The COVID-19 and its Impact on Global Employment

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The purpose of this paper is to consider the influence, scope, limitations, barriers, and challenges imposed on employment by the existing condition brought on by coronavirus 2019 (COVID-19) health crisis, along with the potential consequences. An in-depth literature review was conducted of the current COVID-19 crisis, along with similar pandemics in recent history, and the effect of such events on global employment, unemployment, and economic activities. The research focus is primarily on the impact of COVID-19 from January to May 2020 , i.e. the first months of global awareness of the threat posed by the virus In January 2020, the increasing number of COVID-19 infections resulted in orders to stay-at-home or observe social and physical distancing restrictions, which subsequently led to the shutdown of industrial production, financial markets, corporate offices, businesses, events, and different operation management activities in order to minimize the transmission of the virus. The findings suggest that the increasing number of lockdowns and restrictions on national and international travel by air, land, or sea, as well as the shutdown of production, operation, and marketing activities jeopardized and even collapsed some economic sectors and systems. Consequently, worldwide unemployment increased drastically, in regions like the United States, Europe, and the Arab States. A sudden rise in worker migration further aggravated the situation and placed an additional burden on state government entities. It is likely that it will take years for the global economy to recover from the economic and employment challenges brought about by this crisis.

Keywords: COVID-19, social distancing, pandemic, financial crisis, global recession, public health, employment, unemployment

Introduction

The 21st century has witnessed a vast increase in research concerning global employment. The current paper will address the influence and challenges imposed by the ongoing coronavirus disease 2019 (COVID-19) crisis on this key economic indicator. The novelist George Orwell (1969) in his post-war work of fiction, *Coming Up for Air* aptly describes the atmosphere of instability, insecurity, and fear that high levels of unemployment impose on those affected by them as gauged in the below excerpt from his book.

"I suppose there has not been a single month since the war, in any trade you care to name, in which there weren't more men than jobs. It's brought a peculiar, ghastly feeling into life. It is like on a sinking ship when there are nineteen survivors and fourteen lifebelts. But is there anything particularly modern in that, you say? Has it anything to do with the war? Well, it feels as if it had. The feeling that you have got to be everlastingly fighting and hustling, that you'll never get anything unless you grab it from somebody else, that there's always somebody after your job, that next month or the month after they'll be reducing staff and it's you that'll get the bird—that, I swear, didn't exist in the old life before the war(Orwell, 1969)."

The current COVID-19 outbreak is emotionally challenging for everyone and according to Klomek (2020), individuals who are already at risk will likely see an increase in suicide ideation and behaviors. This is because job loss has detrimental effects on subjective perceptions of social integration, life satisfaction, access to economic resources, and an individual's mental health (Pohlan, 2019). On the other hand, individuals facing long-term unemployment also run the risk of losing relevant skills, which could lead to further exclusion. Shore and Tashchian show that employers are reluctant and even unwilling to hire workers with large employment gaps.

Furthermore, educated youths will likely be particularly impacted by the pandemic, given that they already face a high rate of unemployment in recent years prior to the pandemic, Rajarshi and Mukherjee report that technical degree-holders in particular face greater than average unemployment rates (, 2013).

Similarly, the risk and duration of future unemployment is higher for those currently unemployed compared to those in low-paying roles (Plum & Knies, 2019), especially if jobseekers become overly selective (Beranek & Kamerschen, 2011). The research reviews relevant literature and analyses available data from secondary sources. The sections that follow present the findings of the literature review and analysis of relevant findings

Literature Review

While earlier pandemics in human history have similarly witnessed high rates of unemployment and adverse economic consequences, however, the fallout of these historic events pales in comparison to COVID-19 for various reasons. One is important fact to not is that populations were much smaller, less educated, and less reliant upon technology with respect to those of today. This review of the literature identifies and discusses various key themes related to how the current COVID-19 health crisis impacts on employment to contextualize the nature if the problem instigated by pandemic. The following paragraphs present the events following the onset of COVID-19 pandemic, as well as similar viral epidemics which have occurred in the recent past, -in view of how unemployment in general is conceptualized.

