The deadly impact of COVID-19 in Peru: A health expert's perspective

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Dr. Juan Pérez is a physician from Peru who has conducted extensive research on the country's COVID-19 statistics using the national database for deaths known as SINADEF. His name has been changed to protect his identity. He contacted the WSWS explaining he was a frequent reader and wanted to discuss his work on the pandemic in Peru.

Thus far, in the course of the pandemic, more than 200,000 people have lost their lives in a country of just 33 million people, making it the country with the largest number of reported deaths per capita on the planet. More recently, Dr. Pérez notified me that cases are beginning to climb as the test positivity rate is rising, heralding a third wave.

According to data from The Economist*, the implied cumulative infection rate per capita is currently at 150 per 100 people, suggesting that there has been a high rate of reinfections. High reinfection rates are becoming commonplace as experiences from country to country are demonstrating that, considering waning immunity to previous infections and vaccines, herd immunity is probably impossible. Many credible scientists and researchers suggest that the pandemic may continue for several more years,especially as countries are employing a vaccine-only strategy to ensure that the economy is left undisturbed.*

As Dr. Pérez relayed, the pandemic in Peru started when infected travelers returning from Spain seeded the infection in the capital Lima. The dense population in this urban setting, combined with extreme poverty, was the perfect kindling for the explosion of infections that devastated the country, while triggering tremendous political upheavals for the government.

Dr. Pérez was kind enough to provide us time to sit and discuss his work. The interview was conducted in early November 2021, and Bill Van Auken of the WSWS Editorial Board participated in the discussion.

Benjamin Mateus (BM): Good morning, Dr. Pérez. Thank you for taking this interview. Maybe as an initial question, what prompted you to begin collecting these statistics on COVID-19 in Peru? Why did you do it? And I suspect this was quite a difficult undertaking. Perhaps you can also explain what obstacles you encountered with the authorities in trying to bring attention to your findings?

Juan Pérez (JP): I have a clinical research site at a private hospital in Lima. It was a huge challenge when the pandemic started, and I wanted to learn firsthand how terrible it was going to be. And that's how I began to trace it every single day. I used to collect every single report on a daily basis, what was published in the newspapers or was reported via TV or whatever.

And one of the things that happened very early with all this information is that it was quite inconsistent. For example, a place like in the [Amazonian] jungle, the first report coming out from there said there were zero deaths, and then suddenly there were more than 100. … I don't remember if the number was 110, 120 or whatever. And then the next several weeks there were no new reports. The problem was that the government was making decisions based on these reports, which were consistent in all the provinces, that there were few deaths.

But everybody had the perception that there were more deaths than they were reporting. Listening to people who were on the frontlines in the battle—they were in the hospitals, in the ICU rooms—they were saying there were more deaths than they were actually reporting.

And so, one of the things I started to look at, since I like history so much, one of the things I read in the past was regarding the wrongly called Spanish *gripe* … right?

BM: The Spanish Flu?

JP: Yes, that's it. … The Spanish Flu. The way the historians studied the death toll was through the number of excess deaths. I started looking for death certificates, and to my surprise I found out that all the death certificates were online. They have been online since 2017. That became the source I used to investigate the question on the toll of the pandemic. The public health officials said that 90 percent of all death certificates were in compliance, in real time.

Bill Van Auken (BVA): Dr. Pérez, could you explain what you mean by compliance?

JP: I mean that 90 or 85 percent of all deaths had been registered. They initially come in as [hard-copy] reports on paper; then they must be entered online by the central office. That was what they were claiming. I thought that would probably be a better source since it's a legal document; it would be easier to capture deaths because you need the death certificate to bury someone.

BM: Dr. Pérez, if I could just briefly interject, how accurate, in your opinion, were the diagnoses on these death certificates?

JP: I wasn't too worried about that. … Let me answer that question when I start to tell you how I found that information. I spent time looking on the government pages when I came across the data in a database that could be downloaded. I'm still not sure when it was placed there, but by the third or fourth month of the pandemic I found it there.

Once I started looking at the numbers, I realized the excess deaths were four times more than what was being reported on COVID-19, which began to finally make complete sense. I immediately began to distribute that information to all my colleagues. I even published it in June on LinkedIn. I think it even was posted in English. But very few people paid any attention to it.

