



## Impact of the Covid-19 pandemic in daily life

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**Abstract:** The Covid 19 outbreak had a considerable impact on public life; it was affected people in many different aspects. Several studies and articles have been published on this topic, but most of them were focused on a specific criterion. This current study review fills lots of clusters based on systematic content analysis. In this review research, we identified research clusters all around the world. The clusters are: The World Before Covid 19, Covid 19 Impact on Education and Covid 19 Impact on Vocational Training, Covid 19 Impact on Environment, Covid 19 Impact On Health Care Sector, Covid 19 Impact on Economy., The Effect Of Covid 19 In Daily Life Behavior, The main aim is to provide a vast knowledge of primary sectors affected by Covid-19.

**Index Terms:** Daily Life Effect, Economy Effect, Education Effect, Environment Effect, Health Effect

### 1 INTRODUCTION

The world health organisation declared COVID-19 a pandemic due to its spread worldwide, with over 3 million cases and 207,973 deaths in 213 countries and territories in March 2020. Pandemic has no boundaries as it spreads in countries on all continents, so cooperation should extend beyond individual domains to fight against covid-19 to mitigate its effects [1]. In the beginning, as there were no effective vaccines and clinical treatments for Covid-19, the world had to rely on non-pharmaceutical inventions such as smart lock-down, use of masks and hand sanitisers etc. The world began to change with the pandemic in every aspect such as education, health, economy, environment, and whole daily life routine [2].

#### The World of Education before Covid-19

Before the pandemic, the world was already confronting significant obstacles in realizing the promise of education as a fundamental human right. Despite practically universal enrolment in early grades in most nations, more than 250 million children remained out of school, and approximately 800 million people were illiterate. Furthermore, even for those in school, learning was not a given. It was predicted that 387 million children in primary school, or 56% of the world's population, lacked basic reading skills. Before COVID-19, the situation was already daunting in terms of funding. The finance gap to achieve Sustainable Development Goal 4 – quality education – in low and lower-middle-income countries was estimated to be \$148 billion per year in early 2020. The COVID-19 problem is expected to widen this financing deficit by up to one-third [3].

In Georgia, it had been based on compulsory programs for all citizens. Children start their school from the age of 6 and study at the elementary level for four years; they continue to middle school from fifth to ninth grades that are the mandatory level for everyone. From the 10th to 12th grades are treated as

secondary education. The expected years of schooling for the country are 15.4, while the mean years of schooling are 12.8. The main educational methodologies are traditional classroom education, where their teacher uses books and blackboards as a teaching aid & modern classroom education. The classrooms are equipped with whiteboards, projectors, audio-visual display equipment, and digital boards [4]. The education methods were conducted in the institute, and by the large, students are engaging in on-campus learning greater than any other learning methods before the pandemic times [5].

### Covid-19 Impact on Education

The COVID-19's lockdown procedure has disrupted traditional learning around the world. Not only for students but also for teachers, those who had to change their delivery styles on the fly owing to changing circumstances without any prior preparation. On the other hand, the most marginalised populations, who lack access to digital learning platforms and sufficient facilities to engage in digital learning on their own, are at risk of being left behind. This is not a simple matter, as a loss of learning will directly result in the country's skill loss and the production of soiless graduates for the country's productivity. There is no set timeframe for when the schools or universities will return to normal functioning. If schools are slow to return to normal, the growth of the economic sector also would be at higher risk in future [5]. Nepal's schools and institutions have been temporarily closed due to the lockdowns for about two months. UNESCO (2020) estimates that over nine million (8,796,624) pupils in Nepal are affected by school/university closures in response to the pandemic as of the second week of May 2020. 958, 127 (11%) are in pre-primary school, 2,466,570 (28%) are in primary education, 3,463,763 (39%) are in secondary education, and 404,718 (5%) are in higher education [6].

Even though school closures can occur for various causes, the recent Coronavirus school closures have harmed many educational systems around the world (Fig. 1). Over 1.3 billion students were out of school as of March 23, 2020, due to school closures in response to COVID-19 [7].