COVID-19: On 12 January 2020, the World Health Organization (WHO) confirmed that a novel coronavirus variant like the one responsible for severe acute respiratory syndrome (SARS) was the cause of an outbreak of respiratory illness in Wuhan City, Hubei Province, China. The illness itself initially came to the attention of the WHO on 31 December 2019. Unlike the SARS outbreak of 2003, the case-to-fatality ratio for COVID-19 is much lower; however, transmission of the virus is considerably greater, therefore the death toll is a significantly higher due to higher rates of transmissions. The first death outside of China was reported in the Philippines on 1 February 2020 (Hollingsworth, 2020), and the first death outside of Asia was reported approximately two weeks later in France (Ganley, 2020). In China, about 80% of deaths occurred in people over 60 years of age; 75% of these had pre-existing health conditions such as cardiovascular

Diseases or diabetes (BBC, 2020). As of 10 May 2020, the total number of cases worldwide reported was 3,917,366, with 274,361 deaths (WHO, 2020b).

The United Nations Development Programme (UNDP, 2020) reports that cases identified in every continent except Antarctica. Since the emergence of the disease, nations desperately sought to curb the spread of the virus through a variety of actions, including social distancing measures, contact tracing, travel restrictions, quarantine, banning large gatherings such as sporting events and music concerts, and closing workplaces, schools, shops, theatres, restaurants, and bars (UNDP, 2020).

According to the UNDP (2020), the current COVID-19 pandemic is "the defining global health crisis of our time and the greatest challenge we have faced since World War Two." However, the impact of COVID-19 is felt far beyond that of a simple health crisis due to its devastating social, economic, and political consequences. The high risk of transmission lead to a considerable proportion of the population staying indoors predominantly because they were ordered to by government or due to their own choice to protect themselves. Consequently, large sectors of the economy reduced or stopped production which led to many people losing their jobs without knowledge or foresight as to when normality will resume. According to Kumar et al. (2020), the trade impact of the COVID-19 epidemic for India alone is estimated to be approximately 348 million US dollars. This is far more disastrous than any other pandemic seen in history.

The 2009 H1N1 Influenza (Swine Flu) Pandemic: A more recent epidemic is human influenza, which is an infectious respiratory disease due to distinct virus variants determined by the expression of H or N antigens. Certain strains of influenza A virus subtype H1N1 are endemic in humans and cause a small fraction of all influenza-like illnesses as well as mild seasonal outbreaks (WHO, 2010).

An outbreak of this influenza out of character with normal patterns of seasonal illness and mortality was reported in North America in April 2009, By June 2009, the WHO had declared the illness to constitute a global pandemic, with cases affecting

74 countries and territories (WHO, 2010). It was reported that the new strain of H1N1 influenza was of swine origin and this novel virus spread worldwide, causing 18,500 laboratory-confirmed deaths. Saunders-Hasting and Krewski report an estimated 151,700 to 575,400 deaths over the 20-month duration of this pandemic (2016). On 10 August 2010, the WHO declared the H1N1 influenza pandemic over, reporting that worldwide flu activity had returned to typical seasonal patterns (WHO, 2010).

Swine influenza, also known as swine flu or pig flu, is a respiratory disease caused by the swine type A influenza virus which is common throughout pig populations worldwide. Zoonotic transmission of the virus from pigs to humans is not common and does not always lead to infection, often resulting only in increased antibody production in the blood. However, individuals with regular exposure to pigs are at increased risk. Pigs experimentally infected with the strain of swine flu that caused the human H1N1 influenza pandemic of 2009–2010 showed clinical symptoms within four days.

The 1918 Influenza (Spanish Flu) Pandemic: The Covid 19 pandemic is often compared to the Spanish flu, also known as the 1918 influenza pandemic, which was an unusually deadly pandemic caused by an H1N1 influenza virus of avian origin. According to the Centers for Disease Control and Prevention (CDC), it infected more than 500 million people which is equivalent to about a third of the world's population at the time (CDC, 2019). The death toll was estimated to be anywhere from 17 million to 50 million, and possibly as high as 100 million, making it one of the deadliest pandemics in recent human history.

Due to World War One, censors suppressed information about the infection citing reasons of morale, the misnomer "Spanish flu" arose because newspapers stories created the false impression that the neutral territory of Spain was more gravely afflicted by the virus in comparison to other countries (Wikipedia, 2020). However, a report published in 2016 indicates that the responsible virus was in fact circulating within European troops for months and possibly years prior to the pandemic (Shanks, 2016) Furthermore historian Alfred W. Crosby, theorized that the virus originated among American troops in Kansas (Crosby, 2003).