BVA: I'm probably jumping ahead, but the differences were between the figures from Peru's Ministerio de Salud [Ministry of Health] and SINADEF [National Death Information System]?

JP: Huge differences!

BVA: But you said you published this report in June of 2020?

JP: Yeah!

BVA: Only a year later they finally came to those same numbers.

JP: That's correct. The difference was gigantic. And that's when whole groups of physicians in my circle of colleagues and friends—I think there were 30 or more of them—we started relying on the data we extracted from SINADEF exclusively.

BVA: Just to be clear again. SINADEF is a registry of deaths?

JP: That's correct. And it's very accurate. There is a lot of certainty that at least it's directionally correct. Quite different from what were the official reports that the government was giving. And the more we published and distributed that information, the more it was being picked up by the newspapers, even using some of the graphs that I initially distributed to my network of physicians. And then finally it took some time before the official curve was matched to the true curve of deaths. Eventually everybody recognized that the SINADEF information was the accurate picture of pandemic developments.

What the government ended up doing was essentially matching all the reports of COVID-19 deaths with the excess deaths. You can superimpose both curves, because what SINADEF shows is the curve of visual deaths. You can see the picture of the excess deaths, which represents the true COVID-19 deaths.

BM: This is a question I was going to ask later, but as we are discussing it now, you had told me that your analysis found that excess deaths were four times higher than what was being reported by the health ministry in June 2020. And these curves—official COVID-19 deaths and excess deaths—diverged until the end of this spring.

If you look at *The Economist*'s analysis of the pandemic's true toll, excess deaths and reported deaths for Peru are a perfect match. Most countries demonstrate a significant gap between COVID deaths and excess reported deaths. I had been speaking to Van earlier, and he told me that in May 2021, the official reported death toll was 60,000, but then the government revised these figures upwards to 180,000. I'm assuming that this has everything to do with your work and effort to bring this to everyone's attention that has led to these numbers now corresponding.

JP: That's correct. One of the things I did was I tried to influence this issue through a very important infectious disease specialist, who is also a close friend of mine. I presented this information to him explaining what was really happening. He then invited me to participate with the consultation group to the Ministry of Health on COVID-19. That was early. They were having a meeting in June ... or July 2020.

So, I presented my analysis and findings to the group of experts. Afterwards, their only response was, it's interesting, it's interesting information. And then they started debating, "I don't know if that's all COVID-19." And I told them that it's irrelevant whether it's COVID-19 or not.

Because if you see the curve of the "habitual death" [excess deaths] from 2017 to the first three months of 2020, it is basically constant with a little bit of slide because there is more population. And then there's a huge jump. The magnitude of deaths is unbelievable. What else could it be? And if it's not COVID-19, then it is because of COVID-19.

The impact of the pandemic is what is really denoted in this graph. And they still weren't convinced. I had a heated discussion with one of the members as well. He said, "I believe it's not true that everybody is dying because of COVID." But it's not relevant if it's directly caused by COVID. Directly or indirectly, it is the impact of COVID that we're looking at. And it isn't important how precise these figures are. Because if the pandemic wasn't here, we wouldn't have all these excess deaths unless you had something completely different—a huge earthquake or something along those lines. Otherwise, there is nothing else except the pandemic. And I didn't give away my presentation. They asked me to send it, but I withheld my presentation just to see how interested they were or convinced that the information was useful. And they never asked me again.

BM: Why did you think they weren't interested in your analysis?

JP: I had the sense that they were not convinced that the information was reliable because they concentrated their discussion on the issue that we had to make a distinction if what we were seeing was all COVID-19 or not. But that conversation doesn't make any sense because it is the impact of the pandemic. Most probably the great amount of people dying in Peru was because of COVID-19.

BM: In the United States, over the summer, many states began to dismantle their dashboards for tracking COVID-19. They claimed either everyone had been infected or had received the vaccines. Accuracy in the data went to pieces. Behind all of it were the obvious economic pressures to get children back to school and open all the businesses. And then we saw this massive surge in infections and deaths, and no one was doing anything to really bring it under control.

