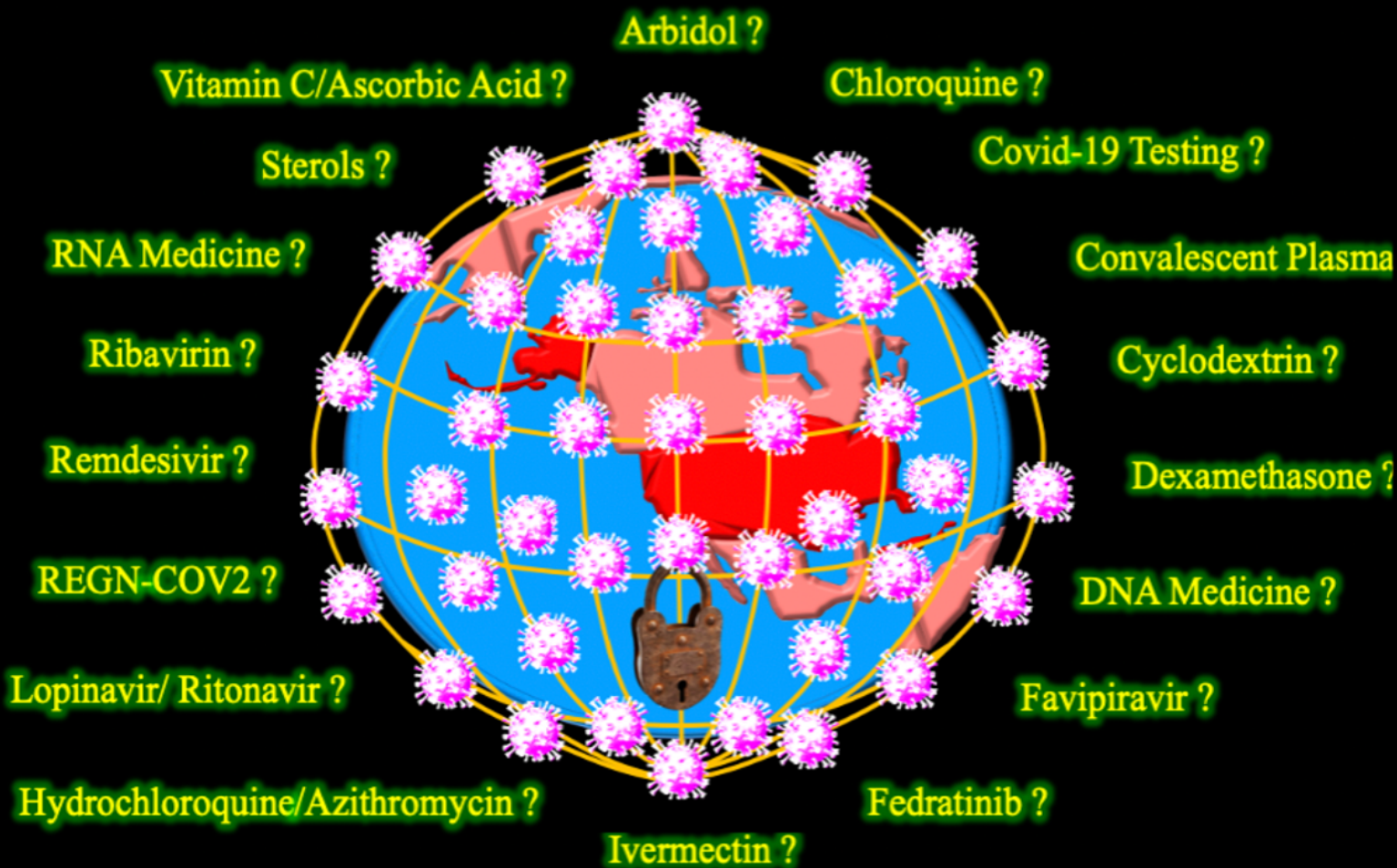




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Fear of coronavirus locks down the world
and resets activities on the earth

Decreased COVID-19 Devastation in Africa - What Can We Learn?

