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What is COVID-19? As COVID-19 a Real Threat to Human Life? Impacts of COVID-19 on Environment, Education, Internet Usage, Sports, and Mental Health of Human Beings Especially on Health Care Staff

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ABSTRACT

In December 2019, a cluster of patients with pneumonia of unknown cause was linked to a seafood wholesale market in Wuhan, China and were admitted in hospital. The etiology was later verified as a novel, the coronavirus genus (2019-nCoV) and was subsequently named COVID-19 by the World Health Organization (WHO) on 11 February 2020. It is spread by human to human transmission via droplets or direct contact. Among patients with pneumonia caused by SARS-CoV-2 fever was the most common symptom, followed by cough, pain and runny nose. The disease rapidly spread all over the world and as of 5 August 2020, data from the World Health Organization (WHO) have shown that more than 18 354 342 confirmed cases have been identified in 213 countries/regions. America is currently at the top, followed by Europe. Based on the facts of an increasingly growing frequency of infections more than half of the global population is under some form of lockdown due to which decrease in environmental pollution takes place. Data released by NASA and ESA indicates that pollution in some of the epicentres of COVID-19 such as Wuhan, Italy, Spain, South Korea and USA, etc. has reduced up to 30%. COVID-19 inhibits the process of learning due to which millions of students and teachers were affected across the globe. The introduction of an online learning system has brought significant improvements in learning of the students. The responses to online education vary widely depending on the level of income. Due to COVID-19 Internet traffic is 25 to 30 percent higher than the average, which has a significant effect on in-house social media consumption worldwide and gives a big boost to apps. It is also a major source of fear, stress and anxiety as well as a main element affecting people's health globally, especially of health carrying a staff which suffered more avoidance behaviours than the general public, and it leads them to sadness and depression. Misinformation and misleading facts from local news sources, lack of daily routine, decrease of social and physical interaction cause severe stress. The COVID-19 global epidemic impacted the sports industry badly. Many professional leagues all around the world banned their seasons and events have been rescheduled, which cause a huge loss to the economy.

INTRODUCTION

A number of cases of viral pneumonia of unknown etiology (VPUE) were admitted to the Wuhan Hospital on 29 December 2019 (Li, 2020; Chen, 2020). It is the most populous city in

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central China with more than 11 million inhabitants (Lu, 2020). These cases have been confirmed by the China Center for Disease Control (CDC). Researchers noted that the patients had previously served in the Huanan Seafood Wholesale Market, an animal sales centre. Samples from these individuals have been forwarded to laboratory review (Li, 2020). Causative factors were identified from the swab sample (Catrin Sohrabia, 2020). The etiology was later verified as a novel, the coronavirus genus (2019-nCoV). The disease was therefore referred to as novel coronavirus-infected pneumonia (NCIP) (Li, 2020) and was subsequently named COVID-19 by the World Health Organization (WHO) on 11 February 2020. (Catrin Sohrabia, 2020; Alexander E. Gorbalenyal, 2020).

Coronavirus is from the Coronavirinae family, order Nidovirales (Guo, 2020). They are large, positive-sense RNA viruses made up of four genera: alpha, beta, delta and gamma (David R Williams, 2020). Virus disease, poses a significant public health threat (Nathan D. Wolfe, 2007).

Coronaviruses may infect the respiratory, gastrointestinal, hepatic, and central nervous systems of humans, livestock, birds, bats, mice, and many other wild animals (Lin-Fa Wang c. a, 2006). COVID-19 patients most notably had clinical symptoms of dry cough, dyspnea, fever, aches, pain, nasal congestion, runny nose, diarrhea, and bilateral pulmonary infiltrates (Lu, 2020; Guan, 2020; Huang, 2020). Although early studies have shown a link between a single local fish and wild animal market and most cases of infection, indicating the possible animal-to-human transmission, studies has increasingly shown the transmission of SARS-CoV-2 from one person to another via droplets or direct contact (Yan Bai, 2020). WHO (World Health Organization) confirmed human to human COVID-19 transmission via respiratory droplets in January 2020 (WHO, 2020).

Since the onset of the novel coronavirus (2019-nCoV) infection in Wuhan, China, in December 2019 (Tang, 2020). It's spread rapidly across China and many other nations (S. Hui, David, 2020; Dutheil, 2020). In 6.4 days the outbreak rise by two thirds (MLeungMDa, 2020). The Chinese government has locked the entire country to slow down the spread of infection (Wilder-Smith and Freedman, 2020). Outbreaks start in February in Iran, Italy and other countries all over the world. Eventually, the epidemic transforms into a pandemic, then by the end of March Fifty percent of the global population was locked up (Tosepu et al, 2020). COVID-19 affected 213 countries and territories around the world, according to the report released on 17 July 2020 (Worldometers.info, 2020)

According to the study released on 5 August 2020, the total number of COVID-19 cases worldwide reached 18 354 342, while the total death toll globally recorded 696 147. America is at the top with the largest number of cases of COVID-19 (9 841 842) and death (367 934), whereas Europe is at the second number with an overall tally of reports (3 451 556) and losses (214 731) (WHO, 2020). Based on the facts of an increasingly growing frequency of infections (H. Wangab, 2020) and the probability of spread by asymptomatic carriers (Cristian Biscayart, 2020), SARS-CoV-2 can be easily transferred to humans and has a high pandemic potential (Xiaobo Yang, 2020). SARS-CoV-2's high transmission capacity, the development and ease of global travel can more enhance its global spread (Cristian Biscayart, 2020). COVID-19 is a major threat to public health, production, life, social functioning and international relations (Chenghua Zhou, 2020). While safety measures such as school shut down, exit inspections, and crowd gathering dissolution are required (Xiaobo Yang, 2020). Governments have imposed border closings, limits on travel and quarantine in countries that make up the world's leading economies, sparking concerns of an imminent global crisis and recession (Buck, 2020).

The dramatic decrease of traveller vehicles on the roads due to COVID-19 has led to a drop in air pollution; into specific nitrogen dioxide (NO₂), the preliminary evaluation of satellite data in many urban areas suggests that the decline in concentration level of NO₂ across cities worldwide during their lock-up time has been inconsistent. For example, cities in China and Italy tend to reveal a much larger and more rapid decrease in this form of pollution than most of the US cities (Smith, 2020). The figures show that mobility has dropped by up to 90%. Especially in Spain, Italy and France, although

mobility has dropped the lowest in the US (Sulaman Muhammad, 2020). In the past, 4.6 million people died due to the production of NO₂, but now, thanks to COVID19, production control exists. COVID19 also restricted socio - economic growth (Dutheil, 2020; He, 2020a; He, 2020b Faustini, 2014; Cohen, 2017; Bhosale, 2020). The pandemic of COVID-19, labelled as a black swan incident and comparable to the World War Two economic scenes, has had a negative impact on any sphere of daily life (Nicola, 2020).

Education is the cornerstone for the growth and advancement of every nation, but COVID-19 in almost every country affects the educational system terribly. They shut down all educational institutions as a result of the greater initiatives such as the shutdown of educational institutions affecting millions of pupil globally (Benaouda Bensaid, Tayeb Brahimi, 2020). Classroom lessons were stopped, as being live pupil demonstrations. But these practices began to be developed over the Internet because of the beneficial side of social media, and HEIs utilised their particular online platforms (e.g., Moodle) or even other online resources, such as Zoom. The state has built a platform where teachers are provided with many online resources (e.g. Easy Scripts, Colrd, Inkscape, and Sketchpad, to list only a few (Portuguese Republic, 2020a, online). In addition, teachers can use the email to send assignments to pupils. Which they then fulfilled and send by email. Pupils perform online tests across several educational institutions, and Live stream the lectures of the assignments they design at houses. (Portuguese Republic, 2020b).

