Covid-19 dangerous even for young people: The share of a front-line doctor shows how it devastates patients' lungs.

Covid-19 knocked out perfectly healthy people. They can stop breathing at any time, their bodies are completely helpless and can no longer breathe at all.

Louisiana is currently the third highest number of Covid-19 cases per person in the United States.As of March 25, they had nearly 1,400 cases, about half concentrated in the city of New Orleans and 46 deaths.

Yet just two weeks ago, millions of people were still on the street playing on Mardi Gras. The respiratory therapists at a New Orleans hospital were joking around saying that they wished they were infected with corona virus to get paid sick leave.

In the hospital's ICU area, these respiratory doctors are meticulously adjusting the breathing apparatus parameters for their patients.

They do not have too much, mostly older people with asthma or chronic lung disease. A few times a day, the doctor will visit each patient one by one, making sure their oxygen tubes are neatly placed on the nose.

Until the flood of Covid-19 came .

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Lizzie Presser, a reporter on the nonprofit investigative journalist ProPublica interviewed a respiratory therapist in New Orleans to know what happened afterwards.

The unnamed doctor said he was really shocked.Starting last week, he had to give ventilators to the sickest Covid-19 patients.Many people are relatively young, have no significant underlying disease, but are still knocked out by viruses.

These patients were gasping for breath, struggling to grab every sip of air.Pink fluid containing blood flows out of their breathing tubes.No longer a doctor would ever think they would like to have a viral infection to take leave.

The entire ICU area at the hospital is overloaded.The ventilator is running out and the medical protective equipment is available.The breathing doctors here don't have time to adjust the individual patient's ventilator parameters.They must work as quickly as possible, to limit the time in the room.

Each shift is now extended to 12 hours, yet there is a shortage of doctors.Here's what the anonymous breathing doctor in New Orleans told Lizzie Presser over the phone:

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When I read the daily news on Covid-19 in the newspaper, I knew that the disease would be terrible.But because we were dealing with the flu every year, I thought: Well, it probably won't be much worse than the flu.

It was not until I saw with my own eyes that the Covid-19 patients were taken to the hospital, my opinion of the disease completely changed: Covid-19 was much more terrifying than the flu.

I accepted new patients in their 40s, and was really shocked.They were people who looked relatively healthy, had no history of illness that was so ominous, but they were still knocked out by the disease, as if they had just been hit by a truck.

Covid-19 knocked out perfectly healthy people. They are newly admitted patients, usually requiring minimal care with respirator masks and a little oxygen. However, suddenly they could stop breathing at any time, their bodies were completely helpless and could no longer breathe at all.

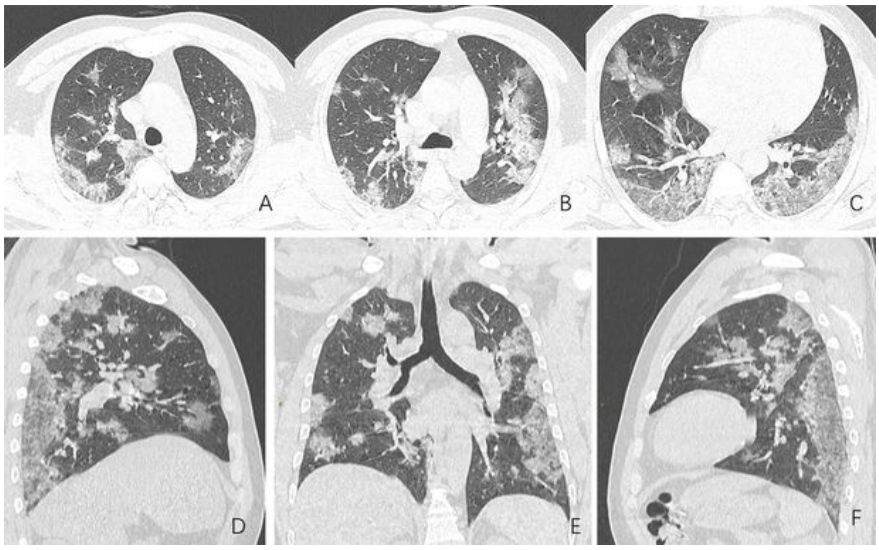
We have a hospital monitoring unit that accepts patients who have been tested positive or suspected to be positive - these are patients who have been in contact with other positive patients.

Every 4 hours, we go to bed to check their life indicators.Some patients are connected to a continuous heart rate monitor, and so we will see their heart rate suddenly increase or decrease.Some medical staff entered the room and noticed that the patient was having difficulty breathing or was not alert.