I'm assuming that these very same health ministers that you refer to were more interested in not reporting these differences in their bookkeeping, meaning they didn't want to cause a panic and close the country's economy. Would that be a fair statement?

JP: Retrospectively, you can say that could be the motive, but I don't know. I'm not 100 percent sure.

BM: In public health, there is this thing called the precautionary principle, which means that policy makers should fall on the side of caution, especially in the face of a global pandemic, and evidence to the contrary, as your report suggested, [showing] that excess deaths were unusually high means that the government should have shut down businesses and schools until they were able to gather sufficient information to ascertain the impact COVID-19 was having on the population. We must determine why so many people are dying. And, if these policy makers are not heeding these precautions, then why?

JP: Well, they were not motivated by such a principle or any principle. Not at all. Maybe to explain more. The infectious disease physician that brought me to the meeting had expressed his doubts about the excess deaths being attributed to COVID-19, eventually he was damaged publicly for other reasons.

He is with a CRO, a clinical research organization, and was involved in the largest vaccine trial in Peru with the Sinopharm [COVID-19] vaccine at the most important university in Lima, Cayetano Heredia University, which is the university where I received my training. The short version of the story is that a group of physicians that were participating in the trial and their friends were given the study drug off-study [a breach of standard protocol]. And the governmental organization, the Instituto Nacional de Salud [National Institute of Health], provided the authorization to do it.

So it was a big scandal. And we lost one of the most important voices, and he just had to go underground. He was not involved with designing the vaccine trial protocol, but he was one of the people who agreed to receive the vaccine study drug, which is unbelievable that it happened.

BVA: Ex-President Martín Vizcarra ended up in the same boat. [The former president of Peru had told the media that he had been a volunteer in the vaccine trial, but the university conducting the trial reported he had asked to be vaccinated with the study drug. He and many high officials and the well-connected jumped the vaccine line last year to secretly get the shots before frontline health workers.]

JP: And he continued lying. He said he was a voluntary participant in the study, meaning he was blind to whether he received the placebo or vaccine. But no. He was vaccinated by the principal investigator in Peru's White House.

It was a huge scandal, which damaged [the reputation of] what the vaccine represents in Peru, in particular, the one with Sinopharm, which, by the way, there isn't that much difference between it and Pfizer with some caveats. But that's what happened.

BM: I wanted to interject the following figures here. There have been 2.2 million reported COVID-19 cases in Peru and over 200,000 deaths. Peru's population is just at 33 million, which means that one in 165 people have died from COVID. Why was the pandemic so devastating there?

JP: I have been having conversations with doctors who are treating and seeing patients. And I don't know whether you have ever visited a Third World country in Latin America, but the hospitals are old. They lack

resources and were completely unprepared. It was overwhelming.

I was preparing some information to show you that might help you understand what happened. But I was talking to people who were in the ICUs and the hospitals and all that. The number of patients was staggering. It was over, *over [emphasis added]* the capacity. And they had to decide about who was going to be hospitalized or not. The other thing that happened, and I don't have all the complete details, is that medicinal oxygen was very scarce.

A lot of people died because there wasn't enough oxygen. I don't have the complete figures, but I know these stories or can get you someone that can relate these from these institutions and hospitals. People who use private hospitals represent maybe 2 or 3 percent of the population, and the rest of the population relies on social security from the ministry of health and public hospitals…

So, it was dramatic. It was so fast. They were completely overrun. They were just not ready for what hit them. There were not enough ICU beds. There were not enough of everything.

BVA: This question of not enough oxygen, that was one the issues in the recent indictment of Bolsonaro by the Brazilian Senate. Part of it was Manaus, where there was no oxygen. It's recognized in Brazil that it was the criminal failure on the part of the Brazilian government. The same thing I assume will be true with [President] Sagasti's government.

JP: I'm pretty sure of it because that's what the pulmonary specialists told me, that they were running out [of oxygen]. People will go and rent oxygen. How do you call that? A cylinder? They would go to a different city and look for them and pay—I don't know how much money for it, but it was like looking for gold.

BVA: They were bringing their own cylinders to the hospitals.