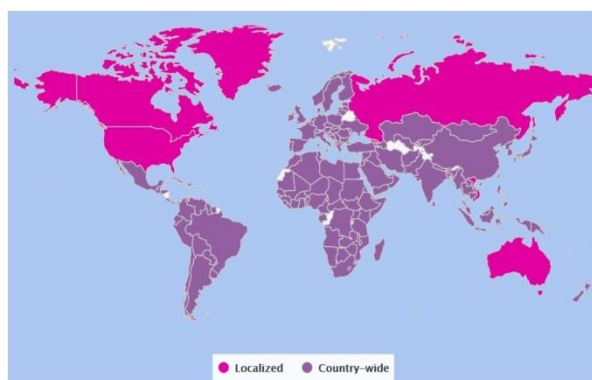


Fig. 1. Countries that have shut down or localized the schools in the world (UNESCO Report)

As governments struggled to limit viral transmission by shutting down the whole economy, including schools, universities, and technical colleges, a second wave of economic development with skilled individuals emerged. The public is currently dissatisfied with educational costs since healthcare costs have taken precedence. In reaction to lockdown measures, the COVID-19 pandemic influenced higher education, with colleges shutting their borders and governments limiting their borders to international student mobility. Despite the change to online learning at higher education institutions, these closures had an impact on learning and examinations, as well as the legal standing of the degree's quality in their country. COVID-19 reactions from around the world are featured, with a focus on school closures due to Coronavirus. Because of the pandemic, most schools in the United States of America were closed. To maintain the health requirements, scheduled exams and examinations were also cancelled. Furthermore, more than 11 million pupils in Spain are affected by school cancellations as a result of the virus's widespread impact [5].

According to UNESCO (2020b), some of the negative consequences of coronavirus school cancellations include:

- 1. Interrupted learning:** Schools provide critical learning, and pupils miss out on opportunities for growth and development when they are closed.
- 2. Nourishment:** Many children rely on free or reduced-price meals supplied by their schools for food and nutrition. As a result of the coronavirus outbreak, this is compromised.
- 3. Unequal access to digital learning portals:** difficulty to continue learning during school closures due to a lack of technology or good internet connectivity.
- 4. Increased strain on schools and the school system that remains open:** Localized school closures put pressure on schools since parents tend to send their children to open schools.
- 5. Social Isolation:** Because educational institutions serve as hubs for social activity and human contacts, school closures may deprive youth and children of social communications and socialization, which are critical for learning, growth, and creativity [7].

### **Covid-19 Impact on Vocational Training**

Online platforms are ineffective for delivering industrial training, laboratory practicals, and workshop activities. For Technology, Engineering, and Technical College students to put theoretical knowledge into reality, they need hands-on experiences. Due to the partial lockdown, certain industries stayed closed and relied on online technologies. As a result of a lack of training slots, many students are at home without suitable industrial training. The instructor records most laboratory practical and delivers them as an online practical session. Hands-on experiences with physical practicals, on the other hand, are an important aspect of quality education. Furthermore, field visits or industrial visits are essential for improving the required knowledge for a future vocation by allowing students to visually experience the production process and manufacturing methods and occupational health and hazard practices and labour management abilities. However, due to the COVID-19 pandemic, all field and industrial visits have been halted following health regulations [5].

### **Concept of Online Education**

Technology is an important part of education in the twenty-first century. Teachers' methods have changed as a result of the increased use of technology in education, shifting from a traditional approach in which they act as knowledge dispensers to a more flexible approach in which they act as facilitators, mentors, and motivators to encourage students to participate and learn [7]. We've discovered a simple approach to add videoconferencing to the existing school administration system using Google's G Suite for Education. When replacing the traditional teaching form with the internet at the institution, the team's transition to the online experience was critical [4].

During this difficult time, huge corporations such as Microsoft, Google, Zoom, and Slack have stepped in to help public schools by providing many of their products' services for free. There is a variety of online education tools/platforms available to help with online learning, especially during epidemics like the Coronavirus pandemic. The following are some of these technological tools/platforms such as, *GoToMeeting.com*, *Skype.com*, *Google Classroom/Open Online education (edu.google.com)*, *Youtube.com*, *Blackboard.com*, *udemy.com*, *coursera.org*, *memory.com*, *alison.com*, *edx.org*, *easyclass.com*, *vedamo.com*, *Khanacademy.org*, *TED-Ed (ed.ted.com)*, *Codeacademy.com*, *Stanford Online (Online.stanford.edu)*, *futurelearn.com*, *rcampus.com*, *learnopia.com*, *learnopia.com*, *Peer 2 Peer University ( p2pu.org)*, *Teachers pay Teachers (teacherspayteachers.com)*, *Thinkific (thinkific.com)*, *MOOC.org*, *openculture.com*, *academicearth.org*, *itunesU Free courses (apps.apple.com)*, *lessonpaths.com*, *memrise.com*, *funbrain.com*

(for kids), *whyville.net* (for teens), *Edmodo* (*edmodo.com*), *Schoology* (*schoology.com*), *classdojo* (*classdojo.com*), *googlehangouts* (*hangouts.google.com*), *Zoom* (*zoom.us*), *Whatsapp.com* [7].

