Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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OPINION

COVID-19: Situation of European Countries so Far

The coronavirus disease 2019 (COVID-19) pandemic, having infected more than 4 million people by May 12th 2020, across the world is the biggest disaster that has hit mankind globally during recent times (1). The first reported case was on December 31st 2019 in Wuhan, China and was confined to the area (2). Although many countries implemented strict measures to slow down the spread, the World Health Organization (WHO) officially declared a pandemic on March 13th (3). Eventually, sporadic incidents started being reported before the disease spread worldwide, uncontrollably with disastrous consequences.

Europe is one of the worst affected continents with an increased incidence with more than 1.75 million COVID-19 positive cases. In Europe, the worst affected countries are Italy, Spain, France, and the United Kingdom (UK). The death rates across these countries sparked alarmingly and are still on the surge. Other countries in Europe were affected too, though with less intensity. Mostly, COVID-19 spread was by community transmission and clusters of cases. Open border law in Europe, apart from being a threat to the economic, social, and secure fabric of the countries abiding by it, also paves the way for opportunistic infectious agents to cross borders, thereby creating a global emergency. COVID-19 is one such infection that is a threat to health and safety mechanisms and hence, public health in broader terms (4). As per Article 45 of the Treaty of Lisbon, which came into force in 2009, the members of the EU have powers to limit freedom of movement for issues that can be considered a threat to public health (5). Article 29 of Directive 2004/38 further provides powers to the member states to limit freedom of movement or expel carriers of epidemics from entry into the respective countries (5). Interestingly, countries like the UK and Italy though are under lockdown have not enforced complete border controls as of May 4th 2020 (6), and free movement in the height of pandemic could attribute to an exponential increase in COVID-19 cases. Unlike the UK, Italy has brought about some restrictions in movement during the peak of the pandemic. Furthermore, the worst affected country in Europe is Italy, with the UK catching up. Arguably, the total number of casualties and deaths in the UK could be much higher than reported since, until recently, the UK did not include deaths due to COVID-19 outside the National Health Service (NHS) in the daily death reports. If these were included, the numbers could likely exceed that of Italy and the rest of Europe. UK argues that closing borders temporarily will not stop the pandemic from spreading and takes the example of Italy and the US who, in spite of having brought about some travel restrictions, suffered very badly due to the pandemic. Williamson E, et al (2020) reported that in the UK, there is high risk for males, patients having diabetes. neutral for current smoking or, high blood pressure (7).

The UK believes that the virus is here to stay for a long time, and hence blocking borders is not a solution (8). Countries like Germany, which temporarily closed borders, have escaped the wrath of the pandemic without causing much damage to the public health system prevalent there. The countries that reinforced border controls initially allowed travel within the Schengen zone despite closing the borders to others. The effectiveness of such a partial border control policy is controversial as the borders remain open for travel between the hard-hit countries in Europe, such as Italy, and thus has proven ineffective in controlling the spread of the pandemic, though some control is always better than none. This is probably because the European Union (EU) and some of its members have drastically underestimated the virulence and the severe consequences of this potential life-threatening disease. Amount of commercial flight routes as well as total passenger volume are highly relevant risk factors for the spread of current COVID-19. While in North America, the flight destinations are concentrated on fewer countries (USA and Canada) and fewer international airports, the number of countries and destinations affected in Europe is much higher. Multiple countries within Europe are at serious risk of constant exposure to COVID-19 from China and other highly infected countries due to frequent air traffic. Direct passenger flights also triggered COVID-19 spreading. Before COVID-19 pandemic lockdown in Hubei on January 23th 2020, Wuhan airport had direct flights to major European air hubs such as London, Rome, and Paris, the capitals of the most affected countries in the region (9).

The EU member countries implemented some standard measures, such as social distancing, isolation besides testing. Most countries closed schools and public gatherings until the numbers decrease. Germany, like many countries, has shut its schools (3). In Scandinavia, Norway recorded their 100th case on March 4th 2020, Sweden after two days, and Denmark after five days respectively. Surprisingly, social distancing measures vary strongly between the three countries. Whereas both Norway and Denmark

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introduced strong social distancing measures at approximately the same time, Sweden imposed relatively light restrictions. For instance, daycare centers and primary schools in Sweden remain open (10). Although Sweden has a sound healthcare system, the mortality rates match West European countries (11). The capacity of the virus to cause manifestations of variable intensities in the affected people with some being asymptomatic, but virulent carriers can deepen the challenge further.

Germany has been reported as having 29.2 critical care beds per hundred thousand inhabitants as compared to Italy (12.5), France (11.6) and Spain (9.7) (12). Though the healthcare system in Germany has been ranked as the best in all of Europe, Germany has still reported 7533 deaths as of May 12th 2020 (1). However, the death rate is still low compared to other countries like the U.K., Italy, France and Spain. It is interesting to explore the failures in the healthcare system of those countries that were hit the most by the pandemic. One of the significant failures could be due to overestimation of the healthcare systems with their ability to deal with such a rapidly spreading pandemic, which can claim thousands of lives daily. The healthcare system needs to be revisited across Europe since the overburdened system struggles to cope with the increasing population, leave alone a rapidly spreading pandemic. To deal with the pandemic requires adequate personal protection equipment (PPE) for all the staff who need to make public contacts and cannot maintain social distancing. Besides, the hospital requires enough beds and critical care facilities, including ventilators. Unfortunately, most of the European nations are not prepared to deal with this global disaster. Many of the EU countries have restricted sales of medicines, hand-sanitizers, face masks and medical devices due to mass panic buying. Hospitals are lacking critical drugs to treat COVID-19 patients for global trade restrictions and excessive stockpiling by EU governments (13). This may be linked with the perceived feeling of insecurity and instability of certain situations while the patient numbers are rising (14). The effect on the health care system of the strict lockdown measures by Denmark and Norway with the warmer approach of Sweden. They showed that more robust measures are effective and decrease the stress on the health care system. Compared to the more loosened measures of Sweden, the lockdown sharply reduces the number of hospitalizations and intensive care patients in Denmark and Norway. Their analysis also revealed that the Swedish approach would have resulted in more than twice as many hospitalizations and intensive care patients at the peak (10). Thirty-eight laboratories in 24 European countries had diagnostic tests available by January 29th 2020. The main implementation obstructions were identified as low availability of PPEs, primers/probes, positive controls and skilled personnel (15).

Arguably, the number of cases is accurately reported across Western Europe due to strict ethical guidelines, which may unfortunately not be the case in those countries that do not abide by ethical code and international obligations. Since it is not possible to monitor individual county data on an international level, the statistics provided by individual countries can only be taken into consideration. This is another reason why some Western European countries have reported an alarming number of casualties as opposed to the rest of the world. The statistics should not, therefore, present a false interpretation of a failing healthcare system in some Western European countries as there is questionable clarity on the data gathered from the rest of the world.

Conflict of Interest

None.

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None.

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