3</sup>

Received: 6 March 2022 / Accepted: 30 June 2022 / Published online: 1 August 2022  
© The Author(s), under exclusive licence to Springer Nature B.V. 2022

## Abstract

The COVID-19 pandemic changed the way of living on the planet and, in my case, revealed the fragility of primary care services to respond to a health emergency that mainly affected older adults. Upon obtaining my medical degree, I felt guaranteed to have the skills to be a primary care physician; however, the coronavirus gave me “a reality bath with the aroma of impotence, bewilderment, and abandonment.” Contradictory provisions and regulations, absence of a continuous policy, poor leadership, insufficient resources, and mismanagement by the Ministry of Health. Scandals of possible corruption and vices in the processes of research studies on vaccines. Anti-vaccine strategies, screening tests without evidence. The reference hospitals without oxygen, intensive care beds, and the outpatient consultations of specialist doctors closed. A community that is organized and wants to help but does not have a clear technical guide. These are some of the things I have had to deal with as head of a municipal health program. Meanwhile, I watched helplessly as members of my community continued to die and become disabled. Learning from mistakes and horrors is our duty. I narrate this experience to contribute to being prepared for the next time.

**Keywords** Primary care physician · covid-19 · Population Health Management

Not even in my wildest dreams did I imagine someday I would be living a time like this. I guess many of you could relate to that. I am a physician and work as a community health coordinator in a seaside district in Lima, Peru.

Perú is one of the Latin American countries that had been hardly affected by the COVID-19, despite being one of the first nations in the Americas to take strict pre-

ventive policy measures during the lockdown. (Vázquez-Rowe & Gandolfi, 2020) To date, Peru is the fifth country in the world with the most infections by SARS-CoV-2, and the global leader in the number of deaths per capita, with more than 29,000 deaths. More than 60% of COVID-19 deaths reported in Peru have occurred in adults 60 years and older. (Ministerio de Salud - Perú, 2020)

If we have learned something during the past months living with SARS-CoV-2, it is that the older adult population is the most affected. (Parodi & Runzer-Colmenares, 2020) Aging itself is the strongest predictor of mortality. (Blagosklonny, 2020) But that is not it; older adult patients are also hospitalized the most and have a greater need for oxygen therapy and mechanical ventilation, and greater sequelae. On the other hand, older adults people who did not get sick with SARS-CoV-2 are more vulnerable to inattention to their comorbidities, which impact their mental health and wellbeing, and in certain households, they are even susceptible to domestic violence. (Banerjee, 2020), (Calleja - Agius & Calleja, 2020)

## **The pandemic revealed the fragility of primary care for older patients with chronic health conditions**

Mandatory self-quarantine started almost at the end of March 2020, so many older adults who used to spend summer in seaside districts stayed here for the whole isolation period. By having a larger population of older adults than usual, the first problem that arose was chronic disease management. At that time, hospitals were already overcrowded with COVID-19 patients, so older adult patients turned to primary care centers nearby. These centers suddenly received an increase in the demand for care for chronic patients, exposing the fragility of our health system, already fractionated and overloaded. Health workers were not trained to deal with the particularities of the older adults with chronic illness; pharmacies did not have sufficient amount of medication for chronic comorbidities; and lastly, many primary care centers were left without health personnel - either because they became ill with COVID-19 or because workers were taken from small centers to fill the shortages in larger centers and hospitals.

## **COVID-19 is always one step ahead**

Despite the early measures (school and borders closings, quarantine), the huge increase in the availability of hospitalization and intensive care (ICU) beds, and the dedication of health personnel, the results have not been as expected. Peru's death rate kept surging. And everybody starts to ask themselves "what went wrong?" (MIDIS, 2020).

It is important to remember that Peru has a fragmented health care system administered by 5 subsystems: the Ministry of Health, Social Security, the Armed Forces, the National Police, and the private sector. Coordination between them is poor, and their performance often overlaps. Likewise, the ratio of doctors and nursing personnel is quite significant between each of the subsystems. The private sector is much

more attractive than the public sector, making it difficult for skilled professionals to stay in rural and remote areas. (OECD, 2017) Also, Peru has had sustained economic growth over the last 15 years, this economic bonanza is not reflected in public health expenditure, our public expenditure per capita is below the average in Latin America. (World Health Organization, 2017) And the efficiency of expenditure within public health management does not correlate with the quality of services offered to the community.