JP: That's correct. That's what happened. My friends working in the ICUs told me a lot of people died from asphyxiation because there was no oxygen. It was horrible.

BM: You recently showed me statistics where you categorized deaths by various age groups. What was the rate of death among the elderly?

JP: I will share my screen with you. One moment. This is a picture from the Pan-American games that were held a few months before the pandemic. They converted these to hospitals. Many, many people from Lima were hospitalized here who were not in a critical state. These were not ICUs.

BM: These were apartments that were built for the games?

JP: Yes, these apartments were built for the games and used for this [pandemic] circumstances. All of them were converted to hospital beds.

Dr. Perez then returned to the question of the contrasting lines of official COVID deaths and excess deaths reported by SINADEF.

JP: This is the official report noted in grey by the Ministry of Health down here and then the orange line showing excess deaths way above it. [There is a fourfold difference in the number of deaths between the graphs.] Look at the numbers. I made the presentation in June 2020 to the Ministry of Health. And how many months later did they officially recognize the real scale of death? Basically 12 months later, when they officially recognized these as COVID-related. [Between May 2021 and June 2021, the official COVID-19 deaths jumped from 69,342 to 193,139.]

BM: Why the sudden change? Why did they "officially" recognize that the death toll was so much higher?

JP: Because the information from SINADEF was populated all over [the internet and media] since I began distributing the real data, and then all the people started doing the same. Then everybody was distributing that information that said more people had died.

The argument they are using to defend their position is quite childish. They said they were forced to exclusively report only those that had tested positive for COVID-19. In those days you didn't have as many PCRs that you could do. Only those with a positive test were being reported.

But it didn't make any sense because they couldn't explain the gap. Even though he was asked several times, the president kept trying to change the direction of the conversation or raise so many different arguments that it became very confusing and embarrassing. But it was crystal clear that there was this disparity.

BM: It seems the government had come under significant political pressure.

JP: Everybody was saying the official information was not correct. Everybody was saying we are seeing more people dying. And when you look at the numbers of those who were over 60, one in 30 lost their life. Everyone knew of someone that had passed.

The data was crystal clear. But another interesting thing I found was that the ratio of deaths between older and younger people stayed the same during the pandemic. Typically, 70 percent of all deaths occurred in those 60 years old and over and 30 percent in those under 60. Though excess deaths were so much higher from their baselines, the ratio of death between old and young remained constant.

BM: I see. It was just that more people were dying, and it was taking a toll on younger people too.

JP: Exactly.

BM: You had mentioned that things have been stable in Peru recently with regards to the pandemic. Looking at the Worldometer dashboard, the rate of daily new infections is just over 800, and deaths are around 30. Do you believe Peru has reached some level of herd immunity? You had previously expressed concern. [Peru has one of the highest per capita excess death rates now, only second to Russia. According to *The Economist*, the "implied cumulative infection rate" per 100 people is 150, meaning there have been high reinfection rates.]

JP: I'm not an expert … but when I looked at the way it was going up, and then I analyzed the rate as it was going down, I predicted mathematically, assuming mathematically that if the decline continues as it was, that we would see another wave of infections.

So, when the numbers went down after the first peak, everybody started claiming we had reached herd immunity. But there was no evidence to claim that was the case. I had people arguing with me, and I had to tell them that we had to wait. We couldn't say that. There wasn't enough understanding of the pandemic, not enough information that could allow anyone to claim such a thing.

I said wait. We are going to have a second wave whether you like it or not because it makes sense; it makes sense because of the way it's evolving. And it makes sense because it's happening in all the countries, as well as in Peru. And it came back really bad. And in the summer time, not winter. And the winters are mild here. We just use sweaters, and there is not much to say.

Now the numbers are down again. But all sequencing data shows it is Delta. It is 100 percent Delta. And we are now in the valley. I am not saying that it will, but it could come back.

BM: What public health measures are being used now to mitigate the spread of the virus?

JP: In my opinion, they are only vaccinating. [As of November 17, 2021, 51 percent of the population was fully vaccinated; 64.7 percent with at least one dose.]