### **Challenges & Problems of During Covid-19 Period**

Millions of pupils have been forced to study and learn from home due to the Coronavirus outbreak. This isn't a new phenomena; the home has long been the core of learning, especially in informal schooling. For pupils, learning from home is becoming the new normal. According to Education Task (2020), the majority of university students still choose to study at home since they have everything at their fingertips without having to leave their chairs. However, many educators, learners, and parents may find the realities of obtaining formal education from home to be very problematic, particularly in underdeveloped countries where access to, availability of, and usage of technology in education is not common. Considering the cost of online education, a variety of other difficulties such as network troubles, poor power supply, interruptions, lack of digital skills, inaccessibility, and availability issues can all make learning at home difficult. There's also the issue of finding time to learn new technology that may be required to learn from home, as well as disturbances from neighbours and neighbourhoods [8].

Due to confinement and remote schooling, 92.8 per cent of teachers experienced emotional weariness, worry, agony, or anxiety. Teachers cited excessive bureaucratic tasks, imprecise directions, a lack of teleworking support, and a lack of technical resources as the main issues [8] Student enrolment during the pandemic some students have internet connection failures and signal issues during the online classes and do not have proper devices for e-learning. Most students use Smartphones to access their online learning. But some students have money problems buying a proper device. Home WIFI and Mobile Data are general methods to access the internet. But they have problems getting proper connection methods to learning. Because it is very expensive&financial difficulties for paying internet bills [5]

There are a variety of technologies accessible for online learning, but they can occasionally cause a lot of problems. Downloading issues, installation issues, login issues, audio and visual problems, and so on are all examples of challenges and problems linked with modern technology. Students may find online instruction to be uninteresting at times. Students never find time to do online learning since it requires so much time and flexibility. Online learning also has a significant problem with personal attention. Students desire two-way communication, which can be challenging to provide. The learning process will not reach its full potential unless pupils put what they've learned into practice. Online content can be theoretical at times, making it difficult for students to practice and learn successfully. Course content that isn't up to par is likewise a huge issue. Students believe that the main impediments to online learning are a lack of community, technological issues, and difficulty understanding instructional goals. Students were found to be unprepared to balance their work, family, and social lives with their study lives in an online learning environment in a study. Students were found to be underprepared for a variety of e-learning and academic-type abilities. In addition, students have a low degree of preparation when it comes to using Learning Management Systems [9].

### **Covid- 19 Impact on Environment**

COVID-19 and the environment were the most relatable topics when it comes for review research on these types of topics. Covid 19 mostly effected to the world as a negative impact but when it comes for environment this was opposite.Covid 19 outbreak has been affected to the environment as this way. While in the pandemic situation people daily activities have been restricted and all factories were closure, education, travel sports, entertainment, tourism, transportation, manufacturing and all other sectors affected by this outbreak [10]. Pollution is a major threat facing as a world so above-mentioned facts significantly affected

to the air pollution all around the world. In Barcelona, (Spain) they revealed that there was a decrease in air pollution.

The amount of pollution in the air has greatly decreased, and the environment has somewhat recovered. The consumption of fossil fuels by industries, thermal power plants, air transport, and automobile traffic are the primary sources of carbon emissions. Since vehicular traffic was stopped down in industrial sectors throughout the lockdown period, the level of carbon concentration has decreased. According to one research, extending the COVID-19 pandemic lockdown until the end of the year may reduce world emissions by up to 7% [11]. NO<sub>2</sub> is a significant air pollutant that is typically released into the atmosphere during the refining of petroleum and metals, welding, commercial manufacturing of nitric acid, and N-based products, such as food processing. NO<sub>2</sub> pollution is caused by the combustion of fossil fuels such as coal, gas, and oil in companies, automobiles, and even at home. Lockdown measures are being introduced in a number of European countries, including Italy, Spain, France, and Germany. There has also been a considerable reduction in the amount of greenhouse gases such as CO<sub>2</sub> and NO<sub>2</sub> in the atmosphere [12]. While the COVID-19 outbreak had a massive impact on social and economic development, it has also aided in the recovery of some environmental harm. Many governments throughout the world have used full or partial lockdowns and tight movement control orders (MCO) to minimize greenhouse gas emissions (GHG), nitrogen dioxide (NO<sub>2</sub>), water pollution, noise pollution, and pollution on beaches [13].