Furthermore, an important part of the public resources assigned to healthcare is managed by regional and local governments, which in many cases are not technically prepared to implement the changes that are required.

## **Learning curve: community and National Health decisions in the pandemic**

At the start of the pandemic, the Ministry of Health launched a pneumococcal vaccination campaign for older adults as part of the measures to lessen the damage caused by COVID-19 in Peru. Older adults must go to the nearest primary care center to be vaccinated. A few days later, the dynamics changed, and it was reported that to maintain physical distance measures, the vaccination campaign would change to home visits. As the coronavirus spread, all immunization programs were suspended. Today, immunizations programs are back, every patient must make an appointment to get vaccinated in the primary care center of their neighborhood. (MIDIS, 2020)

Home visits were also suspended, and telemedicine was given a shot, but older adult patients do not own a smartphone or even a cellphone, and the technological tools in primary care centers were not enough to cover their needs. Creative efforts are still being made to fill the gap in telemedicine tools, using support from neighbors and the community to reach out to those who cannot be reached. (Benítez, et al., 2020)

Another important lesson was that food and street markets have become large hotspots for COVID-19 infections. The central government presented a plan for local governments, together with merchants, to make markets safe spaces. As there was a lack of COVID-19 testing, the community provided money to buy the testing kits to screen all the district merchants. Purchase hours were also established in the markets for the most vulnerable people (pregnant women and older adults). (MIDIS, 2020)

The government created a support network, targeted for the older adults at high risk and for people with severe disabilities, to receive a package of prioritized services: counseling on healthy practices to prevent contagion and mitigate the effects of COVID-19 infection, identification of warning signs for COVID-19 infection, immunization (pneumococcal and influenza), follow-up of likely cases and investigation of intra-household contacts. (MIDIS, 2020) However, this support network, called Amachay, was focused on COVID-19, leaving aside the usual needs of the older adults.

In 2020, the Ministry of Health conducted a community screening based on the use of qualitative rapid tests in coordination with the local government. This is called “Strategic Health Intervention” and is carried out in local sports fields, where the

older adults are summoned and get tested with COVID-19 IgG-IgM rapid tests, and if a positive is found they receive a bag with medicines as treatment. However, during this activity, the local health center is closed because all the staff is working on the health intervention.

Local governments with the support of civil society organizations have taken a significant role, making extraordinary efforts to close the gaps. Some measures that were taken in my district were: registration of the older adults residents of the district; delivery of baskets of goods and supplies to all patients in vulnerable situations who were diagnosed with COVID-19, or in poverty; shopping service for the older adults; a collection of prescriptions in health establishments and home delivery; and telephone support.

Also, the community has itself bought oxygen tanks, which are taken into the homes of patients in most need of oxygen support, since there is a nationwide shortage of oxygen tanks in the country. I cannot even imagine how communities and local governments are performing in rural communities, where poverty reigns.

## **The Ministry of Health had seven ministers since the start of the pandemic in Peru**

Since March 2020, the first minister to attend to the first cases of patients infected by the new coronavirus was Elizabeth Hinojosa. Together with former President Martín Vizcarra, emergency measures were issued and a budget of 1.3 million soles was allocated for the health sector. A few days after the start of the pandemic in Peru, Vizcarra replaced Hinojosa with Víctor Zamora, a public health specialist. “Sooner or later, we are all going to end up infected with the coronavirus”, was one of her first statements causing anxiety in the population, while he asked to pray to the “gods” to face the disease.

On April 10, 2020, the minister announced the creation of a “humanitarian command to remove corpses” from the streets, hospitals, and homes. A month later, Zamora referred to health professionals who were infected in regions and asked to be transferred to Lima to receive specialized care and told them: “We have some logistical and ethical limitations, (...), but from the legal, constitutional point of view, all professionals are equal citizens than the rest of us”. After the statements, various congressional benches called for his resignation. Already with curfews at the national level and quarantines that were extended every 15 days, Pilar Mazzetti arrived on July 15, 2020. She was in the portfolio until November 9, 2020, when the second presidential vacancy process against Martín Vizcarra was approved. During the political crisis, Manuel Merino presented the pediatrician Abel Salinas, in his Cabinet, but this management barely lasted five days until the streets forced the then president to resign.