Several explanations were offered to account for the high mortality rate of the 1918 influenza pandemic. The epidemic was unique compared to other influenza outbreaks, in terms of the unexpected number of fatalities among young adults and otherwise healthy individuals (CDC, 2019). Some researchers hypothesized that the virus triggered a 'cytokine storm', which is a hyperinflammatory immune response which destroyed the stronger immune systems of young adults (Robson, 2018). Others claimed that a six-year climate anomaly resulted in abnormally increased precipitation and cold temperatures, which are factors which changed the migration patterns of birds thought to be the primary reservoir of the virus as well as the worsened living conditions for humans (More et al., 2020). However, in 2007, an analysis of past medical articles indicate that the infection was no more aggressive than that caused by previous influenza strains. Therefore, the exceedingly high mortality rate being can be explained by bacterial superinfections caused by malnourishment, overcrowding, and poor hygiene (Wikipedia, 2020).

While the first wave of the 1918 influenza pandemic resembled typical seasonal flu outbreaks, in that the sick and elderly were deemed most at risk, the second wave was much more deadly and impacted younger and healthier individuals more than anyone else (Wikipedia, 2020). In January 1919, the third wave initially affected Australia, before rapidly spreading through Europe and the United States until June 1919. Between February and May 1920, a minor fourth wave occurred in isolated regions, including New York City, the United Kingdom, Austria, Scandinavia, and some islands in South America (Wikipedia, 2020).

Effect on Unemployment due to COVID-19?: Previous sections reported on the nature of the pandemic and the rate of transmission however this section will specifically explore its impact on unemployment. For the purpose of this paper unemployment is conceptualized as the state of being unable to find work while actively searching for employment (Chappelow, 2020). In the United States, the highest rates of unemployment were reported during the Great Depression between 1931–1940 (Amadeo, 2020).

According to Rkein et al. (2020), unemployment is affected by automation because specific jobs disappear due to the rise of technology which allows more tasks to be performed by machines, on the other hand, new jobs necessitate skills such as critical thinking and consultancy may substitute automated these jobs.

Unemployment is often utilized as an indicator of the health of the economy (Amadeo, 2020). The most frequent measure of unemployment is the unemployment rate, which is calculated as the percentage of unemployed people out of the total number of people in the labor force. Below are key points to note when contextualizing unemployment which are important in considering the current work environment brought on by Covid 19 pandemic.

01. *Unemployment occurs when workers who want to work are unable to find jobs, which lowers economic output; however, they still require subsistence.*

02. *High rates of unemployment are a signal of economic distress, but extremely low rates of unemployment may signal an overheated economy.*

03. *Unemployment can be classified as frictional, cyclical, structural, or institutional.*

04. *Unemployment data are collected and published by government agencies in a variety of ways.* (Chappelow, 2020).

Even during the pre-pandemic period, high rates of youth unemployment were observed throughout the world (Visaria, 1998). According to Bairagya (2015), determinants of unemployment differ between developed and developing countries, with higher education levels lowering the likelihood of unemployment in developed countries. However, other researchers report evidence to show that the relationship between education and unemployment is often complex (Riddell & Song, 2011). Martin-Roman (2014) states that when unemployment goes up it is highly likely that a decrease in labor force participation to occur. De Lima and Marques (2019) stress the importance of monetary policy instruments for a job creation environment to increase the percentage of national activities, inflation, and exports lead to a reduction in

Unemployment. Soliman (2017) noted that long-term unemployment and capacity utilization have a significant impact on unemployment. According to Yin (2017), unemployment rate, median household income, and education level do not strongly affect changes in property crime.