With COVID-19 the use of the internet is also getting more and more. Billions of people are affected from COVID-19 all over the world and the internet is one of the major lifelines for all these people. Students of all levels are studying online, exercise courses, religious services and automated medical appointments (Medina, 2020). The use of internet is 25 to 30 percent higher in the duration of COVID-19 than in general and online sources are also evolving. (Branscombe, 2020). The use of the Internet has expanded considerably, especially in the night time (GRAHAM-CUMMING, 2020). People are at home all day, engaged in either work-from-home, communicating with their colleagues online, and constantly using internet platforms for work and entertainment (CLOUDEFLARE, 2020). During COVID-19 period people seem to want to do more than just communicate through messaging and text, they want to see each other which give a big boost to apps (Popper, 2020).

COVID-19 has some negative effects on the health and mind of human beings, as it is a major source of fear, stress and anxiety. It also affects the quality of life globally (Alexander Reznik, 2020). Due to COVID-19, a condition of fear and depression has spread all over the globe and seems to bring the globe to a dead stop (Ajay Kumar*, 2020). People living for education or work away from their families or otherwise separated from their loved ones are at a higher risk of developing mental health problems such as depression, anxiety etc. (Sood, 2020). When the information from official news channels is lacking or irregularly distributed, which mislead people and cause severe stress to them (Cyrus SH Ho, 2020). Loneliness and financial loss during COVID-19 is also a major risk to mental health. (Barreto, 2020; Okruszek, 2020; Samantha K Brooks, 2020). Because of the minimal supply of personal protective equipment at the start of COVID-19, health carrying staff suffered more than the general public, displayed more avoidance behaviors after quarantine, registered more loss of income, and were significantly more psychologically impacted by more resentment, anxiety, disappointment, depression, loneliness, nervousness, sadness, and less joy (Samantha K Brooks, 2020; Huang, 2020; Xianget,2020)

Sports have long been considered a sector important for connecting of cultures and generations. Any event, whether it's a single competitive football game, baseball, cricket match, running track, horse racing festivals, creates a critical danger at both national and international level therefore, to reduce the spread of COVID-19 the closing of gyms, stadiums, parks, fitness centres, exercise facilities, physiotherapy centres, parks, and playgrounds take place (UN, 2020; Daniel Parnell, 2020). Every part of the sporting value

chain has now been impacted, from players, clubs, and leagues to the media reporting and covering games (WEF, 2020).

COVID-19 has impacts on almost every aspect of human life around the world. In this paper, we will discuss a few of them. 1) COVID-19 a big threat to human life. 2) COVID-19 and the global Environment. 3) Impacts of COVID-19 on education. 4) Impacts of COVID-19 on internet usage. 5) COVID-19 VS mental health. 6) Impacts of COVID-19 on global sports.

Materials and Method

In this study, the secondary research approach has been adopted. This study accomplished the analysis by reviewing different articles, newspaper, World Health Organization (WHO), Worldometers, NASA, ESA, OECD, CNN, United Nations, ILO, Educational International, THENEWSTACK, UNESCO etc.

COVID-19, a Big Threat to Human Life

COVID-19 is seriously affecting human life across the world and the number of cases and deaths is continuing to increase every day. According to WHO, 2020 report America currently ranks the highest, followed by Europe. The number of cases and deaths present across the world and in those countries that are suffering most from COVID-19 are shown in table 1. This table also tells us how many new cases and deaths have happened over the last 24 hours. According to the report of WHO, peoples whose age is from 26 to 64 years, affecting the most from COVID-19 than the others, as shown in the table 2

Table1. COVID-2019 Confirmed Cases and Deaths as of 5 August 2020 (WHO 2020)

Situation in numbers (by WHO Region)		
Total (new cases in last 24 hours)		
Globally	18 354 342 cases (206 709)	696 147 deaths (5 116)
Africa	834 147 cases (8 875)	14 750 deaths (611)
Americas	9 841 842 cases (100 115)	367 934 deaths (2 600)
Eastern Mediterranean	1 585 458 cases (10 907)	41 601 deaths (399)
Europe	3 451 556 cases (21 623)	214 731 deaths (476)
South-East Asia	2 299 433 cases (56 777)	48 569 deaths (995)
Western Pacific	341 165 cases (8 412)	8 549 deaths (35)

Table 2: Age distribution of confirmed COVID-19 cases, COVID-19 WHO surveillance, January to July 2020

Age groups (years)	Cases (%)
0-4	1.2%
5-14	2.5%
15-24	9.6%
25-64	64%
65-84	19.4%
85+	3.4%

Figure 1. Number of confirmed COVID-19 cases reported in the last seven days by country, territory, or area 30 July to 5 August, 2020

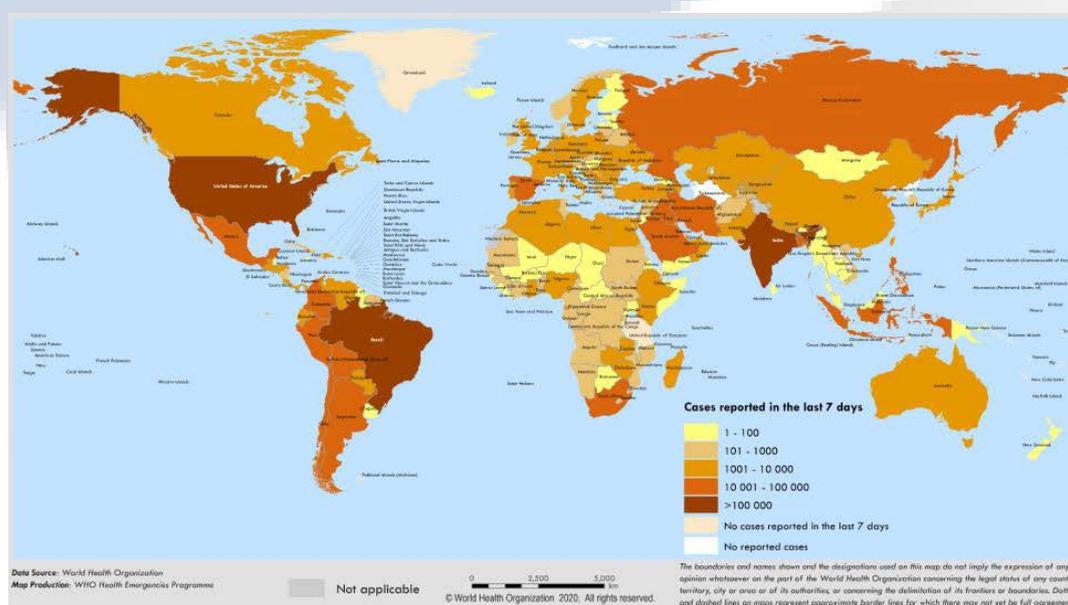
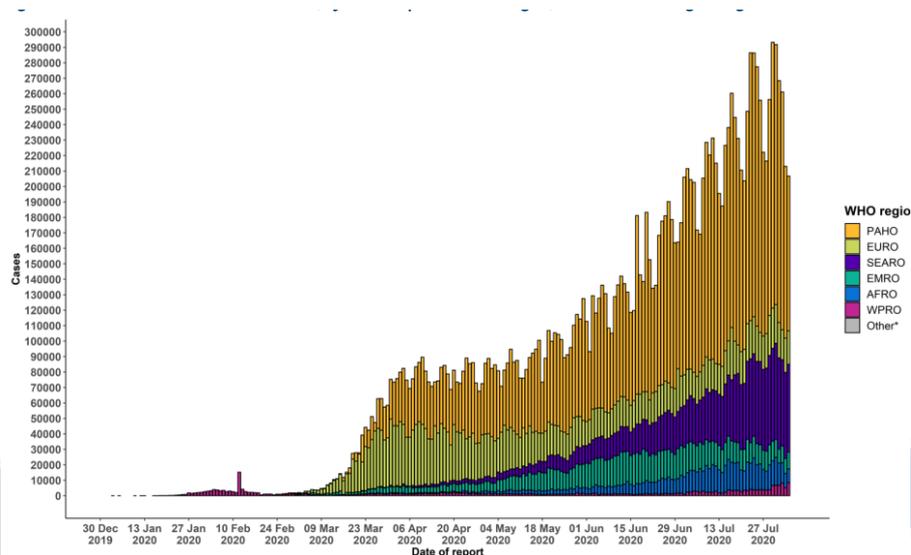


