Mexico to Identify COVID-19 Patients Through Cough

By: Telesur
23/07/2020

Sick and healthy people have different tones of voice and cough. This principle will help to identify, with only 15 seconds of audio, whether a person is sick or not.

Scientists from Mexico, the United States, Spain, and Italy are developing a technological algorithm to identify COVID-19 patients just by listening to their cough from their cell phones.

RELATED:

Mexico City Sets Up Medical Tents For Wide Covid-19 Diagnosis

Led by specialists from the Massachusetts Institute of Technology (MIT), the scientists make up a database with thousands of coughs of people of all ages who are healthy and who are carriers of the disease.

This information will be analyzed with artificial intelligence "so that a system records the details of a cough from a sick person and their differences with someone healthy", the Guadalajara University professor Barbara Vizmanos explained.

Sick, healthy, and asymptomatic people have different tones of voice and cough. This principle will help the system to identify, with only 15 seconds of audio, whether a person is in any of those states.

"The people 'donate' their cough and general data. If they are carriers, their coughs will feed an artificial intelligence system that, through voice recognition, will identify what healthy and diseased coughs are like. The system makes

a comparison of sounds with a precision that the ear is not capable", she said.

The study began two months ago at the Hospital Clinic (Barcelona), the Luigi Sacco Hospital (Milan), and various health centers in the United States. It continues now in Mexico at the Civil Hospital and the Guadalajara University's Health Sciences campus.

For researchers, it is essential to have a record of the coughs of people in Mexico, a country that had reported 362,274 COVID-19 cases and 41,190 deaths until Thursday morning.

"From Mexico, we can expand the range of coughs we have so far. As we have the curve (of contagions) going up... we identified an area of ??opportunity to have not only the cough of people who are healthy but with suspicion or confirmation of COVID-19," Vizmanos said.

The Mexican scientist also commented that the detection system will be available in a short time and can be downloaded for free.