Such limits have assisted countries in preventing pollution and improving air quality and life quality. The findings, however, do not support GHG reduction in the long run because, once the lockdown is lifted, economic activity and energy demand will likely return to normal as major manufacturing activities recommence, resulting in increased energy consumption and GHG emissions, which will likely exceed the limit during the lockdown period [14]. The findings, on the other hand, do not support GHG decrease in the long run because, once the lockdown is removed, economic activity and energy consumption will likely return to normal as large manufacturing activities resume, resulting in increased energy consumption and GHG emissions, which will likely increase the lockdown period's limit. Large-scale industrial activity contributed to sound pollution, which affected public health and destroyed ecological environment. The lockdown limited public transportation and fully halted industrial activities, resulting in a considerable reduction in noise pollution around the planet [15]. Likewise, pollution in beaches. Due to the low number of travellers, the water in places like Acapulco, Barcelona, and Salinas has become clear. Similarly, NO<sub>2</sub> and PM<sub>2.5</sub> readings in Wuhan, China, fell by 22.8 g/m<sup>3</sup> and 1.4 g/m<sup>3</sup> respectively as a result of the rigorous lockdown.

Many countries are fighting to keep COVID-19 from spreading further. While predicting the spread of COVID-19 in some warm nations, there has been a big debate about the influence of temperature on COVID-19 [16] transmissions. The hot and humid weather in India have been cited as a possible reason for the low transmission rate of COVID-19 infections. However, it has also been stated that stringent lockdown is a key factor in the minimal number of COVID-19 cases transmitted [15] [16]. Below Fig.2 shows that impacts of Covid 19 on Environmental degradations. Water quality, Medical waste, Environment Quality have a increase on the other hand Pollution in beaches, Sound pollution, carbon emission have been reduced [12].

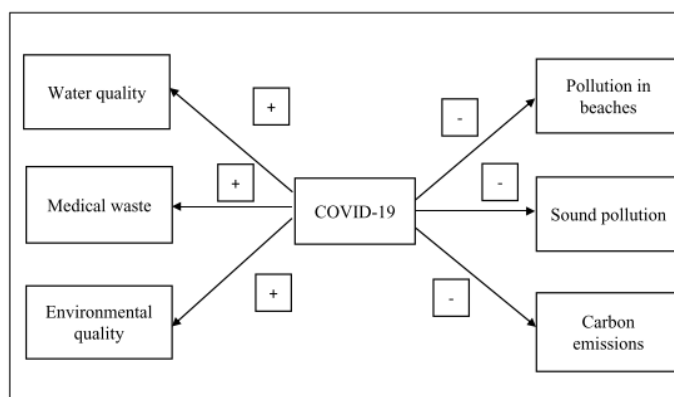


Fig. 2. Impacts of COVID-19 on environmental degradation

### Effect Of Covid 19 on Healthcare Sector

Covid 19 has affected to the each and every sector of the economies of majority of the countries throughout the world. Healthcare sector has been directly affected by the pandemic from the beginning of 2020 until the end. Lack of awareness about the nature of the virus is the major problem that has experienced by healthcare facilities during the attempt. personal protective equipment (PPE) has become the most essential equipment for the workers at healthcare sector from the beginning of pandemic. Due to the rapid increase of PPE demand throughout the world, a huge short supply was occurred at the beginning of pandemic. According to a study it has shown that only 37.4% of Pakistani healthcare workers were able to fulfil their N95 respirator need. 34.5% to gloves, 13.8% to face-shields and 12.9% to full suits need. This situation is worse in countries like Jordan where only 18.5% doctors have access to all forms of PPE. Even the United States, a country where the health care system is often heavily linked to medical supplies, has not escaped the PPE shortage. In addition to PPE shortage, world healthcare services have experienced global shortages of ICU beds and ventilators. Globally, many health care facilities did not have extensive testing capabilities and infections were difficult to diagnose and isolate. This shortfall was aggravated by the fact that lockdown around the world disrupted the supply chain. COVID-19 has become a victim of non-communicable disease management due to its strong focus on combating the epidemic. A survey of 155 countries by the World Health Organization (WHO) has revealed that non-communicable disease (NCDs) prevention and treatment services have been severely hampered since the onset of the Covid-19 epidemic. As the virus continued to spread, health workers who normally allocated to NCDs were reassigned to respond to COVID-19. Patients with serious illnesses like cancer, diabetes, and cardiovascular diseases were not able to access health services and receive their medicines in proper time due to lack of availability of public transport services during pandemic situation [17].