Figure 2. Number of confirmed COVID-19 cases, by date of report and WHO region, 30 December to 5 August, 2020



COVID-19 and the Global Environment

Regardless of the lockdown across the world, the industrial activity, manufacturing and transport sector hit COVID-19 badly. Citizens are either hesitant to fly or not permitted to. As per the report, owing to COVID-19, the lowest in 75 years (CNN, 2020), air transport fallen by 96 per cent. Owing to this epidemic condition, oil consumption decreased dramatically and prices declined significantly. COVID-19 has a serious negative impact on health and the global economy, but also leads to a decrease in pollution due to reduced socio - economic activities (Dutheil, 2020)

NO₂ (nitrogen dioxide) is a very reactive source of pollution released mainly from the fossil fuel combustion. Pollution from transport is considered a significant source of NO₂ emission (He et al., 2020a, 2020b). NO₂ is deemed very harmful to human health (Faustini et al., 2014). NO₂ can create a number of illnesses. (He, 2020a and 2020b). Every year, 4.6 million people worldwide die due to bad air quality. Atmospheric pollution is a global problem and its effects can be seen even across developed countries, such as Europe, in which 193,000 people died from atmospheric pollution in 2012 (Cohen, 2017).

Table 1.

NO₂ emissions data acquisition across different regions.

Location	Agency	Satellite	Time	% Reduction	Source
Wuhan	NASA and ESA	Aura and Sentinel-5P	Jan–Feb (2019 and 2020)	30%	(NASA, 2020)
China	ESA	Sentinel-5P	Jan and Feb 2020	20–30%	(ESA, 2020)
Europe	ESA	Sentinel-5P	Mar 2019 and Mar 2020	20–30%	(ESA, 2020)
Italy	ESA	Sentinel-5P	Mar 2019 and Mar 2020	20–30%	(ESA, 2020)
France	ESA	Sentinel-5P	Mar 2019 and Mar 2020	20–30%	(ESA, 2020)
Spain	ESA	Sentinel-5P	Mar 2019 and Mar 2020	20–30%	(ESA, 2020)
USA	NASA	Aura	Mar 2015–19 and Mar 2020	30%	(NASA, 2020)

Pollution Assessment During COVID-19

Lockdown due to COVID-19 limited all transport activities across the globe, resulting in lower energy usage and lower demand for oil, which have a huge effect on the quality of the atmosphere. NASA (National Aeronautics and Space Administration) and the European Space Agency (ESA) have provided fresh data indicating an increase in air quality and a reduction in NO₂ emissions by up to 30%. NASA gathers the information on its AURA satellite using OMI (Ozone Monitoring Instruments). ESA gathers the information using TROPOMI (Tropospheric Monitoring Instrument) via Sentinel-5P satellite. NASA and ESA release satellite images of different places before and after locking (see Table

1). Additionally, Google released mobility index data for February 23-April 05 (see Table 2). The statistics show that mobility has decreased to 90%. Especially across Spain, Italy and France, while mobility has decreased the least throughout the USA.

Table. 2

Mobility index report based on google tracking.

Location	Transport	Grocery and pharmacy	Retail and recreation	Work place	Parks and outing	Residential
USA	-54%	-20%	-49%	-40%	-20%	+13%
Spain	-89%	-77%	-94%	-68%	-90%	+23%
Italy	-86%	-82%	-95%	-62%	-90%	+24%
France	-82%	-62%	-85%	-53%	-73%	+17%
Germany	-47%	-13%	-58%	-30%	+61%	+8%
UK	-70%	-41%	-82%	-54%	-29%	+15%

Wuhan

At Figure. 1 during 2019 and 2020 the abundance of NO₂ in Wuhan is demonstrated. The emissions are reduced by approximately to 30% (NASA, 2020). That is measured via Sentinel-5P satellite with TROPOMI equipment. The picture offers correlation of NO₂ emissions from Wuhan 2019 (Jan and Feb) to 2020 (Jan and Feb). Where it specifically shows the COVID-19 reduced NO₂ emissions substantially.

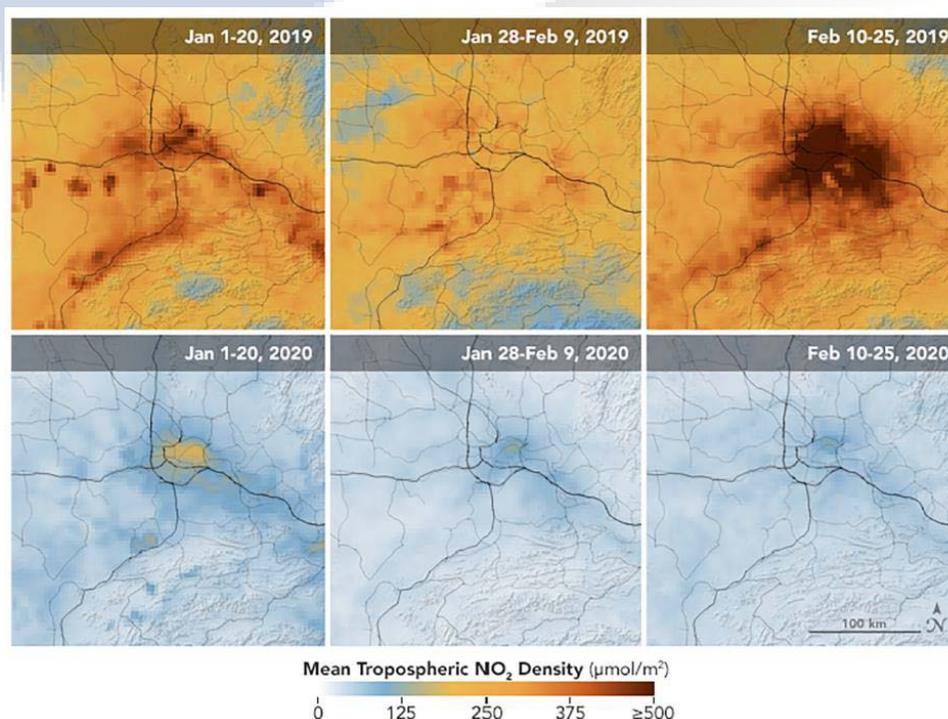
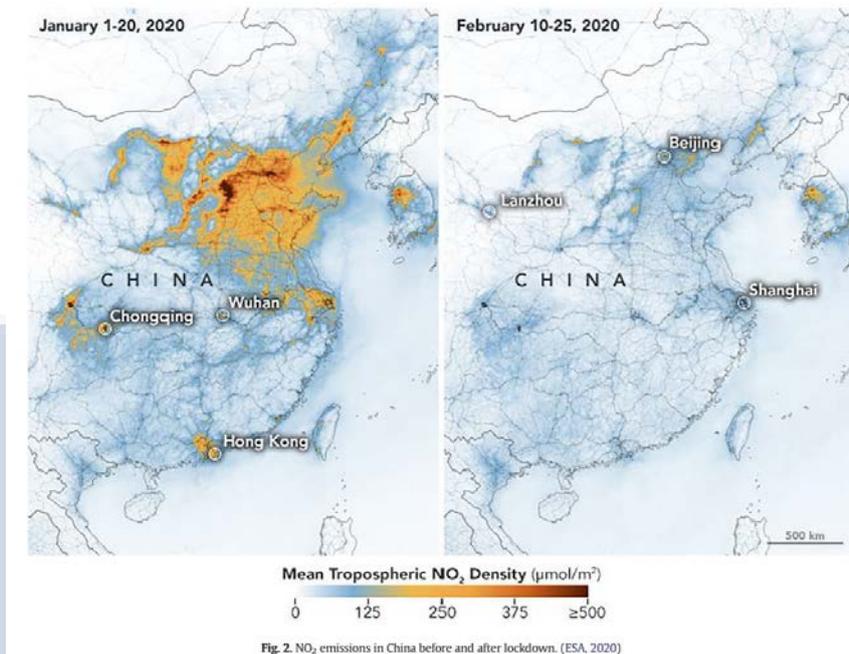


Fig. 1. NO₂ emissions in Wuhan during 2019 and 2020. (NASA, 2020)
China

Figure. 2 reflects China's series of NO₂ emissions pre and post lockdown. Where NO₂ emissions are decreasing from 10 to 25 February to 20–30 percent after lockdown (ESA, 2020). ESA satellite Sentinel-5P has captured the satellite image using TROPOMI instrument.