That's what happens to many Covid-19 patients: They suddenly lose consciousness or suffer from respiratory failure.

It is called acute respiratory distress syndrome, ARDS, when the lungs are filled with fluid.This situation is exposed on X-ray film: The entire lung is basically white because it has been flooded with fluid.Patients with ARDS absorb oxygen extremely difficult.They have a really high mortality rate of about 40%.The treatment is to put the patient on a ventilator.Creating extra pressure helps oxygen get into the blood.

Typically, ARDS is a condition that progresses gradually over time, as the lungs become inflamed little by little.But with this virus, it seems that it happened overnight.



The patient's lungs look like a layer of translucent white glass, or sometimes white as it contains too much liquid instead of air.

While healthy, your lungs are made up of small balls. Like a tree made of foliage, the lungs are made up of air sacs called alveoli.

When you breathe in, all those small air sacs will inflate, and they have many capillaries in the septum, small blood vessels.Oxygen is absorbed from the air in the lungs into the capillaries so that it can be carried along the bloodstream throughout the body.

Usually with ARDS, the lungs will become inflamed.It is like inflammation anywhere on the body: If you burn your arm, the surrounding skin will turn red because of the additional blood flow flowing there.The body is sending inflammation of additional nutrients to heal it.

The problem is, when that happens in your lungs, excess fluid and blood begins to flow.The virus can damage the cells in the walls of the alveoli, causing fluid to leak into the lungs.An ARDS identifier on x-ray films is called *'opaque glass damage* ', which resembles old-style bathroom window glass that is opaque so that no one can see inside.

The lungs appear like this because the liquid on the X-ray film will be white, so the lungs look like a translucent layer of white glass, or sometimes white because it contains too much liquid. because of the air.

Patients with corona virus infection in our place, once they had to use a ventilator, most needed to be installed at the highest level we could do.About 90% oxygen and PEEP (positive end pressure then exhale) level 16 keeps the lungs inflated.

This number has nearly reached the highest level I've ever seen. Having to install a ventilator at that level means we're running out of options.

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In my experience, only drowning patients have such severe respiratory depression - because they have a pile of dirty water in their lungs.Or another is the person who has inhaled caustic gas.

The acute onset in Covid-19 patients is difficult to explain.I have never seen a microbe or an infectious disease causing damage to the lungs so quickly.That was really what shocked me.

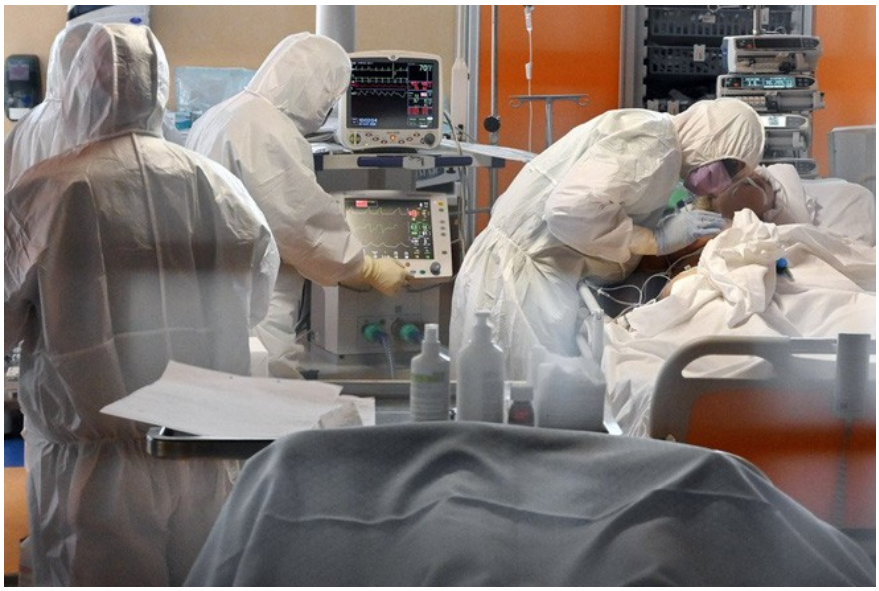
The first shot that made me see the difference of Covid-19 was when my first patient was seriously ill.Almost, I had to call God, this is clearly not the flu.Seeing this relatively young man gasping for breath, pink droplets dripped from his breathing tube and mouth.

The ventilator should have helped the patient breathe but he was still gasping for breath, moving his mouth, giddy and struggling.We had to restrain him down.All other patients infected with corona virus, we also had to restrain them.