With the arrival of Francisco Sagasti to the presidency, Pilar Mazzetti returned to the portfolio on November 18, 2020, and the process of acquiring vaccines against Covid-19 began. But she resigned on February 12, 2021, during the scandalous “Vacunagate” case.

Immediately, the new management by Oscar Ugarte Ubilluz advanced the vaccination of older adults and front-line personnel, leaving more than 25% of the population vaccinated after having overcome the second wave of the coronavirus. After Pedro Castillo Terrones took office, he presented Hernando Cevallos Flores as the new minister. Under his management, it was possible to vaccinate more than 85% of the population with the two doses and the application of the booster inoculation began. In addition to the start of vaccination of children.

The political crisis brought recent changes and Castillo's fourth Cabinet. He appointed Hernán Condori Machado, a close friend of Vladimir Cerrón as the new Minister of Health. Condori Machado is being investigated for alleged corruption crimes by the Junín Anti-Corruption Prosecutor's Office, a region where he served as director of the Chanchamayo Health Network and director of the Regional Health Directorate in 2019 and 2020, respectively.

### **Difficult times require creative and evidence-based solutions**

While everyone is at risk of contracting COVID-19, older people are more likely to become seriously ill if infected, with those over eighty with a mortality risk five times higher than people aged 60 years or less. The United Nations report "The impact of COVID-19 on older people" suggests that this may be due to underlying conditions that affect 66% of people over 70 years of age. (United Nations, 2020) Globally, between 40% and 80% of COVID-19 deaths developed at long-term care homes, in Peru, where the care of the older adults is conducted in the home, physical distancing is a particular challenge.

A systematic review of the clinical characteristics of older patients with COVID-19 determined that the most frequent parameters were hypertension, fever, cough, respiratory distress, and ground-glass opacification in chest radiography and tomography. Furthermore, a decrease in PaO<sub>2</sub>/FiO<sub>2</sub> ratio and lymphocytes, and an increase in C-reactive protein and Interleukin 6 were observed. (Saavedra Córdova et al., 2021)

This pandemic has exposed that primary care is far from the resolution capacity that it should have in the beginning. That the technical support that the Ministry of Health can give to local governments is very distant. And as this disease continues, I have doubts and concerns about the future challenges that are yet to come.

In the community in which I am working, we do not have a space for the isolation of COVID-19 patients. Once discharged, primary care facilities cannot provide community-based rehabilitation, not to even mention palliative care. Evidence-based responses are needed, and we need to continue solving problems as they surge; however, there is no time for the evidence to arrive. That is why I share this experience, which I hope will generate debate and input to build future solutions.

Vaccination of older adults has contributed to the reduction in deaths amid the second wave of coronavirus.

On April 16, the Ministry of Health began its new vaccination strategy against COVID-19. The Peruvian State thus proposed a territorial approach and by age, for

which the application of doses was reordered, and it began with people over eighty years of age who lived in certain districts.

## VACUNAGATE and vaccine hesitancy

What was believed on January 9th to be the start of vaccination against Covid-19 for healthcare workers on the frontline of the battle against this virus, has not been such. Parallel to the clinical trials launched in the country in September 2020, people outside the studies had already received the active experimental vaccine in a directed and irregular manner. (Mayta-Tristán & Aparco, 2021) This group of almost five hundred people - including relatives and friends of Peruvian officials, ministers, and other politicians - had privileged and secret access to the vaccine at the end of 2020. One of them was, precisely, the former president Martín Vizcarra. (Kenyon, 2021)