Spain

Figure. 3 is the concentration of NO₂ releases in Spain between March 2019 and March 2020. As per (ESA, 2020), Spain's NO₂ emissions were reduced by up to 20 to 30% owing to lock down, particularly throughout large cities like Madrid, Barcelona and Seville. The satellite image was obtained using TROPOMI Instrument using ESA satellite Sentinel-5P.

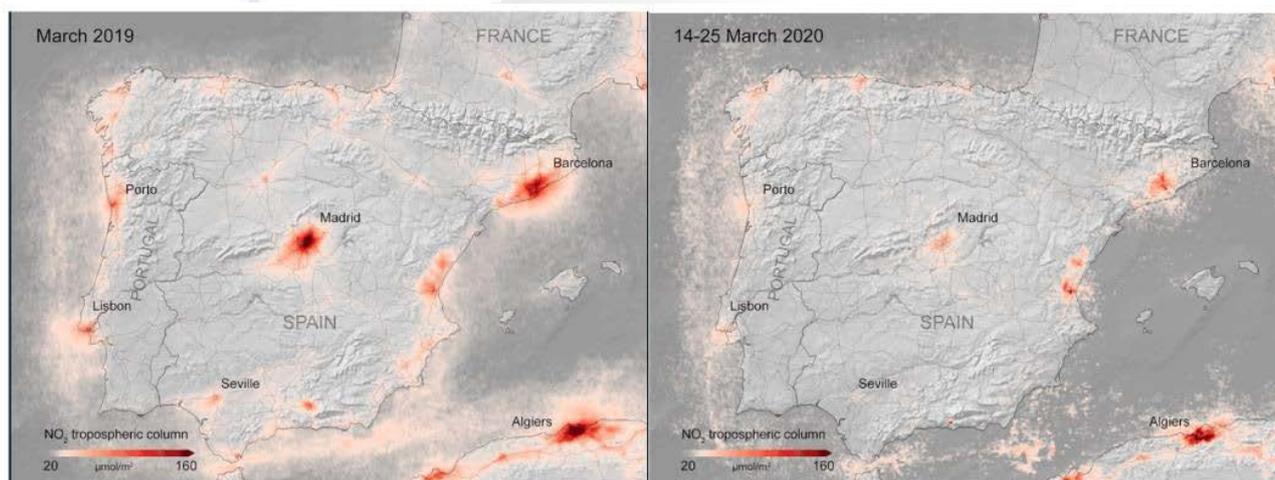


Fig. 3. NO₂ emissions in Spain before and after lockdown. (ESA, 2020)

France

Figure. 4 Consists of the amount of NO₂ releases in France between March 2019 and March 2020. Emissions of NO₂ in France were decreased by 20 to 30 percent (ESA, 2020). The satellite image was

obtained by TROPOMI Instrument by ESA satellite Sentinel-5P. NO₂ concentrations dramatically decreased throughout lockdown in Paris as well as other large cities due to closure of transport. S. Muhammad et al. / Science of the Total Environment 728 (2020) 138820

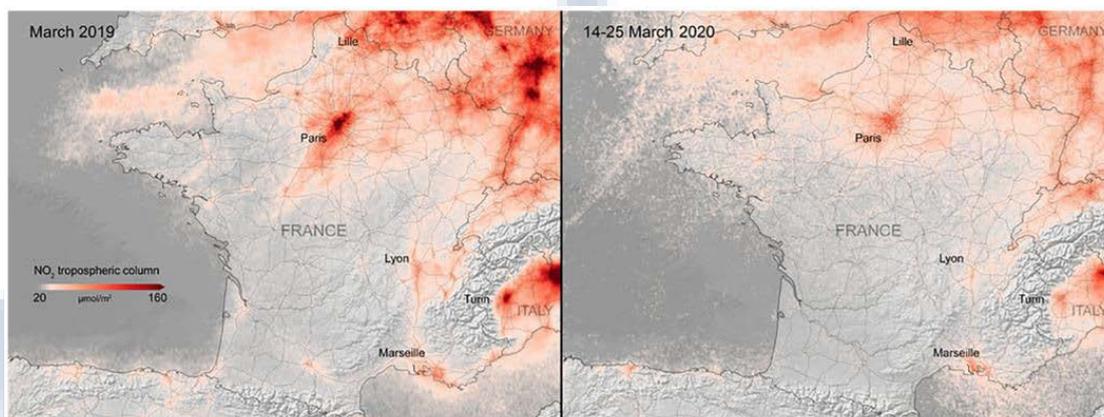


Fig. 4. NO₂ emissions in France before and after lockdown. (ESA, 2020)
Italy

Figure. 5 Consists of the concentration of NO₂ emissions in Italy during March 2019 and March 2020. The picture shows that throughout lockdown, the concentration of NO₂ decreased significantly owing to transport closure and limited mobility. The satellite image was obtained by TROPOMI Instrument by ESA satellite Sentinel-5P. Emissions of NO₂ in Italy were reduced by 20 to 30 percent (ESA, 2020).

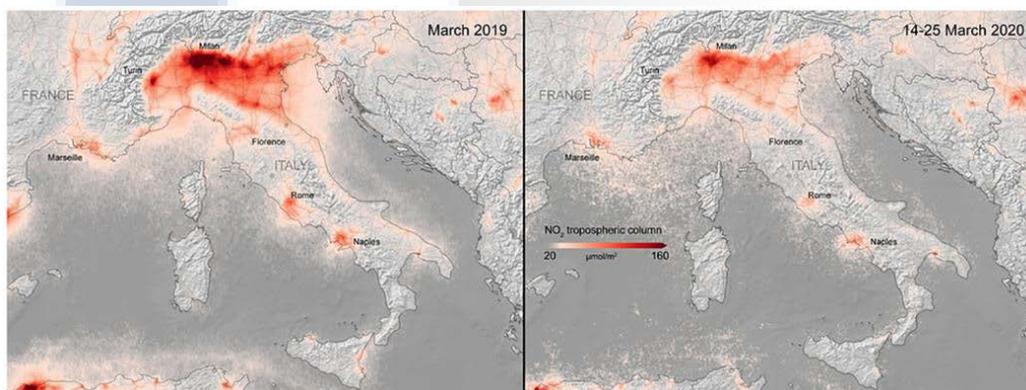


Fig. 5. NO₂ emissions in Italy before and after lockdown. (ESA, 2020)
USA

Figure. 6 represents a concentration of NO₂ emissions in the northeastern part of the U.S between March 2015 to 2019 and of March 2020. The satellite image was taken by NASA via the AURA satellite using the OMI instrument. Where NO₂ emissions are reduced by up to 30% owing lockdown in the Northeastern part of the U.S (NASA, 2020).

