**A novel Virus and unchartered course**

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Located some 11,000 miles east of Lahore, Wuhan,the capital of Hubei province in central China intruded on the world’sconsciousness in December 2019 as the epicenter of a novel coronavirus which was making hundreds of people sick.Thesevere respiratory diseasecaused by the coronavirus, similar in symptoms to seasonal influenza,has now been named by the World Health Organization, Coronavirus Disease 2019 (Covid-19) and its spread has been declared a World Global Health Emergency.Coronaviruses can infect animals, usually bats and birds, as well as humans.While animals normally serve as primary reservoirs for these viruses, occasionally they change and acquire the ability to infect humans, as seems to have been the case with Covid-19. The Chinese Government initiated a massive effort torein in the disease,putting the entire population of Wuhan in virtual quarantine. They achieved only partial success.

The six well-recognizedcoronaviruses cause a spectrum of illnesses, ranging from ordinary seasonal colds tothe much moreseriousillnesses, Severe Acute Respiratory Syndrome (SARS) and MiddleEast Respiratory Syndrome (MERS). The SARS virus was first identified in February 2003, and is believed tobe normallyharbored bybats, while MERS virus was detected in Saudi Arabia in 2012 and its normal reservoir is thought to be camels.Atsome time,pathogens jumped from animals to infect humans.

The Corvid-19 virus, first identified in Wuhan, is a newlcoronavirus of which we have only meagre knowledge. The disease is highly contagious and has spread round the world in a short time. In China, the number of confirmed cases has now reached 87,000, while some 7,000 caseshave been diagnosedoutside China,with 3,000 deaths recorded globally. This number will rise as more people are tested for and diagnosed with the virus. The outbreak has now reached 61 countries, the most severely affectedareSouth Korea, Japan, Italy and Iran. In India there have been 21 confirmed cases of the illness. However, only a few cases of Covid-19 have been reported in Pakistan, but no tests for the virus are being performed. Mercifully, in China, the pandemic seems to have peaked and new reports indicate that the number of new cases is declining.

The mortality rate of Covid-19, based onepidemiological studiesin China, is about 2%, which is significantly higher thanthat caused by flu (300,000-650,000 deathsglobally;0.1-0.2 %) that strikes every year. However, the 2% current estimate of mortality by Covid-19 is likely to be too high because the exact number of people infected remains unknown. According to most experts, almost 80% of infected persons experience only mild symptoms, so mild that some may not even be aware that they have been infected. Most at risk are the elderly and those with a compromised health status from heart disease, diabetes and lung ailments.Children, paradoxically, are relatively immune to the contagion. Severe inflammation of lungs and acute pneumoniaare the most serious complications, asantibiotics don’t work, and thereare no effectivetherapy or preventive vaccines available.According to most authoritative sources in the US, it will take at least a year for a vaccine to become available,

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Although Covid-19 shows clinical symptoms very similar to ordinary flu, the two diseases are caused by entirely different viruses. The mode transmission of Covid-19 is still not entirely clear. It was initiallyassumed that infected persons showing symptoms of the disease, sneezing and coughing, transmitted it to others through air-born micro droplets.However, in the west coast of the US, new patients have come down with the disease with no knownprior contacts with any anyone who had been sick. It has led to the conclusion that the viruscan bespread through people who are not overtly sick, but have the virus circulating in their bodies. In this way, the virus can remainundetected ina community for a long time. Large congregations offer optimal environments forsuch spread. To prevent any propagation of the virus, the US Center for Disease Control (CDC) has advised frequent and thorough hand washingwith soap andstaying away from people showing overt signs of infection. For sick people, it is best to stay homein order not to infect others. Facial masks have not proven effective against inhalation from outside of viruses,but are useful against spreading the disease if worn by infected people.

The speed of propagationand virulence of Covid-19 have reprised memories of another pandemic of a century ago, the Spanish flu, that struck in 1918 in the midst of the First World War. The deadly contagion killed an estimated 50 million people worldwide and 675,000 in the United States alone. An unusual feature of this virus was the high death rate it produced among the healthy adults,15 to 34 years of age. The nature and identity of the Spanish flu virus remained a mystery for many decades. It was only in the late twentieth century that, as a result of painstaking researchon tissue samples extracted fromexhumed bodies, itwas identified as H1N1, the same virus that has caused several flu epidemics in the past two decades. It most likely jumped from birds to humans, but it is still not fully understood what made this contagion so devastating in 1918.

Beside its clinical and epidemiological consequences, Covid-19 may have other long-termeconomic consequences. It may cause a world recession and a loweredrate of growth. Already, there is a sharp decline in tourism and international travel, which in turn isadversely affecting the business of hotels, restaurants, airlines and general transportation. In the past week, stock markets around the globedeclinedsharply, nearly 13% in the US. A certain amount of fear is pervading the population across many countries, and in the US west coastpanicky people have been buying large quantities of toilet paper, tinned food, andfacial masks in preparation for aprolonged period of quarantine, prospects for which have been strongly discounted by health officials.

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