The COVID-19 epidemic has a considerable impact on unemployment, in which 93 per cent of the world's workers were affected in one form or another due to workplace closure, partial loss of jobs, total unemployment, working-hour losses which were at unusual scale. In year 2020, 8.8% of global working hours were lost, which is approximately equal to 260 million hours of full-time employment. The tentative working-hour. Employment losses were world-over, however major impact was felt in USA, Europe, and Asia. The total worldwide employment immobility grew by 81 million and major loss in individual income. (ILO monitor)

Analysis and Findings

Wuhan is one of the most crowded regions in China a town of about 14 million people in Hubei Province, which the current COVID-19 health crisis began , In December 2019, reports began to circulate regarding an unknown illness attacking the respiratory system rapidly spreading among local people (Huang et al., 2020). The etiology of the virus was initially ascribed to a specific seafood market (Cohen, 2020), but by 7 January 2020, a novel variant of the SARS coronavirus family (SARS-CoV-2) was identified and confirmed by Chinese health authorities to be the cause of the illness (WHO, 2020a). Subsequently, scientists found evidence linking the SARS-CoV-2 virus to bats after performing RNA sequencing of many different coronavirus genomes (Lu et al., 2020).

The International Labor Organization (ILO) has identified three critical dimensions of employment affected by the current COVID-19 outbreak:

"*COVID-19 will have far-reaching impacts on labor market outcomes. Beyond the urgent concerns about the health of workers and their families, the virus and the subsequent economic shocks will impact the world of work across three key dimensions: 1) The quantity of jobs (both unemployment and underemployment); 2) The quality of work (e.g. wages and access to social*

Protection); and 3) Effects on specific groups who are more vulnerable to adverse labor market outcomes (ILO, 2020a)."

Moreover, another ILO report indicated the catastrophic effect of the pandemic on earnings, eliminating 6.7% of working hours globally in the second quarter of 2020, the equivalent of 195 million full-time workers (ILO, 2020c). The COVID-19 outbreak has been described as "the worst global crisis since World War Two" (ILO, 2020a).

COVID-19 and Worker Migration: Prior to the pandemic, unemployment was already a major problem in India (Kumar, 2016; Singh, 2018), an issue further exacerbated by the current health crisis. As COVID-19 cases increased on a global scale, most workers started working from home or lost their jobs following the sudden announcement of a nationwide lockdown on 23 March 2020 (Das, 2020). This announcement was made by the Government of India just four hours prior to the imposition of strict travel and movement restrictions, thus prompting a huge migration of laborers who stood to lose their only source of income without being eligible for social welfare measures due to their residency away from home.

It is estimated that, by 25 March 2020, less than two days after the lockdown came into effect, approximately 60,000 migrant workers were in transit to their native regions or towns; this number was expected to exceed 10 million by the end of May 2020, (Das, 2020). Even after the lockdown was imposed, this huge migration of workers continued via various modes of transportation, notwithstanding special passenger trains run to take stranded migrants back to their homes. Without public transportation, low-income workers were forced to trek hundreds of miles back home, with some dying on the journey (Das, 2020). In response to the situation, the United Nation Human Right Commission Chief called for domestic solidarity towards displaced migrant workers, stressing the importance of ensuring "measures in response to the COVID-19 are neither applied in a discriminatory manner nor exacerbate existing inequalities and vulnerabilities" (United Nation Human Rights Commission, 2020).

Global worker migration trends are likely to further increase rates of unemployment and have

A severe cost, both monetary and non-monetary, on individuals, including increase the risk of adverse mental and social issues such as depression, alcoholism, and suicide. Voluntary migration also causes changes in rural-urban household income due to wage differentials (Ahamad et al., 2011). Lyu et al. report that the initial migration of workers from rural to urban areas in the first place is sensitive to the rural unemployment rate(2019), (can you link the significance as an added consequence of Covid?)

COVID-19 and Global Unemployment: Initially, the ILO (2020c) predicted that 25 million jobs were threatened by COVID-19; however, estimates were subsequently revised to warn that up to 195 million jobs could be lost (Clarke, 2020). Although, the ILO Director-General noted that global unemployment at the start of the year, prior to the pandemic, was already at 190 million. Four sectors were identified as having experienced the heaviest job losses: namely food and accommodation (144 million workers), retail and wholesale (482 million workers), business services and administration (157 million workers), and manufacturing (463 million workers) (Clarke, 2020). Altogether, these sectors represent 37.5% of global employment.