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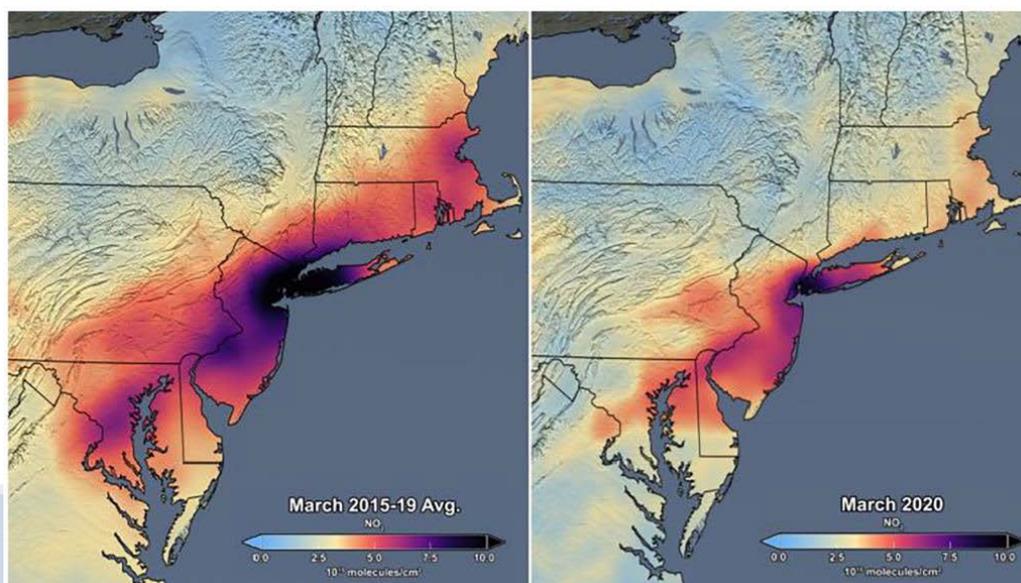


Fig. 6. NO₂ emissions in northeastern USA before and after lockdown. (NASA, 2020).

South Korea

Figure. 7 NO₂ levels have also decreased in South Korea, which has long been struggling with more emissions from its large fleet of coal-fired power plants, as well as from industrial areas centres in China. South Korea has tried to avoid lockout of the entire country, and is also thoroughly monitoring and separating suspicious coronavirus cases.

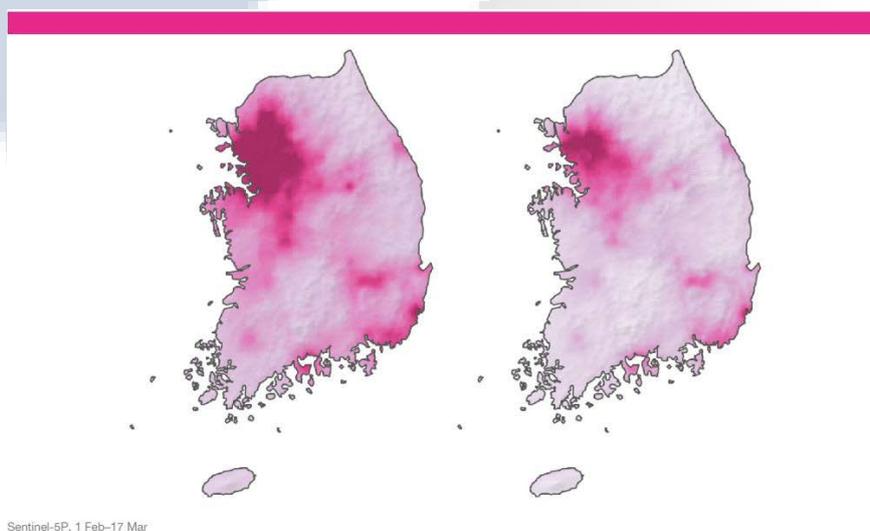


Fig.7. No₂ emission in South Korea before and after lockdown

Impacts of COVID-19 on Education

Education is a cornerstone from which every culture grows and progresses. This is a foundation for human development. COVID-19 inhibits the process of learning at various levels. In order to prevent the spread of novel coronavirus disease, many countries closed off their public and private educational institutions. As a result of the COVID-19, the strong initiatives, including the closing of schools and colleges, social distancing and the change from face to face teaching and learning to e-learning impacted millions of students around the world. These changes caused both students and educators into some degree of discomfort, but also provided a glimpse of how education could change quickly and forced education policymakers and administrators to look at new models of creativity and

innovation in education. Although most students will come up with a solution in face-to-face learning worldwide (Benaouda Bensaid¹; Tayeb Brahimi², 2020). The first closure of educational institutes began on February 20th in China and Mongolia where 999,014 enrolled learners were affected (UNESCO, 2020). This number rose to 298,368,352 by the end of February and jumped to 1,600,780,887 by the end of March, then fell to 1,292,378,969, May 1,184,120,554 June 1,067,968,447 by the end of July, 1,066,817,855, when some countries started to raise the shutdowns of coronavirus. The closure resulted in about 1.5 billion students from schools across the globe, which is 87.6 percent of the total enrolled learners in the world (UNESCO, 2020; Educational International, 2020). On July 16, 2020, educational institutes were closed in 107 countries, which impacted 1,066,817,855 learners by the end of July (60.9 percent of total enrolled learners) and prompted virtually all educational systems to implement distance learning (UNESCO, 2020). More than 63 million primary and secondary school teachers, as well as countless educational support workers, were also affected. This also influenced educators in early childhood education, technical and vocational training workers, and teachers in higher education (ILO, 2020).

Figure. 1

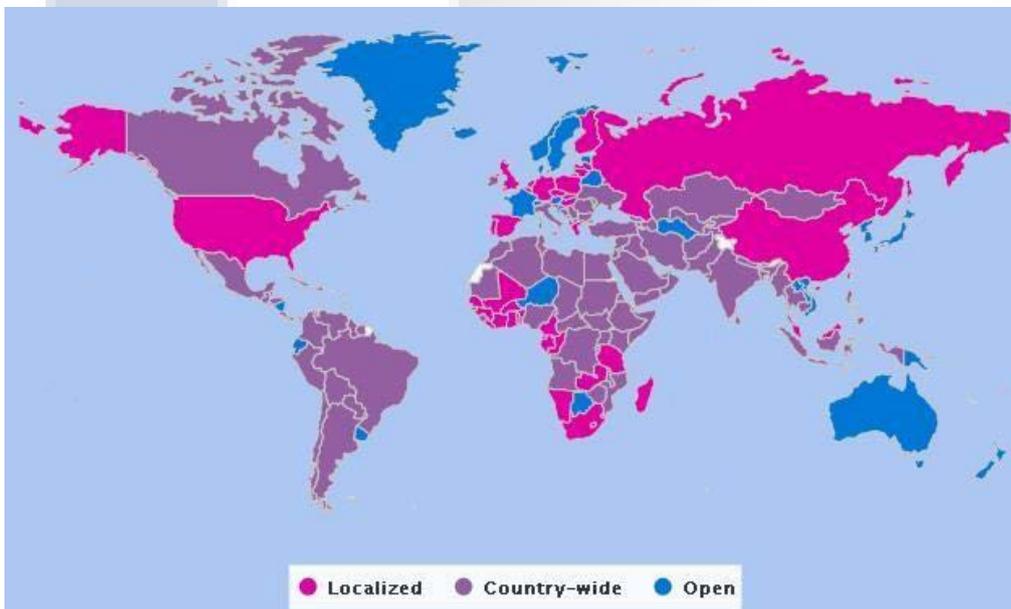


Figure. 1 refers to the number of students enrolled in pre-intermediate, intermediate, lower-secondary, and upper-secondary levels of education [ISCED levels 0 to 3], and at tertiary level [ISCED levels 5 to 8]. Enrolment statistics based on the most recent statistics from the UNESCO Institute for Statistics. (UNESCO, 2020).