BVA: They are going back to in-class instructions at schools? They're bringing the children back into the schools, right? What I understood was that in 2022, they're saying …

JP: I started to see a lot of push for that. And starting this week [in early November 2021], they're starting to vaccinate 12- to 17-year-old kids, which you can tell that the purpose is to open schools as quickly as they can.

BVA: In Europe, that's been the driving factor of the new wave of Europe and Germany.

JP: I wanted to show you another figure. [Dr. JP presents a graph

showing deaths that took place at a health care facility versus at home by various age groups.]

Let me describe this. … IES means hospital, and domiciliary care means care received at home. It has been segmented by age groups. Those that were under 60 years of age were far more likely to die at a hospital, while those that were older most likely received care at home. In the next age group, 60 to 69, domiciliary care goes up a little. But look what happens at 70 and then at 80.

I spoke to the physicians working in the ICUs. Anybody that came to the hospital who were 70 years of age or older, well, there were more people infected who were younger, and they got the priority. And those that were older didn't.

BM: Just to clarify. These graphs highlight that care was rationed by age, yes?

JP: It could be. … If I had someone, if I had my grandfather, which I don't, and he was 80 years old and he developed COVID-19, maybe there would be some arguments in the family whether it would be reasonable to not bring him to the hospital.

When you go and talk to people who are working in the ICUs, they tell you that they make decisions based on capacity versus demand. And demand means we're going to work. ... We're going to prioritize care to those who have better chances for surviving, specifically those who are younger and with less comorbidities.

BM: Juan, you had mentioned you were looking at this question. Reuters recently reported that there are remote tribes living in the Amazon rain forest who are just now learning about the COVID-19 pandemic. Health officials were bringing the vaccine to these regions. I looked up the figures, and there are about 2.7 million indigenous people living in the Amazon, divided between 350 different ethnic groups. Have you looked at this question? How has the COVID-19 pandemic affected these people?

JP: I've tried to work with someone from IBM who can actually provide all the information on populations in every single district in Peru. Fortunately, SINADEF reports all deaths that have district zip codes. So we can match those and look at the population, location, urban versus rural, jungle. I haven't looked at it myself, but I think there are enough resources to investigate it and respond to your question.

What is true is that there is a relationship of higher rates of death as related to population density. The urban setting versus rural is a huge difference. For example, in the city of Lima, the district of Lima, which is all downtown and has the highest density, also had the highest number of people die in absolute numbers.

BM: How has the pandemic impacted day-to-day life, social and economic well-being in Peru? The World Bank said that GDP in 2020 for Peru dropped by 12 percent or more. Could you speak to this and perhaps give a portrait of Peru's experiences?

JP: Well, my daughter was fired. She was trained in the US. She has worked in several companies. And then eventually they had her work at home … then started to reduce … their footprint and let a lot of people go. I think it's happening all over.

At the beginning, it was very difficult because we couldn't get out of the house for about eight to nine weeks. So, we had to work from home. I had the clinical research site, and we had to postpone some of visits because we couldn't get out.

BVA: You were essentially in forced lockdowns. They brought the army out.

JP: Yeah, yeah. But it was difficult. It was difficult for everybody. Well, perhaps not for those who have all the money, but it was very difficult for the workforce. Just about everybody was impacted terribly.

BM: Were you able to join the webinar with the scientists discussing the need to eliminate COVID-19 hosted by the WSWS?

JP: I listened to all of them. By the way, I've been reading the WSWS for the last three and a half years. And I have looked at every single presentation.

BM: What is your opinion on the work, the fight that the WSWS has been conducting on the call to globally eliminate COVID? You are a scientist, a researcher, and have studied the pandemic. What does global elimination mean to you, and what do you think we need to do?

JP: Well, we don't know whether we can eradicate the virus. But the best understanding for the globe is how do we control it? For example, a simple example. And I think this is absolutely pertinent. What has happened in New Zealand, full control for 18 months, and now they just let it go. Cases are going up and eventually these will come with more deaths.

What happened in China, in Singapore, even in Vietnam. They were controlling infections quite well. These were the Asian countries. The rest of the countries didn't control anything. They just let it go. What has happened in Brazil is criminal, right?