Although all regions of the world have suffered from the fallout of COVID-19, the United States, Europe, and Arab States are worst impacted. According to one study, 1.25 billion workers are at high risk of layoffs or reductions in wages and working hours, with 81% of the global workforce of 3.3 billion currently affected by full or partial workplace closures (ILO, 2020b). From a regional perspective, the proportion of workers in at-risk sectors—such as those in low-paid, low-skilled, or informal jobs—ranges from 43% in North America to 26% in Africa (ILO, 2020b).

Moreover, large decreases in employment are predicted in the Arab States (8.1%, equivalent to 5 million full-time workers), Europe (7.8%, equivalent to 12 million full-time workers), and Pacific Asia (7.2%, equivalent to 125 million full-time workers) (ILO, 2020b). In India, more than 120 million workers and daily wage earners lost their jobs as economic activity ceased due to the nationwide lockdown (Inamdar, 2020). Countries in Africa may face severe health and economic challenges due to the large number

Of workers employed in informal jobs, a factor compounded by the lack of social welfare, high population density, and weak capacity of the healthcare system (ILO, 2020b).

For obvious reasons, the global travel and tourism industry was predicted to be particularly susceptible to the negative consequences of the COVID-19 pandemic, resulting in the loss of 100.8 million jobs (Lock, 2020). The region purported to see the biggest loss from tourism earnings is the Asia Pacific region, losing approximately 63.4 million jobs, while Europe is forecast to be the second hardest hit, predicted drop of 13 million jobs. The following graph shows employment loss by region in 2020 for the travel and tourism industry (Lock, 2020).
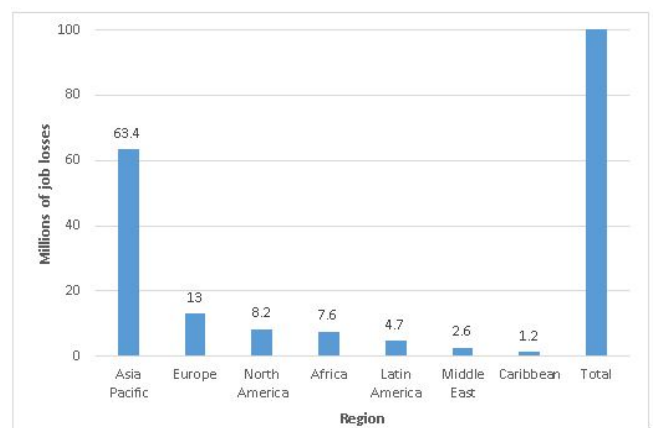

Figure 1 – Employment loss in the travel and tourism industry in 2020 by region (reproduced from Lock, 2020).

Overall, developed and developing countries alike are facing catastrophic economic consequences from COVID-19, thus necessitating a fast, decisive, and collaborative approach in the implementation of urgent remedial measures. According to the Director-General of the ILO (2020b), COVID-19 represents "the greatest test for international cooperation in more than 75 years". He went on to state that:

…If one country fails, then we all fail, we must find solutions that help all segments of our global society, particularly those that are most vulnerable or least able to help themselves. The choices we make today will directly affect the way this crisis unfolds and so the lives of billions of people. With the right measures we can limit its impact and the scars it leaves. We must aim to build back better so that our new systems are safer, fairer

And more sustainable than those that allowed this crisis to happen. ILO (2020).

COVID-19 and Unemployment in the Middle East: Prior to the pandemic, the Middle Eastern economy was valued at 1.6 trillion dollars. However, the current COVID-19 crisis has resulted in massive layoffs affecting approximately 30 million people, the vast majority of whom are foreign workers (Foxman & Omar, 2020). In particular, many Arab nations are known to have workforces highly dependent on expatriate labor, with non-nationals—most of whom are originally from Asian or East African countries—making up an average of 70.4% of the employed population (ILO, 2020d). In 2017, the Arab States hosted an estimated 23 million migrant workers, with Gulf Cooperation Council (GCC) countries accounting for over 10% of all migrants globally. In particular, the United Arab Emirates and Saudi Arabia have some of the largest employed migrant populations in the world (ILO, 2020d). Remittances from migrant workers in the GCC represent a significant source of annual revenue for countries in Southeast Asia and Africa, potentially exceeding official figures of 70–75 billion dollars per year (Foxman & Omar, 2020).