At country-wide government-mandated closures of educational institutions affecting at least 70% of the student community enrolled from pre-primary to upper secondary [ISCED levels 0 to 3], while at Localized level government-mandated closures of academic institutions which influence more than 70% of the student population enrolled from pre-primary to upper secondary level. Accessible Governments have not closed educational institutions in the sense of COVID-19 or have declared officially that schools are permitted to reopen after a regional or national closure (UNESCO, 2020a). From the outset, it was expected that the global lockout of educational institutions would trigger a significant (And potentially unequal) interruption of learning outcomes, disruption of internal tests, and the cancelation of public performance

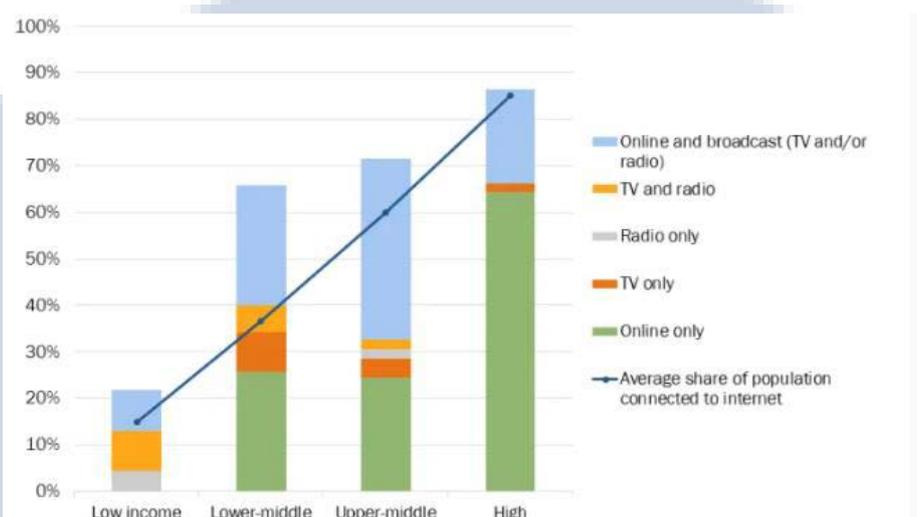


Figure. 2 Summarizes how governments in countries of different income levels are using remote learning, to continue basic education in light of school closures.

Assessments or their substitution by an inadequate alternate. The educational disturbance often affects families across the globe as home schooling affects the income of the parents as well as the learning and social life of the children. In addition, internal evaluations which were the primary source used to measure the success of students for both teachers and parents were cancelled. Public tests such as rates GCSEs and A were also discontinued (Burgess, 2020).

Though some improvements are needed, outbreaks have gone well. Nevertheless, Changes in the learning environment arise at all educational stages, ranging from primary, secondary, and higher. In higher education the application of learning has become something that needs further recognition. Discovers that many institutions of higher education, private and state colleges as well as universities across the world, are not equipped to introduce electronic systems. This is because learning was combined with the previously implemented learning system. The introduction of the online learning system has triggered significant improvements in learning for the students (Benaouda Bensaid, 2020). During this COVID-19 lockout, online learning platforms play a major role in the current phenomenon, but thousands of students with disabilities in kindergarten, college and university level find it difficult to access classes without a laptop and internet, lack of study material in the correct format. The loss of social contact, weak internet connection, noise, lack of independent learning skills among children and young children or emotional maturity to maintain attention. Students in urban areas have an advantage over the rural areas because they are economically from stable family while the students of rural areas are generally from a poor family and going to public educational institutions. These poor students are worried about exam as they have no materials for exams (Ullah, 2020).

Students must also hold Higher Order Thinking Skills (HOTS) to solve problems. They will also need to have COVID-19-related Pro Environmental Behaviour (PEB). Previous work has developed an Environmental Issue (HOTS-AEP) based Higher-Order Thought Skills Assessment (HOTS-AEP) to explain the implementation of e-learning, HOTS, and PEB on students during COVID-19. Previous studies showed that eLearning implementation was generally effective (27.74 percent) and very effective (43.07 percent), even though some problems were encountered. Other findings showed that the HOTS of learners are in the bad category (26.20) while the PEB was in the excellent category (84.82). Governments use online education to promote proper education (K-12) throughout the light of school closures (Vegas, 2020).

According to figure 2, the responses vary widely depending on the level of income: less than 25 percent of low-income countries actually have any kind of remote learning, most of which use TV and radio. By comparison, nearly 90 percent of high-income countries have resources for remote learning, almost all of which are provided online. A mixture of online and broadcast education is used in more than twenty percent of high-income countries. More than 70 percent of upper middle-income countries provide remote learning opportunities, using a combination of internet and broadcasting. A smaller share of low-middle - income countries 66 percent offer opportunities for their students to learn online and/or broadcast remote. Yet even as governments of low- and middle-income countries are attempting to provide online educational content, for example, only 36 percent of citizens of low-middle - income countries have access to the internet (Vegas, 2020).

Impacts of COVID-19 on Internet Usage

The Internet has become a vital lifeline for billions of people around the world who are affected by COVID-19. Students of all levels are studying online, exercise courses, religious services and automated medical appointments (Medina, 2020). In general, Internet traffic is 25 to 30 percent higher than average, and what we do online is also evolving. For Akamai, Internet usage also increases in a typical month; (a global content delivery network, cybersecurity, and cloud service company, providing web and Internet security services) that's usually 3 percent rise, 30 percent last month. Their peak traffic was 82Tbps in March 2019, while in March 2020 it was 167Tbps. The average daily traffic rate is higher than the record in March of last year. Web exchanges in Amsterdam, Frankfurt and London saw traffic rises of 10-20 percent about March 9. The trade in Milan rose by 40 percent the day it quarantined Italy (Branscombe, 2020). The use of the Internet has expanded considerably, especially at the night time. It seems like people are using the Internet more at night time. Traffic has increased by more than 30 percent at all hours of the day and night with Internet use (GRAHAM-CUMMING, 2020). The

global market for wireless internet services is projected to rise from \$569.2 billion in 2019 to around \$968.7 billion in 2020 as COVID-19 expanded and the shutdown as a result has led to a dramatic increase in demand for wireless internet services. People are at home all day, engaged in either work-from-home, communicating with their colleagues online, and constantly using internet platforms for work and entertainment. The demand is projected to grow at a CAGR of 6 percent by 2023 and hit \$717.9 billion (CLOUDEFLARE, 2020).

A global survey conducted in March 2020 reported that coronavirus had a significant effect on in-house social media consumption worldwide, with 35 percent of total respondents claiming to have read more books or listened to more audio books at home and 18 percent listening to more radio because of the COVID-19 pandemic, while more than 40 percent of customers spent longer on messaging services Ironically, although at least 50 percent of respondents in most countries said that, they were watching more television coverage, estimates for Australia and the United States were lower, reflecting just 42 and 43 percent, respectively. Also, Australians were the least likely to read more newspapers; just five out of hundred customers said they were doing so compared to the 14 percent global average. Although 60% of Italians spent most of their time on messaging services, the same was true in Japan for just 8 percent of respondents, and survey participants from China and the

Philippines were by far the most likely to spend more time on streaming music services (Koptyug, 2020).

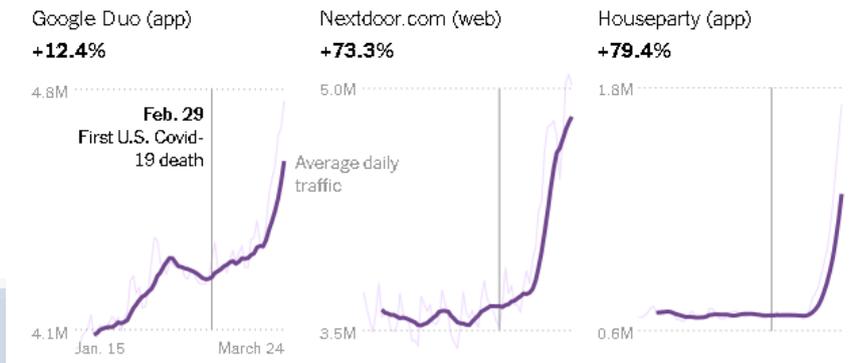


Figure. 1

Although conventional social media sites have evolved, people seem to want to do more than just communicate through messaging and text they want to see each other. It gave a big boost to apps that used to remain in relative obscurity, such as Google's video messaging service, Duo, and House party, as shown in the figure 1, which allows groups of friends to join a single video chat and play games together. World has also become much more interested in the immediate climate, and how the virus and the quarantine measures are evolving and responding. This has resulted in a renewed interest in Next-door, the social media platform focused on linking local communities (Popper, 2020). Self-isolation and time of work-from-home definitely changed the way we use the internet. This situation has significant effect on consumer behaviour, including online search behaviour (The European Business Review, 2020). The figure 2 reveals the Google search words as of June 5, 2020 with the largest growth in search volume in Germany over the last month. Request containing the word "tomris uyar" rose by 4.050 percent over the previous month during the time of consideration, while "George floyd" came in second position, rising by 3.900 percent (Koptyug, 2020).