Why did people outside the direct practice of the Sinopharm study receive doses of the candidate vaccine? The 'Vacunagate' learned that the Chinese laboratory had sent an extra batch of 3,200 effective doses when the trials began in Lima. According to the study protocol, this total was supposed to be addressed to the team in charge of scientific research. Germán Málaga is a principal investigator at the Universidad Peruana Cayetano Heredia (UPCH), who was responsible for the Phase III clinical trials of the Sinopharm vaccine in Peru. He explained that of the 3,200 doses, the UPCH kept 2,000. The remaining 1,200 were distributed to the Chinese Embassy in Peru. Málaga maintained that obtaining extra candidate vaccines in such quantities was not uncommon and that it has already happened in other countries. Regarding the vaccinated 'guests', he stated that in one way or another they had collaborated or functioned as liaison personnel. This could affect adherence to vaccination programs because the older people and health workers were the first groups considered in the vaccination calendar. (Kenyon, 2021). Ethical faults and mistakes in the development of research protocols contribute to the belief of "vaccine conspiracy", which is one of the factors that favor people's resistance to vaccination since they harm preventive health behaviors, and in the intentions to be vaccinated (Yang, Luo, & Jia, 2021). A survey found that 41.4% of the participants agreed that information about the safety of COVID-19 vaccines is often made up (Caycho-Rodríguez et al., 2022).

Fear of the unknown is a driver of vaccine hesitancy. Even though Peru was in first place with the most deaths from COVID-19 in 2020 including people at risk such as older adults, a rejection attitude towards vaccines against the disease was observed. According to Vizcardo et al., acceptance of the COVID-19 vaccine in our country is influenced by the level of education. The acceptance is relatively high in people with university education but decreases in people with high school or a lower level of education. (Vizcardo et al., 2022) There was a particular rejection of the Sinopharm vaccine, which includes factors such as Vacunagate, (Alarcón-Ruiz et al., 2022) the requests from the Colegio Médico del Perú (Medical Association of Perú) for third doses, and the vaccination of 50 people with the Pfizer vaccine, who they had already been inoculated with Sinopharm. This has completed the circle of distrust for an important sector of the population, concentrated mainly in Lima and some cities, which are resistant to receiving said vaccine.

**Table 1** Perú COVID - Coronavirus Statistics (MINSa, 2022)

	TOTAL	60+
<b>POSITIVE CASES</b>	3,496,009	
<b>DEATHS</b>	209,468	145,948
<b>VACCINE PROGRESS</b>		
<b>One dose and incomplete</b>	27,629,387	4,318,293
<b>Two doses or equivalent</b>	24,336,444	4,179,255
<b>Booster dose</b>	10,329,640	3,073,577

Fear of COVID-19 can trigger erratic and questionable individual behavior. But the magnitude of the facts reveals something more abysmal: the Peruvian institutional crisis is so deep that, at the hardest moment in our history, the ruling class will put the country on pause to save itself, since they distrust their ability to conduct an efficient immunization process. In conclusion, several factors made those responsible for primary care health programs feel helpless and disconcerted. We had to face a complex and unknown enemy. But the ineptitude and inefficiency of a fragmented, poorly coordinated health system, the lack of policy continuity, and the possible corruption contributed to increased population damage. I am standing at my post, I see the population in a trench, these shoes feel too big for me, I feel that if I walk, I will not move forward or fall, I raise my head for help, and my command does not respond.