Oil is the primary source of government revenue for all countries in the Middle East, ranging from 47% percent in Yemen to 94% in Iraq (International Monetary Fund, 2016). In addition, oil comprises 60% to over 80% of total exports for most of these nations. As such, high-export oil-producing nations—such as Saudi Arabia, Kuwait, the United Arab Emirates, and Qatar—are critically affected by fluctuations in oil prices. Oil revenues also support many non-oil activities in these countries (International Monetary Fund, 2016). In addition, this sector is responsible for many job opportunities, both directly and indirectly because of the oil-fueled boom in economic growth of the 1970s and 1980s (Al-Moneef, 2006).

Unfortunately, the financial impact of the current COVID-19 crisis has been compounded by a drop in oil prices, resulting in huge job losses. Foreign workers employed in this region—who number upwards of 35 million—are inordinately affected as local governments and firms prioritize the jobs of nationals over expatriates (Barbuscia & Rashad, 2020). This has led to a massive exodus of foreign workers, one likely be even greater

Than the migrations observed after the 2008–2009 financial crisis or the 2014–2015 oil price crash.

However, this trend of worker migration and mass unemployment poses further risk for the economies of countries in the Middle East, given that many domestic sectors—such as services, retail, and housing, among others—are dependent on expatriate spending (Foxman & Omar, 2020). In turn, low-income migrant laborers are at risk of destitution and even starvation, while the lack of revenue from remittances may affect the economies of other countries.

It is a very challenging time for local authorities in the region as they struggle to manage responses to control the COVID-19 outbreak, while also attempting to boost the economy and roll out stimulus measures to help individuals and businesses survive the financial toll of the pandemic. Although efforts have been made to facilitate repatriation flights and transportation to their home countries, hundreds of thousands of foreign workers remain stranded in the Gulf region due to national lockdowns and travel restrictions, all whilst struggling to navigate standard immigration policies (Barbuscia, & Rashad, 2020). Repatriation efforts are especially important given that transmission rates of COVID-19 have been extremely high among low-income foreign workers in the GCC region due to the prevalence of densely packed labor camps or residences with substandard living conditions lacking appropriate sanitation or ventilation (Pattison & Sedhai, 2020).

COVID-19 had Any Positive Impacts on Society?: There is no question that the current COVID-19 outbreak has many negative effects on society, irrespective of the social, cultural or political differences between countries. Apart from illness and death, the pandemic also resulted in massive job losses or cuts in pay and perks, as well as other social consequences like increased rates of loneliness, isolation, harassment, suicide, and so on (Kawohl & Nordt, 2020). This is particularly concerning for unemployed individuals who demonstrate significantly worse perceived mental health compared to those who are employed (Pharr et al., 2012). In addition, the pandemic dramatically hampered business activities, causing entire industries to come

To a standstill (Clarke, 2020; Lock, 2020). Frustration, stress, and irritability are growing increasingly more prevalent as people suffer the psychological effects of confinement, with a corresponding increase in mental health disorders (Klomek, 2020).

Both the authorities and the media generally focus on the negative aspects of the crisis, for instance by relaying the number of cases and deaths without also notifying the public of more reassuring news, such as the number of cures or recoveries. However, there are several positive aspects to the pandemic, which inspired extraordinary changes in society. For instance, potential benefits of the COVID-19 crisis include the following:

01. Time spent at home facilitated developing more genuine relationships and deepened existing connections with family members, friends, and loved ones through social bonding, an aspect that may have been neglected by many individuals in their busy pre-pandemic lives (Edwards, 2020). Periods of confinement represent a golden opportunity to get to know people better or renew or further strengthen family ties.

02. In addition, the past year witnessed increasing interest in and acceptance of more minimalist lifestyles, as many people embrace a "less is more" mentality regarding consumerism (Cohen & Bora, 2020) and expectations, thus resulting in greater tranquility and peace of mind.

03. Concern regarding the risk of transmission of the virus prompted better hygiene standards among members of the public, with people becoming more aware of the need to wash their hands, avoid touching or coughing on others, and thoroughly clean and disinfect shared surfaces, such as counters, desks, and doorknobs (WHO, 2020b). This may also lead to a reduction in the prevalence of other transmissible infections in the future.