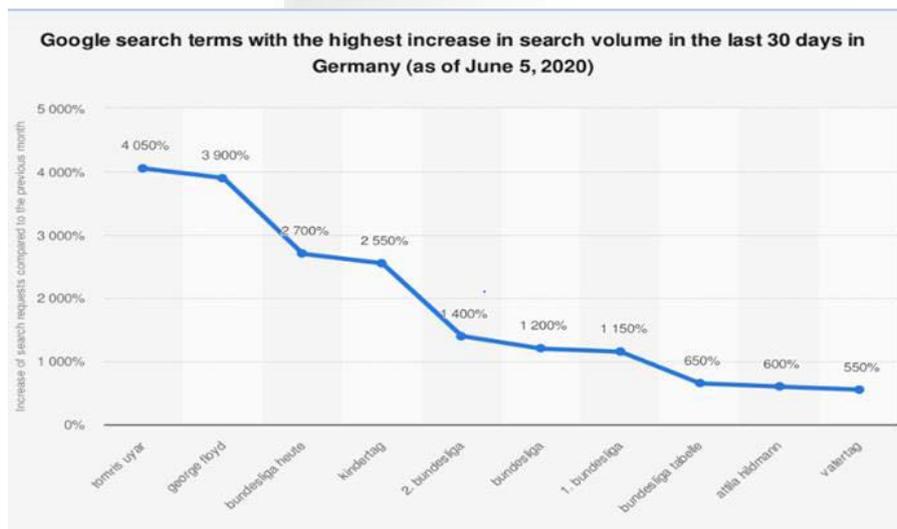


Figure 2.
Covid-19 VS Mental Health

Specific health-seeking behaviours are affiliated with psychological responses. (Cyrus SH Ho, 2020). COVID-19 is a major source of fear, stress and anxiety as well as a main element affecting people's health and quality of life globally (Alexander Reznik, 2020). While the planet reels under the crisis triggered by corona virus disease (COVID-19), a condition of fear and depression has spread all over the globe and seems to bring the globe to a dead stop (Ajay Kumar*, 2020).

Throughout disease outbreaks, the general population was covered by several safety systems, including shutdown or suspension in routine activities, social distance, decreased interaction among people, wearing face masks and adequate ventilation to minimize the risk for infectious diseases (Tan, 2020b; Wang, 2020b; Wilder-Smith, 2020).

People living for education or work away from their families or otherwise separated from their loved ones are at a higher risk of developing mental health problems such as depression, anxiety etc. Elderly people are also heavily habituated to live alone. Although social media helps people to become more involved in physical isolation, it is indeed a main source of misinformation and misleading facts that adds to the burden (Sood, 2020). People also search for event-related knowledge to keep updated about different issues. However, when information from official channels is lacking or is irregularly distributed, so people use some local news sources which mislead them and cause severe stress (Cyrus SH Ho, 2020) depression has spread all over the globe and seems to bring the globe to a dead stop (Ajay Kumar*, 2020).

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Hospitals had a minimal supply of personal protective equipment at the start of the spread of the virus, and protocols or treatment were not well defined (Xianget, 2020). Many health care staff and experts also feel overwhelmed and unprepared to properly treat patients infected with the new virus (Huang, 2020), therefore health workers suffered more than the general population, displayed more avoidance behaviors after quarantine, registered more loss of income, and were significantly more psychologically impacted by more resentment, irritation, anxiety, disappointment, sorrow, helplessness, depression, loneliness, nervousness, sadness, concern, and less joy (Samantha K Brooks, 2020).

As a result, health care staffs were faced with isolation, stigma perception and rigid expectations, which could lead to many emotional and psychological outcomes such as frustration, anxiety, insomnia, and stress related to the uncertainty of the outbreak (Ran, 2020; Zhang, 2020). Any of the

above risk factors will cause the burnout onset more likely (Ornell, 2020). Burnout can be described as a psychological illness characterized by chronic fatigue, frustration and inefficiency and it occurs as a reaction to the existence of highly stressful working conditions (Maslach, 1998). Numerous studies have recorded the prevalence of mental health disorders (Ahmed, 2020; W. Lu, 2020). Lai, 2020 found that 50 percent had depression, 45 percent had anxiety, and 34 percent had insomnia in a survey of frontline health care staff in China. In particular, the prevalence of burnout among health operators has a very strong effect both on their physical and psychological health and on their organizational and work performance (Portoghese, 2014; Low, 2019; Woo, 2020). Get longer screen time, erratic sleep habits as well as bad diets under the conditions to be less physically active, resulting in weight gain and lack of physical activity. Lack of exposure to exercise and physical activity may also have effects on mental health, which can intensify depression or anxiety that many may feel in the face of distancing from normal social life (United Nation, 2020). The current condition causes problems of mental wellbeing, such as stress, depression, anxiety symptoms, insomnia, rejection, frustration and fear (Jones, 2017). These mental health issues not only affect medical workers' attention, understanding and decision-making capacity, which could hamper the fight against COVID-19, but might also have a prolonged impact on the overall well-being (Kang, 2020).

Impacts of COVID-19 on Sports:

Sport has long been considered a sector important for connecting, nurturing, and bridging cultures and generations. The worldwide COVID-19 crisis exploded the closing of gyms, stadiums, parks, fitness centres, exercise facilities, physiotherapy centres, parks, and playgrounds (UN, 2020). While changes in policies to reduce the danger of large events for public safety (WHO, 2020). Any event, whether it's a single competitive football game, baseball, cricket match, running track, horse racing festivals, creates a critical danger. Therefore, it was important at both international and regional levels to stop spreading the disease (Daniel Parnell, 2020).

All Significant sporting activities cancelled, including the Russian Football tournament had also been suspended (Aljazeera, 2020). The European Union also announced that next year's European Championship, postponed to 2021 because of COVID-19, the competition will still be coined UEFA EURO 2020. Due to the coronavirus pandemic, Germany's top handball league, the Handball-Bundesliga (HBL), cancelled the rest of their season (DW, 2020).

The postponement of all scheduled fall contests alongside SWAC championships by the Southwestern Athletic. This affected fall sports all over the country for men and women. The meeting begins the process of establishing plans to execute a competitive fall sports program during the spring of 2021 (Bullard n.d, 2020). On April 23, UEFA also postponed the Euro 2021 Women's championship, and it will now be played in England from July 6 to July 31, in the same venues that were originally proposed to host the event. Asian Champions League matches involving Chinese clubs Guangzhou Evergrande, Shanghai Shenhua and Shanghai SIPG have been postponed. The start of the knockout tournaments shifted back to September. The World Athletics Tournaments planned for August 2021 in Oregon were postponed back to July 2022 to postpone conflicting with the delayed Olympic Games (Français, 2019). The world sports industry as well as its related activities platform that gathers athletes, staff, and fans together only helps to increase the overall challenge to a prolonged global expansion. (Bullard,n.d,2020).

National Basketball Association in the United States the season was suspended in March 2020, there were already 259 games remaining in the 2019/20 NBA regular season. Combined league gate revenues damaged as a result of these cancellations are valued at between 350 and 450 million U.S. dollars, while Non- ticket revenues damaged up to 200 million U.S. dollars as shown in figure 1 (Gough, 2020).