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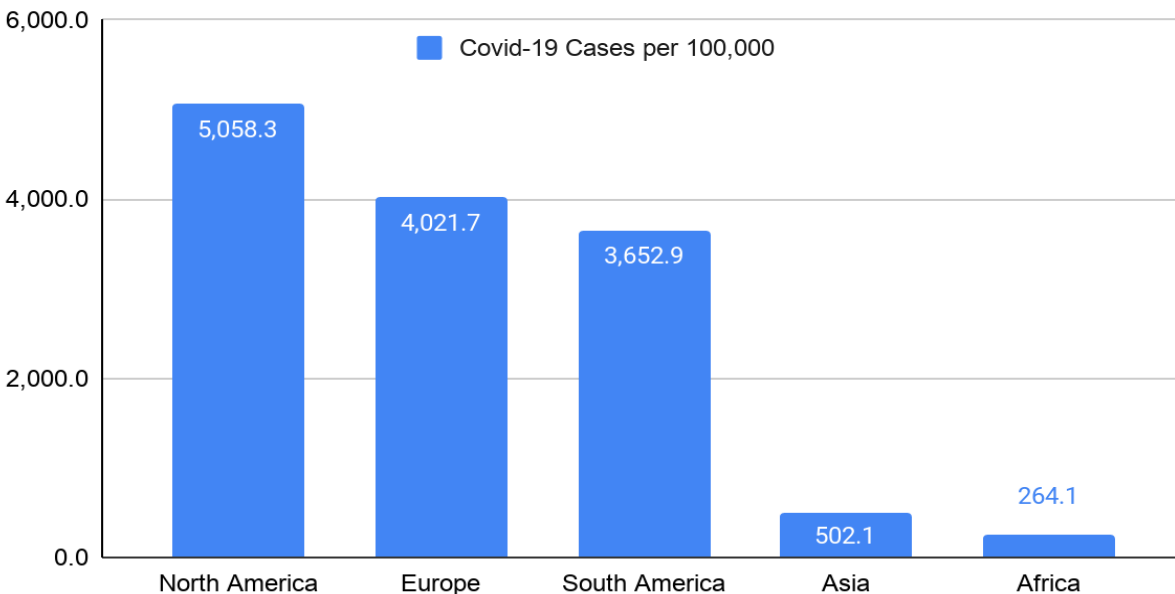
Despite its reputation for providing sub-standard health systems, African countries are credited for conducting an effective coronavirus spread suppression program. The continent, with a population of over one billion, has had nearly 1.5 million cases, according to Johns Hopkins University. These numbers are far less than those reported in Asia, America, or Europe. Africa has over 37,000 deaths, compared to almost 580,000 in North and South America, 205,000 in Asia, and 230,000 in Europe. The Partnership for Evidence-based Response to Covid-19 (PERC), which uses several private and public entities, noted a recent study in Africa. The case-fatality ratio (CFR) of the coronavirus is far less than the global CFR, implying that the results within African populations have not been as severe. So, what are the factors behind Africa's comparatively low COVID-19 fatality rate?

Rapid Preventative Action

The first case in Africa was in Egypt on the 14th of February 2020. At that time, the expectation was that the novel virus pandemic would swiftly overwhelm the fragile health systems of the continent. Several African policymakers took concerted steps right

and entered a three-week shutdown with some other South African states. But just days after the lockout was lifted, Lesotho discovered the first confirmed cases. This then resulted in nearly 1,700 cases followed by 40 deaths.

Covid-19 Cases by Continent as of Early 2021



from the onset to mitigate the spread of the coronavirus. Like avoidance of handshakes, frequently washing the hands, mandatory use of face masks, and social distancing, were widely implemented. A few nations, such as Lesotho, started preventive initiatives long before any cases were confirmed in the country. They declared a state of emergency and shut down schools on March 18th