04. From an environmental perspective, experts have shown that the COVID-19 crisis resulted in decreasing resource consumption as well as improvement of the Earth's atmosphere from the significant reduction in pollution due to traffic, greenhouse gases, and aerosols (Kottasová, 2020; Dahiya & Butt, 2020).

In particular, the deceleration in anthropogenic emissions caused by industrial activities (mainly chlorofluorocarbons and nitrogen oxides) have slowed down and even repaired holes in the ozone layer, resulting in a significant decrease in ultraviolet radiation harmful to biological life (Wray, 2020).

05. The COVID-19 crisis also influenced the adoption of online, distance, or blended learning systems. Blended learning resulted in positive outcomes for teaching science-related interdisciplinary subjects, such as conceptual understanding, eagerness, and confidence (Lee et al., 2016).

06. Finally, the challenges brought about by the pandemic helped stimulate innovation or spurred existing technologies to unforeseen heights, resulting in new tools and software in many different fields, from artificial intelligence solutions (Brady, 2020) to telehealth and virtual care (Hollander & Carr, 2020).

How Will Society Differ Beyond COVID-19?: At the outset, it is hoped that this pandemic will end as soon as possible by the discovery of a vaccine or curative medicine which can be rapidly distributed to the masses at an affordable cost. However, the question remains as to whether COVID-19 will have long-term consequences. Various changes are expected beyond the current COVID-19 pandemic:

1. It is expected that the immune systems of most individuals will manufacture antibodies to the virus responsible for the pandemic and any subsequent mutations, thus allowing for herd immunity protection.

2. Budgets and funding for health, education, and sanitation measures are expected to increase manifold. Ideally, most countries will take action to improve their educational, health, transport, and social policies.

3. Certain professions will be recognized for their significant role during the pandemic, including healthcare workers as well as law enforcement agents, public transport employees, sanitization workers, scientists, medical researchers, and engineers.

4. Since viruses can mutate into different forms, research priorities will shift,with more emphasis

On scientific, medical, and technological breakthroughs for the betterment of society, health, and the environment.

5. Finally, governments will prioritize pandemic preparedness planning in order to better equip themselves and their citizens to cope with similar global health crises in the future.

Conclusions and Results

As of the end of May 2020, the number of COVID-19 cases reported was approximately 6 million, with 360 thousand deaths and 2.5 million recoveries. However, the pandemic is far from over and the rate of infection in certain parts of the world continues to rise exponentially. There is urgent need for researchers of diverse disciplines to collaborate to explore and distribute appropriate, effective, and safe treatments of Covid-19. In other fields, bio-tech engineers can investigate the development of tracing technologies and intelligent or virus-resistant materials, particularly for front-line workers and medical practitioners.

From an economic standpoint, the COVID-19 crisis has fundamentally altered trends in economic growth and the entire global macroeconomic scenario. According to the ILO, the pandemic is predicted to eliminate 6.7% per cent of working hours globally in the second quarter of 2020, corresponding to 195 million full-time workers. The COVID-19 pandemic has been described as the worst global crisis since the last world war, with up to 1.25 billion workers at high risk of layoffs and reductions in wages and working hours. Certain regions have been deemed more at risk than others, including the United States, Europe, and Arab States.

Results suggest that the pandemic has considerable impact on unemployment effecting more than 93% of workforce. There was loss of working hours was 8.8% of total global working hours that equates to 260 million of full-time employment. Major job loss was in USA, Europe and Asia. Nevertheless, certain positive aspects of COVID-19 were identified. For example, a reduction in pollution resulted in benefits to the Earth's atmosphere and the natural environment. Moreover, the increased time at spent at home due to confinement orders encouraged greater

Family bonding, self-reflection, and introspection. The employment gap can be bridged through promoting and normalizing online and remote workspaces, creation of employment, and government spending on infrastructure building, which will create job, enhanced Gross Domestic Products (GDP) and real income in society.

Post-pandemic, it is hoped that global investment in health, education, and cleanliness will increase, while the indispensable contributions of medical practitioners and other key workers are celebrated and recognized worldwide. Finally, the current outbreak highlights existing flaws in pandemic preparedness and stockpiling in many countries, thus ideally enabling governments to rectify these weaknesses to better deal with future global outbreaks in future, further research will explore Empirical data using PSS or Structural Equation Modelling (SEM) to analyze the impact according to economic sectors.

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