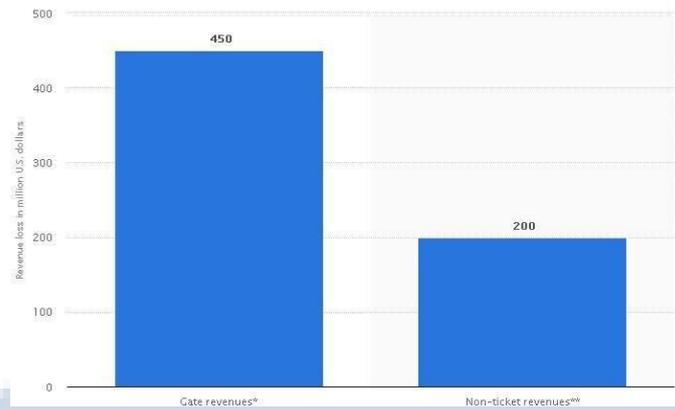


Figure. 1

Summer Olympics, usually one of the most-watched sporting shows worldwide, is moved back a year. The sports industry's global revenue was valued at \$471bn in 2018 – a rise of 45 percent since 2011 – and the only trend seemed to be upward before coronavirus stopped playing. Every part of the sporting value chain has now been impacted, from players, clubs, and leagues to the media reporting and covering games (WEF, 2020).

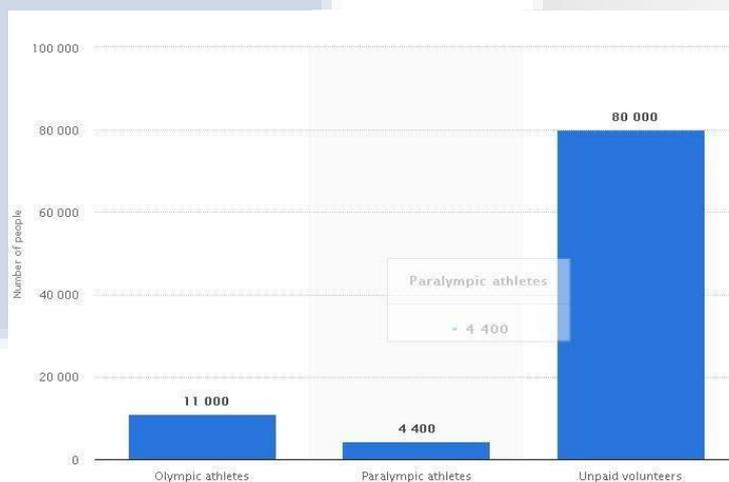


Figure. 2. Number of people affected by Olympics 2020 postponement due to COVID-19

The COVID-19 global epidemic at the beginning of 2020 impacted the sports industry badly. Many professional leagues all around the world banned their seasons and events have been rescheduled. The government announced in March that the Olympics in Tokyo, originally scheduled for July 24 to August 9, will be postponed until July 2021. Given the effort and preparation required throughout the run-up to an Olympic year, this postponement has had a massive impact on the 11,000 Olympic athletes, 4,400 Paralympic athletes and 80,000 unpaid volunteers as shown in the figure 2 (Gough, 2020).

With football the globe's largest sport in sales, the financial effect is expected to be massive. Figure.

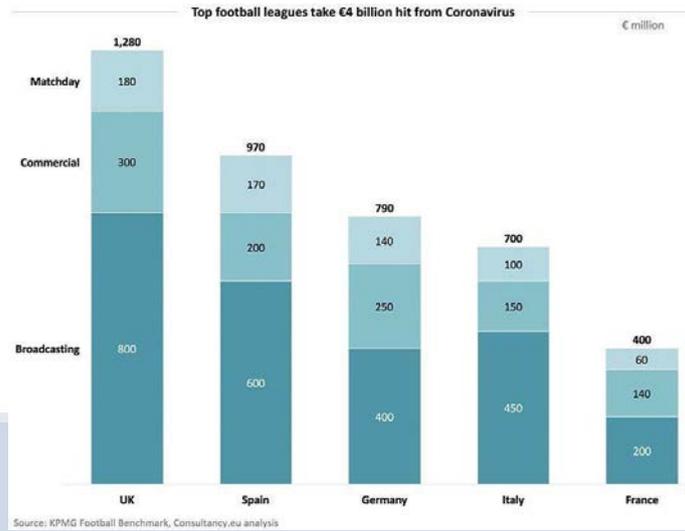


Figure.3

From figure. 3 it is cleared that according to the estimate by KPMG, the region's five largest leagues will suffer a loss of €4.1 billion in missing revenues. Quite unexpectedly, Europe's wealthiest football competition, the English Premier League, is hit very hard, with British teams predicted to lose up to € 1.2 billion. The Spanish Primer Division – also known as LaLiga, would see between €800 Million and €950 million of funds drain away, while the German Bundesliga, the Italian Serie A and the French Ligue 1 could see up to € 750 million, €650 million and € 400 million respectively authored off from their previously estimated earnings. The figures are based on three key components: no revenue from stadium visits reduced income from media rights, and a decline in other business operations, such as merchandising. –The clubs experience the greatest pain with missing broadcasting sales, which usually make up half of the lost income,|| Said Paul Adriani from KPMG. Channels who have joint agreements with leagues will demand funds refunded if events are postponed and the schedule is not accomplished (KPMG, 2020).



Figure.4

Figure. 4 shows that the US sports leagues-NFL, NBA, NHL, MLS, and MLB-are expected to lose at least \$3. 2bn in gate revenue from mid-March to the end of June, a report by Sports Innovation Lab revealed. British football, cricket, and rugby will collectively lose around \$850 m in the coming year, according to estimates reported to UK members of Parliament. In the most badly affected European countries, Spain's football league, La Liga, will endure a potential revenue loss of \$1bn and the Italian Serie A \$703 m if they are forced to cancel their seasons, according to a report by international accounting company KPMG (Aljazeera, 2020).

Conclusion

COVID-19 is a global pandemic and a serious threat to human health and life. It spread very quickly from person to person and country to country and killed thousands of people around the world. It globally damaged the education system and sports sector. The educational system is badly disturbed at all levels all around the globe. Although e-learning system has triggered significant improvements in learning for the students, but due to lack of internet facility, laptop, etc. students is facing many problems which are a sort of obstacle in their way of learning. All significant sporting activities are either cancelled or delayed due to which a huge loss is occurring in the sport sector around the world and impacted thousands of players. Over use of social media, false news, lockdown, quarantine, loneliness, loss of income, closing of businesses, distancing from families, and social distancing etc. cause depression to the people around the world. During COVID-19 the use of the internet is increased. People are at home all the time, engaged in either work from home, communicating with their friends, taking online classes, and constantly using internet platforms for entertainment. It also gave a big boost to apps. Apart from this a clear and distinct decrease is occurring in environmental pollution due to lockdown, which is a sort of positive aspect of COVID-19.

Governments should take strict measures to implement lockdown and banned unnecessary movements in those areas where COVID-19 is at the peak to prevent the spread of the disease and lower down the number of deaths. It is also the responsibility of governments to provide e-learning facilities to students in order not to disturb their education. In order to lower down the anxiety and depression, governments should need to give proper and timely awareness to people about this disease and to ban local news channel. Moreover, governments need to facilitate people economically in order to lower down their depression.

It is also necessary to wisely open the sports activities in order to prevent the economic loss. Due to a lockdown reduction in pollution occur, but this positive impact of the COVID-19 on the environment may be temporary, but governments and individuals should learn from this lockdown to learn that how to reduce pollution on a long term basis. The use of social media and internet is enhanced during lockdown which is a good source of income so government should need to launch new apps to bring ease and facilitate the public to use more and more internet to become aware of the situation and enjoy their time during lockdown.

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