I was talking to some of my colleagues, and I said, "Look at the way we are handling this pandemic. It's not proper. We're not suppressing the virus." And their typical response was that we don't have enough money. It's going to be quite complex. And this always leads to the argument on how can we even think about stopping the economy?

Everything is being prepared to accept death. This is terrible. Why did I study medicine only then to accept death? Why would I do that?

BM: I can't agree more with you.

BVA: Peru is somewhat unique, I think, in terms of what happened at the end of May with the adjustment in the death figures. Could similar things be done in any country that chooses to? If you took what are recorded cases and the actual death certificates, would you come up with similar results?

JP: I looked at the way deaths were reported in Chile, and it doesn't have the strength of what we have in Peru. And I think Colombia doesn't have it either. Because of the way SINADEF was built, it is really strict. They must follow rules, and everybody's forced to use check lists and all that. It basically doesn't even need any evaluation for anybody.

BVA: I guess I wasn't clear. Are you saying it's because there wasn't as great a contradiction between actual deaths and recorded deaths, or there wasn't as good record of deaths? Meaning that in Colombia, their registry of deaths wasn't as good as Peru's.

JP: Your last statement is what I favor. But I don't have enough understanding to confirm if that's 100 percent accurate, because I started reviewing it only a few months ago. And theirs wasn't anything compared to what we have in Peru. Here, the way it is set up it's you [who] must post the certificate; there's a check list, and there is nothing you can do differently. You have to just post the data, and nobody reviews it. It goes directly into the database. It is instantaneous.

And they use the ID as the initial information. Every single person in Peru has an ID, even the children. So, you start with that information and then it goes, the rest is simple. There is the cause of death, the age at time of death, zip code of death, and all that stuff. It is quite well designed.

BVA: It seems the Peruvian government is better with death than it is with life. It's better at recording death than it is at saving lives.

JP: That's correct. It's even ironic, right. Very organized. But in that case, it was unbelievably well done. And even the vaccine is linked to the same ID. If I go with my ID and they put that information in, they can give the QR of my vaccine. It is all the same databases.

I'm working now with others to have the Ministry of Health link the death certificates together with the vaccine database. We can easily trace how many people have been vaccinated, when they were vaccinated, and then go to time zero and look at when they are losing efficacy. I think we're getting close to convincing them. And if we put this together, then we can analyze the impact of the pandemic on a daily basis.

BVA: One final question, Juan, of a political character. You now have, of course, a new supposedly "left" government led by Pedro Castillo with

100 days in power. Is there any distinction between its policy towards the pandemic and the previous policy pursued by Francisco Sagasti's government or that of Vizcarra?

JP: No difference. I don't see any difference at all. I was checking in today, this morning. I called two of my employees at my office who have family members with COVID-19. They have to isolate and be observed and all that. I called them in the morning just to find out if there was any contact tracing, right? Nothing! Nobody asked what happened. From what I understand, the success in China is because they do contact tracing. It's as simple as that.

I had two cases, just two. One of them was simple. Three brothers and one of them goes to the gym, and that's the one that brings COVID-19 home. Fortunately, nobody else got infected. But there was no action at all. They should have gone to the gym and looked at who else may have become infected and who infected them. No contact tracing at all. And the other one was the same, and these are people who work with me. I have firsthand accounts with sincere complete information.

BM: Juan, any last comments, or thoughts you'd like to share?

JP: I would like to collaborate whenever it is necessary if you deem that what I do is of help. What I really care about is to have the truth about all this exposed. I have to have the truth. That's what really matters.

BVA: How can you confront it if you don't have the truth. Otherwise the next one, and there will be a next one, will be far worse.

JP: Yeah, of course, it will. But we have to make sure that we really have all the information, the relevant information to make a clear diagnosis of what's happening. That's what really matters. And then over that, then there's political decision. ... What are we going to do with that? But I think it begins to have the best data possible, right? To understand really what's happening. And that has been my pursuit.

BM: Well, you should be commended highly for the work that you've done and your contribution to the working class. I certainly applaud what you are doing. Dr. Pérez, thank you for all your time. I look forward to our next discussion.

BVA: Thank you.

JP: Anytime.