## References

- Alarcón-Ruiz, C., Romero-Albino, Z., Soto-Becerra, P., Huarcaya-Victoria, J., Runzer-Colmenares, F., Romani-Huacani, E., & Cuba-Fuentes, S. (2022). Effects of vaccination against COVID-19 on the emotional health of Peruvian older adults. *medRxiv*. doi:<https://doi.org/10.1101/2022.01.24.22269781>
- Banerjee, D. (2020). 'Age and ageism in COVID-19': Older adults mental health-care vulnerabilities and needs. *Asian journal of psychiatry*, 51, 102154. doi:<https://doi.org/10.1016/j.ajp.2020.102154>
- Benitez, M. A., Velasco, C., Sequeira, A. R., Henríquez, J., Menezes, F. M., & Paolucci, F. (27 de August de 2020). Responses to COVID-19 in five Latin American countries. *Health Policy and Technology*, 449. Obtenido de <https://doi.org/10.1016/j.hlpt.2020.08.014>
- Blagosklonny, M. V. (2020). From causes of aging to death from COVID-19. *Aging (Albany Ny)*, 12(11), 10004–10021. doi:<https://doi.org/10.18632/aging.103493>
- Calleja - Agius, J., & Calleja, N. (June 2020). Domestic Violence among the Older adults during the COVID-19 pandemic. *Revista Española de Geriatria y Gerontología*, 1–2. doi:<https://doi.org/10.1016/j.regg.2020.05.002>
- Caycho-Rodríguez, T., Gallegos, M., Valencia, P., & Vilca, L. (2022). How much do Peruvians support conspiracy beliefs about COVID-19 vaccines? *Aten Primaria*, 54(5). Obtenido de <https://doi.org/10.1016/j.aprim.2022.102318>
- Kenyon, G. (2021). Vacuna-gate escalates in Peru. *The Lancet. Infectious Diseases*, P463
- Mayta-Tristán, P., & Aparco, J. (July 2021). El uso de un producto en investigación fuera de un ensayo clínico: el caso «Vacunagate». *Rev Peru Med Exp Salud Publica*, 38(2), 203–205
- MIDIS (Marzo de 2020). Aprueban el diseño de la Red de Soporte para la persona adulta mayor y la persona con discapacidad severa. *El Peruano, Decreto Supremo N° 005–2020 - MIDIS*, págs. 4–6
- Ministerio de Salud - Perú (2020, September 3). *Sala Situacional COVID-19*. Retrieved from COVID – 19 - MINSa: [https://covid19.minsa.gob.pe/sala\\_situacional.asp](https://covid19.minsa.gob.pe/sala_situacional.asp)
- MINSa. *Sala Situacional COVID – 19 Perú*. Retrieved from COVID – 19 - MINSa: [https://covid19.minsa.gob.pe/sala\\_situacional.asp](https://covid19.minsa.gob.pe/sala_situacional.asp)
- OECD. (2017). *OECD Reviews of Health Systems: Peru. OECD Reviews of Health Systems*. PARIS. Obtenido de Global Health Workforce Alliance: OECD Publishing

- Parodi, J. F., & Runzer-Colmenares, F. M. (Marzo de 2020). El Amor en los Tiempos del COVID-19: Centrado En Cuidado de las Personas Mayores. *Rev. cuerpo méd. HNAAA*, 13(1). doi:<https://doi.org/10.35434/rcmhnaaa.2020.131.628>
- Saavedra Córdova, L., Vega, M., Luján-Carpio, A., Parodi, E., Moncada-Mapelli, J., & colaborad, E. (2021). y. Clinical characteristics of older patients with COVID-19: a systematic review of case reports. (A. d. Comportamento, Ed.) *Dementia & Neuropsychologia*, 1–15. doi:<https://doi.org/10.1590/1980-57642021dn15-010001>
- United Nations. (2020). *Policy Brief: The Impact of COVID-19 on older persons*. United Nations
- Vázquez-Rowe, I., & Gandolfi, A. (11 de June de 2020). Peruvian efforts to contain COVID-19 fail to protect vulnerable population groups. *Public Health in Practice*, 1. Obtenido de <https://doi.org/10.1016/j.puhip.2020.100020>
- Vizcardo, D., Figueroa Salvador, L. N. V., Dávila, P., Alvarez-Risco, K., Yañez, A., J., & Mejía, C. (2022). Sociodemographic Predictors Associated with the Willingness to Get Vaccinated against COVID-19 in Peru: A Cross-Sectional Survey. *Vaccines*, 1–20
- World Health Organization (2017). *Global Health Expenditure Database*. Recuperado el 20 de August de 2020, de Data Explorer: <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD>
- Yang, Z., Luo, X., & Jia, H. (September 2021). Is It All a Conspiracy? Conspiracy Theories and People's Attitude to COVID-19 Vaccination. *Vaccines*, 9, 1051

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

## Authors and Affiliations

Rocio Morante-Osores<sup>1</sup> · Fernando M. Runzer-Colmenares<sup>2,3</sup> · Jose F. Parodi<sup>3</sup>

✉ Jose F. Parodi  
jparodig@usmp.pe

Rocio Morante-Osores  
chiomorante@gmail.com

Fernando M. Runzer-Colmenares  
frunzer@cientifica.edu.pe

<sup>1</sup> Centro de Salud de Punta Hermosa, Lima, Perú

<sup>2</sup> Universidad Científica del Sur, Lima, Perú

<sup>3</sup> Facultad de Medicina, Centro de Investigación del Envejecimiento, Universidad de San Martín de Porres, Lima, Perú