In order to screening the patients, identify COVID-19 patients among returning citizens and to provide other health facilities UNDP Accelerator Lab has developed five anti-epidemic robots. Rwanda's Ministry of ICT and Innovation has cooperated with this project and this was really helpful for frontline workers to fight the epidemic. Another innovation done by UNFPA Cote d'Ivoire during covid-19 pandemic is an electronic nano server, which can serve as hotspot and storage device. From this nano serve Midwives can receive learning materials and training regarding COVID-19 - with or without Internet access [18].

Due to the high transmissible nature of covid 19 and rapid increase of infected patients, number of hospitalizations has been increased day by day. As a result of this large amount of healthcare solid waste has been generated. Highly use of personal protective equipment (PPE) during epidemic also leads to the collection of excess healthcare solid waste. By considering these factors, it is necessary to increase the handling capacity for healthcare waste because improper healthcare waste management may cause further

spread of the virus. Different countries have adopted their best healthcare solid waste management strategies based on their capacity, resources, and commitment. COVID-19 healthcare solid wastes are considered as infectious waste by various member states of the European Union and waste management capacity should increase.

In China, infected healthcare solid waste has been collected and packed by waste handling employees in hospitals. These wastes disinfect using 0.5% chlorine solution and packed in double bags. After completing this process waste are placed in temporary healthcare storage within the hospitals. Healthcare waste disposal method is different according to the particular hospital. Automatic cleavage or sterilization is used before disposing of the waste part of a licensed garbage can. Other than this Cement kilns and other industrial furnaces are also use for disposing of healthcare waste. In China, they only use designed vehicles for transporting healthcare solid waste and all the data have been recorded. In United States of America, waste generated by covid 19 patients are consider as regular waste and does not require any additional special treatment. In Jordan, healthcare waste management is carried out fewer than three principles. They are reduction of unnecessary healthcare waste, isolation of regular waste from hazardous waste and proper treatment in order to reduce risks to health workers and society [19].

Healthcare workers (HCWs) are the people that directly faced crisis of COVID-19 from the beginning. HCWs had the main responsibilities of treating patients with COVID-19, reducing the spread of virus and to develop short term and long-term strategic plans. They also had to treat non covid patients and maintain their personal routines including their families and their lives [20]. HCWs had to work under the situations where proper personal protection equipment is not available. Media reports about less public awareness of social distancing, improper lockdown policies, sanitization measures and rapid increase of infected patients are also affected to the mentality of Health care workers [21]. This emotional exhaustion of HCWs caused less empathy about patients, medical errors, lower productivity etc. HCWs that directly contact with Covid-19 patients had higher risk for anxiety. In hospitals, medical staff had greater fear, anxiety, and depression levels than administrative staff [20]. The situation in isolated and intensive care units is extremely unsettling as patients are isolated, infectious and critical. Prioritizing beds and ventilation, continuous treatment protocols change and seeing patients get worse inevitably adds stress and anxiety. The social behaviour of these patients and their relatives, the risk of transmission of the disease to health care providers and their families, wear full body protection during hot and humid weather and the inability to take food breaks during office hours adversely affects the overall health and sleep of these HCWs [21].

### **Covid- 19 Effect on Economy**

During the Covid 19 period, the economy suffered a major setback. This economic impact mainly affected the tourism industry, the job market, the stock market, the event organization, the transport services, the disappearances or decline due to people's cautious behaviour[22].

The travel and tourism sector are one of the most affected sectors in the economy due to the Covid-19 pandemic [23]. Due to the health and economic crisis caused by the pandemic the tourism sector is affected on a large scale. The “UNWTO” was estimated at approximately 1.1 billion tourist arrivals losses and us\$ 0.91 trillion to us\$ 1.1 trillion export revenues and 100 to 120 million jobs due to the wider spread of the novel Covid 19 viruses [24]. The recession caused by Covid-19 covers almost all countries and the recession caused by the current epidemic has resulted in the fastest and steepest downgrade of the Global recession since 1990, which can also be observed in following this figure[25].

