

Cultural change as a prevention strategy

From TecSalud's perspective

In December 2019 the appearance of a new virus, SARS CoV2, in the Chinese city of Wuhan, modified all known human structures, from the social to the economic, causing a greater impact on a sanitary scale.

The virus causes the disease known as COVID-19 that so far has infected more than 72 million human beings and has caused more than 400 thousand deaths globally. The challenge it has imposed in all countries has made them face the crisis with their best arguments, but with heterogeneous and changing results.

SARS CoV-2 belongs to the family of coronaviruses, infectious agents known since decades ago and are responsible for 30% of common cold cases. The big difference of their known relatives with the current viral agent lies in three characteristics: their degree of contagiousness, a long incubation time and its higher lethality. Thousands of people over age and individuals with comorbidities such as diabetes and cardiovascular disease -between others - are particularly susceptible to the entity caused by this new coronavirus.

In order to reduce the rate of transmission of the epidemic, the following should be considered: the duration of the infection, meaning that the longer it lasts, the greater the possibility of contagion; the chance, that implies the possibility of the infected individual having contact with other healthy people and spreading the virus to them ; the probability of transmission, which depends on the agent itself and its environment; and finally, the susceptibility of an individual to get the virus and become ill.

The efforts to have a vaccine or a healing treatment are massive, but so far without conclusive results. Therefore, the best strategy for pandemic control lies in community epidemiological measures.

Isolating the sick and monitoring their close contacts decreases the opportunity; the probability of contagion decreases as the distance of physical contact increases, implementing the use of contact barriers such as masks, and sanitize regularly and routinely our hands, as well as all those surfaces, we touch. Susceptibility is modified by separating from risk people who are vulnerable.

Cultural change today is the best strategy that we as citizens can have. The health measures in our study centers and workspaces provide us with a window of opportunity while biotechnology provides us with the vaccines or drugs needed to fight the disease.

Dr. Fernando Castilleja
TecSalud
June 2020