They were gasping for breath, really having to grab every sip of air.When your mind is engulfed in shortness of breath and delirious with fever, you don't know when and someone is trying to help you, so you will try to pull your breathing tube out because you feel it makes you suffer from choking, but the truth is you are drowning.

In the past, when I met a patient with an infection, I would see normal colored fluids that could be properly explained.They are green or yellow.But with Covid-19 patients with acute respiratory failure, they had a lot of pink secretions, because they were filled with blood cells leaking from blood vessels into the airways.

Basically, they were drowning in blood and fluids because their lungs were filled with them.Because of that, every time we walked into the hospital bed, we had to constantly drain the secretions out.



God, this is clearly not the flu. Seeing this relatively young man gasping for breath, pink droplets dripped from his breathing tube and mouth.

Before all this happened, we were joking.The jokes were extremely outrageous, that if we were exposed to the virus ourselves, tested positive, and quarantined we would receive a pension.

We all joked: I want to get corona virus because I will get paid leave after that.

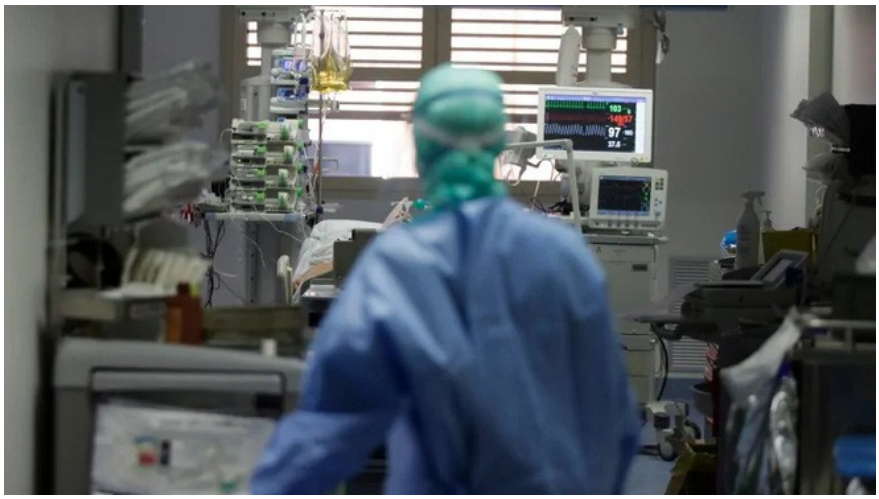
But then when I witnessed what happened to this patient, I seemed to say again: God, I don't want to be infected with this virus and I don't want anyone I know is infected with this virus. .

Starting last week, I was working under very heavy intensity.My friend even considered it a new experience.But later on, it became a serious problem.At first, my hospital only accepted one or two patients, but then it increased to 10 and 20.

Every day, the working intensity keeps increasing.We have more patients and more and more patients get worse.When it all started, we all had tons of equipment, tons of medical supplies.But when there were more patients, everything gradually dried up.

The hospital had to set a limit.At first, we try to use a mask for each patient.But then the new directive is: You have one mask for active patients, another mask for the others.And now the directive is: You have only one mask.

I work in 12-hour shifts.Right now, we are operating 4 times more breathing machines than usual.We have a large patient population and it's hard to find enough people to fill every case.



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The proportion of people taking care of patients has decreased and you cannot spend more time with each patient.You can't even stop to set the ventilator parameters meticulously, because you don't have much time when visiting each room.

We must also make every effort to limit access to preventive medicine to the minimum possible, to reduce the risk of cross-contamination to health care workers and to extend the duration of the use of personal protective equipment.

We are trying to reduce the appointment of ventilators to as few patients as possible.Because you do not want to let any patient have mechanical ventilation longer than they need to.Your risk of death increases every day when you use a ventilator.

Meanwhile, a high-pressure airflow is being pushed into the lungs, and can spill into the small balls inside it.They can be broken.Air can destroy alveoli.Even if you survive ARDS, although some damage can be healed, there are sequelae in the lungs that will last long.

Your lungs may be filled with scar tissue.ARDS can lead to cognitive impairment.Some people lose muscle, and they take a long time to recover from the end of mechanical ventilation.

One thing that is very realistic at the moment is that we can run out of ICU beds at any time. And at that time, not knowing what would happen to patients who needed intubation and ventilators.

Will they die because we no longer have the equipment to keep them alive?What if the epidemic persisted for months, dozens of patients would die because we had no breathing apparatus left for them?

I hope things won't go that far, but if you only have one ventilator and have two patients, you'll have to give a ventilator to someone who is more likely to survive.And I'm afraid we went there.I heard that this happened in Italy.

Refer to *Propublica*