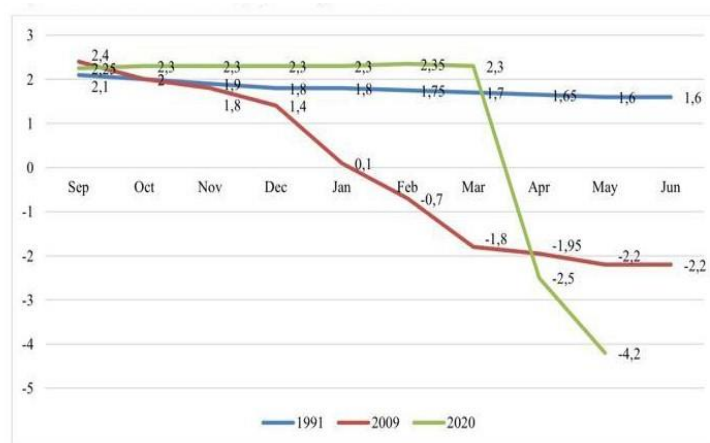


Fig. 3. Global GDP forecast (%) during recessions [25]

As per the IMF forecasts, the global economy may be more likely to contract by 3% and the loss of GDP due to pandemic situation could be around 9 trillion dollars in 2020[24]. The most visible outcome of the Covid-19 crisis on financial markets was the effect on the global stock market. Global stock markets lost \$ 6 trillion in value over 6 days from 23 to 28 February in 2020, according to S&P Dow Jones Indices, Between February 20 to March 19 S&P index of 28% fell, the FTSE index 41.3% fell, the Nikkei index 29% fell, and in the same period Larger International banks witnessed plums in their share price, for example, City group, Morgan Chase's, Barclays[26].

The loss of purchasing started to take place online during the lockdown period. Even in countries having moderate and lower-income per capita, the internet users started to shift to online shopping and these shopping experience incorporate some basic Industry products like textile and leisure tools as well as consumer goods. In the USA bank's transactions were evaluated to estimate results showed during February to March 56% of consumer spending for necessities were rose and expenditure in grocery stores and supermarket had risen by 39% between the 16th of February to 22nd of March 2020 [27].

Almost instantly, the coronavirus transformed the workforce. The global pandemic is having a significant impact on the economy and job security. Researchers can already see how it will have long-term ramifications and how the market's power balance will shift dramatically. There are also several industries, businesses, and workers who gain advantages from the current covid situation. There would be several enterprises that will be harmed in some way. People who work will lose their employment, and finding new jobs Will Be Extremely Difficult [28].

### The Effect Of Covid-19 In Daily Life Behaviour

This global pandemic redefined the day today activities of people as this pandemic challenges the people behaviour [29]. Lockdown is one of the options suggested by WHO to reduce the rapid spread of COVID-19 and it effected for people's lives in physically and mentally [30,31,32]. According to different countries the changes that happened in daily lives are different, in some countries sleeping habits were changed dramatically and in some countries there was only small change in those habits. For example the survey data shows that in Netherland 14% of the respondent show a decrease in sleeping hours and 13% of respondent show increase in sleeping hours, in Indian survey it showed that there is a significant increase in sleeping hours, in North Italy the amount of sleeping hours increased with Covid-19 pandemic [33,31,32].

Then if we consider the change in eating habits, most of the people tend to have a healthy and home-made meal. The amount of fruits and vegetables usage is increased during the lockdown situation. [29,31,32] In the surveys conducted in countries such as Netherland, North Italy, US, Croatia shows that the



amount of alcohol usage and smoking increased slightly [30,32,33, 34] but in countries such as India shows a significant decrease in using alcohol and smoking [31].

The amounts of participation of people in physical activities are decreased with lockdown situation people trapped in a shelter. Then the amount of sitting hours and screen time dramatically increased. Due to decrease in physical activities and increased in sitting and screen time many people (about 30% and more) show a weight gaining. So during this covid-19 pandemic the life style of people changed in unexpected way this pandemic is also an unexpected [29,30,31]. With all these changes in day today activities, the mental health of the people also effected. With decreased of physical activities the rate of depression increased significantly. Those who maintain their normal life style without dramatic change doesn't show much change in depression level but those who changed their daily life with pandemic faced the depression mostly [34].

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