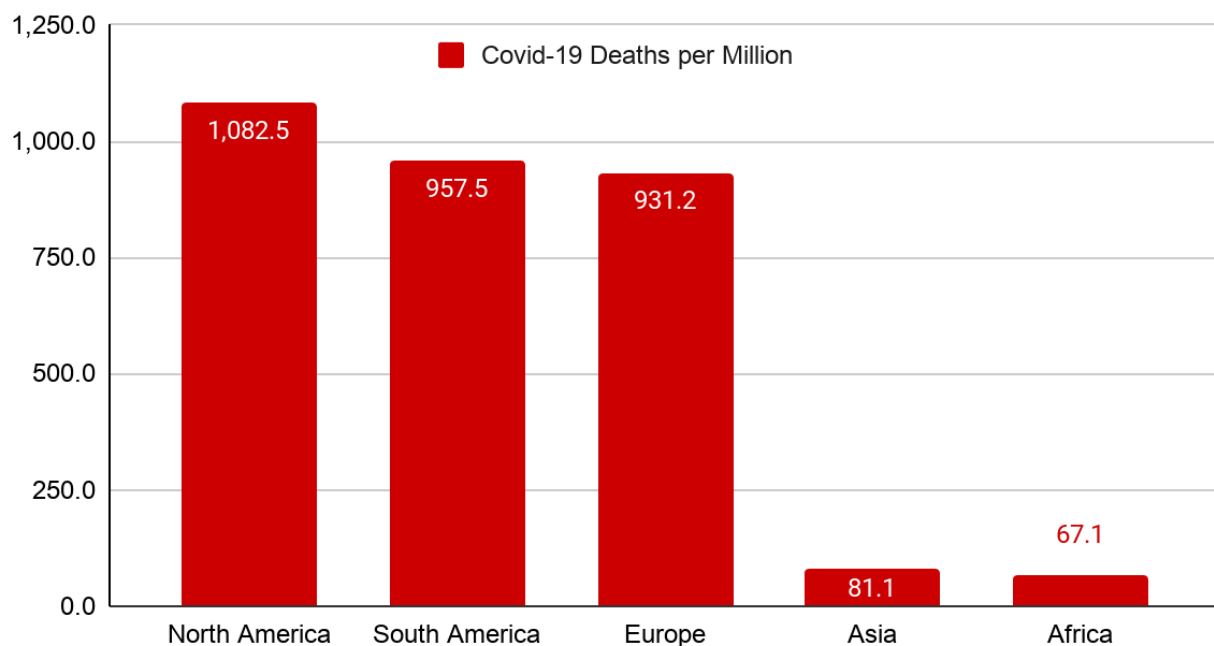
Younger Population

Globally, most of the people who died were over the age of 80. On the other hand, Africa has the highest young people population, with the median age being 19 years old. In sub-Saharan Africa, about 91 percent of COVID-19 infections are among the people under 60; and over 80 percent are asymptomatic. The oldest populations were in North America, Europe, and

wealthy Asian nations. Elderly homes are sparse in most of Africa since elderly persons are likely to live in rural areas. In many African communities, it is a tradition for people to retire to their rural homes when they finish their urban employment. In rural areas, the population density is lower, making it much possible to handle social distances. Another factor was an underdeveloped transportation system within and across countries. This meant that Africans don't travel as often, minimizing contact and exposure.

fought the world's worst Ebola outbreak in 2013-2016, have already perfected the public health strategies used to prevent COVID-19, including quarantining the infected, recording their contacts, and quarantining them whilst they are being screened. In addition, teams that traveled to villages in the most populated province of Africa, Nigeria, to vaccinate children for polio were hastily re-purposed to educate communities about the new virus. Even while the hospital infrastructure in most of the continent is less developed than in other countries,

Covid-19 Deaths by Continent as of Early 2021



Supportive Population

In a poll conducted by PERC in 18 African countries, public support for personal and social safety measures was high, with 85 percent of the respondents saying they wore masks the previous week. Because of this, there has been a dramatic decrease in the number of reported cases and virus-related deaths in about half of Africa, possibly because of the end of winter in the southern hemisphere.

Ebola Strengthened Health Systems

The pandemic took off as the Democratic Republic of Congo (DRC) was handling the Ebola outbreak. The neighboring states were on alert, and COVID-19 surveillance was included in Ebola traveler health surveillance. Several West African countries, which

the continent's strength lies in its hardened community health systems. Although the Ebola virus prepared them for the COVID-19 pandemic, Africa must still stay alert.

Harsh Climate

The relation between temperature, latitude, humidity, and the distribution of COVID-19 was found in a study carried out by researchers at the University of Maryland. COVID-19 does not scatter in rural areas. African countries, farther from the tropics, haven't been as successful in avoiding the pandemic. The spread of the virus worsened in South Africa when the Southern hemisphere headed into winter. But when it grew warmer, the number of cases declined significantly, affecting the continental outlook, as South Africa accounted for almost half of

the deaths and cases on the continent. African countries, though underdeveloped, has been successful in limiting the spread of the disease. Their model teaches us that pandemics should be prepared

beforehand instead of at the last second. This precautionary mentality could have kept the pandemic at bay for a longer period along with theoretically saving hundreds of thousands of lives.

References:

1. Staff, *Science X*. “Reasons for Africa's Low COVID-19 Rates Revealed.” *Medical Xpress - Medical Research Advances and Health News*, Medical Xpress, 6 Oct. 2020, medicalxpress.com/news/2020-10-africa-covid-revealed.html.
2. Linda Nordling Aug. 11, 2020, et al. “The Pandemic Appears to Have Spared Africa so Far. Scientists Are Struggling to Explain Why.” *Science*, 12 Aug. 2020, www.sciencemag.org/news/2020/08/pandemic-appears-have-spared-africa-so-far-scientists-are-struggling-explain-why.
3. Soy, Anne. “Coronavirus in Africa: Five Reasons Why Covid-19 Has Been Less Deadly than Elsewhere.” *BBC News*, BBC, 7 Oct. 2020, www.bbc.com/news/world-africa-54418613.

